CALIPER
Gender Equality in STEM Research

Linking Research & Innovation for Gender Equality

D2.1. Co-design Guidelines for the development and reporting of scenarios

WP2 - Design and development of customized GEPs

Version: 0.1

Disclaimer

Copyright message

Document information

Grant Agreement Number	873134	Acronym		CALIPER
Full Title	The CALIPER project: Linking research and innovation for gender equality			
Topic	SwafS-09-2018-2019-2020 - Supporting research organizations to implement gender equality plans			
Funding scheme	CSA – Coordination and Support Action			
Start Date	1st January 2020	**Duration**		48 months
Project URL	http://caliper-project.eu/			
EU Project Officer	Katherine QUEZADA, REA, Unit B5			
Project Coordinator	Vasiliki Moumtzi - ViLabs			
Deliverable	D2.1. Co-design guidelines for the development and reporting of scenarios			
Work Package	WP2 - Design and development of customized GEPs			
Date of Delivery	**Contractual**	M10	**Actual**	M12
Nature	R - Report	**Dissemination Level**		P - Public
Lead Beneficiary	ULB			
Responsible Author (s)	Valentine Duhant			
	Laurent Licata, Patricia Mélotte & Sara Aguirre			
Reviewer(s):	VIL, SV & NTUA			
Keywords	Institutional change, strategic change scenarios, co-design, GEP			

Document History

Version	Issue Date	Stage	Changes	Contributor
0.10	**17/12/2020**	**Draft**	**1st draft shared with VIL & SV**	**Valentine Duhant (ULB)**
0.20	**22/12/2020**	**2**	**2nd draft reviewed by VIL & SV**	**Valentine Duhant (ULB)**
0.30	**19/01/2021**	**3**	**Editing and minor corrections**	**Sara Aguirre (ULB)**
0.40	**26/01/2021**	**4**	**Review by SV & NTUA**	**Maria Sangiuliano & Marzia Cescon (SV), Emmanouil Ntanos & Maria Flouri (NTUA)**
1.00	**29/01/2021**	**Final**	**Submitted**	**(ViLabs)**

Executive Summary

The objective of this document is to help the Research Performing Organizations (RPOs) and Research Funding Organizations (RFOs) to develop a tailored co-design strategy and build tailored strategic change scenarios. This task is part of WP2 (Design and development of customized GEPs), which aims at developing customized Gender Equality Plans (GEPs). The purpose of the methodology guidelines is twofold: 1. Design a co-design process that will be used along the three tasks of WP2; 2. Design strategic change scenarios that will be the basis of the GEPs design.

The document presents, on the one hand, theoretical insights on co-design and, on the other hand, practical steps to follow to carry out the tasks of WP2. It also provides a toolkit with practical activities that can be used in any of the tasks. These guidelines will allow for an understanding of the scope and action flow of WP2 as well as for the development of tailored strategies to develop strategic change scenarios and organize multi-stakeholder dialogues.

Contents

1   Introduction

1.1   Purpose & scope

This deliverable is part of WP2: Design and development of customized GEPs. This WP aims at developing tailored GEPs to be implemented by each RPO and RFO. Based on methodologies and analysis carried out along WP1, the RPOs/RFO will be engaged in a co-design participatory process that will lead to the development of tailored GEPs. For this purpose, the development of a set of customized scenarios will take place as a means of identifying the main issues that need to be considered while designing and developing the different GEPs in the different national contexts. The CALIPER GEPs will stem out of internal assessment and change management processes and interaction with each RFO/ RPO, and the R&I Hubs which will be created by each piloting institution.

The objective of this deliverable is to help the RPOs and RFOs develop a tailored co-design strategy and build tailored strategic change scenarios. The purpose of the methodology guidelines is twofold: 1. Design a co-design process that will be used along the three tasks of WP2; 2. Design strategic change scenarios that will be the basis of the GEPs design.

The document presents, on one hand, theoretical insights on co-design and, on the other hand, practical steps to follow to carry out the tasks of WP2. It also provides a toolkit with practical activities that can be used in any of the tasks. Attention is paid to online approaches to make these activities possible in the COVID-19 context. These guidelines will allow for an understanding of the scope and action flow of WP2 as well as for the development of tailored strategies to develop strategic change scenarios and organize multi-stakeholder dialogues.

The guidelines presented in this deliverable are not meant to be fixed and a standard roadmap for all, but to be used and adapted by each RPO/RFO according to their specific context and need because 1. the development of strategic change scenarios will rely on the context analysis carried out in the internal and external assessments (WP1); 2. several methodological options are often provided.

1.2   Structure of the deliverable

Chapter 2 outlines the theoretical foundations of co-design, as well as some practical tips about its use. **Chapter 3** presents the methodology to build strategic change scenarios (T2.1). **Chapter 4** presents the steps and methodology for multi-stakeholder dialogues (T2.2). **Chapter 5** presents the action flow of the GEPs design (T2.3). **Chapter 6** gives advice on how to carry out participatory workshop and provided practical tools and activities.

1.3   Relation to other WPs & Tasks

The results of tasks T1.1 (internal assessment) and T1.2 (external assessment) will feed directly into the development of strategic change scenarios (T2.1). Task T1.3 (methods and good practices on engendering research-innovation ecosystem) will feed into the multi-stakeholder dialogues (T2.2). The Task 5.2 is directly related to the context of Work Package 2 and specifically the Task 2.2, which refers to the set-up of Research and Innovation Hubs by each partner RPO/RFO. One of the assignments of Task 5.2 is to assist on the engagement of target stakeholder audiences with the above-mentioned Hubs.

2   Co-design approach and methodology

Co-design is a very broad concept that derives from various theoretical, epistemological, methodological, and political backgrounds. The goal of this document is not to present an extensive review of its dimensions and definitions in the literature, but to give a broad overview of the concept to illustrate its relevance for the CALIPER project. In order to do so, the following questions will structure this chapter on co-design:

1. What is co-design?
2. What are the benefits of co-design within institutional change processes?
3. How to carry out a co-design methodology?
4. How to apply co-design to gender research?

This chapter will not be focusing on specific tools that can be used to implement the co-design methodology. A set of tools will be presented in the last chapter, from which each partner will choose the tools they deem the most relevant for each step. Tips will be given to help choose the best tool for each situation.

2.1   What is co-design?

2.1.1   General definition of co-design

Co-design is a type of collaborative research. Following the definition of Zamenopoulos and Alexiou (2018, 10) : "At a most fundamental level, co-design is a practice where people collaborate or connect their knowledge, skills and resources in order to carry out a design task." The fundamental tenets of co-design are that **everyone is creative** and that **everyone is an expert of one's own experience**. Co-design is therefore an umbrella term for participatory processes through which various stakeholders collaborate to define creative solutions to common issues (CO-CREATE, 2017).

Co-design is a relevant approach to **solve complex issues** which involve different types of actors with different kinds of expertise, as well as to **empower stakeholders** by providing them with an opportunity to take part in shaping and controlling their environment.

More specifically, co-design is used to seek solutions to make the future better. It is **a practical approach** with the aim of defining concrete actions to solve a specific problem. In their review of co-design approaches, Zamenopoulos and Alexiou (2018, 11) define the activity of "design" as "a task in which people seek to understand, interpret and ultimately address a challenge or opportunity in their present reality by conceptually developing and creating things (e.g. spaces, physical products, services, infrastructures, policies etc.) that could create a (better) future reality. […] Framing and making sense of 'problems' in a present situation while at the same time developing 'solutions' that could shape a better future is a key characteristic of design activity." Three elements can be derived from this definition, which enable us to define **design** as a <u>process</u>:

    1. Co-design is used to **frame and understand a current challenge**. The actions that will be defined and implemented to solve the challenge are taking place in a specific context of which stakeholders must make sense.

    2. Co-design is used to imagine **solutions** to this current challenge. It is therefore a practical approach.

    3. Those solutions aim at building a **better future**. This means that an agreement must be reached about what can be considered as a desirable future. This future corresponds to the goal of institutional change that will take place through the implementation of the GEP.

In **co-design**, the design activity is **collective**. This leads to specific challenges because different interests and understandings of the problems are at stake. In co-design, the main challenge is to work together in the same direction and engage all actors to define a common definition of the problem, agree on solutions and have the same definition of the goal to reach.

> We define <u>**co-design**</u> as a **collaborative and participatory process** that is relevant to make sense of **complex challenges** involving a **variety of actors,** imagine a **better future** where this challenge would be overcome, and define **practical solutions** to reach this desirable future.

2.2   Types of co-design

Co-design is often used along with the term "co-creation", both of which being regularly used interchangeably. When conceived as two distinct concepts, two views exist in the literature regarding their relation.

➔ The first one defines co-creation as a broad concept used to describe any act of collective creative action. Co-design is then conceived as a sub-area of co-creation focusing on design-processes, whether of goods or services, mainly in industry (Sanders & Stappers 2008).

➔ The second one defines co-design as a broad term that encompasses a diversity of collaborative practices. In this case, co-creation – or co-creative design – is one type of co-design practices (Zamenopoulos & Alexiou 2018).

In this second view, there are different types of co-design depending on the nature of engagement within the process. In this document, we rely on **this second view** to: 1. specify which kind of co-design is used in the CALIPER project; 2. contextualize it within its historical and theoretical background; 3. distinguish it from other types of co-design research.

Thus, Zamenopoulos and Alexiou define four **natures of engagement** that represent four possible expressions of co-design: collaboration, co-operation, collective creativity, and connection. They distinguish between them on the basis of how strongly they focus on shared goals and working practices, e.g. if the focus is set upon working together to achieve common goals (collaboration and co-creation) or upon working independently to achieve individual or multiple goals (connection and cooperation). Each of them has its own historical background and its own disciplinary uses:

1. **Collaboration** is key to <u>community design</u>. It originates from community building and democratic design in architecture planning in the early 60s. Its goals are community building and consensus building through participation and communicative action. It has been conceptualized as "an act of reflection and argumentation about beliefs and ideas for the future" (Zamenopulos & Alexiou 2018, 16).

2. **Cooperation** is key to <u>socio-technical design</u>. It originates from the context of industrial democracy movements in the 1960s, which defend direct engagement of workers in management. "Cooperation" thus refers primarily to workers and managers. Its goals are cooperative action between adversaries and the facilitation of polyphony. Its focus is not on the design of material objects but on the design of the conditions of cooperation and participation.

3. **Collective creativity** is key to <u>co-creative design</u>. It originates from the will of private companies, national government, and public bodies to involve citizens/users in the design of their products and services, in order to reach innovation in service and product design. The goal is to learn from collective creativity of potential users to co-create value and innovation. This approach uses "design-thinking strategies". Users work with experts but not necessarily together. Users are defined as a category and not as actors with conflicting interests.

4. **Connection** is key to **social design**. It originates from movements aiming to engage citizens to reflect upon their environment, e.g. societal norms of consumption society, in the late 1960s. Its goal is to connect people to create social good, e.g. through creative citizenship, DIY and self-help practices. Its motivation is to create social innovation, social change, and sustainability. In this approach, citizens are part of complex networks and they impact society through individual every-day actions rather than direct collaboration and community-building.

2.2.1   Co-creative design

This brief overview of the different approaches enables us to understand the variety of research traditions encompassed in the term "co-design". It is useful to distinguish the specificity of the way we will use it within the CALIPER project. The CALIPER project is closest to **co-creative design**, for several reasons:

- Contrary to community design, its chief aim is to foster **collective creativity** in order to create **innovation in organizations**, i.e. the gender equality plan, and not to imagine a common goal for a local community. In other words, the approach used in the CALIPER project is more **practical** than argumentative.
- Contrary to social design and socio-technical design, its focus is on the achievement of a **common goal** through collaboration in a **common arena**.

In co-creation, end-users are thus actively involved in the design process (Voorberg, Bekkers, & Tummers 2015). One of the specificities of co-creation is the involvement of one or several **experts** or **researchers** to facilitate the collaboration of the stakeholders through the use of relevant tools. In this approach, stakeholders are usually not directly interacting with each other, but they follow the methodology that is proposed by the expert.

However, those distinctions are not separate. Although they enable us to relate the co-design methodology used in the CALIPER project to a specific historical and theoretical tradition and to understand the diversity within the term "co-design", we must know co-design is used nowadays in a variety of ways that can overlap and blur the frontiers. For example, paying attention to the diversity of interests of the stakeholders is essential to enable the gender equality plan to succeed, even if it is not the focus of co-creative design.

In a nutshell, in this methodological guide we define **co-creation** as a type of co-design approach that focuses on the **active involvement of stakeholders** in the design process, with the help of one or several **experts** who animates the encounters by means of **relevant tools** used to foster **creativity** and **collaboration**.

2.3   What are the benefits of co-design and co-creation within institutional change processes?

The "Community of practice co-creation toolkit" for the ACT on Gender project (2020) as well as the "Co-design best practice report" for the CO.CREATE project (2017) point out several benefits of co-creation for projects and organizations:

- Enable the active involvement of participants.
- Connect people that would not collaborate under different circumstances.
- Share resources, knowledge, and expertise.

- Foster the creation of networks.
- Enhance innovation processes.
- Create a common understanding of goals.
- Build agreement on actions.
- Empower minority perspectives.

In other words, the benefits of co-creative design can be summarized in the following tags:

➔ **Diversity**: it makes possible the inclusion of a variety of actors, of knowledge, of hierarchical levels, of sectors in the design process.
➔ **Collaboration**: it provides the tools for those various actors to work together to reach a common goal.
➔ **Creativity**: the solutions proposed by a collective of diverse actors are supposed to be more imaginative than the solutions proposed by separate individuals.
➔ **Network**: the collaboration of a variety of actors can foster lasting synergies, which make way for structural change through lasting connections and collaborations.
➔ **Empowerment**: the direct participation of different types of actors enables them to take control of their environment, especially for those who would not be consulted under different circumstances.

