



R&I PEERS

Pilot experiences for improving gender equality in research organisations

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D6.7 - Second report on SDD workshops

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LIST OF ACRONYMS, SYMBOLS AND ABBREVIATIONS

Symbol, acronym, abbreviation	Definition
&	And
#	Idea number
§	Section
A	Action
C	Cluster
CIC nanoGUNE	Centro de Investigacion Cooperativa en Nanociencias
CNR	Consiglio Nazionale delle Ricerche
CNTI	Cyprus Neuroscience & Technology Institute
EIGE	European Institute for Gender Equality
EU	European Union
GE	Gender Equality
GEP	Gender Equality Plan
ISOTITA	ISOTITA: General Secretariat for Demography and Family
L	Level
MLW	Mutual Learning Workshop
OGPEO	Interdepartmental centre for gender studies and equal opportunities
P	Practice
R&I	Research and Innovation
RFO	Research Funding Organisation
RPO	Research Performing Organisation
SDD	Structured Democratic Dialogue
STEM	Science, Technology, Engineering, Mathematics
TQ	Triggering Question
UNISA	University of Salerno
V	Votes
ZRC SAZU	Znanstvenoraziskovalni Center Slovenske Akademije Znanosti in Umetnosti

1 EXECUTIVE SUMMARY

The main objective of D6.7 is to present the results of the two Mutual Learning Workshops (MLW) organised in 2020 and 2021/2022 in the context of the R&I PEERS project. The general scope of the workshops was to (a) strengthen the knowledge base around Gender Equality Plans (GEPs) actions as developed by the project consortium and (b) provide the opportunity to the consortium to share its experiences with stakeholders, practitioners and experts in the field of Gender Equality (GE). This promises on one hand, the long-term adaptation of the customised GEPs and evaluating, and on the other, the proposed actions can feasibly respond to different societal and cultural settings.

The first MLW, entitled “What are the best practices to overcome problems, barriers, issues when implementing your gender equality plans (GEPs)?”, was held virtually on December 9, 2020 under the collaboration between the CIC nanoGUNE and the Cyprus Neuroscience & Technology Institute (CNTI). The workshop was comprised of nine participants from across Europe directly involved in the design, implementation and monitoring of GEPs in their entities.

The second MLW, “Identification of barriers and/or obstacles preventing our Research Performing Organizations (RPO) from designing and implementing successful Gender Equality Plans” was organised virtually with base in Athens and spanned 4 sessions:

- 16/12/2021 (30 min) Preparatory for introductions and to explain process
- 13/1/2022 (2 hrs) Collection and Clarification of contributions
- 20/1/2022 (2 hrs) Clustering
- 27/1/2022 (2 hrs) Structuring and Road Mapping

The MLWs, which constitute the last two of a series of four workshops, were implemented using the participatory method Structured Democratic Dialogue (**SDD**), a methodology that enables a group of stakeholders to listen to each other on issues of common concern and transcend their boundaries of knowledge and culture to reach a common vision and an actionable road plan.

2 INTRODUCTION

2.1 Causes of gender inequality in science

The causes of the gender inequality in science are several and they include but are not limited to: cultural context, gender stereotypes and implicit biases, male-dominated traditional culture, cultural perceptions of femininity and masculinity, unfavourable academic climate for female scientists ('chilly climate', see Britton 2016), horizontal and vertical sex segregation of occupations, social norms of burdening women with excessive family responsibility for childcare, elderly care and household management, demands of full work-devotion within academia and STEM in particular, covert discrimination in the form of old boys' networks, as well as glass ceilings with biased hiring practices that lead to gender and sexual harassment (GENERA Project – D2.2, 2016). Additionally, women often spuriously believe they are not talented enough for scientific positions (imposter syndrome), and the reality is that there is a gap between how they perceive themselves and the real skills they have which are usually underestimated (Blickenstaff, 2005; Di Tullio, 2018).

The European Commission through the Research Framework Programmes and the European Institute for Gender Equality (EIGE) identified Gender Equality Plans (GEPs) as the major tool to tackle gender inequality in research (funding, performing) organisations.

2.2 The role and objectives of the R&I PEERS project

The R&I PEERS project aims to create and validate pilot experiences that disrupt unconscious gender biases which have not only limited the contributions of women in research and innovation, but also the participation of men in certain areas excluded men from certain fields.

More specifically, the project promotes equality and opportunity:

- Equality – increasing the number of women in decision-making positions in the Research and Innovation ecosystem would ensure better distribution better of European talent
- Opportunity – promoting Research and Innovation entrepreneurship that engages female human capital would drive competitiveness and strengthen scientific endeavour.

The project activities will:

- implement and improve GEPs in seven research and innovation-focused organisations forming part of the Consortium
- smooth the gender gap in decision-making and research-performing activities within the seven piloting organisations
- maximise the impact of gender content in research programmes
- train our piloting organisations in gender equality approaches for GEP implementation
- transfer and share generated knowledge and experiences in multi-sectorial conferences organised as part of the project

- organise and execute participatory processes in the form of Mutual Learning Workshops (MLW). These promise to (i) consolidate knowledge on existing strategies to deal with gender inequalities, and (ii) facilitate understanding on how GEPs can be improved.

In particular, the MLWs will be organised during the four years of duration of the project activities in different Mediterranean countries. This will bring together a multi-stakeholder group of experts (e.g. researchers, policymakers, and representatives of EU-funded projects) involved in the Gender Equality Arena at national and European levels, with an eye toward the development, implementation and sustainability of Gender Equality Plans.

2.3 Structure of the Deliverable

Six sections constitute the structure of this deliverable. The Introduction section presents a brief overview of the current situation in the area of gender equality in the field of STEM while additionally emphasizes the objectives of the R&I PEERS project. Sections 3 and 4 shift the attention into the working methodology of the Mutual Learning Workshops, namely, the participatory methodology Structured Democratic Dialogue in which the philosophy and science behind the methodology are described, followed by a concise demonstration of its phases. Section 5, being the core section of this deliverable, is divided into two independent sub-sections, each describing the results of the workshops implemented in San Sebastian (online) and Athens respectively. The results of the evaluation survey answered by the participants of the workshops are illustrated in Section 6 followed by the concluding remarks. Finally, the list of Actions produced during the workshops along with their clarifications are provided in Annex 1, while Annex 2 hosts the list of stakeholders who joined the workshops.

3 WORKSHOP METHODOLOGY: STRUCTURED DEMOCRATIC DIALOGUE (SDD)

3.1 SDD Philosophy

The Mutual Learning Workshops (MLWs) were executed and facilitated based on the method of Structured Democratic Dialogue¹ (SDD). The SDD is a methodology that supports democratic and structured dialogue among a group of stakeholders in an efficient way to achieve consensus in a limited time frame. It is especially effective in harnessing collective intelligence and collective wisdom to solve complex problems. The SDD enables the authentic engagement of individuals with diverse views, backgrounds and perspectives in developing a common framework of thinking based on consensus and a shared understanding of the gap between current and ideal state of affairs and of a future ideal state of affairs.

3.2 Avoiding negative dialogic phenomena: “Group Think” and “Erroneous Priorities Effect”

In meetings where no measures are taken to protect the authenticity of all opinions, it is likely that some participants will support majority views because they do not want to “go against the group”. This results in participants reaching an apparent agreement, which only represents the “most powerful opinion”. This phenomenon is known as “Group Think”. The SDD method prevents this phenomenon by using the Nominal Group Technique, which allocates equal time and equal importance to each idea/opinion. This protects the authenticity of every idea, thus minimizing the likelihood of “Group Think”.

By definition, a complex problem cannot be solved by solving its individual sub-problems, but it requires exploration and detection of relations between the sub-problems. It has been shown in many occasions that if different stakeholders discuss and propose actions to solve a complex problem, but end up choosing the actions that the majority sees as important, they are likely to decide to invest in solving sub-problems, which at first seem important (in the eyes of the majority) but are less so in reality. However, if the same stakeholders are prompted to explore the influence of an action to solve a sub-problem over another action, they would choose different actions. This phenomenon is known as “Erroneous Priorities Effect”.

¹ SDD was developed in the 1970s with the initiators Alekos Christakis (Christakis, 1973), John Warfield (Warfield, 1982) and Hasan Özbekhan.

3.3 SDD added value

The SDD² method utilises a so-called Interpretive Structural Modelling (which is incorporated in the Cogniscope™ system) to ensure that ideas are prioritised hierarchically according to influence. This promises to avoid the “Erroneous Priority Effect” with the use of mathematical algorithms to aid the process and save time.

The Structured Democratic Dialogue method is particularly effective in resolving multiple conflicts, interests and values and to bring the participants closer to agree on a common understanding and strategy for resolving the issue. The implementation of SDD is performed in well-defined consecutive phases and steps, where a deeper understanding of the topic is gradually achieved and solutions in the form of actions can be identified and agreed. SDD facilitates the creation of a common understanding of the topic’s different dimensions. It is important that priority is given to some ideas over others depending on their influence over each other.

In summary, the SDD method allows the conceptual structure of a complex topic to be reorganised in favour of meaningful intervention. Figure 1 below illustrates this by showing each of the six consecutive phases the workshop is divided. Each phase is also briefly described in section § 4 below.

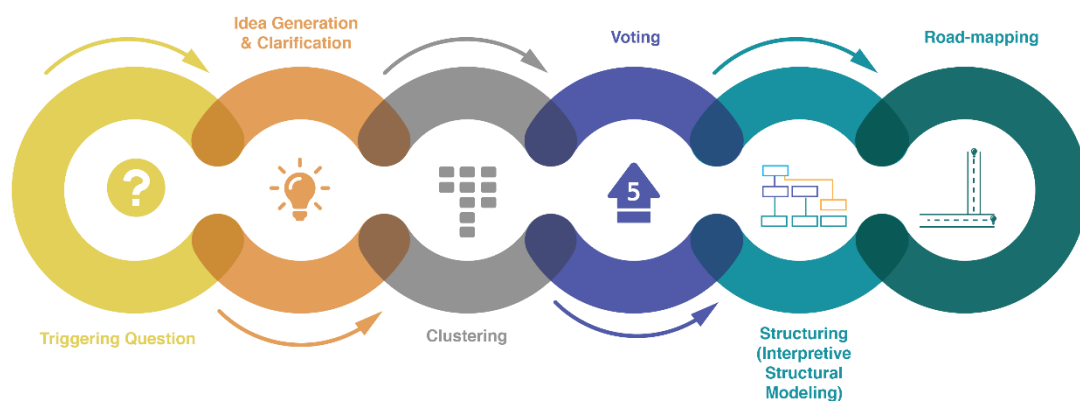


Figure 1 SDD phases

² SDD is based scientifically on 7 laws of science of complex systems (complex systems) and government (cybernetics) and it has been scientifically documented worldwide in hundreds of cases over the last 30 years. More information on the methodology of the Structured Democratic Dialogue exists in books (Christakis & Bausch, 2006; Flanagan & Christakis, 2009), websites (Wiki, 2010), simple introduction to the theory (Laouris, 2012), or earlier related applications (Laouris, Dye, Michaelides & Christakis, 2014; Laouris, Michaelides & Sapio, 2007; Laouris & Christakis, 2007).

