

Mapping Activities, Networks and Needs of GE-Practitioners

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Abstract

The successful implementation of Gender Equality Plans (GEPs)¹ in research organisations remains a difficult challenge. Problems typically stem from a lack of practitioners' respective "know how" but are also related to scattered efforts at inter- and intra-organisational levels. The Horizon 2020 project ACT² aims at overcoming these struggles in implementing GEPs by promoting institutional change through the advancement of Communities of Practice (CoPs). For this purpose, ACT in a first step carried out a Community Survey to map actors – practitioners and experts – who are engaged in the advancement of gender equality (GE) objectives at Research Performing (RPOs) and Research Funding Organisations (RFOs) across Europe. The aim of this paper is to give an overview of key results on GE implementation activities based on survey responses, as well as the experienced struggles and needs for improvement. Furthermore, first results of the conducted Social Network Analysis (SNA) are presented, showing some of the most central and well-connected regions but also gaps in the existing network of cooperation regarding GE.

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1. In the specific context of research organisations and higher education institutions, the European Commission considers a Gender Equality Plan as a set of actions aiming at: Conducting impact assessment / audits of procedures and practices to identify gender bias; Identifying and implementing innovative strategies to correct any bias; Setting targets and monitoring progress via indicators (European Commission 2012, 13).
 2. ACT is short for "Communities of PrACTice for Accelerating Gender Equality and Institutional Change in Research and Innovation across Europe". For more information visit <https://www.act-on-gender.eu/project>.

1 Introduction

Advancing gender equality is one of the institutional goals of many research organisations in Europe and beyond. The European Union tackles this issue and the corresponding waste of talent of female scientists by supporting activities directed at institutional change, for instance through funding projects such as ACT. The aim of ACT is to support Research Performing (RPOs) and Research Funding Organisations (RFOs) in their gender equality actions. This aim will be achieved through creating and supporting Communities of Practice (CoPs) – collaborating groups of practitioners, academics and experts – that work towards advancing gender equality at the organisational level and enhancing the integration of a gender dimension in research and teaching.

This paper reflects on some of the main findings of the ACT Community Survey, conducted as a first step in order to address the current status of gender equality in Research Performing and Research Funding Organisations. The following elaborations first provide information on existing policies and activities to promote gender equality at the organisational level as well as the efforts to integrate a gender dimension in research and teaching. This is followed by an analysis of the barriers hindering the implementation processes, and an identification of the internal and external support needed to overcome these barriers. The last section will focus on cooperation patterns and provide some results of the conducted Social Network Analysis (SNA).

2 Methodology and Sample Characteristics

The ACT Community Survey was carried out online between the 27th of November 2018 and the 15th of February 2019. During that time, the survey was repeatedly distributed through various channels but built mostly on the snowball-method, i.e. respondents were asked to forward it to their GE collaboration partners and so on. This way, some regions were reached more than others, depending on the efforts of respondents and the ACT consortium partners. This bias towards countries of the consortium members needs to be taken into account when interpreting the results.

Overall, a sample of 265 survey responses was analysed. Among the responding institutions, 91% are located in the EU28 whereas altogether, surveys were returned from 36 different countries. The majority of survey respondents are female (88%). The survey mainly reached Higher Education Institutions (57%), but also many public research

centres and other types of organisations (such as NGOs, RFOs, private research institutions, and scientific/institutional networks) in almost all EU28 countries. Half of the respondents are researchers; one third have a leading position and nearly one third hold a position like Equal Opportunities Officer – the three groups of course overlap. Most of the respondents are directly involved in gender equality issues: they either integrate a gender dimension in research and/or teaching as an individual effort (45%) or hold a position that is directly related to gender equality implementation in the organisation/department (44%). The highest share of respondents conducts or funds research and/or educational activities in the field of Social Sciences (53%) and/or Natural Sciences (51%). However, most respondents' institutions are active in multiple fields, not just one. As most of the respondents are affiliated with universities, every fifth respondent claims that his/her institution conducts or funds research and/or educational activities in all of the listed scientific areas.¹ The interest in ACT turned out to be very high: more than half of the respondents want to become members of a Community of Practice.

One specific characteristic of the survey data is that multiple responses from the same organisation were possible. Altogether, the survey respondents represent 192 distinct organisations. The answer level of the respondent (whole organisation or individual department/institute) had to be selected in the beginning of the survey and was accounted for in the analysis. Hence, one respondent may have answered for the whole organisation (henceforth denoted as “mother-organisation”) while another may have answered for a single department.

3 Gender Equality Activities and Needs

Among the respondents of the ACT Community Survey, Gender Equality Plans (GEP) are a frequently applied tool: two thirds plan to have or already have a GEP implemented. In other organisations, a GEP is seen as needed. Interestingly, a higher share of research institutes has a GEP in place compared to Higher Education Institutions – but universities catch up and show a stronger initiative for GEP development (see Fig. 63).

1. Natural Sciences, Engineering and Technology, Medical and Health Sciences, Agricultural and Veterinary Sciences, Social Sciences, and Humanities and the Arts.