2.4   How to carry out a co-design methodology?

In order to carry out a co-design process, 4 questions must be addressed by the participants (Zamenopoulos & Alexiou 2018):

- Which **future** is **desirable** to improve the present situation? Stakeholders need to define a shared goal by imagining the future they are going to build together.
- Which are the elements – from the past or in the present – that can create **obstacles** or **opportunities** for this desirable future? Stakeholders need to be aware of the context in which they are going to implement the actions to build this desirable future. They need to adapt those actions to the context to increase the chances of success. Context analysis was carried out in WP1 during the **internal and external assessments**.
- **What** could create the desirable future? Stakeholders must define actions, steps and measures that will lead to the desirable future.
- **Who** needs to engage, **what** will be the purpose of their engagement, and **how** will they engage? Stakeholders must define who will take part in the co-design process (as well as in the change process) and why they are relevant to the project. They must also define how they engage: different people may engage in a different way, e.g. more or less actively or bringing their own expertise and competences, as well as at different stages of the co-design process.

The **scenarios** that will be presented in the following chapter is one way to address those questions. Indeed, they will be used to define different ways to reach a **desirable future** (e.g. institutional change for gender equality in STEM) depending on different **opportunities** and **obstacles** that will arise. They will be used as a basis to define the **actions** that will be carried out (i.e. the Gender Equality Plan). As to the questions of **who** will engage in the co-design process and **how**, it will need to be addressed to define who will take part in the **Research and Innovation Hubs**. The results of the development of scenarios and of multi-stakeholder dialogues within the R&I Hub will then be used to define a **strategy** to develop and implement **the GEP**.

In their report on co-design best practice for the CO.CREATE project (2017), the authors give advice to address those questions. We rely upon this advice and adapt it to the CALIPER project:

1. **Define clear needs and shared pains**: the co-design process is driven by several individuals with different positions and interests. They are all experts in their own field, and they must all be considered as such, no matter what their professional experience or position in the hierarchy of the organization is. It is therefore important to create a framework that enables them to communicate their needs and pains in an equal way. By enabling them to express themselves in a balanced manner, the facilitator will enable them to go beyond their individual interests to create a collective interest. The goal is to draw upon individual interests to define what the participants' experiences have in common in order to collaborate towards a common goal.

2. **Define a clear framework to create a creative environment**: the framework for collaboration must both be open to creativity and make the structure for participation clear. The structure applies to **time**, **place**, **content,** and rules of **participation**.

   → When an encounter among participants takes place, **the following points must thus be clear for everyone**: when does the encounter take place? For how long? What is its goal? How is everyone allowed to participate? Which are the rules to define who speaks when and what they can speak about?
   → Those rules are specifically important given the **diversity of involved stakeholders**: some of them might be more used to take part to similar workshops or to speak their mind than others, and it is essential that everyone be given the same opportunity to do so. Indeed, power dynamics might negatively influence a balanced participation and dialogues. In order to reduce power-related biases, it is important to avoid that some stakeholders participate more than others, especially if they are in a position of power within the institution (e.g. high manager, Dean, professor etc.).

   > **Point of attention**: scheduling meeting should take into account potential work life balance issues (i.e. prefer central hours within working days).

3. **Be inclusive in the selection of participants to create a diverse team**: the choice of stakeholders to involve, both inside and outside the organization, should be as inclusive as possible. The inclusion criteria must be defined according to the objectives of the project and allow for a diversity of sectors (i.e. academia, public sector, industry and civil society – following the **quadruple helix approach** described in D1.3), of hierarchical positions, of gender, etc.

4. **Define a common vision and shared values**: the desirable future relies both on a common vision and on shared values that must be co-defined with the stakeholders. They must not be taken for granted or imposed by the facilitators because each stakeholder should actively engage in the process.

5. **Define individual roles**: not every stakeholder has to be involved in the same way and at the same time. At each stage, the most relevant stakeholders should take part. Moreover, informing them of the outcome of the session afterwards is a way to keep them engaged in the process even if they do not actively participate at each step.

6. **Handle conflicts and interests:** even if the diversity of stakeholders is what makes creativity

possible, this diversity is also likely to trigger conflicts. Conflict can be addressed to remind stakeholders of the goal: not finding the one good idea, but to generate several good ideas based on their expertise/positions. Should conflicts arise, they can be addressed openly to help find what really matters for everyone, and then include those elements in shared proposals.

7. **Foster a reflexive and evaluative approach**: each step should be evaluated to be adapted if needed. Stakeholders should also be informed of the outcome of their participation.

One of the key elements of co-creative design is the engagement of one or several **professionals** who facilitate the interactions of the participants by means of specific tools. Those tools will be further described in a following chapter, but there are general qualities that the facilitator must demonstrate in order to carry out a co-creative design process (CO-CREATE, 2017) and to create an open mindset:

- Being **skilled** and trained to use the relevant tools.
- Being **open to unforeseen developments** and being able to react to them.
- Being able to **create a safe space** where everyone can feel free to speak and participate.
- Being able to **give clear objectives** and explain what is expected from participants.

Two options are possible: the facilitators can be either internal of external to the institution:

→ **Internal actors** can either be the project managers, with the help of the guidelines provided in the toolkit (see chapter 7), or internal actors who already have an experience in collaborative projects and good facilitation skills. To identify them, the internal mapping of capabilities could be a valuable source of information.

- **Pros**: internal actors already know the organization. They can help with the selection of stakeholders to involve. This is also a way to gain time and control the process (especially if project managers design and facilitate the workshops themselves) because there is no need to explain the context of the institution and the goals of the project. Also, this option if free.
- **Cons**: even if the tools presented in chapter 7 are supposed to be accessible by everyone, choosing them and learning them takes time. If RPOs/RFOs hire external professionals, they can focus on the content and data analysis. They are also freer to observe the discourses and dynamics between stakeholders during workshops.

→ There exist some **professional agencies** specialised in participatory process. They can help either with the selection of the tools/activities and the design of the co-creation process, or only with the facilitation of workshops.

- **Pros**: they are facilitation experts. They can advise RPOs/RFOs to design the co-creation process in the most efficient way according to their goals and available time. This option also enables them to focus on the content and data analysis. They are also freer to observe the discourses and dynamics between stakeholders during workshops.
- **Cons**: RPOs/RFOs must explain the context of their institution and the goals of the project. They should engage them from the very beginning, which can delay the start of the process. It also costs money, so it depends on the resources they have at their disposal.

2.5   How is co-design used in gender research?

The authors of the "Community of practice co-creation toolkit" for the ACT consortium (2020) draw upon Joan Acker's analysis (2000) of contradictions which can be considered as **failure factors** in conducting

gender equality projects and give strategies to overcome them:

1. **Power**: one of the goals of the project is to change the structure of power within the organization, yet it cannot succeed without the support of the current authority.
2. **Role**: stakeholders occupy different positions and play different roles within the organization. Even if they are all invited to take part in the co-design process, not all of them hold the power to implement change.
3. **Dual agenda**: the chances of success of a gender equality plan increase if gender equality can be linked to other organizational goals, such as productivity of competitiveness. However, focusing on this other goal can obscure the gender equality goals.
4. **Resistances due to conflict of interest**: not everyone within the organization will benefit from the changes because gender equality changes lead to a redistribution of power, rewards, and resources.
5. **Power/class:** managers and high-ranked hierarchy may approve of gender equality in an abstract and general way, but they may resist to concrete and structural change as it may destabilise the underlying power and class structures.
6. **Timing & rhythms**: gender equality is a long process that require reflection and experimentation. This may not be combined with the timing of the organization, which has its own tempo and is more likely to be based on swift action and decision.
7. **Gender neutrality**: organizations are perceived as gender-neutral. This means that success is perceived as relying on individual competences and qualities, not on social characteristics such as gender or ethnicity.
8. **Ideal worker norms**: the rewarded behaviour perceived as neutral usually relies in stereotypically male behaviour, such as being assertive, forceful and results-oriented.

Those contradictions need to be addressed while developing the GEP in general and the strategic change scenarios in particular. Indeed, they enable implementers to consider the specificities of gender-related institutional change. Failure to consider the specificities of gender-related contradictions within the institution would impede the institutional change strategy.

To sum-up those contradictions, we can insist on the following dynamics we find particularly relevant for the CALIPER project:

1. Gender equality projects address **power relations** and lead to a redistribution of power within the organisation, even more if, as it is the case for CALIPER, a gender+ approach is undertaken, addressing intersections between gender, age, socio-economic status, migration background, gender identity and sexual orientation, etc. This can lead to resistance to change from the actors who hold power and are privileged by the current power structure. Within CALIPER, we can expect resistances from male researchers or hierarchical superiors who would lose some privileges of gender equality is achieved, e.g., more competition for scarce academic positions.
2. **Organizations** are perceived as **gender-neutral**. This means that organizations tend to perceive themselves as being objective and neutral structure. They tend to believe that actors are evaluated on basis of their own performances and that success is due to individual merit. This has two consequences. First, resistances to change can appear if gender is introduced in evaluation methods, e.g., by introducing gender quotas among staff. Second, women can also object to gender equality measures because they would want to be succeeding on their own merits.
3. **Ideal worker norms** are perceived as **gender-neutral**, whereas they are in fact based on male stereotypes such as eloquence and the ability to be assertive. This means that male workers might prove more resistant to change than women because they need to be more self-reflective, that is, they first need to be aware of the gendering of worker norms.

4. Gender equality plans are more successful if gender equality can be linked to other organisation values, such as performance improvement, which is called by Joan Acker (2000) as the "**dual agenda approach**".

To take those challenges into account, some **strategies** can be applied, which complete the aforementioned general co-design strategies:

1. Involve a **variety of actors** within the development of the GEP: actors belonging to various hierarchical levels, genders, seniority levels, ethnical backgrounds, etc. **Treat them in the same way** without stressing their differences, e.g., call them by their name instead of title, allot the same time for everyone to speak in a meeting, etc. This can reduce the bias related to power-related issues.
2. **Norms** must be defined as **social constructs** and repeatedly presented as such. This will reduce the bias related to norms being perceived as gender-neutral.
3. Help stakeholders to define **common goals** and to link gender equality and diversity to **other organisational goals,** e.g., productivity of social inclusion. This can help involve everyone, reduce conflict of interests, and reduce power dynamics.
4. **Involve actors at each step** in order to create adhesion and reduce resistance to change. This will enable each stakeholder to use their own expertise to collectively develop the GEP and foster adhesion to the GEP.

3   Strategic change scenarios

The scope of task T2.1. is the development of a set of three strategic change scenarios. Based on the findings of the previous WP1, a set of three implementation scenarios will be designed for each participating RPO/ RFO, to better understand and reflect on the key factors, the potential measures and the strategic collaborations with internal and external stakeholders that need to be leveraged with regards to the implementation of GEPs. Such an exploratory method will work as a tool for facilitating decision-making at each piloting institution, in highlighting discontinuities from the present and revealing available choices and their potential consequences. The scenarios will be developed by means of a co-design participatory method and will be used in the three following stages.

First, three exploratory scenarios will we developed in collaboration with GEP working groups. One scenario will be based on the perceived negative aspects of adopting and implementing GEPs, in a given institutional context (i.e., resistance to change), and a positive/ideal one whereby there are minimal resistances towards the implementation of gender equality policies and structural change. Finally, an intermediate scenario will also be developed. Sustainability of the foreseen strategies will be discussed already at this stage. Therefore, the goal is twofold: 1) Relying on the results of the internal and the external assessment, identify which cultural, behavioural, organizational, and institutional elements are likely to be a threat or an opportunity for the implementation of the GEP; 2) Draft strategies to foster the identified opportunities and address the identified threats. At least 1 workshop (up to 3, ideally) will be organized to consult the GEP working group, as well as any actor deemed relevant, to refine the scenarios. Consultation of the GEP working group is also twofold: draw upon their expertise to make the GEP relevant for the institution and encourage engagement of internal actors to foster the sustainability of the GEP implementation.

Second, the scenarios will feed into dialogues with external stakeholders within the R&I Hub in T2.2. Two workshops will take place to discuss and refine the scenarios with the input of the external stakeholders. Even though the GEP is focused on internal organizational change, their feedback is useful to analyse the external conditions that could support or impede the GEP, as well as building the conditions for long-term structural change through the creation of synergies, collaboration, and cultural change. Ultimately, the GEP will also be a useful example for external stakeholders who may want to implement a GEP in their own organization.

Finally, the scenarios that were refined through dialogues with internal and external stakeholders will feed into the Co-Design of GEPs in T2.3. They will constitute the basis to define actual strategies and design the implementation roadmap, through the consultation of internal and external stakeholders by means of a co-design methodology.

Strategic change scenarios are thus central to the co-design methodology and GEP development process: they will be first used to organize the date from WP1 and draft relevant strategies depending on three possible futures (an ideal one, a very difficult one and an intermediate one) (**T2.1**), before being discussed and refined through multi-stakeholder dialogues in the R&I hub (**T2.2**) and refined again to make strategic choices and design the actual GEP (**T2.3**).

This chapter presents the methodological guidelines to follow in T2.1, which is the exploratory part of the process. It is structured as follow:

1. What is a strategic change scenario and why is it useful?
2. Purpose and scope of the scenarios in the CALIPER project
3. How to build the strategic change scenarios?
4. Alternative action flows

3.1   What is a strategic change scenario and why is it useful?

Godet (2000, 11) defines a scenario as "the set formed by the description of a future situation and the course of events that enables one to progress from the original situation to the future situation. The word scenario is often abused, especially when used to describe any set of hypotheses." This means that a scenario is composed of two elements: 1. The **definition of the future** to which the scenario must lead; 2. The description of **a process to reach this future**.

Co-design methodology tip

This definition is consistent with the tenets of the co-design methodology described here above that implies the definition of a **desirable future**. Therefore, scenarios used in CALIPER are called "**strategic change scenarios**": following Godet's definition, the goal is not to elaborate a mere "set of hypotheses", but to design the course of events that can lead to the desirable future situation. In other words, the question to be answered is not "what happens if we do this?" but "**what can we do to reach this point?".** Applied to the CALIPER project, the question to be answered by each RPO and RFO through the development of the three strategic change scenarios can then be phrased as: "**which strategies can we design (the process to reach the desirable future) to reach gender equality in STEM within our institution (the desirable future), given the specific level and types of opportunities and threats we face in our institution (the set of hypotheses)?**"

Still according to Godet (2000, 11), two major categories of scenarios can be identified:

> (1) **Exploratory scenarios** "starting from past and present trends and leading to likely futures".

