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The DFG Research-Oriented Standards on Gender Equality – Selected Findings from a Study on Implementation and Impact

At the DFG's General Assembly in 2017, a study was presented on the implementation and impact of the Research-Oriented Standards on Gender Equality, adopted by the DFG in 2008. The study served as preparation for a set of recommendations on the ongoing development and continuation of the standards. This infobrief presents selected results from the study in the area of organisational development.

1 Background to the Study

In 2008, the member organisations of the DFG, primarily German universities, adopted the Research-Oriented Standards on Gender Equality. By entering into this voluntary commitment, the institutions defined structural and personnel-related standards for a sustainable equality policy in the research and university community. For example, one structural standard stipulated that the goal of gender equality should be pursued visibly “at all organisational levels, making it integral to a research institution’s management agenda” (DFG 2008, p. 2). One of the key personnel-related standards was to “publicising and meeting institutional objectives for achieving true gender equality, based on differentiated data” (DFG 2008, p. 3).¹ The aim was to significantly increase the proportion of women at all academic career levels. The approach used was that of the “cascade” model, which sets out targets for the proportion of women at each career level based on the proportion of women at the next lowest qualification level.

The DFG accompanied the efforts with the publication of a toolbox² for the Research-Oriented Standards on Gender Equality, containing examples of good practice in equal opportunity measures. Central to the implementation concept was an obligation on the part of the universities to submit three reports, between 2009 and 2013, on structural and personnel-related measures at the relevant institutions. The universities’ reports provided information about the gender equality situation on site, equal opportunity structures, organisational development, the handling of gender-related data, and planned, implemented and established measures. Implementation was supported by a working group established at the General Assembly, entitled “Research-Oriented Standards on Gender Equality”, made up of university presidents, rectors and experts and led by the Vice President, who was responsible for this topic on the DFG Executive Committee. Finally, the results were discussed at the General Assembly and the working group published the universities’ reports and the evaluations of the

1 A slightly revised version was published in 2017 (DFG 2017a).

2 The toolbox is also available in English: www.dfg.de/toolbox.

reports in a series of “implementation stages”. Following the evaluation of the final reports in 2013, the members decided at the General Assembly that henceforth only quantitative reporting would be required. It was also decided that in 2017 the standards would be assessed by means of a study on implementation and impact and that the General Assembly would decide on the possible future development and continuation of the implementation process on this basis. Below, this infobrief presents a number of findings from this study and summarises the next steps and recommendations.

2 Structure and Content of the Study

The study “The DFG Research-Oriented Standards on Gender Equality: Implementation and Impact” draws on various empirical approaches to analyse the implementation of the Research-Oriented Standards on Gender Equality within the member organisations.

The central question is what contribution the standards have made to developments relating to gender equality in the German research landscape and in particular at the member organisations of the DFG.

The study is divided into five sections. It begins by looking at the representation of women in academia, both in Germany and internationally. This is followed by an analysis of concrete trends in staff figures and targets at DFG member organisations. The third section examines the organisational development prompted by personnel-related and structural equality measures. Finally, the impacts of the voluntary commitment and the associated evaluation system on the implementation of gender equality are considered and comments from the institutions on possible future developments are reproduced.

To address the various questions, the study draws on both quantitative and qualitative survey and evaluation methods. This mixed-methods approach combines five different data sources and methods, which are shown in Figure 1.