4 STRUCTURE (PHASES) OF THE SDD WORKSHOP

4.1 Before the workshop

4.1.1 Preparing the discussion (Phase 1) with steps 1 and 2

The complex problem/topic is described and framed, and a Triggering Question (TQ) is defined.

4.2 During the workshop

4.2.1 Creation and clarification of ideas based on TQ (Phase 2) with steps 3 and 4

All participants are asked to provide possible ideas to the Triggering Question. One by one, the participants state their ideas which are simultaneously recorded in Cogniscope™ software. Once all ideas are defined, printed and displayed on the screen and on the boards in the room, the workshop passes to the Clarification phase where participants take turns to explain their ideas, which are audiotaped. The explanations must be specific and understandable to all. The rest of participants may seek clarification, but they are prohibited from criticising the idea. The purpose of the clarification step is to allow participants to gain the same understanding and interpretation of the ideas based on the original intended meaning attributed to the idea by its own author.

4.2.2 Clustering of ideas (Phase 3) with steps 5 and 6

All ideas are grouped into categories or clusters based on similarities and common characteristics. In this clustering phase, participants decide whether two random ideas have enough common features to justify placing them in the same cluster (without this cluster yet existing!). This bottom-up process results in an organic evolution of clusters. Moreover, participants benefit from an in-depth discussion around the meaning and importance of each idea, enabling the creation of wider consensus regarding the topic discussed. Through this process, participants develop a common vocabulary and a common understanding about the various aspects of the topic under discussion (defined by the triggering question). Broad consensus is achieved through discussion of possible different perceptions in relation to the meaning and importance of each idea. The clustering is registered with the Cogniscope™ software tool. The clusters and their ideas are printed and displayed on the wall, so that all participants can see them.

4.2.3 Prioritisation of ideas (Phase 4) with step 7

All participants have five votes and are asked to choose the ideas they believe are most important in solving the TQ. Only ideas that receive at least two votes move to the next and most important phase.

4.2.4 Mapping of ideas (Phase 5) with steps 8 and 9

This phase collects the ideas that have received at least two votes and the participants are collectively asked how one idea can affect significantly another idea. The question asked is “If we implement action A, will it help us significantly to implement action B?” If the answer is ‘yes’ with a 75% majority, the impact is recorded and added to the roadmap of ideas. When the facilitator asks the participants to vote and the vote is about 50% Yes and 50% No, then the significance is further discussed and the participants are asked to revote. As the exercise progresses, a Roadmap is built, shown and discussed. The ideas at the bottom of the Roadmap indicate the most crucial and influential actions that form the foundation for the rest of the actions to be executed also. Therefore, the roadmap to be generated encourages participants to prioritise influential factors.

4.2.5 Analysis of the roadmap (Phase 6) with step 10

In this phase, the roadmap which is a result of the previous phase is discussed in detail. It is important to note that only by addressing obstacles at the lowest levels, it can be ensured that the ideas of the higher levels will be consequently executed. Following the described steps, the roadmap becomes executable.

5 WORKSHOP RESULTS FROM MLW IN SPAIN

In this section, the results of the Spain Mutual Learning Workshop are presented independently in accordance with the phases of the Structured Democratic Dialogue methodology.

5.1 What are the best practices to overcome problems, barriers, issues when implementing your GEPs?

The Mutual Learning Workshop “What are the best practices to overcome problems, barriers, issues when implementing your GEPs?” was organised on December 9th, 2020 under the collaboration between the R&I PEERS partners CIC nanoGUNE and the Cyprus Neuroscience & Technology Institute (CNTI). Due to the Covid-19 pandemic and the consequent sanctions and difficulties in traveling abroad, the consortium of the project decided to deliver the workshop virtually through Microsoft TEAMS. Aiming at providing a unique experience to the participants, the workshop started with an opening key-note speech by Dr Petra Rudolf, Professor at the Zernike Institute for Advanced Materials, University of Groningen, Netherlands, who elaborated on unconscious bias under the title “Unconscious bias: how it impacts careers in science and how to mitigate this influence”.

5.1.1 Generation and Clarification of ideas based on TQ (Phase 2)

For the successful execution of this virtual workshop, 9 stakeholders from across Europe directly involved in the design and implementation of GEPs in their organisations accepted the invitation to participate in the workshop. The workshop brought together eight female and one male participants. While five of them were directly involved in the operations of the R&I PEERS project, the other four are dealing with gender equality aspects in their organisations (i.e., three research centres and one research funding organisation).

In the first phase of the workshop, the participants were asked to generate ideas to address the TQ “*What are the best practices to overcome problems/barriers/issues (administrative, structural, financial, covid...) when implementing your GEPs?*”. They came up with a total of 29 practices which, according to their experience, knowledge and expertise, would be helpful in addressing such challenges, which often appear while implementing GEPs in research organisations.

5.1.2 Clustering the ideas (Phase 3)

The third phase of the workshop concerned the clustering of the proposed ideas into groups in terms of their similarities and common attributes. In particular, the ideas were compared in pairs in order for the participants to discuss and finally decide whether two ideas should be clustered together (i.e., one idea has enough characteristics with another idea to justify placing them into the same cluster). During the implementation of the clustering phase, the following clusters were identified which are graphically demonstrated in Figure 2: Cluster 1: Training; Cluster 2: Equality Committee; Cluster 3: Organisational; Cluster 4: Network.

Drawing from the figure below, “Organisational” was the most populated cluster of the workshop considering that 15 out of the 29 generated ideas were categorised under it. The second most populated cluster was “Network” with six ideas, while the remaining two clusters, “Training” and “Equality Committee” shared the same number of ideas, that is, four ideas each.

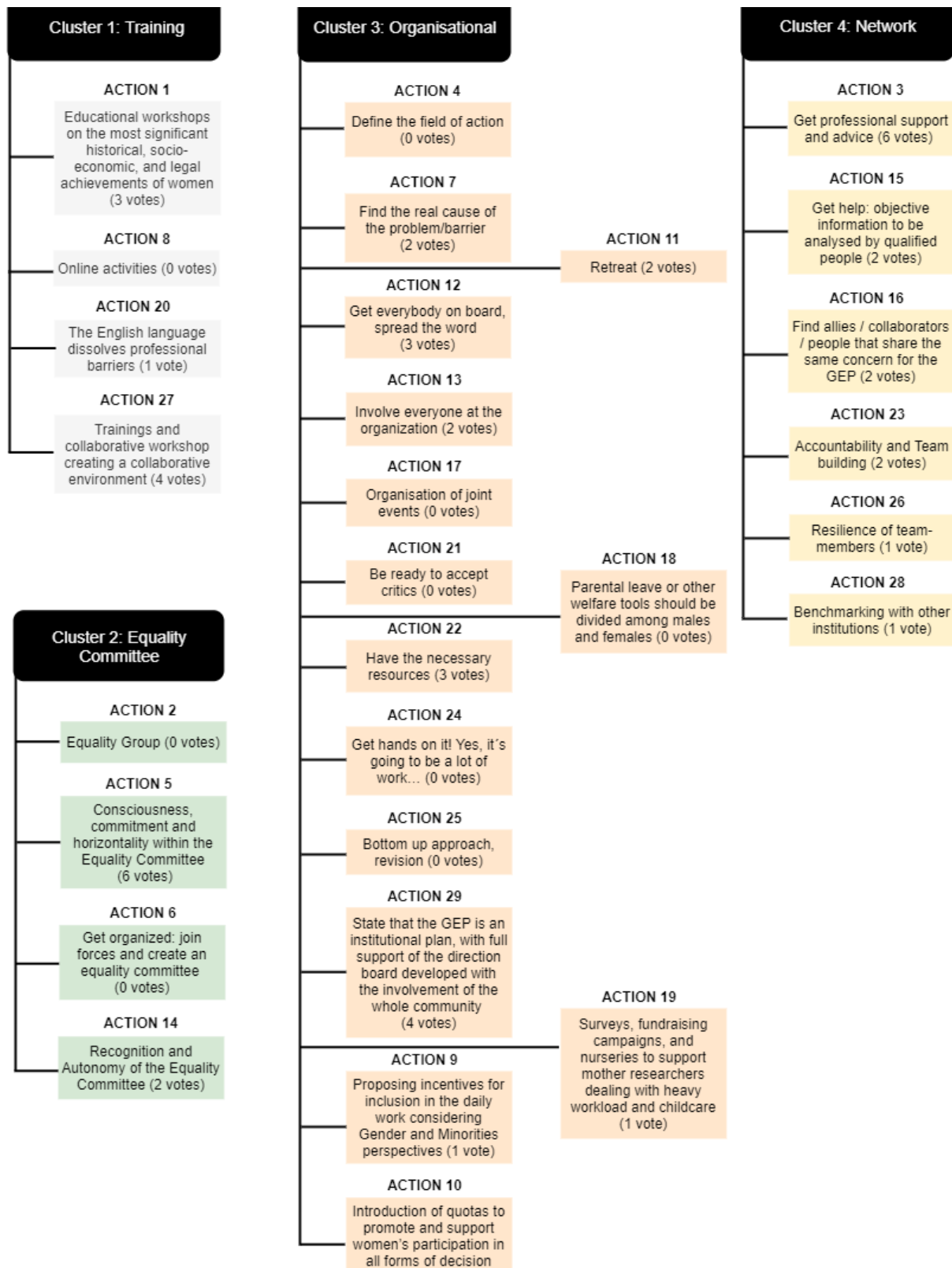


Figure 2 Clusters of Practices

5.1.3 Voting of ideas (Phase 4)

Following the clustering phase, the ideas were shared with the participants who were instructed to vote the five most important ones according to their own criteria and preferences in order to better respond to the TQ. A percentage of 69% of the total number of ideas, that is 20 ideas, received at least one vote, while nine ideas did not receive any vote. It should be highlighted, however, that the virtual nature of the workshop seemed to have some impact on the dispersion of the votes across the ideas. In particular, in face-to-face SDD workshops, the participants are expected to vote for one third of the ideas (around 35-40% of the ideas receive at least one vote) because they often discuss and interact with each other during the voting procedure and as a result they influence each other. In addition, residential voting is a transparent procedure in the sense that each participant sticks his/her five votes on the printed ideas which are displayed on a wall and as a consequent some participants might choose to vote those ideas which have already received a high number of votes and similarly be discouraged to vote for an idea with no votes until that moment. All this considered, the fact that the participants in the virtual workshop voted secretly without interacting with each other might thus have influenced the dispersion of the votes among the ideas.