> (2) **Anticipatory or normative scenarios** built based on alternative visions of the future they may be desired or feared. They have been designed "retroprojectively."" (Godet 2000, 11)

In CALIPER, we use **anticipatory or normative scenarios** because we are not only evaluating the likelihood of a future, but also assessing the path to reach a pre-defined future (i.e., gender equality in STEM). The way we use scenarios is indeed based on "alternative visions of the future they may be desired or, on the contrary, feared" (Godet 2000, 11): **the three scenarios** can be considered as **three possible visions if the future depending on the levels of threats and opportunities that may arise.**

Within the frame of anticipatory /normative scenarios, there are **two stages**: « **an exploratory phase** of **identification of future stakes** » and **« a normative phase** […] required to **define strategic choices** […] that are possible and desirable in order to keep on course" (Godet 2000, 7). In the first stage, the goal is to develop "scenarios of the general environment", whereas in the second stage the goal is to design "scenarios of actors' strategies" (Godet 2000, 7).

The scenarios in task T2.1 belong mainly to the exploratory stage: the aim is to evaluate different options depending on the likelihood of resistances, to assess strategic options in each case. It involves a diversity of actors who will collaborate to create the scenarios. The second phase, strategic planning, will mainly encompass the development of the Gender Equality Plan in a later task. However, both phases overlap because the assessment of probabilities involves the assessment of possible actions and strategies to follow. Nevertheless, the difference lies in the fact that the second phase of strategic planning is more detailed in the description of possible actions and implies making actual decisions about a course of action. Even if strategies are already designed in the exploratory phase and refined through the whole co-design process, they are only the draft of the actual GEP that is designed in the strategic phase.

Co-design methodological tip

In a **co-design methodology**, this distinction between the exploratory and the normative phase is useful to keep in mind when organizing **consultative workshops**: the goal of a workshop is different in each phase, which impacts the information to be communicated to participants as well as the choice of relevant tools. For example, in the **exploratory stage** (**T2.1 and T2.2**), **brainstorming tools** are very useful to foster creativity and imagine diverse strategies. It is important to make clear to participants that all propositions are interesting, and that each idea should be considered as such by all participants. Whereas in the **normative stage** (**T2.3**), **consensus-building tools** can be more relevant because the goal is to make decisions about the strategies to be included in the GEP. The goal is then to focus on what participants have in common in order to agree on a shared course of action.

According to Leney et al. (2004, 5), who developed a scenarios toolkit for European projects, "the scenario method is most useful for those who need to assess different alternatives in the medium and longer term and have to involve a range of different actors and conflicting issues. […] The use of scenarios can provide a tool that encourages policy professionals, planners and managers to establish strategies for alternative futures that allow for a clearer understanding of the uncertainties involved". Therefore, scenarios can be used a means to clarify **the understanding of the context in which the GEP will be implemented** and to take into account the specificities of the context to **design a relevant, context-oriented GEP**.

Scenarios are useful for several reasons, both at the strategic level and at the relation level (Leney et al. 2004):

- At the **strategic level**, scenarios are useful for assessing the opportunities and risks associated with several strategies. They help to make sense of a complex situation by allowing to test several hypotheses. This is mainly useful for long-term processes and structural change.
- At the **collective level**, scenarios are useful to involve several stakeholders and engage them in working together to solve common problems and collectively define solutions.

All in all, we can define **strategic change scenarios** as a **set of hypotheses** used to assess the **opportunities and threats** specific a given context and identify **relevant strategies** to reach a **desirable future**. Scenarios are developed in two phases: an **exploratory stage (T2.1 & T2.2)** and a **strategic/normative stage (T2.3)**. Scenarios allow for **long-term planning** to implement **structural change** because 1. They **clarify the uncertainties** to be faced, and 2. They **foster the engagement and collaboration** of multiple stakeholders who are directly concerned by the effects of the institutional change. During the whole process, scenarios are designed using a **co-design methodology** allowing for the consultation and participation of internal and external stakeholders.

3.2   Purpose and scope of the scenarios in the CALIPER project

Based on WP1, three implementation scenarios are built to better understand and reflect the **key factors**, the **potential measures** and the **strategic collaborations with internal and external stakeholders that need to be leveraged** with regards to the implementation of GEPs.

Such an exploratory method will serve as tool for facilitating decision-making at each piloting institution, in highlighting continuities from the present and revealing available choices and their potential consequences to feed into dialogues with external stakeholders inT2.2 and the Co-Design of GEPs in T2.3.

The **three scenarios** will be based on:

- The perceived **negative aspects** of adopting and implementing GEPs in a given institution context (i.e., resistance to change)
- A positive/ideal one whereby there are **minimal resistances** towards the implementation of gender equality policies and structural change.
- An **intermediate scenario**.

Sustainability of the foreseen strategies will be discussed already at this stage.

This is an **exploratory phase**. The scenarios will be reviewed in T2.2. within the R&I hubs and, based on this review, they will be refined, and strategic priorities will be defined in T2.3.

3.3   How to build the strategic change scenarios?

There is not one way to use scenarios in institutional change processes. Even if this method relies on a set a general principles, this framework needs to be adapted to each context (Godet 2000; Leney et al. 2004). This applies to each project, but also to each institution. Therefore, the methodology presented in this document is a general framework that will have to be adapted by each RPO/RFO in order to make it relevant to the context of their own institution. Indeed, although the guidelines here under provide advice and templates to organize the data and build the scenarios, they are meant to be as broad as possible to fit the need of all partners.

The methodology to build the three strategic change scenarios will follow this action flow (each step will be detailed below):

1. **Pre-organize the data** of the internal and external assessment by summarizing them into a thematic text (optional).
2. **Organize the data** of the internal assessment and of the external assessment by topic. To do so, an Excel file template is provided. This step also included a draft analysis of resistances, opportunities, and strategies. This template is the basis for the building of scenario, it is **an essential step**. Two options are possible:
    a. Project managers fill the template and start brainstorming on their own. This will constitute a basis for discussion when consulting the working group.
    b. Project managers fill in the template in a collaborative way with the working group. This can take the form of a shared file (with instruction) or a workshop (either to fill the file directly or to get the information that project managers will use to complete the file).
3. **Build the scenarios** by translating the data of the Excel template into three texts (example of structure is provided): one focuses on resistances; one focuses on opportunities and one takes both into account. Again, two options are possible:
    a. Project managers complete this task on their own.

b. Project managers complete this task collaboratively with the working group. In this case, project managers can organize a workshop with the working group to design the structure of each scenario. Project managers will then translate this into text.

4. **Consultation with the GEP working group**: this is the only compulsory consultation workshop of the task (eve, if the more participative it is, the better). Two options are possible:

a. If this is the only workshop, the goal is to present the three scenarios and ask for the working group's feedback to improve it.

b. If other workshops were organized beforehand, the goal of this workshop is to reach consensus about each scenario and to finalize it.

5. **Refine the scenarios**: this is the finalization stage. This should be completed by project managers by adapting the scenarios to the input of the GEP working group.

Co-design tip

There are different possible levels of participation. Depending on the level of participation each RPO/RFO wants to implement, more than one workshop can be organized. Therefore, there are different possible action flows. See **point 4.4**. for alternative action flows. The level of participation chosen depends on several factors, such as the time left to complete the task or the availability of the GEP working group. If RPOs/RFOs lack time, they can organize at least one workshop but in a way to receive deep feedback. The idea is that the scenarios must seem relevant to the internal actors who will implement them, so the more they are engaged, the better. Also, the more workshops organized, the shorter they can be. If only one workshop is organized, it should be deeper and longer.

3.3.1   Step 1. Preparing the analysis (optional)

To organize the data to build the scenarios, project managers will fill in an Excel file in step 2 (see template aside). To facilitate this task, it can be useful to first organize the date in a draft text divided by broad topic, even if it is simply by copying and pasting abstracts from the internal and external assessment. For example, at ULB, the data were organized by broad topics (Human resources, Research (content), Transfer to market, Teaching, Communication, Governance, Students and services to students, Sexism and sexual harassment, Intersectionality). In each topic, three parts were filled in (see the frame for an example of the human resources topic):

-   The data (by copying and pasting the relevant abstracts of the internal and external assessment). When necessary, the data were organized in sub-topics (see the Excel file the topics and sub-topics). This is also a brainstorming phase: feel free to add any relevant hypotheses (e.g., This situation could be explained by…). It is also useful to start with the numbers, then follow with the existing measures within each institution.
-   The possible strategies: how could the situation be improved? This is a brainstorming phase so it can be quick and creative.

So, the proposed structure for this (optional) draft document is:

-   Main numbers from internal and external assessment (along with some hypotheses about their cause)
-   Main measures that already exist within the institution
-   Possible strategies to improve the situation.

There is no need to go through this preparation phase to fill in the Excel file. It can be however useful for

the next stages of scenarios building. Alternatively, the Excel file can be filled in directly. To give an example of how to proceed, here is the abstract of the preparation document of ULB, using the example of the topic of Human Resources (see the structure in red).

Example of the analysis preparation phase based on data from ULB: "human resources" abstract.

1.   HUMAN RESOURCES (The topic)

1.1 Main conclusions of the analysis (The sub-topic)

1.1.1.   Figures (Start with figures)

- **Recruitment** (Organize data by subtopics, either the relevant ones or the examples of the Excel file. Subtopic 1)

According to the overall analysis of recruitment files for the last 3 years (2017-2018 to 2019-2020) the proportion of men and women recruited for full-time academic vacancies (profiled flesh) was around 50% of each gender. This is even though there have been globally fewer applications from women (23-32% female applications vs. 68-77% male applications). The proportion of women on the short lists was also slightly higher than the number of female candidates [see indicator 1].

If one takes into consideration the disciplinary field (humanities and social sciences, STEM, or health), the proportion of women recruited in the two STEM faculties (Faculty of Sciences and EPB) is only 36% for the 3 years analysed (vs. 50% in social sciences and humanities and 45% in health). This can be explained in part by the low number of female applications received for STIM vacancies (14% vs. 33% in SHS and Health). The proportion of women in the short lists was 22% in STEM vs. 40% in SHS and health sciences [see indicator 1].

Regarding recruitment commissions, the Coordinated Text of Provisions for the Careers of Scientific and Academic Staff (2018) states that commissions must be composed of at least 1/3 of members of each gender (33%). According to the overall analysis of recruitment files, the proportion of women was 39% in 2017-2018 (all commissions combined). This percentage was 38% in 2018-2019 and? in 2019-2020. On the other hand, although the minimum representation of women within the commissions seems to be respected overall, this is not always the case when considering each commission individually. In 8 commissions out of 48 (16%) the male/female ratio established in the regulations was not respected, men being in the majority: 3 commissions of the Solvay Business School and Management, one commission of the Faculty of Medicine, one commission of the School of Public Health and three commissions of the Brussels Polytechnic [see indicator 8].

- **Type of contract for academic and scientific bodies** (sub-topic 2)

At the institutional level, 62.8% of permanent contracts in the academic and scientific bodies are held by men and 37.2% by women. Fixed-term contracts are more balanced, although the proportion of men with fixed-term contracts is also higher than that of women (59.3% vs. 40.7%) [see indicator 4].

In relation to the duration of the benefit, the proportion of women working part-time is slightly higher than that of men (14% for women, 10% for men). The percentage of women with a part-time contract is higher in the scientific corps (16%) and PATGS (15%) than in the academic corps (9%). This may be due to the greater precariousness/instability of scientific positions, but also to the fact that women in the scientific body are more often of childbearing age than women in the academic body. Within academia, the proportion of men and women working part-time is the same (9%) [see indicator 13].

- Vertical segregation and glass ceiling index

At ULB the proportion of women in the academic body was 32% in 2017, 33% in 2018 and 34% in 2019. It is therefore lower than that of men and has been stable over the last three years [indicator 23].

In STIM faculties, the proportion of women in the A and B levels is 13% and 12% respectively for the EPB and 26% and 26% respectively for the Faculty of Science (year 2019-2020). The number of women is therefore very low in the highest levels of the academic career in STIM disciplines. Not only is the proportion of women low, but there is also a "loss" of women throughout their careers: the percentage of women in doctoral theses was 23% at the EPB and 34% at the F. of Sciences in the same year [see indicator 5].

The Glass Ceiling Index (GCI) is 3.3 for the EPB and 4.4 for the Faculty of Science. This index compares the proportion of women in academia (levels A, B and C) with the proportion of women in senior academic positions each year. The index can vary from 0 to infinity. The interpretation is that the higher the value, the stronger the glass ceiling effect and the more difficult it is for women to move to higher positions (EU, 2015). If we consider level D (proportion of women in doctoral theses) the index would be 23.6 for the EPB and 11.7 for the Faculty of Science.

For PATGS, although women are most staff in both Level 1 and Level 2 (60% female, 40% male), men are in the majority among Level 1 specialized career staff (73% male, 30% female). Level 1 specialized careers are mainly in STIM engineering and IT-related professions. Women are in the majority among staff in non-specialized careers at both levels [see indicator 7].

- **Promotion of academic staff** (sub-topic 3)
Adopted in the 2016-2017 academic year, the "Cascade" measure establishes that the distribution of women/men among those promoted and upgraded must be at least equal to the same proportion in the previous level of the career (proportions at the institutional level, not at the faculty level). The aim is to combat the erosion of the gender balance at university ("leaky pipeline"). This measure applies to promotions to the titles of professor and ordinary professor. According to the latest data for the year 2018-2019, the measure is being met: the overall proportion of women promoted within the University is slightly higher than the overall proportion of women in previous levels [see indicator 9].
However, when looking within the different disciplinary fields, the number of promotions of women has been equal to or greater than that of men in the humanities and social sciences and health sciences over the last three years (2016-2017 to 2018-2019), but lower in the STEM fields. Concretely, at the EPB no women have been promoted in this same period (100% promotions of men). Inter-faculty differences can therefore be observed [see indicator 9].

1.1.2.   Work conditions (subtopic 4)
Nearly half of women in academia and science have experienced discrimination in the workplace (compared to 1/5 of men). In addition, women are less willing than men to pursue an academic career. However, there is no difference in men's and women's perceptions of the likelihood of their application being successful. These data suggest that, even if they are unsure of their success, men are more willing to apply for academic vacancies, and probably do so to a greater extent, than women. Women are also more likely than men to perceive sexism in academic careers.