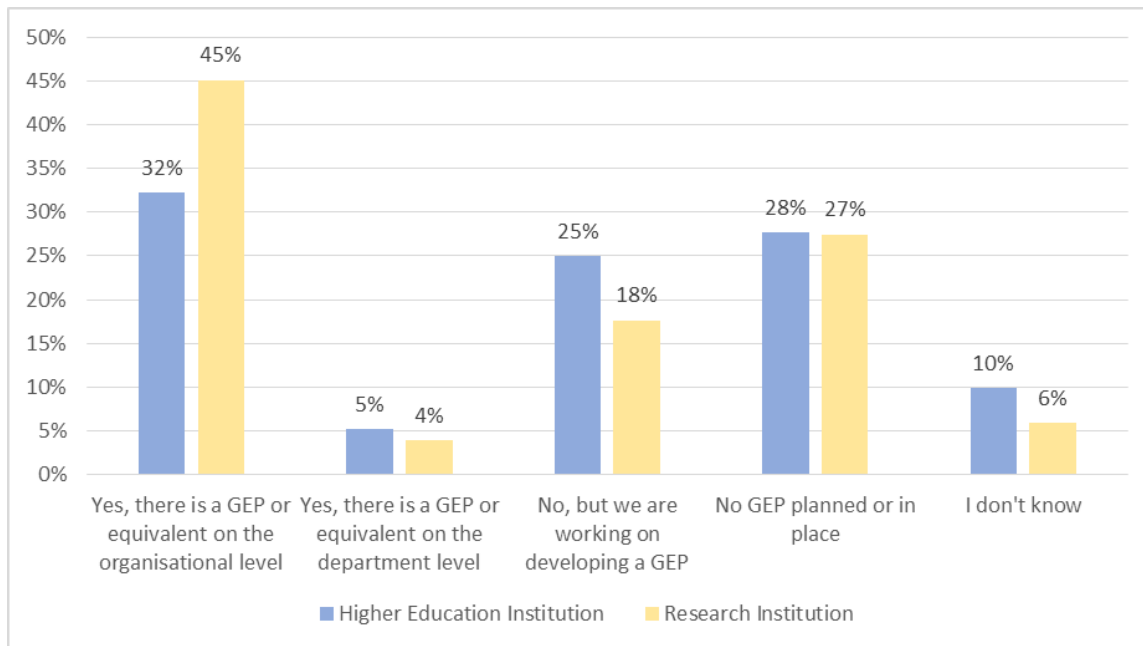


Fig. 63: Existence of Gender Equality Plans or equivalent by type of organisation (n = 203).* – Source: ACT Community Mapping Survey (2019) * Excluding other forms of organisations that participated in the study

The commitment to a GEP is more often reported at the organisational level: 49% of survey participants who represent their entire institution and 28% who represent the departmental level have a GEP in place at the level of organisation. At the same time, only 1% representing the entire institution and 7% representing a single department are aware of such measures at the department level. This illustrates the tendency to implement gender equality measures rather for the whole organisation. Furthermore, it potentially shows a lack of knowledge about gender equality measures implemented at the department level among respondents representing the entire organisation.

The regional differences in the existence of GEPs in research institutions (RPOs and RFOs) are particularly strong: only 10% of respondents from Eastern and South-Eastern European countries report having a GEP in their organisation. In all other regions of Europe, the share lies between 60-74%. Hence, the potential for GEP development in Eastern/South-Eastern Europe is particularly high, according to survey results.

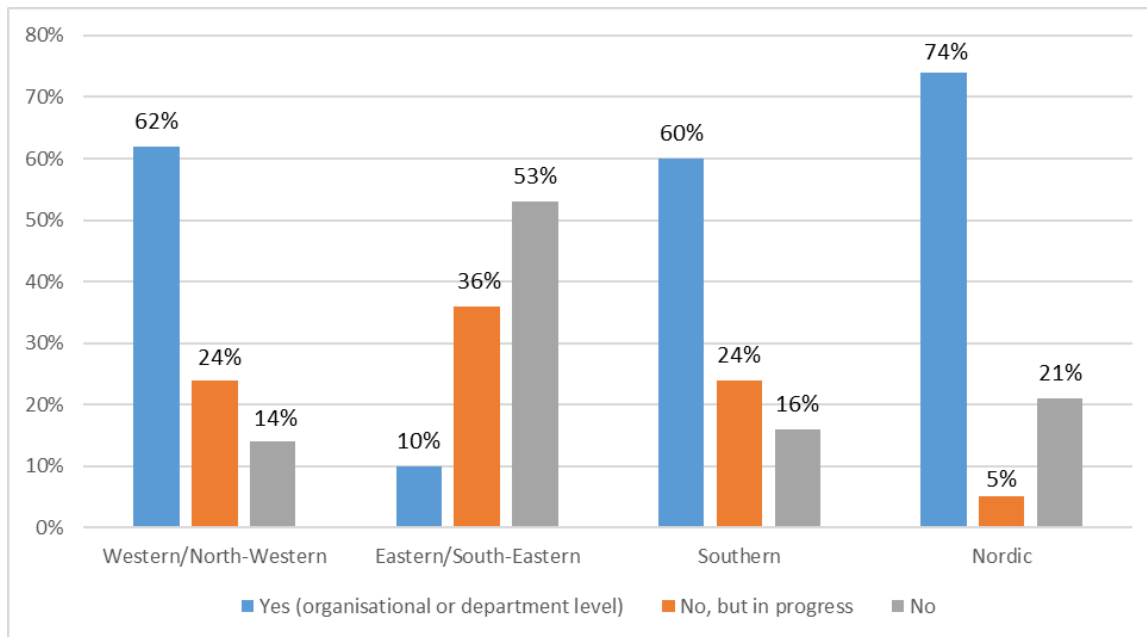


Fig. 64: GEP Status by European region (n = 265).* – Source: ACT Community Mapping Survey (2019)
 * Single selection, excluding those who replied “I do not know” and non-European countries due to low response

Gender Equality Plans, as described by respondents from organisations that develop or implement a GEP, cover diverse measures and respond to various aspects of gender inequality. The most frequently implemented measures correspond to activities for identifying gender inequalities and introducing institutional solutions to the problem. Such activities include collecting sex-/gender-disaggregated data, awareness raising measures and setting up a gender equality office or equivalent. These measures are likely to be chosen frequently because they are helpful and needed at the beginning of a structural change process. Yet they are rather “soft measures” that may not lead to sustainable structural change. It is notable, however, that these measures are considered by the respondents to be very effective. Also equal pay measures, even though they are not so commonly implemented, are viewed as effective tools. This suggests that equal pay measures should be considered for inclusion in GEPs.

Slightly less popular, but of a more binding character to the institution, are measures aimed at fostering institutional commitment towards tackling inequalities: such measures include a commitment to gender mainstreaming, measures addressing non-discrimination and gender diversity, as well as those combatting sexual harassment. Other measures that have been mentioned frequently by survey respondents address the reconciliation of

work and private life, the recruitment and promotion of women and the enhancement of equal representation in decision-making (see Fig. 65). All of these measures were evaluated as rather effective.