Following the completion of the voting procedure, those ideas which received at least two votes proceeded to the next phase, that is, the generation of the Map of Influences. The voting results are listed in descending order based on the votes that each idea received (see Table 1 below):

#	Votes	Practice
3	6	Get professional support and advice
5	6	Consciousness, commitment and horizontality within the Equality Committee
27	4	Trainings and collaborative workshop creating a collaborative environment
29	4	State that the GEP is an institutional plan, with full support of the direction board developed with the involvement of the whole community
1	3	Educational workshops on the most significant historical, socio-economic, and legal achievements of women
12	3	Get everybody on board, spread the word
22	3	Have the necessary resources
7	2	Find the real cause of the problem/barrier
10	2	Introduction of quotas to promote and support women's participation in all forms of decision making
11	2	Retreat

#	Votes	Practice
13	2	Involve everyone at the organization
14	2	Recognition and Autonomy of the Equality Committee
15	2	Get help: objective information to be analysed by qualified people
16	2	Find allies/collaborators/people that share the same concern for the GEP
23	2	Accountability and Team building
9	1	Proposing incentives for inclusion in the daily work considering Gender and Minorities perspectives
19	1	Surveys, fundraising campaigns, and nurseries to support mother researchers dealing with heavy workload and childcare
20	1	The English language dissolves professional barriers
26	1	Resilience of team-members
28	1	Benchmarking with other institutions

Table 1 Voting Phase

5.1.4 Synthetic Analysis of the Clusters based on total votes received

5.1.4.1 Organisation support is deemed necessary

Cluster 3 “Organisational” received the highest number of votes, making it the most important cluster of the workshop. In particular, 20 votes were allocated among the 15 ideas identified under this cluster. The ideas focused on actions which can be undertaken at an organisational level that would create a culture of acceptance conducive to facilitating the development and execution of the GEP. To this end, the ideas were mainly divided into two categories: a) those related to what should be done for the development of the GEP and b) those supporting the implementation of the GEP once it has been established.

Being one of the most voted ideas of this cluster, Action 22 “Have the necessary resources” stresses the necessity of having resources, especially people, who can devote their time to the development of the GEP in addition to some financial resources needed for the development and implementation of the plan in the organisation. Action 29 “State that the GEP is an institutional plan, with full support of the direction board developed with the involvement of the whole community” was the most important idea of the Cluster 3, receiving four votes in total. This particular idea aims at protecting the people responsible for the implementation of the GEP who often receive criticism from their colleagues for delegating a seemingly unnecessarily extra workload. However, the ownership of the GEP does not go to the people working on the development and implementation of the plan – it is the whole organisation that should initiate and

execute it. It thus follows that positive and negative criticism should be directed to the organisation and not to specific people. In the same vein, Action 12 “Get everybody on board, spread the word” which received three votes calls for transparency and awareness of the whole organisation regarding the implementation of GEP.

5.1.4.2 Networking can be beneficial for the implementation of the GEP

With a total number of 14 votes distributed among its six ideas, Cluster 4 “Network” was the second most important cluster of the virtual workshop with 2.3 votes/practice. The ideas categorised under this cluster predominantly focused on the importance of networking with professionals and experts during the design and implementation of the GEP. Action 3 “Get professional support and advice” was the most voted idea of the workshop. Alongside Action 5, it illustrates the importance of collaborating with consultancy firms which can facilitate the successful implementation of the GEP. The cluster additionally includes ideas which received two votes, such as Action 15 “Get help: objective information to be analysed by qualified people” which calls for an external and objective analysis of the past and current situation of the organisation before generating the GEP; and Action 16 “Find allies/collaborators/people that share the same concern for the GEP” which stresses the responsibility and accountability of the core team involved in the implementation of the GEP.

5.1.4.3 Training on gender issues seems vital

Cluster 1 related to “Training” received eight votes, with an average of two votes per idea. The cluster brings together four specific, measurable and accountable ideas which aim at illustrating the importance of educating and training the personnel of the organisation on gender issues in general. In particular, Action 27 “Trainings and collaborative workshop creating a collaborative environment” was the most voted idea of this cluster with four votes. It reinforces the notion that trainings and collaborative workshops should be institutionalized in order to define a sense of belonging to the community in the work environment. The second most voted idea was Action 1 “Educational workshops on the most significant historical, socio-economic, and legal achievements of women”. This idea advocates meaningful dialogues between younger and elder generations of women in order to exchange ideas, opinions, and suggest solutions on how to overcome gender related difficulties experienced in any social domain.

5.1.4.4 A GEP should be supplemented by a Gender Equality Committee

Cluster 2 “Equality Committee” was the least voted cluster together with Cluster 1. It received a total of eight votes distributed among its four ideas out of which only two received votes. In particular, Action 5 “Consciousness, commitment and horizontality within the Equality Committee”, which shared first place of the most voted idea with Action 3, demonstrates the necessity of establishing an Equality Committee, the members of which must be aware of persistent inequalities in society that manifest also in the academic world. Finally, Action 14 “Recognition and Autonomy of the Equality Committee”, the second most voted idea of this cluster, highlights the necessity of establishing an Equality Committee characterised by autonomy in order to be able to accomplish its goals.

5.1.5 Tree of Influences

As demonstrated in Figure 3, the Influence Map of the virtual Structured Democratic Dialogue workshop includes six different hierarchical levels. The most influential practices are considered the root ideas, which are the *drivers*. The implementation of these ideas should be prioritised in order to facilitate the implementation of the subsequent practices. These root practices are located at the bottom of the roadmap and in particular at the Levels V and VI as they have the greatest influence among all other practices. It also follows that the practices identified on the upper levels of the Map are the least influential in facilitating the implementation of other practices.

The influence of one practice over the other is completely irrelevant to the importance of the two practices emerging from the voting phase that preceded. In this vein, any practice which has received more than two votes during the voting phase, and was thus moved to the Mapping phase, can be considered a root practice regardless of the number of votes it received. Therefore, a practice with low popularity can be a root practice while a practice with high popularity can appear at the upper levels of the map. For instance, consider Idea 27: Trainings and collaborative workshop creating a collaborative environment” which received votes from four participants and thus becoming one of the most important ideas of the workshop. Despite this, the idea appears on the upper levels of the map and thus is considered one of the least influential ideas of the workshop.

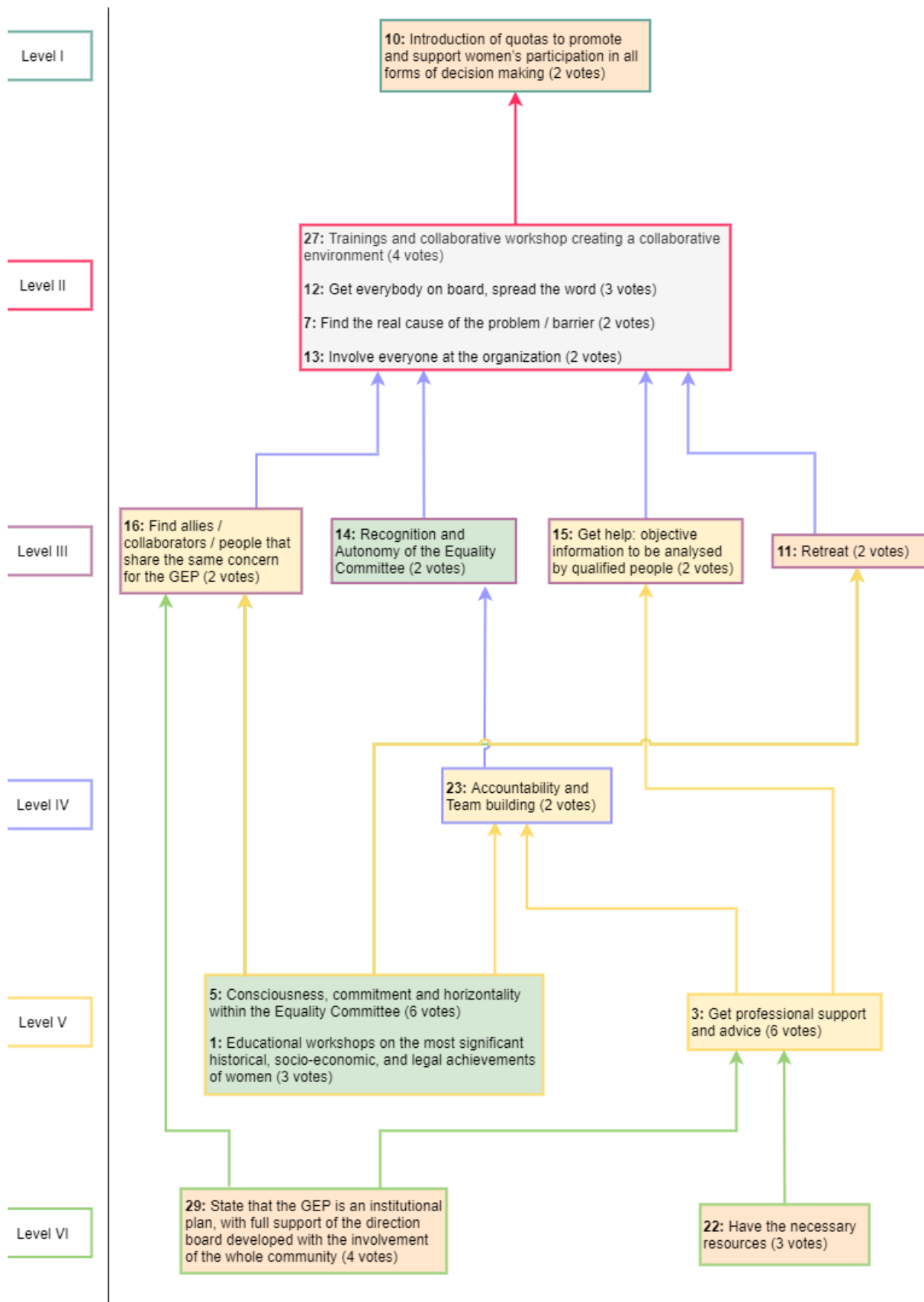


Figure 3 Tree of Influence

Taking into consideration the distinction between influential and less influential practices explained above, the smooth and successful execution of the Map of Influence heavily relies on the initial implementation of Practice 29: State that the GEP is an institutional plan, with full support of the direction board developed with the involvement of the whole community (four votes) and Practice 22: Have the necessary resources (three votes), both of which are located on Level VI. As evident in Figure 3, both ideas are also connected with Practice 3: Get professional support and advice (6 votes) which implies that the implementation of Practice 3 can be facilitated by the implementation of Practice 29 and 22. In general, in order to overcome problems, barriers, issues occurring during the implementation of a Gender Equality Plan (GEP), an organisation should consider initially working on the materialisation of the following practices derived from the root levels VI and V and shown as [Practice (P), Votes (V), Cluster (C), Level (L)] before considering the implementation of other practices of the Map of Influence:

- Level VI: State that the GEP is an institutional plan, with full support of the direction board developed with the involvement of the whole community (P29, V4, C3, L6)
- Level VI: Have the necessary resources (P22, V3, C4, L6)
- Level V: Consciousness, commitment and horizontality within the Equality Committee (P5, V6, C2, L5)
- Level V: Educational workshops on the most significant historical, socio-economic, and legal achievements of women (P1, V3, C1, L5)
- Level V: Get professional support and advice (P3, V6, C4, L5)

Taking a closer look at the Map, one can notice that Practice 5: Consciousness, commitment and horizontality within the Equality Committee (P5, V6, C2, L5) and Practice 1: Educational workshops on the most significant historical, socio-economic, and legal achievements of women (P1, V3, C1, L5) located on Level V share the same box. This is in contrast with Practice 3: Get professional support and advice (P3, V6, C4, L5) which stands on its own. The reason behind some ideas sharing the same box lies on the fact that both ideas equally influence each other. In particular, the vast majority of the participants argued during the workshop that the implementation of Practice 5 can significantly influence the implementation of Practice 1 and vice versa that the implementation of Practice 1 can significantly influence the implementation of Practice 5. All three ideas located on Level V influence Practice 23: Accountability and Team building (P23, V2, C4, LIV) which is the only idea of Level IV.