The proportion of people who report having experienced discrimination at work is higher among academics than among scientists. This may be because the careers of academics have been longer than those of scientists (usually young researchers). In terms of disciplinary fields, personnel in the humanities reported more often having experienced discrimination at work than personnel in the health sciences, social sciences, and STEM. It is important to note, however, that this point reflects subjective discrimination and requires the victim to identify the behaviour received as discriminatory. Therefore, the differences can also be explained by the level of awareness of the respondents.

Both women and men were fairly satisfied with their work. There is also no difference in women's and men's perceptions of job certification. However, women reported feeling more exhausted and stressed physically and emotionally than men in the three months prior to the survey (women reported lower levels of well-being than men).

1.1.3.   **Practices and measures in place [Internal analysis report].** (After presenting the figures, present the measures and practices that already exist within each institution)

Numerous measures to promote gender equality in recruitment are included in the Diversity Plan, such as the use of non-sexist language in job offers, the production of a video to combat discrimination in selection and promotion commissions, and the standards stipulated in the Coordinated Text mentioned above, including the gender composition of the commissions and the establishment of evaluation grids to objectify the selection process. On the other hand, according to the interviews, focus groups and surveys conducted, several problems persist despite the measures put in place:

a) There are no figures on the male-female ratio at the departmental level (particularly relevant in the Faculty of Science). However, there are many differences between departments.

b) Evaluation grids are sometimes filled in by the recruitment commissions *a posteriori* (once the person has been selected) and often only the grid of the person recruited is completed. For the commissions, this is a rather cumbersome procedure. At the same time, it sets a standard and the recruitment process becomes more professional.

c) The evaluation grids establish general criteria that must be concretized by the commissions for each vacancy. This is where gender bias (and other types of bias) can impact the recruitment process. At the same time, it is impossible to further define these criteria because they vary greatly from one discipline to another. In addition, selection criteria are often related to how "excellence" and "meritocracy" are understood and are not neutral and objective concepts.

d) Many committee members are not familiar with the video on recruitment bias even though it should be sent to all members prior to any selection and recruitment process.

e) In the faculties where there are few women (STIM), the same women are mobilized to participate in all the commissions to achieve the representation of one third of each gender. However, this increased participation implies an additional workload for them, preventing them from dedicating time to research and teaching, tasks that are fundamental to the development of their careers.

f) The "Cascade" measure aims at gender balance in promotions within the academic body, but it does not address recruitment in previous levels of the "leaky pipeline" (PhD, post-doctoral, first assistant/lecturer).

- The Coordinated Text does not establish selection criteria for the recruitment of faculty members.

- Figures and interviews show that the "after thesis" is a key moment in women's careers: many women leave the academic career after finishing their thesis, a moment that coincides with the age of having children. Although the Coordinated Text no longer requires a postdoctoral stay abroad but rather an "international experience", such a stay is often expected. This is common practice. Many committee members are not even aware that such a stay is no longer an obligation. It is also difficult to demonstrate international experience without a stay abroad.

- There is little funding to carry out a postdoctoral stay in Belgium. ULB has postdoctoral mandates for assistants.

- In disciplinary fields where women are in the minority (STIM), the number of applications from women is very low. This is particularly the case in computer science and physics. In these cases, it is difficult to recruit women if there are no binding measures (e.g., quotas).

g) Sometimes there is resistance to the establishment of certain binding measures such as quotas for recruitment or the "Cascade" measure for promotions.

h) Some sectors (technical staff) or disciplines (computer science, physics, engineering) are too masculinized, which discourages women and makes it difficult for them to integrate. There are often sexist comments and remarks.

i) As far as maternity leave is concerned, female assistants are given an extra year to complete their thesis. However, there are no regulations regarding such leave at the time of recruitment of the academic staff. In order to be able to do so, candidates would have to be asked if they have children and when, which cannot be done.

j) At ULB there is no data on the gender pay gap. Although these are the legal scales, a gap may occur because of the type of contract ((full-time/part-time, determinate/undetermined, seniority, etc.).

1.2.   **Courses of action to be explored** (Brainstorm possible actions to be taken or strategies to solve the problems identified in the data here above)

- Set up an optional monitoring system for the male-female ratio at the level of departments in each faculty so that the indicator is collected systematically each year.
- Define selection criteria for the recruitment of scientific staff (assistants).
Risks/limitations: making the recruitment process more cumbersome.
- Establish measures to support women to continue the academic career after the thesis.
Risks/Limitations: available resources; international academic context (competition).
- Further define the selection criteria for the recruitment of faculty members and/or establish different criteria for different "academic profiles" (e.g., "international research" profile, "local research" profile, "teaching" profile).
Risks/Limitations: This could be detrimental to women's scientific careers. It may create hierarchies of academics that are also gendered.
- Supporting women in carrying out postdoctoral stays abroad (e.g., measures to enable them to go with their families).
Risks/Limitations: Lack of resources.
- Promote critical reflection on how the notions of "excellence" and "meritocracy" are understood within our University, especially among members of the commissions.
- To ask candidates to provide a "gender plan" as a selection criterion explaining how they intend to integrate gender in their management, research and teaching practices.
Risks/Limitations: People are not equipped for this. The institution must equip them. Moreover, the responsibility lies with the new recruits, whereas it is the institution that should establish this culture of equality and ask the recruits to adhere to it. We should not put everything on the shoulders of the people who are going to be hired, it is not consistent. These people must fit into a gender equality framework that already exists.
- Organize gender awareness training for commission members.
Risks/limitations: very heavy and difficult, there are hundreds of commissions every year, practically all the academic body participates.

3.4   Step 2. Filling in the Excel file template

The Excel template is to be found with the guidelines in the project file repository. There are two documents: an empty template that will fill in, and an example with part of the "human resources" topic already filled in with data from ULB.

In the example from ULB, the data are the same as in the example above so RPOs/RFOs can follow most of the process as an example. The "situation" column is complete with all the data of the internal assessment for the "human resources" topic. A draft of analysis of resistances and opportunities also appear in lines 8, 9 and 10.

The empty folder is for each partner to fill in. They will find that the file has many columns and, when filled in, many lines. The level of detail in the file has two goals:

- **Gather all data and analysis in one place** so each RPO/RFO can directly refer to the line or column relevant for each stage of the analysis. At each step, they can refer to the relevant cells of the file.
- The number of information encompassed in the file also ensures enough **flexibility for each partner** to use the column that find most relevant to them. Indeed, it is a guide to facilitate the analysis: if partners do not have the information to fill in every cell, they are still sure to have enough information to carry the analysis and build the scenarios. If they wish to add new column that are relevant for their specific institution, they can do so. This template is a guide that they can adapt at their convenience, if they can answer the main questions to be addressed in scenarios:
    - What is the present situation?
    - What is the goal we want to reach?
    - What solutions can be developed to reach the goal?
    - What are the possible resistances to the solutions?
    - What are the opportunities we can rely on?
    - Which strategies can we develop to overcome the resistances?

Before describing the Excel chart and the instructions to fill it in, here are some general advice on how to use it:

- It is advised to **make a copy if this file before starting to fill it in**, because it may be useful to use a new file after the consultative workshops. This is up to each partner to decide.
- When adding data, it is strongly advised to **insert a new line for each data**, even if the chart end up encompassing many lines. By "data", we refer to any piece of information added to the chart. Several examples of this can be found in the example from ULB: in the "situation" column" (column B), it can be seen that a new line was inserted for each data; in the "possible solution to the problem" column (column F), line 8, two lines were inserted to include only one solution in each cell. If a new line for each data is not inserted, the risk is to forget to which data the information contained in the rest of line refer.
- The many columns and lines can make the chart hard to read, but the goal is to gather all data and analysis in one place so partners can directly refer to the line or column relevant for each stage of the analysis. The amount of information encompassed in the file also ensures enough flexibility for each partner to use the column that find most relevant to them. Indeed, it is a guide to facilitate the analysis: **if partners do not have the information to fill in every cell, they are still sure to have enough information to carry the analysis and build the scenarios. If they wish to add new column that are relevant for their specific institution, they can do it.**
- Please keep in mind that this stage is **exploratory**. Feel free to use this chart as a **brainstorming tool**: even vague ideas of solutions, strategies or causes of the problem can be written down in the relevant cells. The strategic choices will be made in a later stage, so RPOs/RFOs can fill in as many cells as possible, even if they are not sure that they will keep those ideas along the whole process.
- We suggest that only **project managers** fill in the template at this stage. The consultation of internal actors will take place in workshops. However, if they want to fill it in collaboratively, alternatives will be proposed here after.

This being say, here are the steps to fill in the Excel file, the description of each column and the instructions to fill them in (it is useful to read the guidelines while consulting the Excel file):

1) **The first column gathers all the topics**. There are the same as the ones used to gather the data in the previous stage if partners chose to do it. In yellow are some general topics to help gather the data, and in white are the precise topics that appear in the project description. There is no need to modify this column unless some important topic relevant to the institution is missing.

2) **Make the context analysis**:
- **Column "situation"**: write the main results of the internal and external assessment in the relevant topic. Make sure to insert a new line for each result to clarify the analysis. It is the only compulsory column to be filled for the context analysis, but the more columns are filled in, the easier the development of scenarios will be.
- **Column "Positive aspect"**: if the situation described presents some positive aspects, write them here. It will be useful for two reasons: 1. It will facilitate the analysis of opportunities in the building of scenarios. 2. It will provide some arguments to overcome resistances by proving that the analysis is nuanced and that partners are trying to change everything that already exists (e.g., "We know what exists is good and what is good should be kept. However, it could be improved because it is not perfect yet.")
- **Column "problem"**: identify the problem in this situation. What can be improved? What is the problem that will need solving? This will be useful to identify resistances to the GEP and to develop strategies.
- **Column "hypotheses about the causes of the problem"**: if there are already some ideas about the causes of the problem, they can be written here. It is a brainstorming phase, so it does not have to be detailed. This will be useful to identify resistances and relevant strategies.
- **Column "possible solution to the problem"**: brainstorm a solution to solve the problem and reach the goal. This column is a draft for GEP strategies.
- **Column "goal"**: this column is useful if there are already some precise goals in mind or if the institution already defined goals. For example, if there is a quota of 30% of each gender in recruitment commission but this proportion is not reached in every commission, the goal could be

"reach 30% of each gender in every commission." This will be useful to evaluate the efficiency of the GEP in a later stage. It will also be useful to have a basis for discussion in the workshops with GEP working groups. Indeed, defining problems and solutions only make sense in relation to a defined goal: the problem is what impedes the realization of the goal, and the solution in the strategy to induce change to reach the goal.

Context analysis					
Situation	Positive aspect	Problem	Hypotheses about the causes of the	Possible solution to the problem	Goal

3) **Analyze resistances**:

- **Column "description"**: describe the foreseen resistances. They can already appear in the "problem" column or they may have been heard in focus group, for example.
- **Column "Intern/external"**: does this resistance rely in the internal or external environment? Select the correct tag. This is useful to identify the actors or organizations with whom develop strategic collaborations, as well as to evaluate to which extent the institution has control over the resistance. For example, if it is a national law, the institution has no control over it and cannot change it. It will have to develop internal strategies to mitigate the negative effects of the law.
- **Column "Actors who would object to the solution":** they are probably the ones who expressed the resistances.
- Partners will now detail the types of actors and distribute the data of the column "actors who would object to the solution "into three columns to be more detailed and analyze the variety of the stakeholders:
  o **"Actors with the power to decide"**: who has the power to approve the GEP? This is likely to be high and/or middle management actors.
  o **"Actors who implement decisions"**: who will have to implement the decision? For example, it can be workers in the administration who must enforce new rules. Another example is the professors who take part in recruitment commissions and who must apply quotas for gender applicants.
  o **"Actors who impacted by change"**: who will be impacted by change, either positively or negatively? For example, if a gender quota is introduced in recruitment rules for tenure, male applicants are negatively impacted because they have less chance to be hired; female applicants are positively impacted by change because they are more likely to be hired, but they can feel they are negatively impacted because they are not going to be judged on their merit. Professors who belong to the commission are also impacted because the new rules can make the procedure heavier for them. Please remember to add one line per actor, so partners can see the diversity of actors. Take this diversity into account will be useful to defines strategies that will be relevant to all.

- - **"Types of resistances"**: select the relevant tag for each column. The description of resistances can be found in D5.1 (p.15) (see abstract below):
    - o **Active/Passive resistance**
    - o **Explicit/Implicit resistance**
    - o **Gender specific/Non gender specific resistance**
    - o **Individual/Group resistance**
    - o **Personal/Institutional resistance**
- - Partners can find example of analysis of resistances in the PPT presentation of the CALIPER online workshop on "Internal engagement and change management strategy" (T5.1) of 22 July 2020[1].

4) **Design strategies to overcome resistances**: brainstorm strategies to overcome the identified resistances. For example, it can take the form of arguments to convince actors resistant to change. Partners can find examples of how to overcome the resistances in D5.1 (p.18) and in the PPT presentation of the CALIPER online workshop on "Internal engagement and change management strategy" (T5.1) of 22 July 2020[2].

3.1.1 Definition and types of resistance

In the context of a Gender Equality Plan, resistance can be defined as "opposition to the change that implementation of gender equality policies promotes"(FESTA, 2016, p. 8). This opposition is related to the actions but also the non-actions of different actors and can stem from both individuals and organisations. Indeed, organisations can constrain actors' possibilities to implement change by means of everyday norms and practices.

Resistance has multiple dimensions characterised by different continuums on which it ranges. It is important to be aware of the different shapes resistance can take in order to be able to identify it and address it more effectively. These dimensions are the following (FESTA, 2016):

- **Active/passive resistance.** Active resistance refers to subversive action, to take action to prevent the implementation of gender equality (being critical, blocking, finding objections, ridiculing); whereas passive resistance related to the act of being silent and not doing anything (agreeing verbally but not following through, withholding information).

- **Explicit/implicit resistance.** This refers to the visibility of the resistance, the extent upon which resistance is overt or covert. In the first case, the person shows an apparent and open opposition to gender equality work. In the second case, the person does not want to openly show resistance and finds more discrete or obscure ways to express it. The second type of resistance is, of course, more difficult to identify and address.