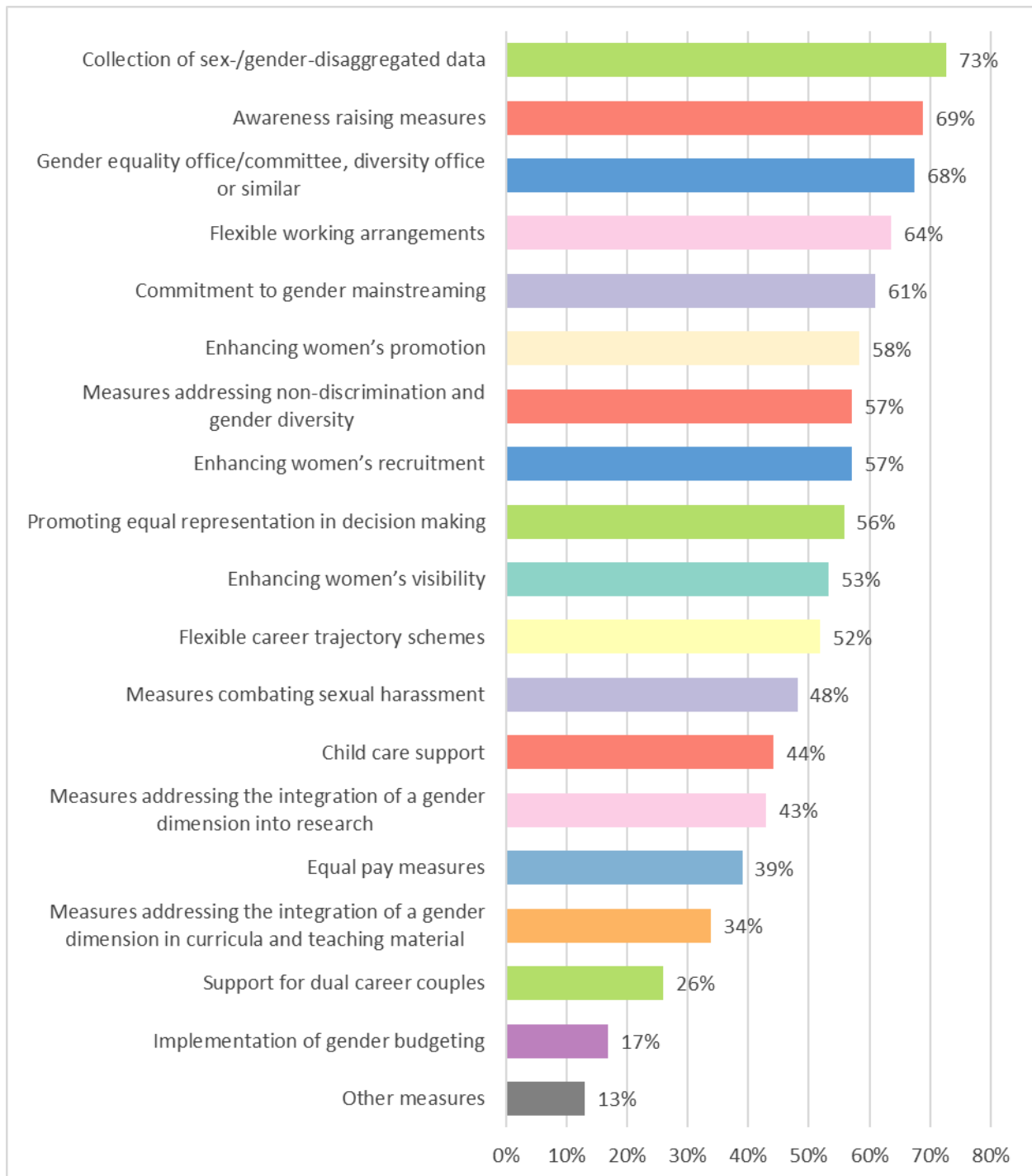


Fig. 65: Popularity of measures included in Gender Equality Plans or equivalent (n = 77).* – Source: ACT Community Mapping Survey (2019), * Multiple selections possible. N based on number of respondents that selected at least one item

While many of the respondents include a gender dimension in their research and/or teaching as an individual effort, this is rather not implemented at the institutional level. The most popular activity in this respect is the collection of sex-/gender-disaggregated data within research projects followed by the inclusion of sex/gender issues in teaching curricula as well as in research programmes and policies. However, it is not a common practice to offer a training for research staff on how to integrate a gender dimension in their research and/or teaching practices. Overall, respondents rarely indicate that institutionalised activities oriented towards providing advice on the inclusion of a gender dimension also in evaluation procedures are present in the organisation (see Fig. 66). However, respondents also expect that including a gender dimension in research and/or teaching has a smaller effect on achieving gender equality in the organisation than implementing gender equality measures at the organisational level.