Level III, the busiest level of the Map together with Level II, is synthesised by four ideas all of which do not influence each other. In particular, Practice 16: Find allies/collaborators/people that share the same concern for the GEP (P16, V2, C4, LIII) which is influenced by Practice 29 located on Level VI as well as Practices 5 and 1; Practice 14: Recognition and Autonomy of the Equality Committee (P14, V2, C2, LIII) which is directly influenced by Practice 23 located on Level IV; Practice 15: Get help: objective information to be analysed by qualified people (P15, V2, C4, LIII) which is influenced by Practice 3 from Level V; and finally, Practice 11: Retreat (P11, V2, C3, LIII) which is influenced by Practices 5 and 1 located on Level V. Interestingly enough, all the ideas located on Level III significantly contribute towards the implementation of the ideas located on Level II which, as being observed on the Map, share the same box. In particular, Level II hosts the following four ideas: Practice 27: Trainings and collaborative workshop creating a

collaborative environment (P27, V4, C1, LII); Practice 12: Get everybody on board, spread the word (P12, V3, C3, LII); Practice 7: Find the real cause of the problem / barrier (P7, V2, C3, LII); and Practice 13: Involve everyone at the organization (P13, V2, C3, LII). Finally, Level I is comprised by only one idea, that is, Practice 10: Introduction of quotas to promote and support women's participation in all forms of decision making (P10, V2, C3, LI) which is influenced by the ideas deriving from Level II. Therefore, in order to implement this particular idea, an organisation should foremost make significant progress in implementing all the ideas of the Map.

6 WORKSHOP RESULTS FROM MLW IN ATHENS

6.1 What barriers or obstacles do we face when designing and implementing GEPs?

The Mutual Learning Workshop “What are the best practices to overcome problems, barriers, issues when implementing your GEPs?” was organised virtually (Due to the Covid-19 pandemic and the consequent sanctions and difficulties in traveling abroad, the consortium of the project decided to deliver the workshop virtually) over 4 sessions using Zoom platform on the dates shown below. The Greek partner, GSFPGE/ISOTITA has sent the invitation 6 weeks before the event to many national, some international and all partners.

- 16/12/2021 (30 min) Preparatory for introductions and to explain the process
- 13/1/2022 (2 hrs) Collection and Clarification of contributions
- 20/1/2022 (2 hrs) Clustering
- 27/1/2022 (2 hrs) Structuring and Road Mapping

Yiannis Laouris, from the Cyprus Neuroscience & Technology Institute (CNTI) has served as the Facilitator.

6.1.1 Generation and clarification of ideas based on TQ (Phase 2)

A total of 14 stakeholders from across Europe directly involved in the design and implementation of GEPs in their organisations accepted to participate in the workshop. The workshop brought together seven female and five male participants.

In the first phase of the workshop, the participants were asked to generate ideas to address the TQ “*What barriers or obstacles do we face when designing and implementing GEPs?*” They came up with a total of 54 practices (Annex 3) which, according to their experience, knowledge and expertise, are root challenges, which should be addressed while trying to implement GEPs in their respective research organisations.

6.1.2 Clustering of the ideas (Phase 3)

The third phase of the workshop concerned the clustering of the proposed ideas into groups in terms of their similarities and common attributes. In particular, the ideas were compared in pairs in order for the participants to discuss and finally decide whether two ideas should be clustered together (i.e., one idea has enough characteristics with another idea to justify placing them into the same cluster). During the implementation of the clustering phase, the following clusters were identified which are graphically demonstrated in the next Figure:

Cluster 1- Commitment

Cluster 2- Resources

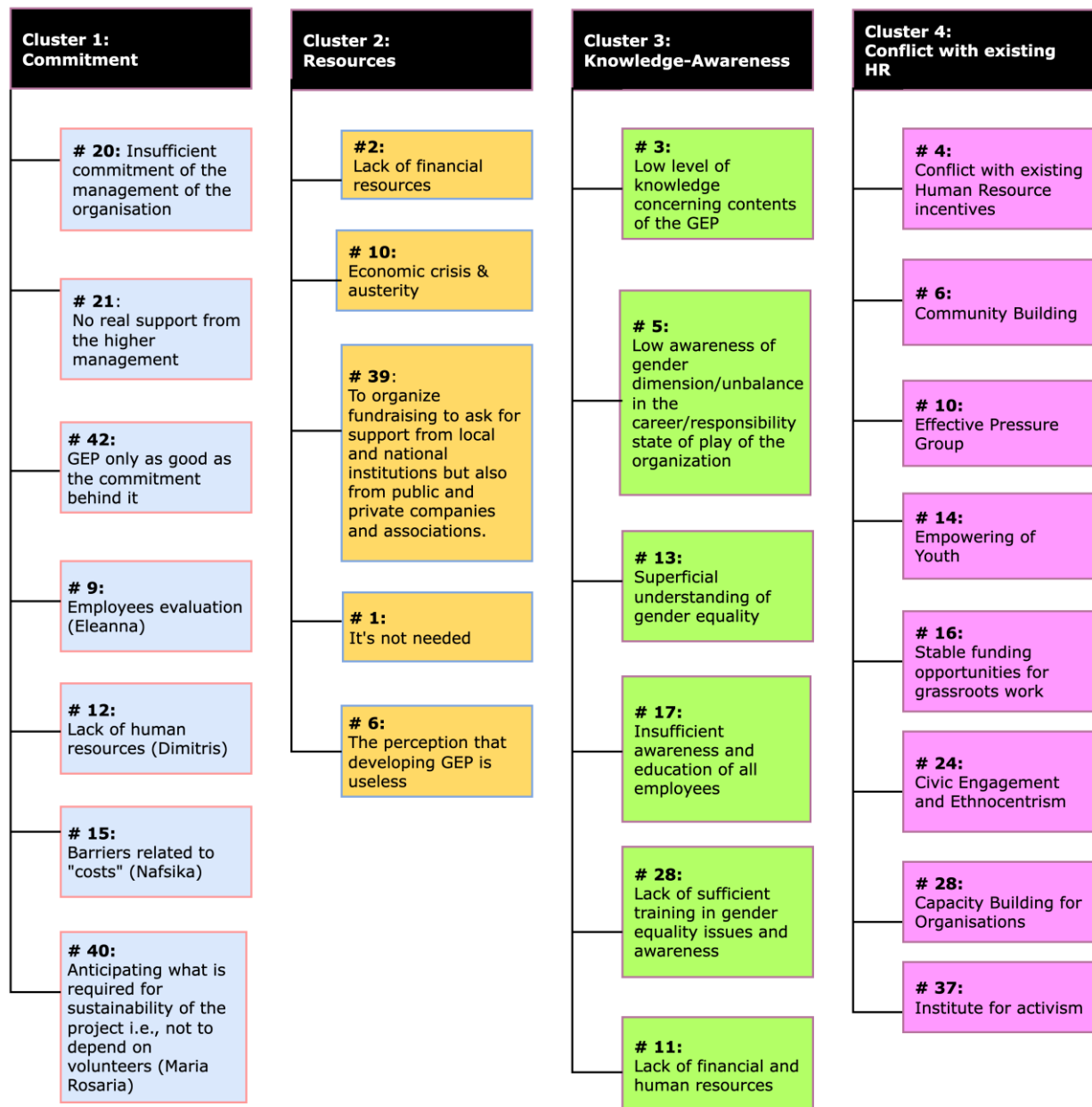
Cluster 3- Knowledge-Awareness

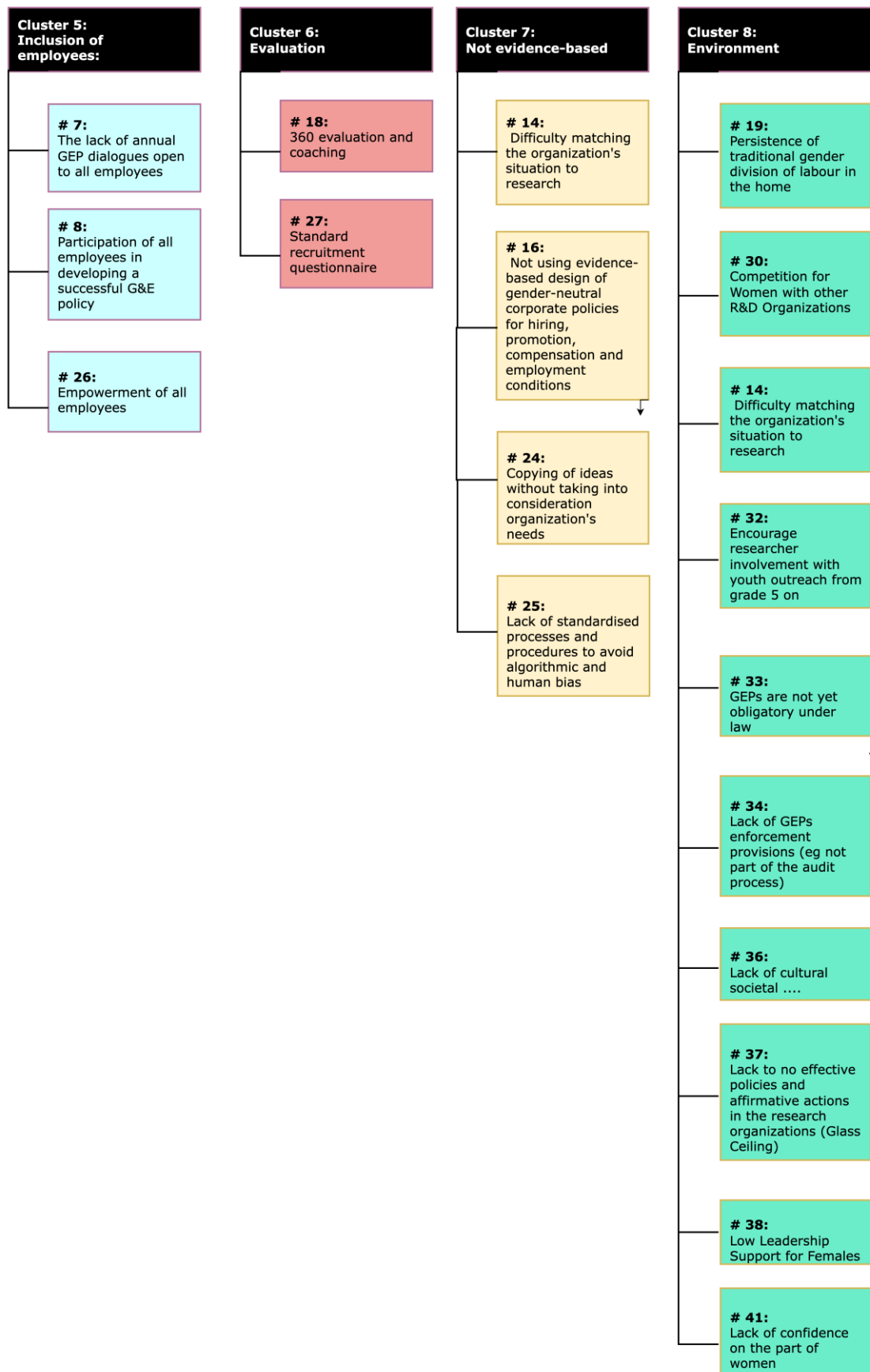
Cluster 4- Conflict with existing HR

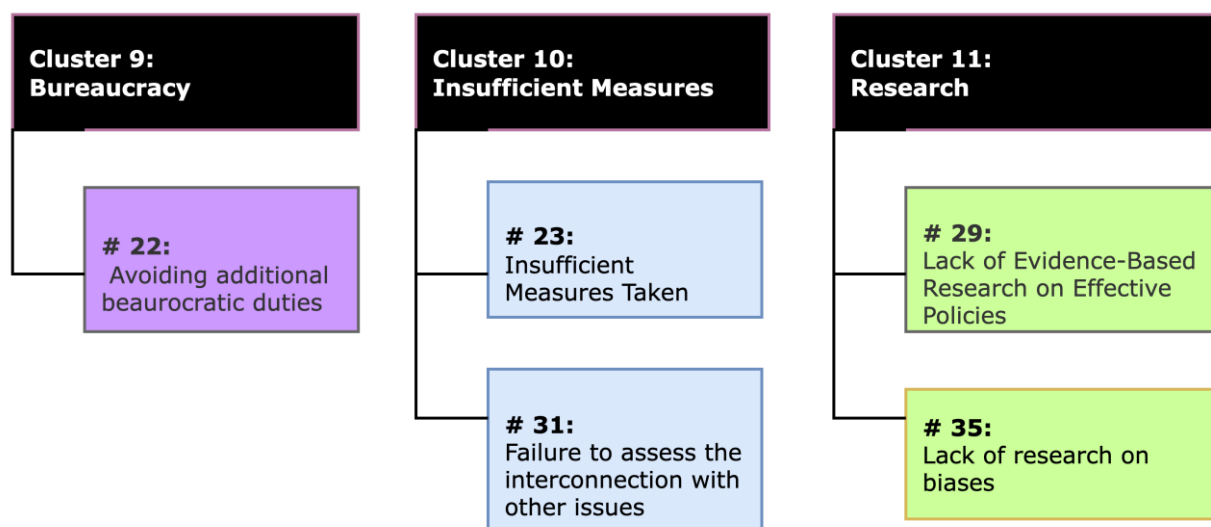
Cluster 5- Inclusion of employees

Cluster 6- Evaluation

- Cluster 7- Not evidence-based
- Cluster 8- Environment
- Cluster 9- Beaurocracy
- Cluster 10- Insufficient Measures
- Cluster 11- Research







6.1.3 Voting of ideas (Phase 4)

Following the clustering phase, the ideas were shared with the participants who were instructed to vote the five most important ones according to their own criteria and preferences in order to better respond to the TQ. A percentage of 54% of the total number of ideas, that is 14 ideas, received at least two votes each, 12 ideas receive one vote, while the remaining 28 received no votes at all. It should be highlighted, however, that the virtual nature of the workshop seemed to have some impact on the dispersion of the votes across the ideas. In particular, in face-to-face SDD workshops, the participants are expected to vote less than half of the ideas because they often discuss and interact with each other during the voting procedure and as a result they influence each other. In addition, residential voting is a transparent procedure in the sense that each participant sticks his/her five votes on the printed ideas which are displayed on a wall and as a consequent some participants might choose to vote those ideas which have already received a high number of votes and similarly be discouraged to vote for an idea with no votes until that moment. All this considered, the fact that the participants in the virtual workshop voted secretly without interacting with each other might thus have influenced the dispersion of the votes among the ideas.

Following the completion of the voting procedure, those ideas which received at least two votes proceeded to the next phase, that is, the generation of the Map of Influences. The voting results are listed in descending order based on the votes that each idea received (see Table below):

#	Votes	Practice
24	7	Copying of ideas without taking into consideration organization's

#	Votes	Practice
		needs (Nafsika)
8	6	Participation of all employees in developing a successful G&E policy (Kriemadis)
20	6	Insufficient commitment of the management of the organisation (Vicky)
11	5	Lack of financial and human resources (Vicky)
21	5	No real support from the higher management (Dimitris)
28	5	Lack of sufficient training in gender equality issues and awareness (Sophia)
5	4	Low awareness of gender dimension/unbalance in the career/responsibility state of play of the organization (Ermina)
13	4	Superficial understanding of gender equality (Agnieszka)
33	4	GEPs are not yet obligatory under law (as they should have probably mean)
16	3	Not using evidence-based design of gender-neutral corporate policies for hiring, promotion, compensation and employment conditions (Marcus)
31	3	Failure to assess the interconnection with other issues (Kevin)
3	2	Low level of knowledge concerning contents of the GEP (Agnieszka)
19	2	Persistence of traditional gender division of labour in the home (Sophia)
35	2	Lack of research on biases (Kevin - Marcus)

Table Voting Phase

The following ideas received one vote each:

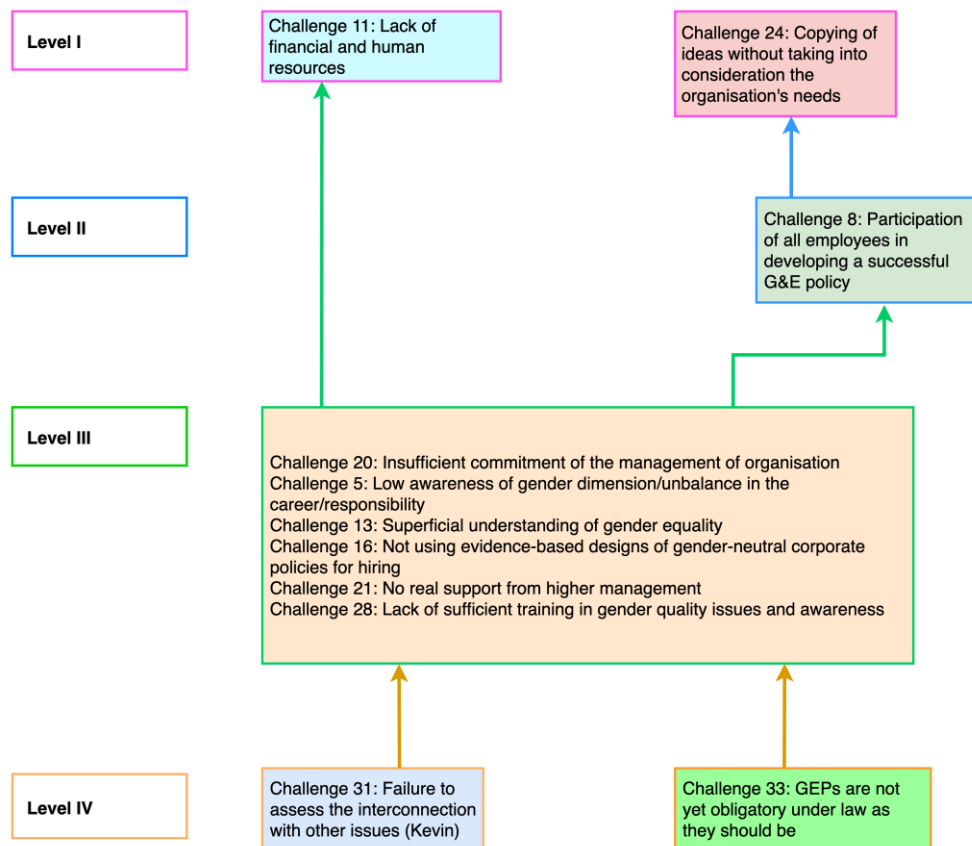
- 1 1 It's not needed (Vicky)
- 9 1 Employees evaluation (Eleanna)
- 14 1 Difficulty matching the organization's situation to research (Kevin)
- 17 1 Insufficient awareness and education of all employees (Kriemadis)
- 26 1 Empowerment of all employees (Kriemadis)
- 30 1 Competition for Women with other R&D Organizations (Kevin)
- 34 1 Lack of GEPs enforcement provisions (eg not part of the audit process)

- (Dimitris - Marcus)
- 36 1 Lack of cultural societal (Thomais)
- 37 1 Lack to no effective policies and affirmative actions in the research organizations
(Glass Ceiling) (Abiba)
- 40 1 Anticipating what is required for sustainability of the project i.e., not to depend on
volunteers (Maria Rosaria)
- 41 1 Lack of confidence on the part of women (Clara)
- 42 1 GEP only as good as the commitment behind it

6.1.4 Tree of influences

As demonstrated in the following Figure, the Influence Map of the virtual Structured Democratic Dialogue workshop includes four different hierarchical levels. The strongest obstacles are considered the root, which also pinpoint to possible *drivers for change*, i.e., removing them will be most effective. The implementation of these ideas should be prioritised in order to facilitate the implementation of the subsequent practices. These root obstacles are located at the bottom of the roadmap and in particular at the Levels II and to a lesser extend II, as they have the greatest influence among all other practices. It also follows that the practices identified on the upper levels of the Map are the least influential in facilitating the implementation of other practices.

The influence of one obstacle over the other is completely unrelated to the importance of the two obstacles emerging from the voting phase that preceded. In this vein, any obstacle which has received more than two votes during the voting phase, and was thus moved to the Mapping phase, can be considered a root practice regardless of the number of votes it received. Therefore, an obstacle with “low popularity” can end up being a root barrier while an obstacle with “high popularity” can end up at the upper levels of the map. For instance, consider Ideas 24: Copying of ideas without taking into consideration organization's needs (Nafsika); 8: Participation of all employees in developing a successful G&E policy (Kriemadis); and 20: Insufficient commitment of the management of the organisation (Vicky), all of which have received top votes but did not make it to the root.



Annex 1 List of actions, clarifications and votes from Spain MLW

Workshop: “What are the best practices to overcome problems, barriers, issues when implementing your gender equality plans (GEPs)?”