- **Gender specific/non gender specific resistance.** Resistance can be directly directed to gender issues or not. For instance, it can be linked to a general resistance to change in the organisation. This renders gender equality work difficult to perform, but it does not focus explicitly on it so there may be ways to overcome it.

- **Individual/group resistance.** This dimension refers to the number of people involved in resistance. It can be an individual, a few or a group.

- **Personal/institutional resistance.** The first one is related to someone's particular motives, traits, feelings, etc., whereas the second one is associated with the institutional culture or its legal and administrative procedures. It is however important to note that people can change institutional culture and the other way around.

5) **Analyze opportunities**:
- **Column "Allies"**: which actors are likely to support change?
- Column "Internal/External actors": are the allies internal or external actors? Select the correct tag. This will help define strategic collaborations and synergies.
- Partners will now detail the types of actors and distribute the data of the column "actors who would object to the solution" into three columns to be more detailed and analyze the variety of the stakeholders:
  - o **"Actors with the power to decide"**: who has the power to approve the GEP? This is likely to be high and/or middle management actors.
  - o **"Actors who implement decisions"**: who will have to implement the decision?
  - o **"Actors who impacted by change"**: who will be impacted by change, either positively or negatively?

		Opportunities		
Allies	Internal/External acto	Actors with the power to decide	Actors who implement decisions	Actors impacted by change

- **Column "Existing measures"**: which existing measures that could support change already exist, either within the institution (e.g., recruitment rules) or in the external context (e.g. laws)?
- **Column "Internal/External measures"**: is this measure internal or external to the institution? Select the correct tag. This will help define whether the institution has control over the measure or not, because external measures can be out of control of the institution.

Existing measures	Internal/External measures

6) **Change strategies**: the strategies here rely on the opportunities: how to collaborate with allies and rely on opportunities to implement change and reach the goal?

Change strategies - Opportunities		
1	2	3

3.4.1   Step 3. Building the scenarios

Now that the Excel file is completed, each RPO/RFO have all the data at its disposal to build the scenarios. Three scenarios must be developed: one where resistance is maximal, one where resistances are minimal and an intermediate one. In terms of the Excel file, this means that the scenario with maximal resistances will not take opportunities into account, the one with minimal resistances will not take resistances into account, and the intermediate scenario will take both into account.

A scenario is a **process** going from the present situation to the goal we want to achieve, with the steps to reach it in between:

Present situation (context analysis) ⟶ Solutions to the problems

Resistances to change and to the solutions   Opportunities to support the solution   Both obstacles and opportunities

(Scenario 1: maximal resistances)   (Scenario 2: minimal resistances)   (Scenario 3: intermediate scenario)

Strategies to overcome resistances   Strategies relying on opportunities   Strategies to overcome resistances and relying

on opportunities

Goal to reach

The RPOs/RFOs will now translate the data encompassed on the spreadsheet into text to build draft scenarios. For each scenario template, they need to choose the priority goals they want to achieve and make a synthesis of the data. They will find the structure in Word documents in Annex, but here is the structure we propose. The goal of this document is to synthetize the information. The scenarios are more easily written by **project managers**, before the consultation with the GEP working group. After the consultation with the working group, they will refine this document and it will be the basis for the development of the GEP in T2.3. However, if they wish to organize more than one workshop with the working group and if they have time to do so, they can organize a consultation workshop before writing the draft scenarios. In this case, refer to the guidelines in Step 4, "Consultation workshop with the GEP working group".

The proposed structures for each scenario draft are listed below:

Scenario 1: maximal resistances

> *For each topic (e.g., recruitment procedure), we propose the following structure:*

> *The situation is ….*

> *The main problems are…*

> *The goal is/ The objectives are…*

> *Possible solutions could be…*

> *The expected resistances are:*

>> - *Coming from the rules or structure of the organization:*
>> - *Coming from the administration:*
>> - *Coming from middle management:*
>> - *Coming from high management:*

- *Coming from researchers:*
- *Coming from students:*

Possible strategies to overcome the resistances are:

- *Argumentative:*
- *In the rules of the organization:*
- *Other actions:*

Stakeholders to involve in strategies (through collaboration/information/argumentation etc.) are:

- *Internal stakeholders:*
  - o *Who have the power to decide to change the organizational rules/to accept the proposed strategy:*
  - o *Who will implement the strategy:*
  - o *Who will be impacted by the strategy (positively or negatively):*

- *External stakeholders:*

Actions to be taken to ensure stakeholders' collaboration:

- *Argumentative action:*
- *Organizational change actions:*
- *Etc.*

Scenario 2: minimal resistances

The situation is ….

The main problems are…

The goal is/ The objectives are…

Possible solutions could be…

The expected opportunities are:

- *Coming from the rules or structure of the organization:*
- *Coming from the administration:*
- *Coming from middle management:*
- *Coming from high management:*
- *Coming from researchers:*
- *Coming from students:*

Stakeholders to involve in strategies (through collaboration/information/argumentation etc.) are:

- *Internal stakeholders:*
  - o *Who have the power to decide to change the organizational rules/to accept the proposed strategy:*
  - o *Who will implement the strategy:*
  - o *Who will be impacted by the strategy (positively or negatively):*

- *External stakeholders:*

Actions to be taken to ensure stakeholders' collaboration:

- *Argumentative action:*
- *Organizational change actions:*
- *Etc.*

Scenario 3: intermediate scenario

The situation is ….

The main problems are…

The goal is/ The objectives are…

Possible solutions could be…

The expected resistances are:

- *Coming from the rules or structure of the organization:*
- *Coming from the administration:*
- *Coming from middle management:*
- *Coming from high management:*
- *Coming from researchers:*
- *Coming from students:*

Possible strategies to overcome the resistances are:

- *Argumentative:*
- *In the rules of the organization:*
- *Other actions:*

The expected opportunities are:

- *Coming from the rules or structure of the organization:*
- *Coming from the administration:*
- *Coming from middle management:*
- *Coming from high management:*
- *Coming from researchers:*
- *Coming from students:*

Stakeholders to involve relying on the opportunities (through collaboration/information/argumentation etc.) are:

- *Internal stakeholders:*
  - o *Who have the power to decide to change the organizational rules/to accept the proposed strategy:*
  - o *Who will implement the strategy:*
  - o *Who will be impacted by the strategy (positively or negatively):*

- *External stakeholders:*

Actions to be taken to ensure stakeholders' collaboration:

- *Argumentative action:*
- *Organizational change actions:*
- *Information actions:*
- *Engagement actions:*

- *Etc.*

3.4.2   Step 4. Consultation workshop with GEP working group

To organize workshops with working group, RPOs/RFOs must answer several questions.

    1.   What is the goal of the workshop?

The goal is twofold.

- **Receive the input from the stakeholders about the building of scenarios.** Stakeholders are experts of their own experience and can be creative about solutions to their problem.
- **Engage stakeholders in the process to ensure their engagement in the implementation of the GEPs.** The collective consultation of stakeholders fosters collaboration, consensus building and engagement.
- **Analyze the reactions, resistances, and internal diversity of the stakeholders**, which should be considered in the scenarios. Indeed, the resistances they express explicitly or implicitly must be analyzed by project managers and must be addressed in the change strategies. Moreover, attention must be paid to the diversity of reactions to foster an intersectional approach. For example, not all female researchers are in favor of quotas.

    2.   Which stakeholders are relevant for the workshop?

The minimum group to be consulted is the GEP working group. However, feel free to invite any other relevant stakeholder. For example, the participants to the focus group organized on WP1, internal stakeholders who expressed their interest in the project without having yet participated, high management members, internal experts, etc. It may be useful to go back to the **mapping of internal capabilities** that was conducted at the beginning of the project.

To reflect the diversity of status and reduce power-related bias, it is interesting to ensure diversity of participants in terms of gender, age, seniority, professional status, hierarchical level etc.

The number of stakeholders to invite depends on the tools RPOs/RFOs want to use and on the availability of participants. However, to ensure a collective dynamic and diversity of participants, **a minimum of 6 participants** is advisable.

    3.   How to structure the workshop?

The structure of the workshop depends on the stage of the process each RPOs/RFOs is in. For example, if consultation happens at the beginning of the scenario building process, the aim can be to brainstorm ideas. If consultation happens in the middle of the process, they can evaluate the draft of the scenarios. If consultation happens at the end of the process, evaluation or consensus building tools can be useful.

→ See section 3.4. for alternative action flow of workshops organization.
→ See chapter 6 for more information in how to organize workshops, especially point 6.1 for general advice and 6.4. for advice on the tools to use.

3.4.3   Step 5. Refine the scenarios

After each workshop, partners add the data gathered to the Excel file. The work is nearly done. Refining the scenario means adding any new information to the draft texts of scenarios and proof-reading them to check their consistencies. This document is the draft for the design of the GEP in T2.3.

3.5   Alternative action flows

Co-design implies the direct participation of stakeholders in the process. Therefore, at least one consultation workshop must be organized with stakeholders. However, various levels of participation are possible. The choice of the level of participation depends on several criteria, like the availability of stakeholders, the schedule of project managers, the time left to complete the task, etc. Therefore, we propose several examples of action flows that each partner can choose from and adapt.

The basic structure is the same: organizing the data from WP1 in the Excel file template, writing the scenarios, refining the scenarios. We advise to organize between one and three consultation workshops in this action flow, which would make possible three levels of participations:

- **Minimal level of participation:** (pre-organizing data from WP1 in a thematic text – optional), organizing the data from WP1 in the Excel file template, writing the scenarios, **consultation workshop with working group**, refining the scenarios.

Subtask	Description	Timeframe	Implementing Partner
Pre-organize data (optional)	**Synthetize and organize of the internal and external assessment in a thematic text**	**Jan- M13**	**All RPOs/RFOs**
Organize data for the scenarios	**Fill the Excel file with data from the internal and external assessment (with or without consulting GEP working group)**	**Jan – M13**	**All RPOs/RFOs**
Consultation workshop (optional)	**Consultation workshop with GEP working group to evaluate the priority problems and strategies to be included in scenarios**		
Design three scenarios	**Translate the data of the Excel file into text: one for each scenario**	**Jan – M13**	**All RPOs/RFOs**
Consultation workshop with working group	**Consultation workshop with working group to evaluate the scenarios**	**Jan – M13**	**All RPOs/RFOs**

Refine the scenarios	Add the input from the GEP working group to the scenarios	Jan – M13	All RPOs/RFOs

- **Intermediate level of participation:** (pre-organizing data from WP1 in a thematic text – optional), organizing the data from WP1 in the Excel file template, **consultation workshop with working group,** writing the scenarios, **consultation workshop with working group**, refining the scenarios.

- **Maximal level of participation**: (pre-organizing data from WP1 in a thematic text – optional), organizing the data from WP1 in the Excel file template **with the help of the GEP working group (e.g., in a shared document)**, **consultation workshop with working group,** writing the scenarios, **consultation workshop with working group**, refining the scenarios.

In the next table, the timeframe and implementing partner for each task and subtask is presented.

4   Organization of multi-stakeholder dialogues

Upon identification of the different working scenarios in T2.1 and building on the T1.3 results, the CALIPER Research & Innovation Hubs will be set up by each involved RPO/ RFO. Multi-stakeholder dialogues will take place in the form of two workshops. Hubs have a light/flat structure and will be used to brand and communicate the existing collaborations at each regional/ national ecosystem, to identify common challenges and carry out joint efforts of promoting gender equality as a mark of excellence and a driving force for innovation.

Led by each GEP Working Group, and steered by top and middle management representatives, 2 dialogue workshops will be organized at each RPO/ RFO to discuss outcomes from T2.1 to identify the key challenges around which the 9 partner institutions shall develop their own GEPs in order to maximize synergies and collaborations with their own research and innovation environments. Dialogues will proceed along 4 main steps: 1. Review the scenario description delivered in T2.1, 2. Assess implications of the scenarios,3. Identify the best strategy opportunities and threats, 4. Develop a portfolio of strategic priorities. The main expected outcome of this task is reinforcement of top and middle management awareness of how gender equality can contribute to excellence and innovation in a networked context. Participatory design thinking will be used ensuring the maximum and broad involvement of the various stakeholders.

4.1   What are the goals of the multi-stakeholder dialogues?

The goals are to:

- Discuss the strategic change scenarios to add the input of external stakeholders and engage them on the topic of gender equality.

- Identify common challenges and carry out joint efforts of promoting gender equality as a mark of excellence and a driving force for innovation.

- Maintain a dedicated network of external facilitators for the GEPs design, implementation, and sustainability.

The main expected outcome of this task is reinforcement of top and middle management awareness of how gender equality can contribute to excellence and innovation in a networked context.

4.2   How to set-up the R&I hub?

The hubs will involve **the key external stakeholders selected among those identified during the proposal phase and also in T1.3**, with **a quadruple helix approach**: the Hubs will be formed by the main partner organizations of research and innovation ecosystems at regional and national levels, with a balance among research and academia, government, business and civil society.

Vilabs will provide guidelines to explain how to contact stakeholders in T5.2.

4.3   How to conduct workshops with the R&I hub?

Dialogues will proceed along 4 main steps:

1.   Review the scenario description delivered in T2.1.
2.   Assess implications of the scenarios.

3. Identify the best strategy opportunities and threats.
4. Develop a portfolio of strategic priorities.

Step 1 and 2 can take place on the first workshop (e.g., using evaluation tools), while steps 3 and 4 can take place in the second workshop (e.g. using consensus-building tools). See chapter 6 for advice on how to build the workshops and how to choose tools/activities.

5   GEP's design and development

5.1   Scope of T2.3.

The main scope of this task will be to merge results of the multi-stakeholder dialogues of the previous task together with inputs from the internal assessments held in WP1 and through a co-design process develop the GEPs followed by an implementation roadmap. Findings from tasks in WP1, T.2.1 and T2.2 will be elaborated, summarized, and made available in a highly communicative format such as infographics and conceptual maps and shared at first within the GEPs Working Group for a further internal consultation with middle and top management representatives in order to identify the most appropriate strategy and a set of feasible solutions to address the existing challenges previously identified. To fully exploit the co-design environment set up along WP1, T2.1 and 2.2, the identified GEPs Strategy will be exposed to feedback from the Research and Innovation Hubs through an additional workshop organized by each RPO/RFO and finalized in a GEP document to be formally approved and signed by the relevant administration/ academic boards. Following guidelines foreseen in the GEAR Toolkit, the GEPs will define SMART objectives and measures that are Specific, Measurable, Attainable, Realistic and Time related.