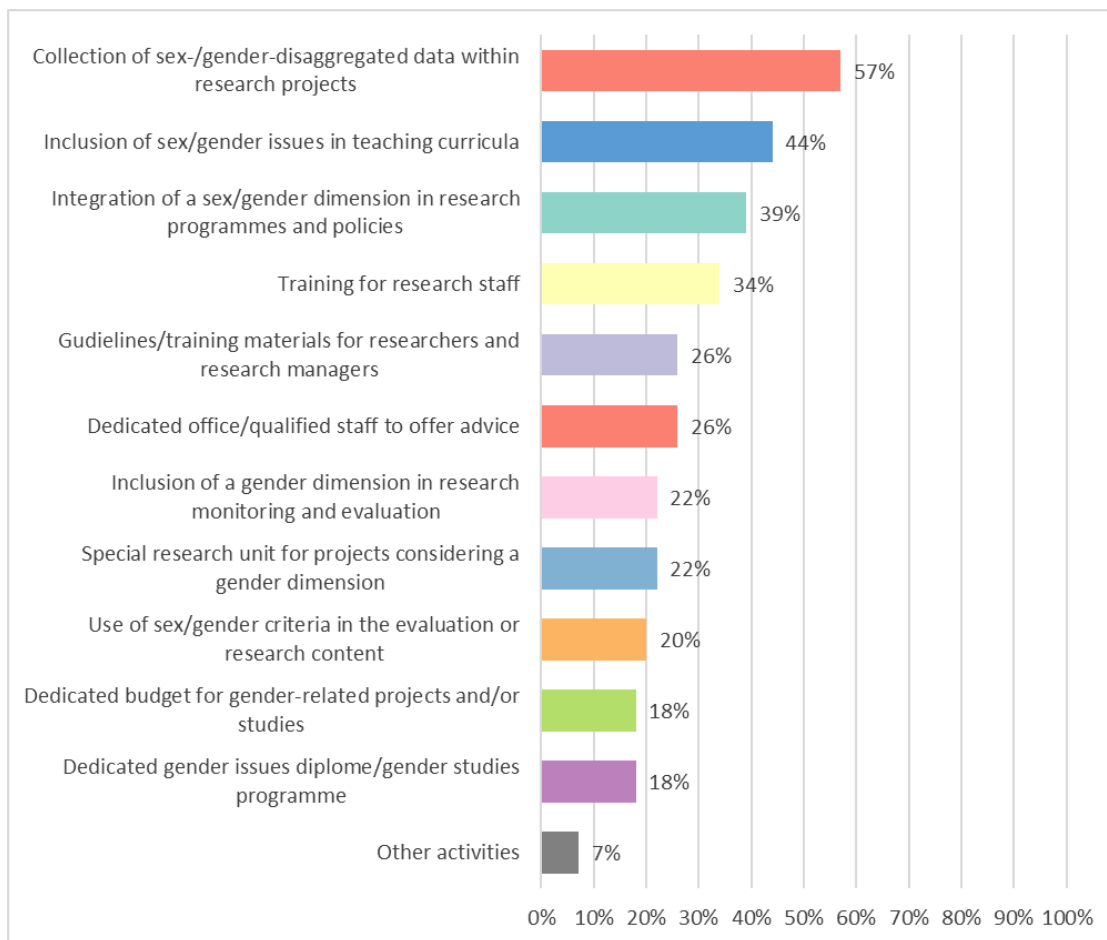


Fig. 66: Popularity of activities directed at including a gender dimension in research and teaching (n = 165).* – Source: ACT Community Mapping Survey (2019) * Multiple selections possible. N based on number of respondents that selected at least one item

Altogether, most respondents see progress in relation to gender equality at their organisations. The share is even higher in organisations that have a GEP in place. Furthermore, a positive change is more often reported by respondents that represent the whole organisation, by those in management positions, Human Resource Managers or those in positions linked to policy implementation such as Diversity or Equal Opportunity Officers. Nevertheless, organisations are also facing barriers when trying to implement gender equality measures: the most often reported ones refer to a lack of personnel, time (65%) or financial (55%) resources. The implementation of gender equality measures is also frequently hindered by the lack of commitment and support from employees/staff members (49%) and management (43%). Finally, a lack of expertise within the organisation/institution (43%) can be an important hindering factor. The survey does show, however, that only few respondents have to deal with active resistance from organisation management or employees/staff members. Hence, it turns out that securing the necessary resources and engaging those who are affected by the solutions are the main challenges, whereas fear of potential opposition may be exaggerated.

Closely connected to the previously mentioned barriers, Fig. 67 shows the internal factors needed in order to improve gender equality in responding organisations. Besides securing the resources, an important strategy should be to broaden the knowledge on gender equality and enhance the support from upper management. Moreover, clear responsibilities within the organisations are necessary. Notable is also that 45% of respondents see the need to participate in gender equality networks/projects or Communities of Practice.