#	Practice	Votes
1	<p>Educational workshops on the most significant historical, socio-economic, and legal achievements of women</p> <p>Creating occasions of meetings and dialogue between younger and elder generations of women favours the exchange of ideas, opinions, and suggests solutions on how to overcome the difficulties experienced in any social domain. This could be done by organising seminars, workshops, school and University visits to raise awareness on the most significant historical, socio-economic, and legal achievements of women through history. In particular, to obtain a real change, teachers, educators and all those who work to engage the hearts and minds of the community to help drive women's equality, should manage to reach out to the remote and rural areas. The benefits would be multiple: first, younger generations of women would better know the difficult steps women have been through to have their rights recognised as human beings. Second, educational workshops focusing on the obstacles met by women to reach gender equality, and how they managed to overcome them, would inspire young women to fight for their everyday battle bearing in mind the solutions adopted. These latter are crucial to have a broader understanding of the issues, to fully appreciate the rights obtained, and, most importantly, to fight for their daily achievements. Indeed, nowadays, women and girls are making a mark not just in the media, but in other challenging fields including law enforcement, politics, and STEM disciplines. Nonetheless, these opportunities were not built in a day and it is fundamental to recall and retrace the path layered with different struggles to get where we are.</p>	3
2	<p>Equality Group</p> <p>At MIGAL, one of the seven GEPs implementing partners of the R&I PEERS project, we gathered a heterogeneous group of female researchers, who were at different stages in their careers. The goal was to carry out educational and formative activities that would enable the participants to get to know one another and gain new skills that would help them advance in their professional career. Activities included various workshops, such as (1) how to present oneself, (2) time managing, (3) experiential learning and (4) academic writing. There were lectures regarding intellectual property and how to pass from the comfort zone into the growth zone. In addition, there were conferences on gender equality and on women as an engine for economic growth. These activities, we hope helped improve self-confidence, as well as oral and written presentation capabilities. Moreover, through this interaction, women researchers of different ages and career choices became more acquainted with others in different positions in the research institute and were hopefully inspired to pursue an advanced degree or some other career-advancing alternative.</p>	0
3	<p>Get professional support and advice</p> <p>The process of designing a specific Gender Equality Plan (GEP) for CFM was a top-bottom approach. Even if certain members of the community expressed the willing to "help" it was obvious from the beginning that a consultancy service was going to be crucial. We got support from "Elhuyar Aholkularitza". Elhuyar is also part of the implementation stage in which we are immersed in. Nevertheless, a strong and well</p>	6

	organized structure has arisen from all the process, with a Gender Equality Committee well defined and a growing community of people involved in specific actions.	
4	Define the field of action	0
	Furthering equality between men and women in the field of research requires action in many different spheres: management, recruitment, evaluation, education, dissemination. When making an equality plan, it is essential to define the objectives and the field of action properly, since an action plan that is too ambitious can make us lose our way. We consider that it is essential to establish few objectives, but which should be well defined and achievable by the organisation, in order not to lose the focus of the plan and not to have a feeling of frustration from not observing significant advances.	
5	Consciousness, commitment and horizontality within the Equality Committee	6
	All members of the Equality Committee must be aware of persistent inequalities in society that manifest also in the academic world. Our team is committed to continue making progress for greater equality and inclusivity in the workplace. We also share a commitment for viewpoint diversity. This is essential in order to spread the message assertively to our community.	
6	Get organized: join forces and create an equality committee	0
	Being aware of the problems derived from a gender non-balanced working environment might be a good starting point, gather with colleagues which feel the same way and join forces. Other colleagues might not see any problem at all, and the task of rinsing awareness is not an easy one. Might be some of you already are involved in individual actions working towards equality but not all the efforts are united into one direction. The creation of a committee or commission which will be in charge of the supervision and elaboration of the GEP it's recommended. This committee has to be representative of the overall workforce. Having full support from your institution is key, from the administration and direction as from your colleagues, everybody needs to be on board. Representation from all departments (administration, services and researchers in our case) and all levels within these departments (from junior to senior positions) is a must, and of course, gender balance! This heterogeneous mixture of backgrounds, in which everyone brings different perspectives and various day to day problems to overcome, is key for the final GEP to be integral within the institution and relevant. The committee should define the major objectives which would like to fulfil with the GEP elaboration and implementation.	
7	Find the real cause of the problem/barrier	2
	Often, the real problem may hide, so that we cannot find the right solution to deal with it.	
8	On-line activities	0
	Convert some of the planned actions online: meetings between team-members, trainings.	
9	Proposing incentives for inclusion in the daily work considering Gender and Minorities perspectives	1
	Proposing incentives for inclusion considering Gender and Minorities perspectives means that producing scientific publications or promoting scientific actions which are inclusive should be an indicator for the evaluation of the activity and for career. This could incentivise a new mindset.	
10	Introduction of quotas to promote and support women's participation in all forms of decision making	2
	To reduce the gender gap in decision-making bodies, breaking the so called "glass-ceiling", it is fundamental to develop and implement legal and policy reforms ensuring	

women's participation in decision-making as well as initiatives to develop women's capacities as leadership. Indeed, the EU has introduced gender equality policies conceived as functional, not in contrast, to the market needs. That is to say, a workfare model based on the idea that addressing gender imbalances in decision making bodies leads to positive outcomes at individual and social level. Not only does it improve women's position at a personal level, but it also allows to represent viewpoints, experiences, and needs of a broader and more balanced proportion of society. Thus, to increase women's participation and leadership in all decision-making bodies, including academia and public institutions, initiatives to accelerate women's progress in political participation are required. First, promoting women's participation as voters and candidates in electoral processes. Second, supporting women's representation in governance institutions and other measures to build a conducive environment for women's political participation. This could be reached, in the initial phase, with the introduction of obligatory quotas for women as a means of breaking a culture that only helps men. Third, it is necessary to work with the national and international normative bodies, to advance global norms and national practices to further women's leadership in politics and public institutions. Finally, to implement the Gender Equality Plans and to fulfil the aforementioned aims, a collaboration among different government bodies must be sought. Particularly, it would be worth creating strong synergies with all women's organizations in any social domain, including politics and academia, to support women's leadership and gender equality in the workplace.

11	Retreat	2
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The meaning of the word "retreat" is: withdraw, retirement. From a Buddhist point of view, a retreat is a period of intense meditation in a quiet and remote place to which one would consciously retire from everyday tasks and from any external activity that might be distracting and preventing him/her to concentrate on a focused goal. The goal of our retreat was to be able to break away from the noises of everyday life and enable woman researchers to promote their scientific writing of grants and articles, in the company of others, who could also provide help. Such a retreat is even more important during the present pandemic. It has been reported that the corona pandemic-induced lockdown has caused many women to reduce their work output. Not only do they lack a quiet place to work, but also, they have to care for their children who are at home instead of at school. Therefore, the retreat was very worthwhile endeavour.

12	Get everybody on board, spread the word	3
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Be as transparent as possible and keep all the community informed on the state of the art of the GEP.

13	Involve everyone at the organization	2
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The equality plan does not have to only be from a specific part of the organization. It must be transversal to the entire organization. In order to advance in equality, it is very important for it to be immersed in the culture of the institution. This means that we should take into account the gender perspective in our daily job, that is to say, we need to work from that perspective. Therefore, it is very important to involve all the people that make up the organization. It is not enough for one person to make the plan and communicate it to the rest. Everyone needs to feel part of that process. For this reason, participatory processes that allow co-creation are very important for the plan to be carried out properly.

14	Recognition and Autonomy of the Equality Committee	2
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The institution must recognize the commitment and work of members in the committee and give autonomy to this entity to accomplish its goals. In one hand, the committee, as an entity, can emit opinions and suggestions independently. On the other hand, a budget must be assigned to accomplish the consensual actions.

15	Get help: objective information to be analysed by qualified people	2
	An external and objective analysis of the past and current situation of your institution/company by qualified experts it's a good starting point to generate a successful GEP. From the analysis, nonbiased conclusions will be extracted and operational objectives to tackle main problems related with gender equality. To get the necessary answers and the correct questions also has to be done. The committee in collaboration with the external advisor should get involved in all the stages of the GEP: elaboration, supervision that the direction and main outcomes from this GEP are in consonance with the previously established goals of the committee. Also, it's important to communicate the progress and motivation to all workers to get the full community on track and receive as much feedback as possible. All contribution counts, and in most of cases this feedback has been very positive. External networking is key to get started. Having contacted with other institutions with same problems and similar trajectory to ours, facilitated very much the gathering of information and the different possibilities when generating a GEP and contacting with external consultants.	
16	Find allies/collaborators/people that share the same concern for the GEP	2
	GEP implementation needs people that are committed to it. Sometimes detailed task description and defined procedures are not enough, if the persons responsible do not really care for the GEP objectives.	
17	Organisations of Joint events	0
	ANPR R&I PEERS Team has opted to join events organized by the Ministry of Higher Education and Scientific Research to involve the strategic actors of the Ministry and broaden the spectrum of the target audience by benefiting from the quality of the participants (community scientists, institutional actors, ministries ...)	
18	Parental leave or other welfare tools should be divided among males and females	0
	I mean that for example parental leave or other welfare tools for males cannot be used by females and vice versa. Moreover, some of these periods should be introduced as compulsory, to avoid that the existing mindset does not change, and some roles are in any case only in charge of females.	
19	Surveys, fundraising campaigns, and nurseries to support mother researchers dealing with heavy workload and childcare	1
	There is strong evidence to maintain that research and higher educational institutions, as with other social spheres, reproduce and mirror gender inequality. The well-known horizontal and vertical segregation see women excluded from certain fields, i.e. STEM, and from the top hierarchical positions in academia. This double form of ostracism leads to different negative outcomes in research including the development of a masculine image of science and, most importantly, gender-blind or gender-biased research. Indeed, since sex and gender are fundamental factors affecting the organisation of our life and society, it is crucial to take into account the impact of these variables for the advancement of scientific knowledge. Nonetheless, as a matter of facts, female researchers are often excluded from scientific inquiries and experience impediments of different types to their academic career enhancement. This is particularly true for female researchers with children since the struggle for career enhancement is discouraged and made even tougher by the workload associated with childcare. That is why it is paramount intervening, first of all, to identify and tackle the different types of issues experienced by mother researchers. This can be done employing surveys and periodical meetings focused on the discussion of the main changes and difficulties due to dealing with research and childcare at the same time. Second, it would be worth organising fundraising campaigns, among companies and higher research institutions, to raise	

awareness of the extra budget needed by researchers with children, particularly abroad, who have to work on the data collection and analysis and do not have the support of their families to look after their children. Therefore, to encourage researchers to still take up or continue their studies in institutions abroad, it is necessary to provide each University and higher-research institution with nurseries and babysitting services as well as extra budgets to support them in the double challenge of motherhood and research.