5.2   Action flow

Task T2.3. will take place in three steps:

-**Step 1**: Start the GEP design with a consultation meeting with High and Middle Management where results from all the previous steps are condensed and presented, and discussed to give shape to clear GE strategies, and the main actions.

-**Step 2**: An additional meeting with R&I Hubs to confirm their commitment to collaborate under specific GEPs actions where their contribution can be relevant.

-**Step 3:** The Final version of the GEPs where the Gender Equality Strategy is presented, each action described in details and a timeline set.

Guidelines will be further elaborated by Smart Venice, as task leader. Smart Venice will provide:
- A repository of possible measures to be put in place to address the challenges under each area of intervention (by M15).
- Templates to structure a reasoned description of each action to be included in the GEP already aligned with monitoring and evaluation across WP3 and WP4 (By M15).
- On-demand individual guidance to the GEPs WG in the GEP Design process (between M15 and 18).

5.3   Next steps and calendar

Subtask	Description	Timeframe	Implementing Partner

Creating a repository of actions/measures	**Per challenge and area of intervention**	**M15**	**SV**
Design templates to describe GEPs Actions	**Aligned with WP4**	**M15**	**SV + UOC**
Organizing meeting(s) with High & Middle Management	**Present and discuss results from T2.2, outline of the GEP and its actions**	**M15-16**	**RPOs/RFOs**
Organize one more meeting with R&I Hubs	**Get confirmed commitment and finalize details of collaboration x GEP's action**	**M17**	**RPOs/RFOs**
D2.3 preparation	**Final version of the GEPs (and their formal internal approval in parallel)**	**M18**	**ViLabs and SDV**

6　Co-design toolkit

This toolkit presents several tools organized by categories, so RPOs/RFOs can choose the most relevant one for them in each workshop. Before presenting all the tools, partners will find some general tips to organize online workshops as well as a brief presentation of different online platforms on which they can use. Keep in mind that these guidelines are meant to be used as a guide. Some extra resources for the toolkit are also provided.

6.1　General tips for online workshops

Some general rules apply to all participative workshops, such as time management or participation rules. In online workshops, these need to be adapted. Here are some tips to ensure smooth online workshops:

- **Time** is an important factor.
    - o　Be **clear** about the time each activity takes and announce it to stakeholders.
    - o　Make sure to **check the time** of each activity, e.g., by setting an alarm clock or even an online chronometer.
    - o　**Choose the activities according to the time available** to the workshop.
    - o　Online workshops are tiring. A workshop should not last more than **two hours** in a row. If it is longer than two hours, organize breaks.

- Create a **safe space**. In online workshops, you cannot use the space to create a comfortable environment. You must there adapt yourselves to the tools at your disposal.
    - ▪　**Create the group in a way that makes everyone equal**, e.g., with an energizer exercise or an "inner weather exercise". If participants do not know each other, start by letting everyone present themselves in the workshop, try to address participants by their name instead of their title to do reduce power relations.
    - ▪　**Clearly explain the goal of the workshop**. Explain that the goal is to let them express their own experience and to create common solutions.
    - ▪　**Make the rules of participation clear**. To make sure that everyone is given the same chance to participate, be clear about the way each one can participate. Depending on the activity, microphones should be on or off, or only on when speaking. Define if participants should raise their hands before speaking or speak whenever they want. Define if they can use the chat, when and what for. Ask that everyone to keep their camera on. If the participation rules are the same during the whole workshop and do not change in each activity, you can also send them by email to participants in advance with the practical details of the workshop and remind them orally at the workshop.
    - ▪　If participants do not respect participation rules, make sure to **remind them of the rules** in the workshop to avoid the structuration of power dynamics between participants.
- Be fully **available** to what is happening. To do so, you must be ready to deal with the unexpected.
    - o　Make sure you know **how to use the online tools**. If needed, test them beforehand with a colleague.
    - o　Make sure **the rules of each activity are clear to you** so you can answer unexpected questions from participants.
    - o　Be prepared for **unexpected events**:

- What if a participant is unable to come at the last minute? Does it impede the activity you had planned?
- What is there is technical problem, for example with the internet connection? Is the timespan sufficient for you to wait to see if the problem solves itself? Do you have the contact of a technician at hand? Can you reschedule the workshop another time?

o Are there any **technicality** participants should be aware of? Should send technical explanation on how to use the online platform beforehand or is it unnecessary? Keep in mind that if participants must learn to use the platform on D day, you may lose much time.

o If possible, make sure you are **not alone** to animate the workshop. Between two and three facilitators should ideally take part: one to animate and explain the rules, and another to check the time, the technical problems, the chat and observe the dynamics between participants. If you can be three, the roles are more precise: 1 animator (explain the rules, animate the activities), 1 technical assistant (check the time, the technical problems, manage the chat), 1 observer (of the dynamics between participants, the resistances they express and their diversity).

Examples of rules of participation

- Rounds: everyone speaks in turn in a given order, that facilitator decides. No one can interrupt. The facilitator can also add a duration for everyone. It ensures equal participation of all. Mics are only on when speaking.
- Raise hands: most online tools have a "raise hand" icon. If not, participants can physically raise their hand. Mics are only on when speaking.
- Everyone speaks when they want: it is not ideal to ensure an equal speech time to everyone, but it can be useful for brainstorming. Mics can all be on unless there is too much echo.

6.2 Online platforms

Online platforms provide several tools that RPOs/RFOs can use. We only present some of them in this guide: before using them, we advise to check which platform each institution is using and what possibilities they offer.

The two most useful tools on online platforms are collaborative white boards and – but for some of them only – the possibility to create sub-groups of participants. If you wish to make sub-groups but it is not possible with the platform you use, you can still send several meeting links and create groups yourselves, even if it more complicated.

Some tools are complete collaborative platforms and can enable you to work on various pre-designed boards models (Miro and Mural), but they are not free (although you can try them for free). Others are simple white boards (Jamboard). Miro, Mural and Jamboard do not include videoconference tools, they are to be used aside.

Here are some of the main platforms:

Platform	Video calls	White board	Sub-groups	Free or not free	Link

Zoom	Yes	Yes	Yes	Not free if more than 40 minutes	https://zoom.us/
Microsoft Teams	Yes	Yes	Yes	Not free	https://www.microsoft.com /en-gb/microsoft-365/microsoft-teams/download-app
Skype	Yes	No	No	Free up to 50 persons	https://www.skype.com/en /
Jamboard	No (separately with Google calls)	Yes	No (unless you create several boards)	Free	Jamboard.google.com
Mural	No	Yes (many kinds of boards, including storyboarding for scenarios) Complete collaborative tool (timer, voting etc.)	No (unless you create several boards)	No (from $12/month) But 30-days free trial	https://www.mural.co/
Miro	No	Yes (as well as other kinds of boards: mind map, user	No (unless you create	No (but three boards for free)	Miro.com

		story etc.)	several boards)		
Wooclap	No	No but interactive tools (brainstorming , voting, answering questions, sorting out elements…)	No	Free with limited options, then several pricing plans with more options	https://www.wooclap.com/

6.3   Types of tools and activities

In this section, RPOs/RFOs will find some example of tools they can use. A limited number of tools is presented in this toolkit to make the choice easier. However, tips to adapt them are often proposed, so each tool encompasses various possible activities.

For more resources and tools, see for example:

- The ACT on Gender "Community of practice co-creation toolkit"
- The website www.seedsforchange.org.UK/resources: it has many tools organized by category and facilitation tips.

How to use the toolkit?

Partners will first find a list of tools divided by category, to help them choose the most relevant tools for their need. They can be adapted it to another duration, group size or task.

The categories used in this toolkit are:

- Energizers and icebreakers

- Brainstorming

- Prioritizing ideas

- Evaluate ideas and explore ideas in depths

- Consensus-building

All activities are designed for online platforms.

Several variants of the same tools are often proposed so that they can be adapted to specific needs.

Several options are available. Let us take the example of building scenarios.

1. Mix-and-match short activities to fit your need. Design the general structure of the workshop and choose the most relevant tool for each stage.

   For example:

   Goal = Fill in the scenario template (T2.1): Energizer – ice-breaker – brainstorming – prioritizing

   Goal = refine the scenarios: prioritizing – evaluating – consensus building

2. Choose a long workshop structure and use it as a basis for your workshop (Future workshop OR fishbowl OR focus group). Possibly add an icebreaker or energizer at the beginning or start with a brainstorming session. For T2.1, the Future workshop works very well.

What if I am not an experienced facilitator?

It is fine. The tools in this toolkit can be used by anyone. If partners do not feel confident, it can be better to use a combination of short tools. Or, on the contrary, choose one long structure and stick to it without adapting it or adding shorter activities to it.

Alternatively, there exist some professional agencies specialised in participatory process. They can either assist RPOs/RFOs to choose the most relevant tools, or even facilitate the workshops for them. Look for existing agencies in your country.

6.4 Toolkit

Category	Tool	Goal	Time	Group size	Advised for task...
Energizers and icebreaker	Shake down 5-4-3-2-1	Energize Start a workshop Release tension during a workshop	5 m.	Any	Any
	Four quadrants	Start a workshop Introduce group members Break the ice Team building Take the temperature of how everyone is feeling	5-15 m.	Any	Any
Brainstorming	Brainstorming (basic)	Gather as many ideas as possible in a short time	10-30 m.	5-15	T2.1 Or when stuck
	Open brainstorm	Gather as many ideas as possible in a short time	5-10 m.	Subgroups of 3-6	T2.1 Or when stuck

Prioritizing ideas	Diamond	Sort out ideas by priority, for example after a brainstorming	10-20 m.	5-20	All T2.1: good after brainstorming and/or refine the scenarios T2.2: good to refine the scenarios T2.3: good to define strategic priorities
	Urgent/important grid	Mapping ideas or topics according to their priority level	10-20 m.	2-50	All Idem Diamond but quicker: use whenever stuck
Evaluating ideas Explore ideas in depths	Pros and cons	Decide between different options and to identify different needs and priorities around an issue	15-30 m.	3-20	All T2.1 as an exploratory tool T2.2 to refine scenarios T2.3 as a decision tool

	Heart, Hand, Mind	Examine an issue / problem from many different angles and standpoints

To solve conflicts | Min. 20 m. | 5-15 | T2.1: analyze the different kinds of resistances and strategies to apply

T.2.: to refine the scenarios

Or

Whenever there is conflict or disagreement |
| | Future workshop | Design your desired future

Develop unconventional and imaginative solutions to an issue or a problem | Min. 2h (It can as a structure for a whole workshop or even be split into several workshops along all the tasks) | 5-20 | T2.1

T2.3

Note: it can be used in T2.2 but make sure to base the analysis on the existing scenario drafts. |

	The Fish Bowl	Explore a question in depth. - Promote vitality and creativity in a discussion. Enable everyone to participate.	Min. 20 m. (up to > 1h, depending on the depths of discussion you want – you can also use it as canvas to be separated in several steps)	Min. 8	All
	Focus groups	Gather information, opinions, feedbacks about stakeholders' experiences	Min. 1h	Min. 4	All (it is not the most participative tool but it can be combined with other tools)
Consensus building	2, 4, 8 consensus	Prioritizing in large groups	Min. 1h	Large groups, min. 16 Sub-groups necessary	All to close a workshop (after brainstorming and prioritizing for example) T2.3 especially

	The double go-round	Allow everyone to contribute Reach consensus	Any	Any	All Whenever a decision must be made, but especially in T2.3 (decision phase)

6.4.1   Energizers and icebreakers

Shake down 5-4-3-2-1

Any number of people; 5 minutes

Goal: This very short energiser works well to get people's energy up quickly - or to calm them down if they have tension to release! It does not involve physical contact, or too much 'looking silly'.

Steps:

Everyone shakes their left arm five times, counting to five along with each shake. Model doing this enthusiastically to help people get into it.
Repeat with the other arm, then each leg.
Repeat, with each limb four times. Then three, and so on down to one.

This is specifically interesting for online workshops where participants are sitting without moving at all. It can make them more active and create a feeling of belonging to the group even if they are separate by screens. It is also useful to create a feeling of equality because participants, regardless of their hierarchical level.

Source : www.seedsforchange.org.uk/

Four quadrants
5-15 minutes – Any number of participants

Goal: introduce group members, break the ice, team-building, take the temperature of how everyone is feeling. It is about answering four questions that can be personal or professional. It is recommended that you use a mix of personal and professional questions to keep the activity fun, but focused at the same time. You can also choose to keep it only professional. The template includes four examples: *My Hobby, My Vision for the project; What I Bring to the Project; What I Need from the Group*. However, feel free to introduce your own labels that are more suitable to your community's needs.

You will find two options below: a long version and a short version.

TIP: this icebreaker can be used in every workshop because you can ask a different question each time as to avoid making it repetitive. The question you ask also helps create a focus on what you want to work on in the workshop.

Steps:

Brief explanation

This method is based on everybody answering the same four questions. Each participant divides his or her paper into four quadrants and writes the answer to one question in each of those quadrants. After a certain amount of time of individual work, the participants regroup and present their 4 quadrants and their answers.

Detailed step-by-step guide (long version)
- Firstly, the facilitator needs to present the possible questions for this activity. Other questions could be as follows. You can let your participants prepare some ideas in advance of the event:

• My happiest moment
• My biggest challenge in this project
• My wildest dream about this project
• My most valuable skill for this project
• My most remarkable, defining moment in my life
• My weakness/strength in this project

- There is no limit on how many people can form part of this activity. Subdividing the whole group can be helpful if you are working with a large group. Everyone is included and has equal opportunities to contribute.

- In the beginning everyone works alone and answers four questions. For this, each participant gets a piece of paper or chart and divides it in four quadrants. Then the participants write down the answer to the four questions in one quadrant each.
- After a couple of minutes each person shares his or her answers with the whole group. If you have more time you can invite questions from the other participants about each quadrant.