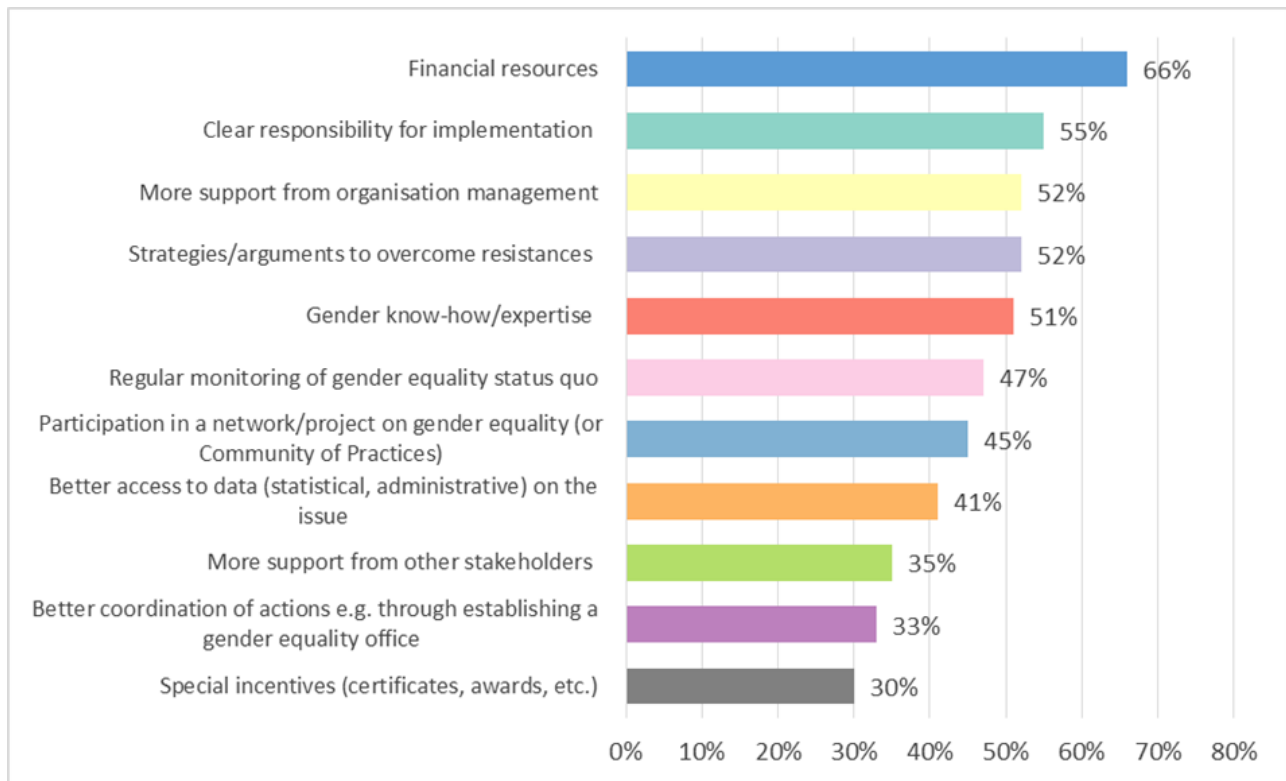


Fig. 67: Different types of internal factors needed to improve gender equality (n = 204).* – Source: ACT Community Mapping Survey (2019) * Multiple selections possible. N based on number of respondents that selected at least one item

These internal changes within the institution should be accompanied by external support. The latter refers primarily to international and national grants, as indicated by two thirds of respondents. More than half of the respondents lack external support in the form of trainings, counselling and lectures. Furthermore, 49% of respondents think that an external evaluation of existing GEPs or gender equality measures is needed (see Fig. 68).

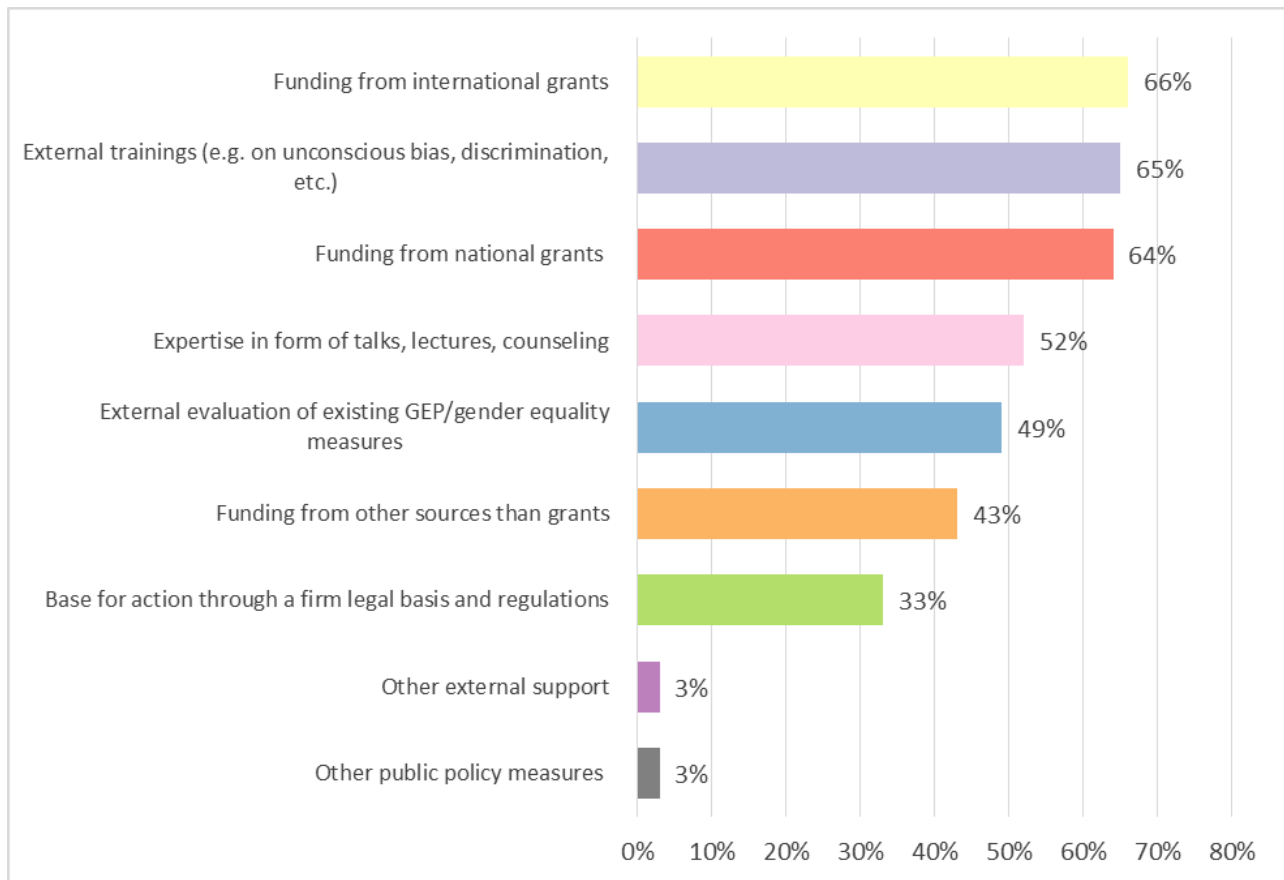


Fig. 68: Different types of external support needed to improve gender equality (n = 196).* – Source: ACT Community Mapping Survey (2019) * Multiple selections possible. N based on number of respondents that selected at least one item

4 Gender Equality Networks

Cooperation can be an important resource for promoting gender equality in one's own organisation. Therefore, the ACT survey also aimed at identifying existing cooperation networks for gender equality. In order to do so, the online-survey asked respondents about their main cooperation partners regarding gender equality (max. 5) and their participation in projects for structural change funded by the EU in FP7 and H2020.