20	The English language dissolves professional barriers	1
	The initial idea was mentoring. In order to give each researcher an opportunity to receive personal guidance of her choice. However, the researchers were not interested in talking to a veteran researcher about their topics. They feared that sensitive information from the meeting would appear down the professional path. They preferred to strengthen a weakness that was limiting their professional success - English proficiency, written and spoken. The fact that English is not their mother tongue creates within them an insecurity, making expression in different professional areas very challenging. In a scientific career, one must be able to express oneself, in lectures of professional conferences and in scientific writing of articles and research proposals. Thus, English proficiency is essential in this career.	
21	Be ready to accept critics	0
	Not all the community share the vision of the GEP. We have tried to keep an open mind for critics, but a firm answer and a strong commitment and support from the direction board not to jeopardize the GEP itself by any means.	
22	Have the necessary resources	3
	Undertaking an equality plan requires having resources, especially people, who have the time and the will to develop the plan. It is necessary for the entire organization to be involved, but it is also necessary for there to be some leading people committed to equality and who have time to dedicate to the carrying out of the plan. The plan must be part of the organizations core strategy, because this ensures the plan is assigned the economic and human resources needed to carry it out.	
23	Accountability and Team building	2
	The committee aims to build and maintain a positive and constructive relationship between team members. We listen to understand, not just to respond. We share equally the responsibilities of the committee. Decision making is also shared within the committee.	
24	Get hands on it! Yes, it's going to be a lot of work...	0
	Once the commission for the negotiation of the GEP has been created, the external company chosen for the analysis and proposal of the GEP now work starts. From gathering a lot of information from your administration, to selection of representative candidates from co-workers for interviews, where more in deep data analysis will be gathered into a general questionnaire which will be answered (hopefully) by most of our colleagues. From the analysis of all that information the main problems will be addressed and actions proposed to tackle them. And finally, a GEP will be generated. And now how we put in place all the actions?? Workgroups have to be defined for the specific actions. Each with a responsible person which will push forward the progress of action implementation, follow up the progress and report regularly progress and difficulties encountered. Also, to prioritize actions and establish a reasonable timeline for fulfilment. To supervise all the actions progress from GEP the equality committee has to established regular meetings and appropriate indicators which will allow to assess the implementation degree and the results.	
25	Bottom up approach, revision	0

	Try to communicate with your collaborators, with the persons responsible and, most importantly the organization staff, define the problem, assess the organization needs and revise/adopt the GEP, where needed.	
26	Resilience of team-members	1
	Commitment and resilience of team-members to deal with misunderstandings caused by differences in interpretation of the gender dimension.	
27	Trainings and collaborative workshop creating a collaborative environment	4
	Trainings and collaborative workshops should be institutionalised in order to define a sense of belonging to the community in the work environment. This means that also the work organisation is defined in a collaborative way and following the needs of work-life balance.	
28	Benchmarking with other institutions	1
	n/a	
29	State that the GEP is an institutional plan, with full support of the direction board developed with the involvement of the whole community	4
	n/a	

Annex 2 Participants from Spain MLW

Workshop: “What are the best practices to overcome problems, barriers, issues when implementing your gender equality plans (GEPs)?”

Surname	Name	Organisation
Arregi Buldain	Amaia	Donostia International Physics Center (DIPC)
Charrad	Amani	National Agency for Research Promotion (ANPR)
D'Angelo	Francesca	University of Salerno (UNISA)
Fishman	Sigal	MIGAL - Galilee Research Institute
Grifoni	Patrizia	Consiglio Nazionale delle Ricerche (CNR)
Llarena	Irantzu	CIC biomaGUNE
Madariaga	Ainhoa	Ikerbasque
Marchaim	Uri	MIGAL - Galilee Research Institute
Mugica Mendiola	Idoia	Centro de Física de Materiales (CFM)
Platis	Dimitris	Greek General Secretariat for Family Policy and Gender Equality (GSFPGE)

Workshop: Towards the identification of measures and actions for successful Gender Equality Plans implementation within Research Performing Organisations (RPO)

Surname	Name	Organisation
Baloh	Vanda	Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti (ZRC SAZU)
Berčič	Tjaša	Ministry of Education, Science and Sport, Directorate for Science (Slovenia)
Fiket	Irena	Institute for Philosophy and Social Theory, University of Belgrade
Grigalionyte-Bembič	Ernesta	National Institute of Biology (Slovenia)
Hofman	Ana	Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti (ZRC SAZU)
Janžekovič	Anita	Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti (ZRC SAZU)
Klanjšek Gunde	Marta	National Institute of Chemistry (Ljubljana)
Komel Klepec	Teja	Znanstvenoraziskovalni center Slovenske akademije znanosti in umetnosti (ZRC SAZU)
Presker	Robert	University of Maribor
Stojanović	Andrija	Institute for Philosophy and Social Theory, University of Belgrade
Tašner	Veronika	University of Ljubljana, Faculty of Education

Annex 3 List of actions, clarifications and votes from Athens MLW

Workshop: “What barriers or obstacles do we face when designing and implementing GEPs?”

#	Practice	Votes
1	It's not needed A lot of research organisations don't believe that a gender equality plan is needed. They refuse to admit that there is gender inequality and discrimination within their organization.	3
2	Lack of financial resources Financial resources are not everything, but they are necessary in order to have facilities/services that are necessary when implementing a successful GEP. For instance, when you want to organize a series of seminars provided by experts, or if you want to build a playing corner and hire stuff for watching the children, or a nursery/breastfeeding room.	0
3	Low level of knowledge concerning contents of the GEP What really is the GEP? How should it look like? What shall it contain to make sense? Deeper reflection is needed, as well as higher level of knowledge about the issue.	6
4	Conflict with existing Human Resource incentives There are structural conflicts with policies needed for gender equality built into human resource management policies. For example, conditions regarding family leave pregnancies caretaking roles that may disproportionately Burden women and so forth. The policies, decision-making, processes and practices act as a system which affects hiring, training, pay, and promotion of women. This system also acts in more subtle ways that may socialize bias, discrimination, stigmatization. These in turn may affect job satisfaction, organizational commitment, and performance. This system may be difficult to change. For an old, large, well established organization with a Human Resources Department the system will have been embedded in the culture for decades and hence can be highly resistant to modification. Change may happen only at the margins or the appearance of change. At the other extreme for a small, younger organization, without a Human Resource Department the policies and overall system may be fragmented and haphazard, thus difficult to organize and muster coherence around. Two examples of Institutional Discrimination in HR Policy are: For instance, if women are under-represented in a particular educational program or a particular job type and those credentials or previous job experience are required to be considered for selection, women are being systematically, albeit perhaps not intentionally, discriminated against. In another example, there is gender discrimination if a test is used in the selection battery for which greater gender differences emerge, than those that emerge for job performance ratings (Hough et al., 2001).* An example of discrimination in performance evaluation is: For instance, “face time” is a key performance metric that rewards employees who are at the office more than those who are not. Given that women are still the primary caregivers (Acker, 1990;Fuegen et al., 2004), women use flexible work arrangements more often than men and, consequently, face career penalties because they score lower on facetime (Glass, 2004). Thus, biased criteria in performance evaluation policies can contribute to gender discrimination.	0

* Cailin S. Stamarski, and Leanne S. Son Hing, Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers' sexism, *Front. Psychol.*, 16 September 2015.

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5 Lack of awareness regarding gender imbalances within organization 6

It's important to share data on the gender dimension in the distribution of position/level/responsibility so to increase awareness of the gender unbalance and promote reflection and next action

6 The perception that developing GEP is useless 0

The majority of organization's staff and members of Board is not aware of what a GEP is and what benefits can be created for the organization by implementing a GEP. This means that the process of developing a GEP is considered to be a luxury that takes time.

7 The lack of annual organisation-GEP dialogues open to all employees 2

Without including a process where all stakeholders (employees, managers, directors, shareholders, etc) are given the opportunity to participate in annual gender equality structured dialogues to validate the gender equality strategy and its implementation across the organisation, employees are unable to actively contribute to and claim ownership of and commitment to the gender equality strategies of the organisation.

8 Lack of organisation-wide participation in developing a successful G&E policy 0

It is not a part of our organizational culture to include all employees (University professors, administrative staff and technical personnel) in the process of developing a G&E policy. Usually, this task is assigned to a University Committee !!!! which is not representative of all people's ideas and perceptions. Consequently, later in the implementation phase we are not so successful and of course not very proud of the results and deliverables as a system.

9 Employees' evaluation 1

Employees' evaluation and connection with payment criteria may have a positive impact on removing stereotypes. When the evaluation process exists and is structured can remove stereotypes from management and employees. By structured I mean that the process contains specific questions on knowledge and specific skills and specific answers to each question. If the evaluation criteria and the evaluation answers are clearly set then it may be quite hard for the person that evaluates to give a low grade to someone just because of gender issues.

10 Economic crisis & austerity 2

Social and care-oriented public institutions in the country are severely affected by the long crisis and their budgets are stressed in an unprecedented way, including the number of staff that are to carry out any respective policies or indeed the actual competencies of the agency itself

can be indirectly downgraded (as in the case of the GSDFPGE). Any panning for the short or long term and of course any implementation has to be compromised accordingly.

11	Lack of financial and human resources	2
	Most of the organisations argue that they don't have the human and financial resources to implement an equality plan	
12	Lack of human resources	3
	A successful GEP needs a lot of effort to be put by different people. Even if there are people willing to undertake the work, there is often a work overload and other priorities that higher management considers more important.	
13	Superficial understanding of gender equality	2
	What does the gender equality really mean in terms of planning and conducting research? What areas shall be influenced by gender equality? What else then equal rights and opportunities of the genders are included?	
14	Difficulty matching the organization's situation to research	2
	There are so many variables which may be pertinent to an organization's situation on gender inequality that it may be difficult to apply learning from the research literature on the topic in a general fashion. So too, within an organization which is not typically oriented to adopting the results of research, or best practices from other industries, there may be no one with the expertise to lead the identification and adoption of the most effective practices.	
	Translating research into practice can so often be such a challenge that it led to the emergence of its own field of study referred to as “Implementation Science”. Its purpose is to learn how to identify and adopt evidence-based practices, and short of that so-called ‘best practices’ into practice within an organization.	
	The imperative to attend to implementation process and effectiveness in addition to intervention effectiveness has emerged over the last two decades in the face of growing recognition that effective practices and treatments do not passively make their way into routine practice. Implementation is not a simple, linear process; rather, it is a highly complex, multi-stage, iterative, multifactorial process that requires distinct expertise and capacity (Brehaut & Eva, 2012). Implementation must be intentional, explicit, and systematic. Emerging research has illustrated that implementation effectiveness is as important as the effectiveness of the evidence that is being implemented, and a strong, positive relationship exists between implementation quality and treatment outcomes (Durlak & DuPre, 2008).**	
	** Melanie Barwick, Raluca Dubrowski, Kadia Petricca, Knowledge Translation: The Rise of Implementation, American Institutes for Research November 2020	
	Brehaut, J. C., & Eva, K. W. (2012). Building theories of knowledge translation interventions: Use the entire menu of constructs. <i>Implementation Science</i> , 7(1), 114–124.	
	Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. <i>American Journal of Community Psychology</i> , 41, 327–350.	
15	Barriers related to "costs"	2
	A GEP is possible to include activities or measures that will bring additional costs for the organization. For example the provision of extra days (beyond the legal provisions) for parental leave, could be a measure -introduced in terms of a GEP- that employers wouldn't be keen to accept. That's why it is important to invest in stakeholders' and employers' awareness of long-term benefits arising by implementing a GEP, in order to persuade them that short-term costs	

are insignificant in comparison to the long-term benefits that a GEP will bring for the organization.

16 Lack of evidence-based design of gender-neutral corporate policies for hiring, promotion, compensation and employment conditions 2

Gender-neutral employment conditions that are not evidence-based could result in the key requirements being excluded. The differing elements that require to be included in a GEP may not be well known in each specific industry. It is possible that only over time, and with detailed recording of the HR function where gender-related issues are concerned, will a body of knowledge be developed that provides evidence of what is required. For organisations lacking this capability will find difficulty in developing their GEP's.

There may also be organisational reluctance to fully document cases where gender equality has not been satisfactorily addressed, as these may reflect badly on the managers involved.