Template (adapt the topics to the ones relevant for you)

My hobby	My vision for the project
What I bring to the project	What I need in the group

Additional ideas / information

- Participants can be very creative in the way they illustrate their answers. They do not have to write it down but can also draw something, use pipe cleaners to create shapes, Lego blocks, etc.
- This activity is adaptable online. You can distribute the template via email in advance for the participants to print out. The participants present their creations to the web camera – verbally, supported with drawings, or other creations, etc. It is possible that your online communication tool has an option to create a drawing/writing note in real time to share with the other participants.

Short version

You can also use this tool as a short ice-breaker. You can one or several questions to each participant who answer in turn. You can either write down the answer or not.

If you choose to write down the answers on a white board, this can be useful to create a feeling of belonging and collaboration. For example, if you ask "what is my wildest dream for this project", you create a feeling of sharing common goals. If you ask "what is my biggest strength in this project", you recognize that everyone has some king of expertise regardless of their position in the institution, and you help foster collaborations because everyone can identify who could be useful to collaborate with based on their ability.

Source: adapted from: The ACT on gender « Community of practice co-creation toolkit"

6.4.2   Brainstorming

Brainstorming: basic principles

10-30 minutes – 5-15 persons

Goal: gather as many ideas as possible in a short time.

Steps:

1. Explain the problem. For example, "more men than women are hired by recruitment commissions for tenure. Which strategies can we develop to change this?"

2. Ask participants to share all the ideas that come to mind. Insist that only ideas are accepted, not comments or reflexions on the ideas. There are two possibilities:
- Ask participants to share their ideas aloud. Write them on **a shared white board**.
- Ask participants to write directly on the shard white board, for example, by writing one idea per post-it.

3. Organize the ideas on the white board. You can involve the participants in this. Several kinds of organization are possible:
- By topics: are there different kinds of strategies?
- By feasibility: are they impossible, unlikely, possible, likely?
- By preference: sort them out from the one participant like least to the one they like most.
- Etc. (see point 6.4.3. for more prioritizing tools)

In practice, you can gather similar ideas on the board and add title to the category, for example using a post-it.
→ Brainstorming is a useful tool to start a reflexion. Depending on how you choose to organize the ideas, you can start a different reflexion. (see point 6.4.4. for more tools to evaluate ideas)

Variant: if you know how you want to organize the ideas, you can prepare in advance a white board with title and ask participants to write their ideas directly under the right title.

Source: adapted from the guide "Outils de facilitation pour réunions et ateliers" by Agir pour la Paix

Variant: the open brainstorm

### Subgroups of 3-6 peoples – 5-10 minutes

Steps:

- Break a large group of people to smaller groups of 3-6 people and present them with a development question for idea generation. The challenge is either pre-defined (you already have it) or to be defined together with the participants (you do not have it yet and need to brainstorm what the problem/challenge is). The development question should be written on a post-it notes and put in the middle of the poster (template provided).

- The group generates ideas on the question for about five minutes and then places eight ideas in the areas around the challenge. The ideas should be written on post-it notes in a different colour to the development question.

- This brainstorm is adaptable online. Instead of physical sheets and post-it notes, you could create a shared document which the participants can contribute to. Alternatively, the facilitator collects all ideas either verbally one-by-one or asks the participants to send them a message via the online conference/ meeting software to collect contributions.

If the issue is controversial, this may encourage honesty and ideas even from the more introvert or shy personalities.

Template:

**DEVELOPMENT
QUESTION**
(post-it note)

Source: Act on gender - Community *of practice co-creation toolkit*
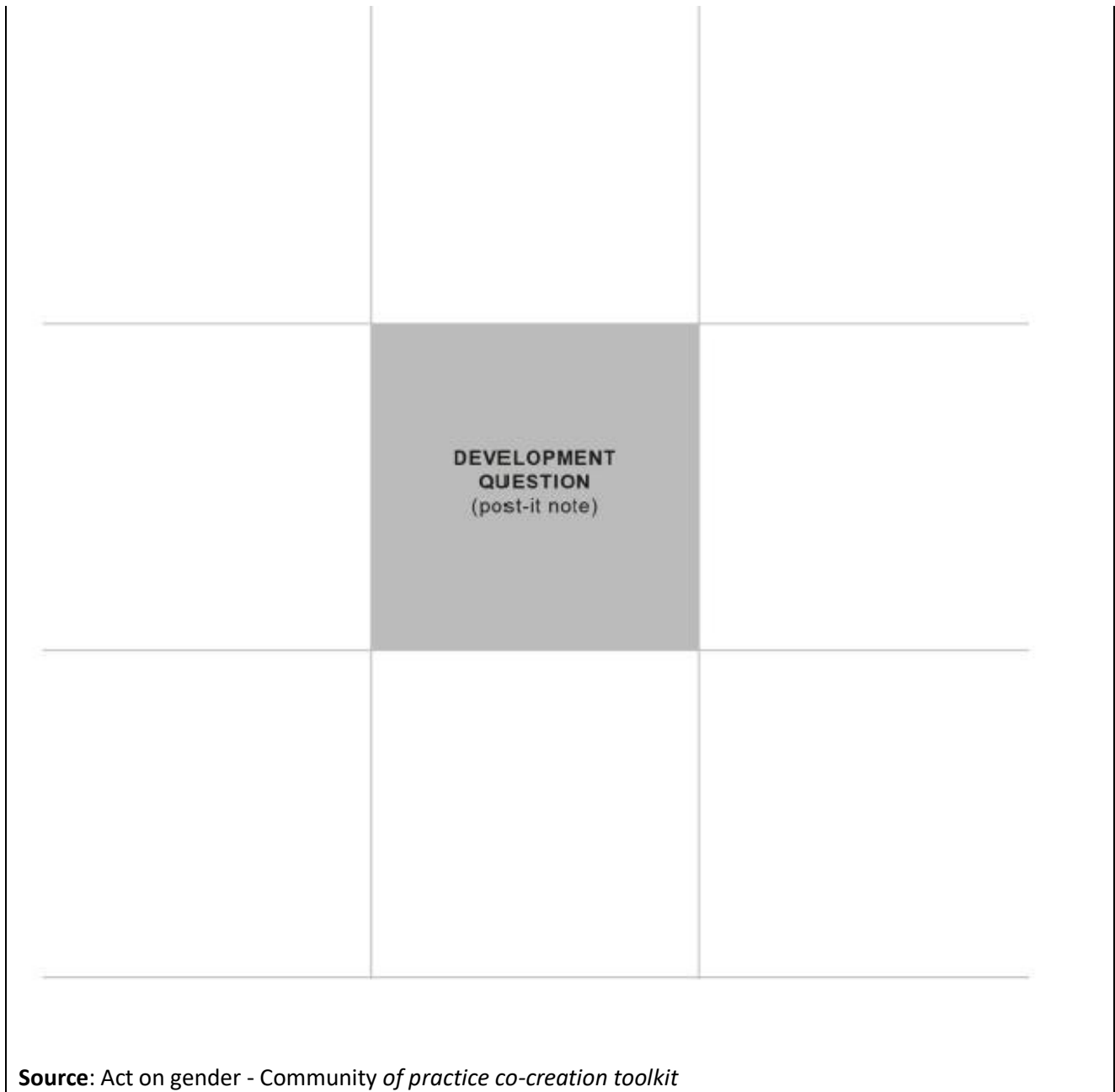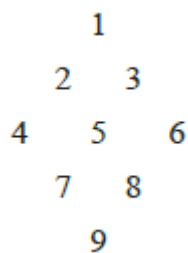
6.4.3   Prioritizing ideas

Diamond - Prioritisation
10-20 minutes – 5-20 persons

Goals: sort out ideas by priority, for example after a brainstorming

Steps

Asking participants to make a diamond:

```
          1
      2       3
  4       5       6
      7       8
          9
```

1 = the idea you support the most

2-3 = the two next best ideas

4-5-6: three other possibilities

7-8: the ideas that are not much supported.

9: the idea that is the least supported.

There are several ways to make a diamond:

1. Either with the whole group or by sub-group (to compare them afterwards and make a common diamond)

2. By asking participants to talk together and negotiate or by asking them to vote (e.g., with Wooclap) and translate the result of the vote into a diamond yourself.

Source: adapted from the guide "Outils de facilitation pour réunions et ateliers" by Agir pour la Paix

Urgent/Important grid

10 - 20 minutes; 3 - 50 people

Goal: mapping ideas or topics according to their priority level.

Steps:

A classic time-management tool that can be applied to group prioritization. The group maps ideas according to their urgency and importance. You can use this tool on the white board. Add labels at the end of the lines to remind people what they mean.

Source: https://www.seedsforchange.org.uk/

6.4.4 Evaluating ideas – Explore ideas in depth

<div>

Pros & cons

15 - 30 minutes; 3 - 20 people

Goal: This tool can be used to decide between different options and to identify different needs and priorities around an issue.

Steps:

For each idea, list the benefits (pros) and drawbacks (cons) and compare the results. Most group will benefit from a third category of 'other' or 'interesting' to mop up any points which are not obviously a pro or a con. You could do this in the form of a table or a mind map.

This can be done as a full group, in pairs or small groups with feedback. You could also task small groups to work on the pros and cons of a different idea each and then report back to the group.

Sometimes groups find it helpful to score the pros and cons according to how significant a benefit/problem they are. For example, if a shared household were choosing a new kitchen table 'we can't afford it' might be ranked as 9/10, and 'we don't like the colour' might only rank 2/10 because it could be re-painted.

Things to be aware of

You may find that you do not all agree on what is a pro and what is a con. Or you might have different views on which pros and cons are most significant. This can be a great starting point for discussion about your differences. However, it helps to think in advance how you will take differences into account when recording people's answers. For example, record the same point in both the pros and cons column if people do not agree.

'Pros and Cons' may not be the best language for every situation. Alternatives include pluses and minuses, strengths and downsides, opportunities and challenges etc.

Source: https://www.seedsforchange.org.uk/

</div>

Heart, Hand, Mind

5-15 participants – min. 20m

Goal: This activity aims at examining an issue / problem from many different angles and standpoints. Heart, Hand, Mind helps to recognize that both our intellect AND our emotions are what makes projects, activities and experiences appealing to us. This tool uses the three separate lenses of the heart, the head, and the mind to inspire reflection of how each could impact an issue, plan or project.

This activity is especially helpful if various standpoints collide and are incompatible. Heart, Hand, and Mind facilitates the swap of point of views and therefore helps to understand the opinion, perspective or argument of others better.

TIP: this tool can be useful in T2.1 to analyze the different kinds of resistances and strategies to apply. It is also useful in T2.2 to refine the scenarios in multi-stakeholder dialogues. It can also be used whenever there is a conflict or disagreement.

Steps

Brief description

By using the three glasses "heart, hand and mind" an issue or project is being seen not only as it is but in its different components. Looking at an issue like this also helps to change perspective on precisely that.

Detailed step-by-step guide

1. Look at an issue, project, idea, or procedures using these three "glasses":

Heart: Why is this topic/task/project etc. emotionally engaging? Hand: What is it that makes it substantial and practical?

Mind: What are the reasons that it is logical and sensible?

2. Make a list of the characteristics or features that appeal to each one of the "glasses".

3. Rate the categories with points from 1 to 10 to evaluate strengths and weaknesses.

Additional ideas / information

Another way of using these three aspects could be to

4. establish rapport and seek empathy with your listener (heart);

5. appeal to your listener's desire for evidence (head); and

6. ask your listener to take action (hand).

• It is important to start with having a goal in mind and to apply "heart, hand and mind" on it.

• Inspire the participants with the following quote:

"It's impossible, said Pride. It is risky, said Experience. It is pointless, said Reason. Give it a try, whispered the Heart."

– Anonymous

Example

HEART - What makes it emotionally engaging?

Example: Gender equality is a must for social justice and creating equal opportunities for all. It is the right thing to do.

HAND – What makes it tangible and practical?

Example: Half of the national population is female, so it is possible to have an equal representation of women in society. Also, women do better academically than men, so they are well-qualified to achieve what they aspire to.

MIND – what makes it logical and sensible?

There are talent shortages in the knowledge economy, so work organizations cannot afford to lose valuable female talent and should actively attract female candidates to work for them.

Source: The ACT on gender « Community of practice co-creation toolkit"

Future workshop

5-20 participants – min. 2h (up to a day – it can be split into several workshops as well)

Goal: The aim of Future Workshop is for all participants to design their desired future without any objections or restrictions from experts or the organization or leading personalities. The aim of this activity is two-fold: first, to design your desired future, and second, to develop unconventional and imaginative solutions to an issue or a problem. Overall, Future Workshop works with an atmosphere that promotes creativity and visionary thinking.

When to use

Future Workshop is helpful to use when new ideas need to be developed and visions need to be explored. Furthermore, it leads to gaining new perspectives as well as a clear view of future developments and possibilities for oneself and the organization.

It is also suitable if creative and visionary solutions for a problem are needed or if new perspectives and visions for the future development of the organization are wanted.

TIP: you can split the process along the tasks or repeat the process along the tasks but focusing more a different part in each task (e.g., focusing more on the criticism and vision phase in T2.1 to develop the scenarios and on the implementation phase in T2.3 to develop the GEP).

Steps

Brief explanation

Future Workshop consists of three main phases:

• Phase 1: Criticism phase – in this phase the current situation is being analyzed and problems are being identified.

• Phase 2: Vision phase – ideas and suggestions are being developed (the initial ideas do not have to be realistic and can be visionary or utopian). Possible obstacles are being ignored at this stage. Participants can think big, everything is possible and there is no right or wrong.

• Phase 3: Implementation phase – the suggestions are being structured and now it is being evaluated if they are realistic and viable. In this phase the participants are reaching an agreement on how to proceed from there.

Detailed step-by-step guide

• A concept needs to be defined that will be the main objective of the workshop. You could let the participants have the issues/ questions to be worked in before the event.

• To execute Future Workshop a moderator must be selected. The moderator will explain the topic of the session as well as the aim.

• The participants are asked to reflect on the status quo and to write down their points of critique.