In order to analyse cooperation patterns of gender equality practitioners, 222 survey responses could be included in the Social Network Analysis.¹ These respondents represent 175 organisations and named a total of 247 cooperation partners. Some of

1. The SNA was carried out entirely in the software environment of R Studio. R packages used for the SNA include the packages **network**, **sna** (Butts 2008; 2015; 2016) and **igraph** (Csardi and Nepusz 2006). For visualisation mainly **ggplot2** (Wickham 2016) and **igraph** were used.

these named partners overlap, and some respondents named each other as partner, leading to clustering within the entire network. Additionally, 60 survey respondents were part of at least one EU-funded structural change project.¹ For each selected project, every consortium member was added as a cooperation partner.

Considering the entire network of all responding organisations and identified connections to other organisations shows the amount of influence of those involved in EU-funded structural change projects. Not only are the projects somehow all connected, but the involved organisations generally seem more actively engaged in GE cooperation activities. In Fig. 69, only small groups of partners can be identified outside of the big cluster that includes all project partners (depicted in green).

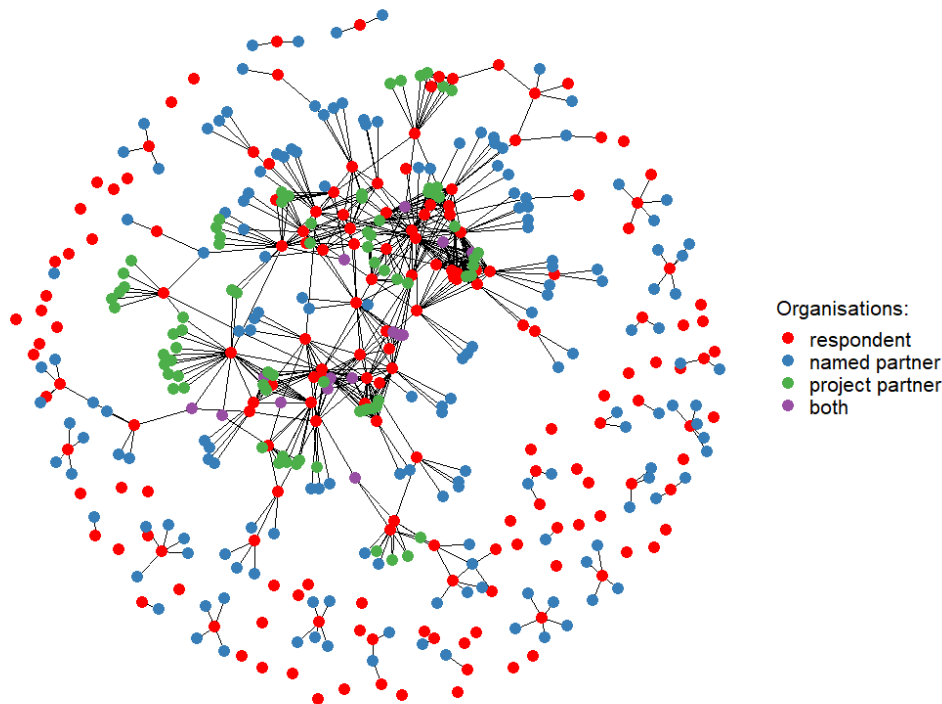


Fig. 69: The entire network of partners at the organisation level ($n = 435$). Source: ACT Community Mapping Survey (2019)

1. The following projects could be selected in the online-survey (in alphabetical order): Baltic Gender, CHANGE, EGERA, EQUAL-IST, FESTA, GARCIA, GEECCO, GENDERTIME, GENERA, GENIS LAB, GENOVATE, INTEGER, LIBRA, PLOTINA, R&I PEERS, SAGE, STAGES, SUPERA, TARGET, and TRIGGER.

Note that the previous figure looked at the network of partners at the organisational level, i.e. all responses from the same organisation were merged together. In order to take a closer look at selected attributes of the survey respondents, we next focus on the individual (respondent) level. To get a clearer image, we separate the networks into (1) a network of survey respondents and partners named in the survey; and (2) a network of survey respondents and their partners from EU-funded structural change projects.

Fig. 70 shows both networks separately and depicts survey respondents as red nodes¹ and added partners as grey nodes. In order to see which respondents stem from the same organisation in the network visualisations, the “mother-organisation” (depicted as circle) is added as a partner to all responding departments (depicted as triangles). Note that the named partner network (left) is based entirely on survey data, whereas the project partner network (right) is based on respondent selection but with full information on the project consortium members.