Without an evidence-based approach, family-friendly policies relating to prenatal safety job-reassignment for all roles (laboratory tasks (scientists), home working (sales, management) strenuous physical tasks (shelf stackers, cleaners, etc) shared parental leave; fertility treatments; assistance with child care; recruitment of people returning to the workforce after child support absence, could be overlooked.

17 Insufficient awareness and education of all employees 0

All employees should be aware and educated about the definition and what constitutes a successful G&E policy in order to be able to participate in the development of such a policy.

18 360 evaluation and coaching 0

Coaching after evaluation can have a positive impact on culture change

19 Persistence of traditional gender division of labour in the home 1

The vast majority of employees (incl those in senior posts) are women but there is a reason to this: work status of civil servants is more attractive as it includes e.g. security of tenure and some basic benefits for motherhood. Also, access to recruitment and career development is generally gender-neutral. But employees are hampered by the persistence of traditional stereotypical roles imposed upon them in the labor division at home, affecting their commitment and development within the organisation.

20 Insufficient commitment of the management of the organisation 1

Sometimes the management of a research organisation doesn't want to commit to such a plan and take the responsibility for it

21 No real support from the higher management 0

Sometimes the higher management considers that having a GEP approved is enough and there is no real conscious decision to put the money, effort and all resources in general in order for a GEP to be actually implemented

22 Avoidance of additional bureaucratic duties 3

This may be seen as one more bureaucratic duty you need to devote time to, while the practical use of it will be minimal. So why shall I waste my time on it?

23 Insufficient measures taken 2

In order to ascertain situation-specific, and systemic reasons for gender inequality that are actionable and fit into an overall plan - much deeper indicators probably need to be investigated than previously undertaken in the organization and perhaps even by other organizations or researchers may already have been established. Deeper measures may have to be investigated. For example, referring to the example cited in Idea 4 – the impact of an explicit or implicit “facetime” metric in performance evaluation which may systematically discriminate against woman. The value placed on facetime may be misplaced in a research environment. Research on “deep work” and “flow states” and productivity in research settings indicates the value of uninterrupted work. Therefore, the facetime metric may be inappropriately applied in this

setting. It may also be anachronistic with respect to the known evidence. The need to not be interrupted may even be better addressed in the home setting depending on the specific situation of the researcher. The facetime metric may have crept into the research department from the overall organization in which facetime is more necessary than in research. So, gaining an appreciation of the evidence-base on the value of facetime versus the value of not being interrupted, trying experiments in the specific research setting, segmenting the day into uninterrupted individual work, and socializing time, learning about best practices from what is known in “Implementation Science” about adopting a best balance between the socializing enabled by facetime versus promoting “deep work” – these are all measures that can be taken to disrupt a fixation with facetime which is inherently discriminatory against women.

Broader measures will have to be accommodated. As noted by the previously cited authors Stamarski and Hing citing Gelfand et al: ... many sources of gender inequality are inter-related and have reciprocal effects. By implication, there are no simple or direct solutions to reduce gender solutions. In fact, as discussed by Gelfand et al. (2007), if an organization attempts to correct discrimination in only one aspect of organizational structure, process, or practice, and not others, such change attempts will be ineffective due to mixed messages. ***

*** Cailin S. Stamarski and Leanne S. Sin Hing, Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers’ sexism, *Front. Psychol.*, 16 September 2015.

Gelfand, M.J Nishii L.H, Raver J.L., and Schneider, B. (2007). *Discrimination in Organizations: An Organizational-Level Systems Perspectives* (CAHRS WorkingPaper#07-08). Ithaca, NY: Cornell University. Retrieved from Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies.

24 Copying of ideas without taking into consideration organization's needs 0

Even in cases where organizations have decided to make an effort to design their GEP, it is a common practice to copy ideas that have been effective for other organizations without taking into consideration their organization’s needs and without following the appropriate methodological steps. This minimizes the possibility to address their needs and to design a GEP that will be effective. It is important for the stakeholders to be trained on relevant methodologies and to follow all the steps to design a tailor-made GEP, based on needs assessment evidence.

25 Lack of standardised processes and procedures to avoid algorithmic and human bias 0

Organisations required to establish standardised processes that address the danger of algorithmic and human-oriented bias. This is required to ensure that hiring processes, performance, promotion and compensation interviews and procedures will ask exactly the same question of candidates in a predetermined order and format and grade responses using pre-specified, standardized criteria. All such processes and procedures must be examined and reviewed to remove instances of gender bias

26 Empowerment of all employees 1

All employees should be empowered (have authorization to make decisions without further approval from top management) to create, implement, continually evaluate and continually improve the G&E policy.

27 Standard recruitment questionnaire 4

Working the recruitment process on a standard questionnaire can remove bias. HR Department is responsible to create a questionnaire that will contain specific questions. Those questions must be focused on technical and specific soft skills. The recruitment team must follow this

questionnaire during the recruitment process and must not ask any other question. This way each applicant can be evaluated in the same way despite the gender.

28 Lack of sufficient training in gender equality issues and awareness 1

Directly connected with the two aforementioned obstacles is the shortage of trainings, educational material, life-long learning methods and mentoring activity that would enhance performance and create multipliers within the organizations, in aid to both planning and implementing effective gender equality policies and actions.

29 Lack of Evidence-Based Research on Effective Policies 4

There may be at least a lack of awareness of best practices and especially evidence-based research which may be thin. People implementing policies for gender equality must appraise themselves of the existing research base if not contribute to it themselves. While research on gender inequality has established the need for interventions, research on the most effective interventions is less well established.

30 Competition for Women with other R&D Organizations 1

To the extent that gender equality policy changes makes it more attractive for women to either be retained or to be attracted to an R&D organization this may put the organization in competition with other R&D entities perhaps even within the same company between departments. This suggests the value of a sectoral approach which is difficult because of anti-monopoly laws.

31 Failure to assess the interconnection with other issues 3

Multiple problems within an organization may have a common cause. Therefore the issues may not be easily distinguished. This may be a good approach to identify future issues of concern. Referring to the quote from Gelfand et al. in Idea 23, prior to an intervention an appreciation of the interconnection of issues ought to be conducted. While this can benefit from general models which are beginning to appear and mature this is likely to also require situation-specific assessment. There is probably an absence of the ability to conduct such an assessment and plan in many organizations. There is also probably a shortage of professional evaluators and intervention specialists in this space. In addition it is important to note that assessments of the situation of gender inequality and proposed interventions ought to involve stakeholders within the organization rather than simply hiring a consultant to generate a report.

Below is an example of modeling the interconnection of issues of women and gender equality in research. Figure 3. from Gender inequality at the Social Sciences and Humanities University in: Inge Bleijenbergh, M. L. Van Engen, M. L. Van Engen, Participatory modeling to support gender equality: The importance of including stakeholders June 2015, *Equality, Diversity and Inclusion: An International Journal* 34(5):422-438

32 Lack of female researcher involvement as role models with youth outreach 0

Educational studies have shown that it is critical to engage adolescents' interest by grade 5, 10 to 11 years of age, in order to secure their interest in science technology engineering and mathematics. Hopefully this will improve the interest of girls in STEM education and careers. It may also help activate researcher's interaction with their own social network to reach youth. It may also create opportunities for learning from women the barriers and challenges they faced as youth regarding the pursuit of STEM pathways from mothers that wanted to pursue STEM but did not as well as how some broke through.

33 Lack of legal obligations to implement GEPs, and lack of enforcement provisions 4

Until there is a legal requirement to implement Gender Equality under law, it will be difficult to persuade organisations with limited resources to fully implement effective Gender Equality Plans. If the organisation has to trade-off budgeting for the costs of Gender Equality against employing another researcher, it could easily choose the latter over the former unless there is a legal requirement to document and implement Gender Equality. And, if there are no

	enforcement provisions, the effect of having a legal requirement to implement GEP's will be "toothless"	
34	Lack of research on biases	1
35	Lack of cultural societal	2
36	Lack of effective policies and affirmative actions in research organizations (Glass Ceiling)	1
	"Women make up less than 25% of all national parliamentarians around the world. Women are generally underrepresented at community, district and national level committees due to system failures. Cultural norms and Burden of Care mostly hinder women's participation in all spheres. Institutions fail to acknowledge affirmative actions that could go a long way in designing and implementing GEPs.	
37	Low Leadership Support for women	1
	Build Child Care Centers. Encourage state institutions and non state institutions to cultivate the culture of making child care centers available and affordable. Series of Advocacies should be implemented to get more commitment from these institutions. Giving all employees the same opportunity irrespective of gender is another great way to design GEPs.	
38	Need for organized fundraising from local and national institutions but also from public and private companies and associations	0
39	Anticipating what is required for sustainability of the project so as not to depend on volunteers	0
	We can't count so much on volunteers.	
40	Lack of general acceptance that Gender Equality is a fundamental human right	1
	It is generally believed by those promoting gender equality that it is a fundamental human right, essential to achieve peaceful societies, with the potential for full human and sustainable development. Empowering women spurs both productivity and economic growth. Until society - religious leaders, politicians, educators, media etc - actively promote Gender Equality there will be no societal push to establish and enforce legislation to make GEP's mandatory.	
41	Gender Equality must become a key part of labour organisations manifestos	1
	Without including Gender Equality as a key element in the manifestos of trade unions and other organisations supporting the rights of workers, it will be difficult to push employers to implement GEP's.	
42	Lack of confidence on the part of women	1
	Even with a GEP in place, women may still struggle with asking for higher pay or equal treatment, fearing that this may compromise their position. This may be due to the relatively few female role models in the workplace (often STEM), a toxic work environment (where harassment or unfair treatment are tolerated) and/or absent support structures.	
43	GEP only as good as the commitment behind it	
	As in greenwashing, the implementation of GEP may serve to superficially paper over structural inequalities without any real commitment to change or intention to address the root causes. This only lets the problem persist.	

Annex 4 Participants from Athens MLW

Workshop: “What barriers or obstacles do we face when designing and implementing GEPs?”

Surname	Name	Organisation
Abdallah	Abiba	Move The World, Ghana
Clara		Future Worlds Center
Dadak	Agnieszka	Foundation of Alternative Educational Initiatives
Dye	Kevin	Future Worlds Center
Hallside	Marcus	Future Worlds Center
Germotsi	Vicky	Research Centre for Gender Equality (KETHI)
Kriemadis	Thanos	University of the Peloponnese
Martini	Ermina	European Training Foundations
Moschovakou	Nafsika	Research Centre for Gender Equality (KETHI)
Nikolaou	Sophia	General Secretariat for Demographic and Family Policy and Gender Equality of the Hellenic Ministry of Labour and Social Affairs
PELIZZARI	Maria Rosaria	UNISA, Italy
Platis	Dimitris	Department of Planning and Developing Gender Equality Policies
Prassopoulou	Eleanna	CSAP: Certified Systemic Analyst Professional, Athens
Shoshilos	Andreas	Green party Cyprus
Vekiou	Thomais	General Secretariat for Demographic and Family Policy and Gender Equality of the Hellenic Ministry of Labour and Social Affairs