• Depending on the group dynamic or the overall mood it might be better to start with the vision phase instead of the criticism phase to not demotivate participants from the start.

• The participants are encouraged to envision their desired future or solutions. The question they can ask themselves is "what would the ideal future look like?". The visions, ideas and approaches to solving the problem do not have to be realistic at this point; there are no barriers or limits.

• The generated ideas are being tested if they are feasible. Barriers and obstacles of those ideas should be written down so that their overcoming can be discussed.

• An implementation plan is being developed based on the ideas, visions, and approaches that were generated in the process.

• The development of the implementation should be monitored.

Additional ideas / information

• Active and honest participation is essential for the success of the Future Workshop. If participation cannot be encouraged the whole session might be unsuccessful.

• The duration of the method can be shortened if participants know well about the status quo (criticism phase).

• It might help the dynamic of this method to start with the vision phase instead of the criticism phase to not lose and demotivate people right from the start.

• Creating a creative and non-judgmental atmosphere is crucial for the generation of new solutions and needs to be considered when preparing the room, selecting the moderator, etc.

• Future workshop is a method that can be designed in very creative ways. When presenting their results, participants can be asked to do that in the form of a drawing or sketch.

• Future Workshop is an action-oriented method. The overall goal should not only be the creation and generation of new ideas but the implementation of those as well. However, you can split it in several steps, using it as an exploratory method for the development of scenarios and as a decision method in the GEP design.

• It helps to work with future-related questions (ideally connected with emotions), e.g., imagine you designed a successful and prospering GEP.

Template

Criticism	Fantasy	Implementation

Source: The ACT on gender « Community of practice co-creation toolkit"

The Fish Bowl

At least 8 people – At least 20 minutes to more one hour (depending on the depths of discussion you want – you can also use it as canvas to be separated in several steps)

Goal: the Fish Bowl is tool to: - explore a question in depth.

- promote vitality and creativity in a discussion.

- enable everyone to participate.

Steps: Several variants are possible. You change choose one from the ones presented here or mix them to create a new one adapted to your need.

Basic principles

The Fish Bowl separates the group in two: the ones in the fish bowl (5-6 people) participate to the discussion. The other ones are observers and do not take part in the discussion. In "real life", this happens with two circles of chairs. Online, you can draw a circle on a white board to figure the fish bowl and write the names of the participants in post-its in the fish bowl in it, and post-its with the names of the observers out of it. Even simpler, you can also ask the participants of the fish-bowl to add a distinctive tag to their video to make them recognizable, such as the "thumb up" reaction that is available on most video-conference software. Ideally, there should be more observers than participants in the fish bowl.

TIP: Make sure to include a **diversity of profiles** (gender, age, seniority, hierarchical levels) in the fish bowl. If not every profile is represented, you can call for swapping of participants and observers during the process.

Here are some **possible adaptations** of the basic principles:

1. Fixed or flexible fish bowl

- *Fixed fish bowl*: you define a time for the discussion and participants in the fish bowl remain the same during the whole discussion.

- *Flexible fish bowl:* an observer can replace a participant in the fish bowl, who then becomes an observer, during the discussion. You can define several rules for this: 1) The observer has to ask to join the fish bowl and one participants in the fish bowl has to leave. 2) A participant in the fish bowl can ask to leave and one observer has to replace him/her. 3) The facilitator can ask for a replacement if the discussion is stuck: one participants must then volunteer to leave to fish bowl and one observer must volunteer to replace him/her. In any case, make the change visible, either by the visual tag or by the post-it method.

2. With or without role play in the fish bowl

- *Without role play in the fish bowl*: the discussion in the fish bowl is open. Everyone speaks their own mind.

- *With role play in the fish bowl*: each participant in the fish bowl has a specific role and must stick to it. If he or her is replacer, the new participant takes up the same role. If you work with post-it, you can write each role in a post-it with a different color for each one. This is really useful to force the group to go beyond their own bias and to explore a question in depth. Here are some roles you can distribute, and some colors to associate them with, following Edward De Bono's Six Thinking Hats [if there not enough participants for all the roles, choose only the most relevant ones for you]:

A. White : he/she calls for information known or needed and makes sure the discussion stocks to facts: "The facts, just the facts".

B. Yellow: he/she symbolizes brightness and optimism. He/she explores the positives and probes for value and benefit.

C. Black: the devil's advocate: he/she symbolizes judgment or why something may not work. Spots the difficulties and dangers; where things might go wrong. Probably the most powerful and useful of the Hats, but can be a problem if overused.

D. Red: feelings and intuitions. He/she expresses emotions and feelings and share fears, likes, dislikes, loves, and hates.

E. Green: he/she focuses on creativity, the possibilities, alternatives and new ideas. It is an opportunity to express new concepts and new perceptions.

F. Blue: he/she manages the thinking process. It's the control mechanism that ensures that the guidelines are observed, and the roles respected.

3. **With or without role play of the observers**

- *Without role play of the observers***:** observers just observe. If you wish to make them report what their observations to a second phase, you can ask them to take notes. But everyone has the same role.

- *With role play of the observers*: here are two alternatives:

         - Observers have organizational roles: for example, one manages the time, one takes notes and will present his/her notes to everyone afterwards etc. This can be combined with a role play in the fish bowl.

         - Observers pay attention to specific aspects of the discussion. The roles can be the same as for the role play in the fish bowl: one pays attention to the facts that are discussed, one pays attention to the

benefits appearing in the discussion (of strategies are discussed for example), one to the dangers that appear in the arguments, one to the feelings that are expressed, one to the creative ideas, and one to the process and dynamics in the discussion (e.g.: what is more focusing on emotions, benefits, dangers, etc?)

→ This can replace a role play in the fish bowl. If you wish to combine both role play, the role the observers would rather be to take notes of what is said, each one being the observer of one specific participant in the fish bowl.

→ Distributing roles to participants help them feel part of the process and be active as well. It is also useful to prepare a possible second phase of the process, where observers explain what they observed to the group. In this way, participants in the fish bowl can really focus on the discussion without thinking about remembering what they said.

4. **After the Fish Bowl**

What happens after the activity? Here are some possibilities:

- Observers explain to the group what they observe. If you did not distribute roles to the observers, ask one or two of them to play this part (but warn them before the activity so that everyone takes notes). If you distributed roles, ask them to report what they were supposed to pay attention to.

- While the observers tell what they observed, take notes on a white board of what is being said. The white board can have been organized by topics beforehand or not, depending on how structured you want the reflection to be. Example of pre-defined topics: resistances, strategies, solutions, emotions etc.

- You can use the information on the white board to go on with other tools, depending on the phase you are in a consensus tool, a prioritization tool etc.

Sources: adapted from:

http://www.debonogroup.com/six_thinking_hats.php

https://www.seedsforchange.org.uk/

The ACT on gender « Community of practice co-creation toolkit"

Formation "Becoming a socio-cultural animator" of the "Ligue de l'éducation permanente" (Brussels, 2019)

Focus groups

From 4 participants – minimum 1 hour

Goal: a focus group is useful to gather information, opinions, feedbacks about stakeholders' experiences. On its own, it is NOT useful to reach consensus or take decision.

Steps:

- Precise the topic in advance and communicate it when inviting participants. Make them sign a consent form. Make sure that all personal data collection and processing regarding the activity is carried out according to EU and national legislation and institutional rules and guidelines.

- Prepare semi-structured questions.

- On D-day, ask if you can record the meeting for analysis. Explain the goal of the focus group and timeframe. Explain how data will be used and which form it will take.

- Outline ground rules: one person speaks at a time; no specific names will be used in the final report; all points of view are important to the discussion. Think of your own specific context and relevant ground rules worth enforcing.

- Ask a warm-up question for everyone to answer.

- Ask the introduction question and then move to the other questions as planned.

- During the discussion, use a flipchart to illustrate the ideas expressed if you feel necessary or helpful.

- Encourage all participants to express their views, for example by asking, 'Does anyone have a different opinion?' Too dominant participants and those who talk excessively should be reined in to give others opportunity. You may suggest that all participants initially write down a few thoughts in response to a question before the group discusses it together.

- Summarize the main points of view and then asks if the summary is accurate or if anything was missed. Answer any final questions about the focus group work.

Source: the ACT on gender « Community of practice co-creation toolkit"

6.4.5   Consensus building

2, 4, 8 consensus

Large groups – 1 hour

Goal: 2, 4, 8 consensus is an excellent tool for prioritizing in large groups. This exercise will take time but will help a group reach a decision that everyone can live with.

Points of attention

You must be able to make **sub-groups** for this activity.

It is usually best to impose **tight time limits** at every stage of this discussion.

Steps

Draw up a list of proposals in the whole group.

Form pairs. Each pair discusses the list of possible proposals and is asked to agree their top 3 priorities (it could be any number, but for this example we'll use 3).

Each pair then comes together with another, to form a group of 4. The 2 pairs compare their lists of top 3 priorities and, after discussion, agree on a joint top 3.

Each group of 4 comes together with another to form a group of 8. Again, each group takes its 2 lists of priorities and reduces it to one list of 3.

Repeat until the whole group has come back together and has a shared list of just 3 priorities.

Source: https://www.seedsforchange.org.uk/conslarge.pdf

The double go-round

Any number of participants – Any time limit (flexible)

Goal: The double go-round allows everyone to contribute to the discussion and to hear everyone else's opinion. It helps reaching consensus.

Points of **attention**

This tool is great for making sure everyone's voice is heard. It does however take time, that you need to plan for. For example, if you have thirty people and allow everyone to speak for 2 minutes each you need one hour per round.

Steps

The meeting listens to everyone express their opinion in turn. Each person has the same amount of time to speak.

Unlike a normal go round, the exercise does not finish once everyone has spoken. Instead, the go-round continues allowing people to respond to what they have heard.

The meeting keeps going round until consensus is reached.

Variant

You can frame the discussion by making a proposal about a strategy or a problem, as well as by allowing only some answers (yes, no, other proposal).

- ***Strategy framing***: if the goal is to decide whether to include a strategy in the GEP, for example, the facilitator can tell the strategy to group. Everyone in turn says either "YES" or "NO". If someone says no, he/she proposes an adaptation. This is the new proposal, and the round goes on based on the new proposal. This goes on until everyone say "yes". [**Useful in T2.3**]

- ***Problem framing***: you can explain the situation (e.g. more boys than girls in STEM masters) and ask for someone to propose a strategy. The round goes on like in the "strategy framing" [**useful in T2.1**]

Source: adapted from: https://www.seedsforchange.org.uk/conslarge.pdf

7   Evaluation and monitoring

7.1   WP2 key performance indicators (KPIs)

The following table shows the key performance indicators for Work Package 2.

Description	Measurement Type	Target
Number of collaborative actions (research/industry/government/civil society) included in the GEPs within the CALIPER R&I hubs to attract more girls to STEM	# of collaborative action (2 per RPO/RFO)	18
RPOs/RFOs organize multi-stakeholder dialogue workshops to identify key challenges, as part of co-design process	# Workshops organized for multi-stakeholder dialogues (2 per RPO/RFO)	18
Number of attendees in the local multi-stakeholder dialogues	>25 participants at each workshop	225
Number of GEPs implementation scenarios designed	#implementation scenarios (3^per each RPO/RFO)	27
RPOs/RFOs design and implement GEP and shared in the GEAR tool	# GEPs (total: 9: 1 per RPO/RFO)	9
9 GEPs including specific actions on gender equality in decision making process aiming at structural changes to raise the female presence in decision making bodies	# GEPs including the specific actions (total: 9: 1 per RPO/RFO)	9

Description	Measurement Type	Target
RPOs include in the GEP dedicated measures to review existing research programmes to take gender into consideration as a dimension in research content	% of existing programmes to be reviewed	30%
RPOs rate the new research programmes taking the gender dimensions into account across the research cycle	% of new research programmes rated	50%
7 GEPs including dedicated measures to review existing research programmes to take gender into consideration as a dimension in research content	# GEPs including the specific actions (total 9: 1 per RPO/RFO)	7
RPOs include 1 new module or course on gender as a research dimension in STEM	# of RPOs including a module or course	7
% of the piloted actions on the GEPs institutionalized and integrated into permanent measures and procedures, official strategic documents, and regulations of the involved RPOs/RFOs by the end of the project	% of the GEP actions institutionalized (>70)	70

7.2   Reporting of strategic change scenarios

Four documents will be used for reporting (to be found separately from this document):

- The final version of the Excel file (see point 3.3.2. for instructions)

- The final version of scenario texts (se point 3.3.3. for instructions)

Annex I: **References**

Literature and toolkits

Acker, Joan. 2020. "Gendered contradictions in organizational equity projects." *Organizations*. 7 (8): 625-632.

ACT consortium. 2020. *Community of practice co-creation toolkit*.

Agir pour la paix, "Outils de facilitation pour réunions et ateliers", www.agirpourlapaix.be

CO-CREATE project. 2017. Godet, Michel. 2000. « The Art of Scenarios and Strategic Planning: Tools and Pitfalls ». *Technological Forecasting and Social Change* 65: 3-22.

Leney, Tom, Mike Coles, Philipp Grollman, et Raivo Vilu. 2004. *Scenarios Toolkit*. Cedefop Dossier Series 8. Luxembourg: Office for Official Publications of the European Communities.

Sanders, Elizabeth B.-N., et Pieter Jan Stappers. 2008. « Co-Creation and the New Landscapes of Design ». *CoDesign* 4 (1): 5-18. https://doi.org/10.1080/15710880701875068.

Seeds for change, https://www.seedsforchange.org.uk/

Sneeuw, Adrian, Aiur Retegi, Barabara Predan, Barbora Spisakova, Martin Kaltenbrunner, et Nora Busturia. 2017. « Co-design. Best practice report ». Co-create project.

Voorberg, William H., Victor J. J. M. Bekkers, et Lars. G. Tummers. 2015. « A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey ». *Public Management Review* 17 (9): 1333-57.

Zamenopulos, Theodore, et Katerina Alexiou. 2018. « Co-design as a type of collaborative research ». In *Connected Communities Foundation Series*, édité par K. Facer et K. Dunleavy. Bristol: University of Bristol / AHRC Connected Communities Programme.

"Becoming a socio-cultural animator", Ligue de l'éducation permanente (Brussels, 2019)