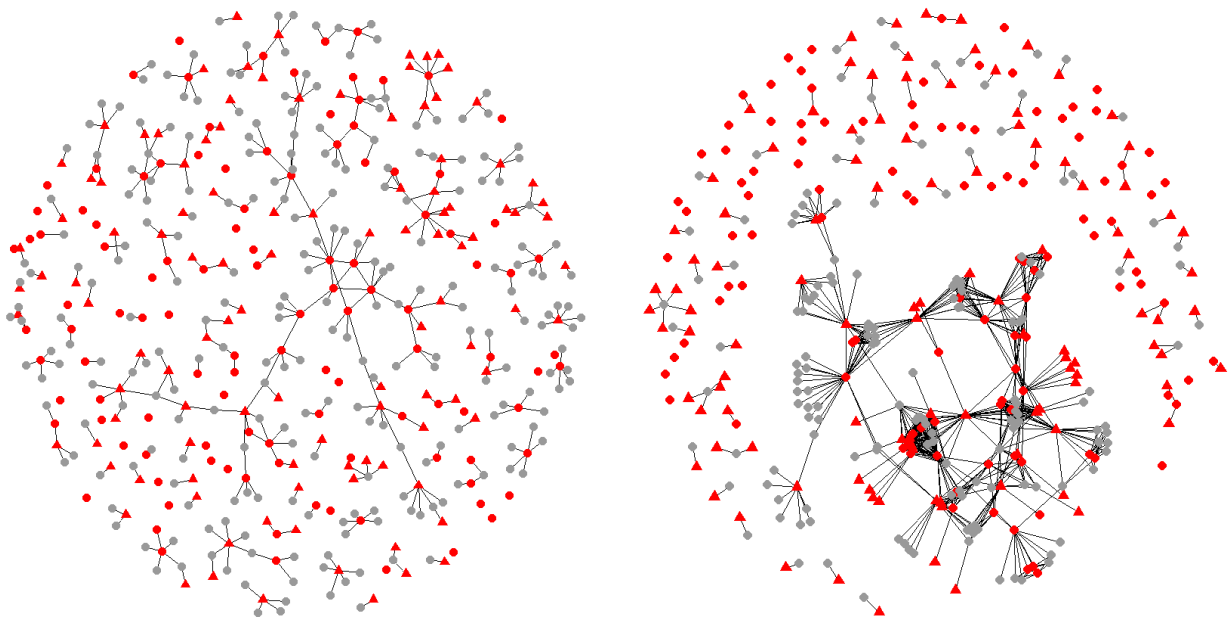


Fig. 70: Named partners (left) and project partners (right) at the individual level. Source: ACT Community Mapping Survey (2019)

1. For those unfamiliar with SNA terms, one „node“ corresponds to one unit of analysis. In our case, one survey respondent or added partner (i.e. one dot in the figure). A more thorough introduction of general SNA terms and measures can be found in Scott (2000), for SNA in R refer to Luke (2015).

Looking at the named partners, a network of 466 nodes (357 distinct organisations) could be analysed. This network covers almost the whole EU28 as well as other European and non-European countries. The highest number of organisations included are located in Spain, the UK, Germany, Austria and Poland. Some South-Eastern and Nordic European countries have scarcely been reached – maybe because there are only a few organisations concerned with the implementation of gender equality, or they have no network connections to the actors depicted. European countries outside the EU28 who are disconnected to the analysed network are Bosnia and Herzegovina, Montenegro, Albania and Macedonia.

In the named partner network, multiple clusters could be identified by looking at connected organisations and social cohesion, i.e. considering the number of connections within subgroups in the network (Luke, 2015, p. 106). Considering the left plot in Fig. 70, it is interesting to see that a rather large share of organisations form one big cluster going through the centre of the plot. This big cluster is held together by five Higher Education Institutions and shows connections of organisations all over Europe. Universities in general play an important role in the survey because they are the biggest group of respondents and they indicated a comparatively high number of cooperation partners. This suggests that this type of organisation is particularly well connected and active in cooperation regarding gender equality. Other (smaller) clusters that were identified are typically more regionally focused than the big central cluster. However, also the small clusters show connections between different organisation types, particularly RPOs and RFOs.

Fig. 71 shows the network of named partners in and around Europe on a geographical map.¹ The size of the points indicates the total number of organisations in the respective city, the thickness of the connecting lines corresponds to the number of connections. Overall, many of the named partners are located in the same country (58%) or even in the same city as the respondents.²

1. Additional R packages used for the geographical mapping include **OpenStreetMap** (Fellows, 2016), **tmtools** (Tennekes, 2018) and **maps** (Minka and Deckmyn, 2018).

2. Note that connections between partners located in the same city are not shown on the map because the points overlap.



Fig. 71: Named partner network in and around Europe ($n = 438$). – Source: ACT Community Mapping Survey (2019)

The project partner network, however, is very international. In this network, only 6% of partners are located in the same country as the survey respondent. Furthermore, the country distribution slightly shifts: now also Bosnia and Herzegovina, Estonia, Liechtenstein, Morocco and Ukraine are represented. The network of project partners even stretches out to Morocco, Turkey and Israel (see Fig. 72).

It is interesting to see that the organisations involved in EU-funded structural change projects actually form a big community of organisations, i.e. the consortia are not isolated from each other. This community is held together by some key actors, which participate in multiple projects and – as shown by the cluster analysis – form a group of very well connected actors. Most of the organisations in this cluster are public Higher Education Institutions or publicly funded research institutions, spread out over the EU28 as well as Switzerland and Iceland.

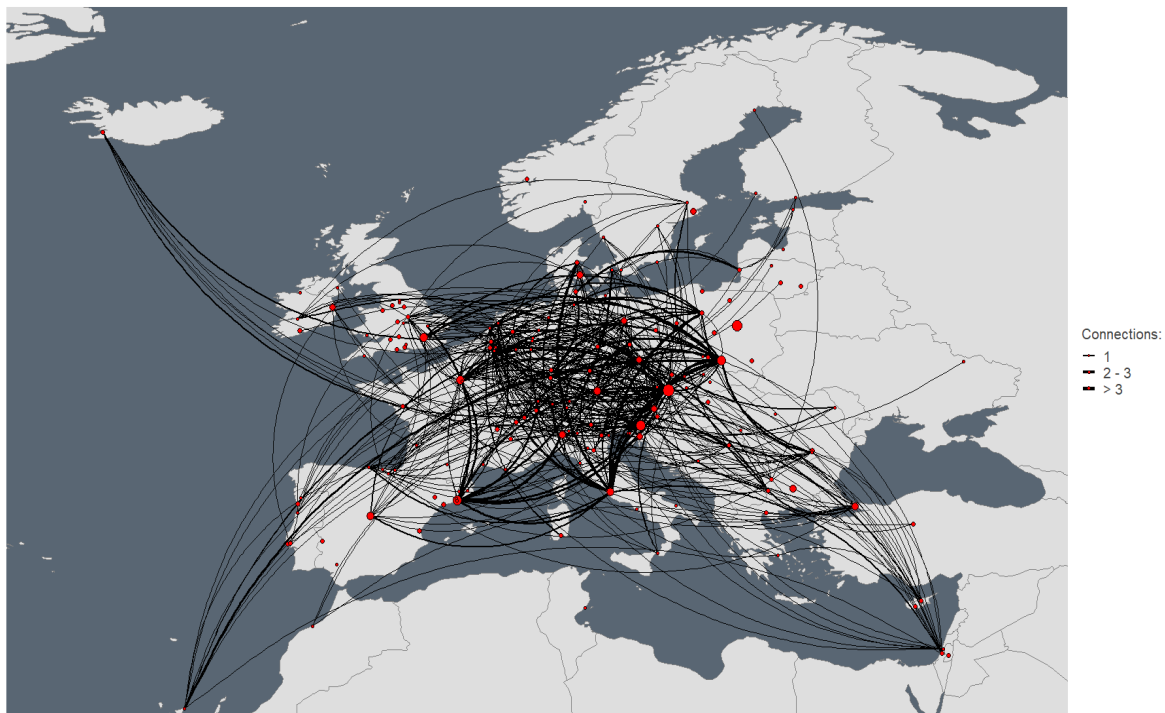


Fig. 72: Project partner network in and around Europe (n = 368). – Source: ACT Community Mapping Survey (2019)

Naturally, these images portray only one part of the existing network connections between European research organisations. The geographical distribution highly depends on the reach of the online-survey and is biased towards a higher representation of countries in which the ACT consortium partners are located. Nonetheless, the analysis shows some of the highly active regions and also identifies gaps that ACT can address. Most importantly, ACT aims at picking up those respondents, which currently do not cooperate regarding gender equality activities but would like to join a Community of Practice.

In this context, it is important to consider not only the number of partners that were actually named in the survey, but how many GE cooperation partners the respondents had in total over the last three years. This takes into account that not all respondents who did in fact cooperate also named some of their partners in the survey, and that only up to five partners could be listed. Fig. 73 therefore shows the network of named partners weighted by the total number of GE cooperation partners in the last three years, as indicated by the survey respondents. All the red nodes are now those, with no GE cooperation partners in the last three years (64 respondents).

Half of them are interested in joining one of the ACT CoPs, most of them from Poland, followed by the UK, Spain and Portugal. Yellow and blue nodes are those, with more than 20 GE cooperation partners, i.e. those very active in GE cooperation activities.

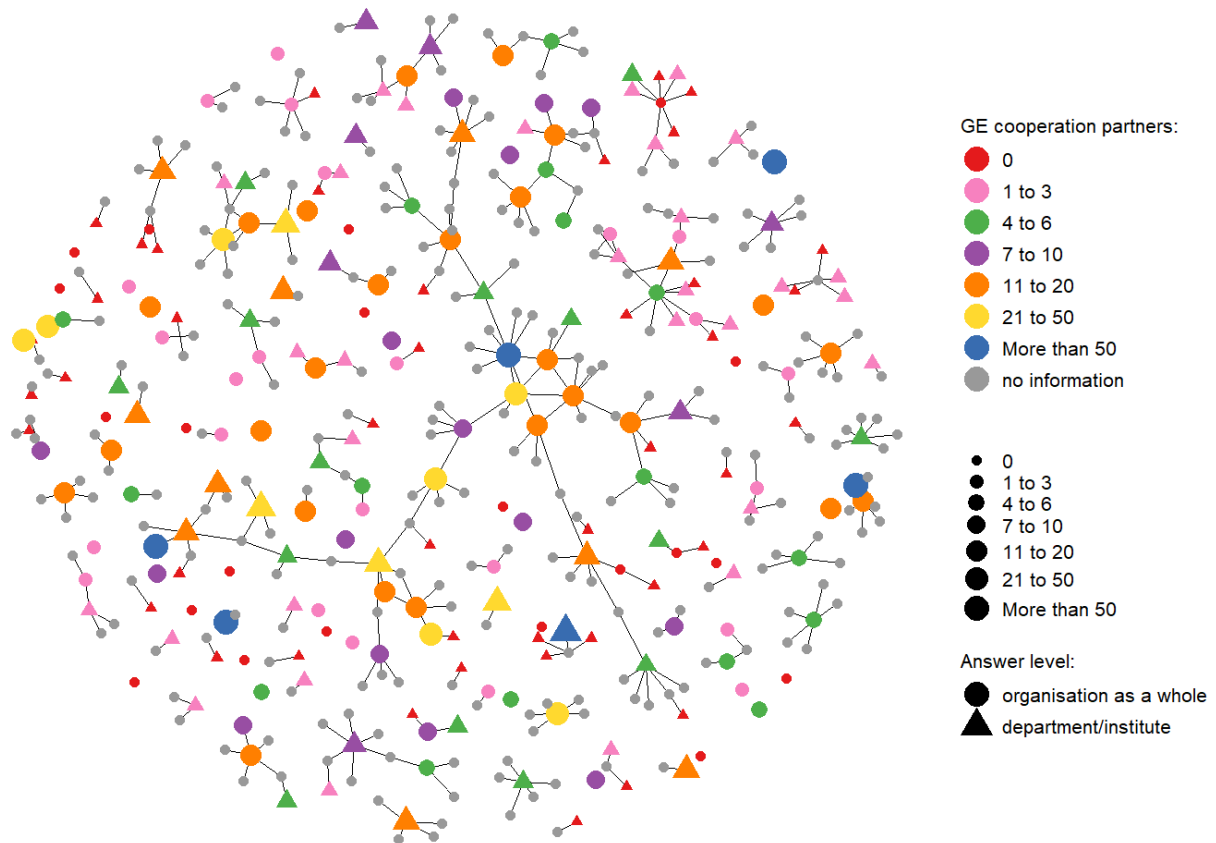


Fig. 73: Named partner network by total GE cooperation partners in the last 3 years ($n = 466$). – Source: ACT Community Mapping Survey (2019)

5 Concluding Remarks

ACT's Community Survey aimed at identifying people who promote gender equality in their research organisation and at gathering knowledge about existing gender equality practices in RPOs and RFOs, their networks of cooperation partners and their support needs. This knowledge will now be used in order to plan effective and successful activities directed at the ACT Communities of Practice (CoPs).

Additionally, the survey aimed at identifying respondents or organisations interested in future collaborations, including the participation in the ACT Communities of Practice. Altogether, 150 respondents from research institutions all over Europe were identified who