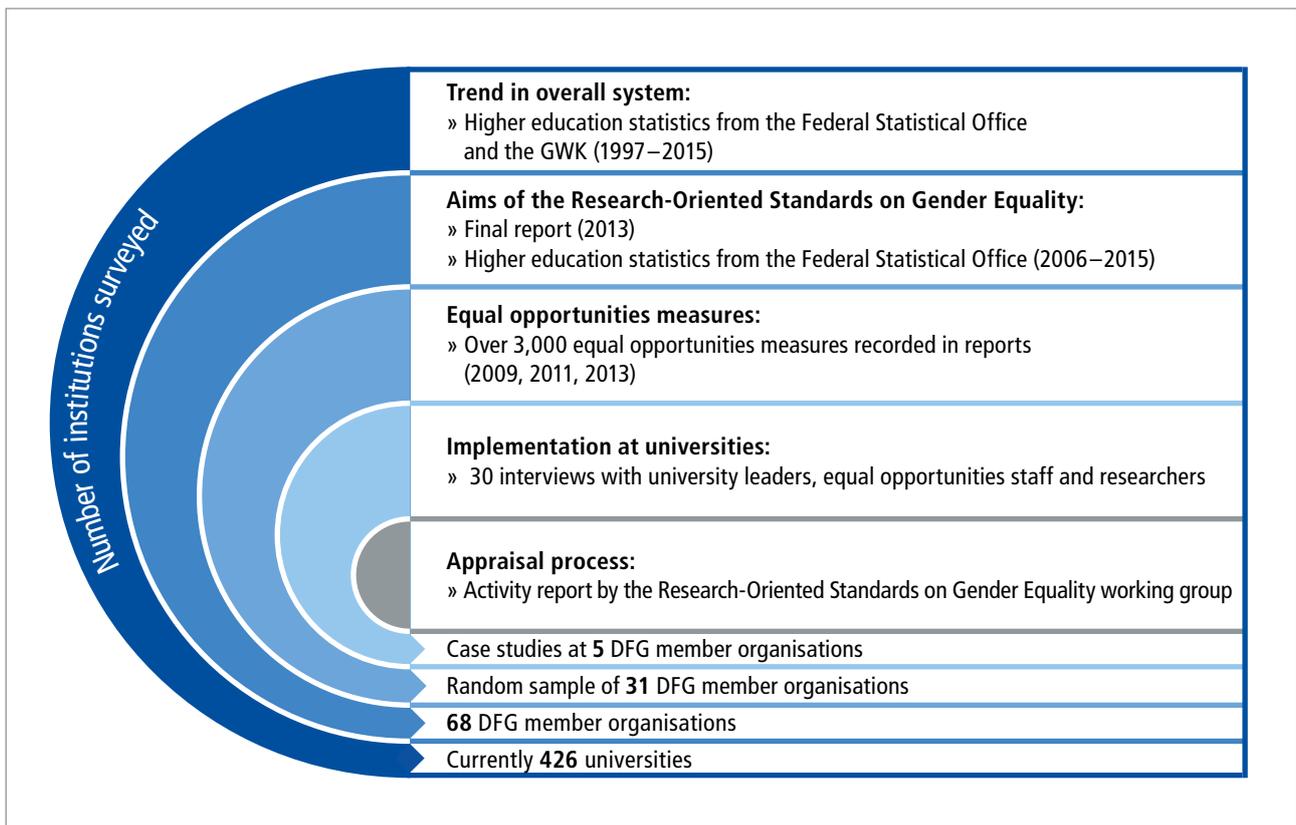


Figure 1: Database and study design

This infobrief relates primarily to a set of data compiled by CEWS (GESIS Center of Excellence Women and Science, Cologne) on behalf of the DFG. This data consists of approximately 3,000 equal opportunity measures described in the gender equality reports (2009, 2011, 2013), taken from a random sample of 31 institutions, allowing the development and implementation of equal opportunity measures to be analysed in the context of the Research-Oriented Standards on Gender Equality. To perform this document analysis, the equal opportunity measures described in each university's three reports were categorised by quantity according to a set of codes. Information from 30 interviews conducted by JOANNEUM (JOANNEUM RESEARCH Forschungsgesellschaft mbH, Vienna) on behalf of the DFG was also used.

3 Representation of Women in the Research System and Targets of Member Organisations

One of the key objectives of the Research-Oriented Standards on Gender Equality is to increase the proportion of women in academic positions. An examination of the participation of women at the various academic career levels shows that it has risen steadily at German universities in recent decades (see DFG 2017b, p. 44). However, simply considering the long-term increase in the proportion of women across all career levels presents an incomplete picture. Additional information is provided by “retrospective cohort analyses” (Löther 2009), which show that women in Germany are still leaving the research system at a disproportionately high rate. This aspect was examined in more detail in the study on the Research-Oriented Standards on Gender Equality (DFG 2017b, pp. 45–47). In these cohort analyses, the proportion of women at different career levels is not considered cross-sectionally. Instead, the gender ratio is tracked through cohorts progressing at an average pace along the

academic career route (Löther 2009). This illustrates that the proportion of women appointed as professors between 2013 and 2015 was, at 32 percent, significantly lower than the proportion of women with doctorates seven years previously (42 percent). This loss of female researchers is referred to by the metaphor of the “leaky pipeline”. However, those women who do remain in the research system until they are eligible for a professorship stand a good chance of success, according to figures from the Joint Science Conference (GWK): Although they are less likely than their male colleagues to apply for a professorial post, when they do, they have a higher chance of being appointed (GWK 2015, p. 24). This is also confirmed by various national and international studies on the likelihood of women becoming professors (Auspurg, Hinz & Schneck 2017, Jungbauer-Gans & Groß 2013; Lutter & Schröder 2014, Williams & Ceci 2015).

To accelerate the participation of female researchers at all career stages, the member organisations of the DFG were required in their implementation reports to include quantitative data on trends in the proportion of women at the various career levels and to develop (subject-specific) targets which they intended to achieve by 2013. The institutions defined targets for the proportion of women with differing levels of detail, either for the university as a whole or for individual faculties. Those institutions whose progress in gender equality was judged to be more advanced were able to set targets more frequently and were more likely to achieve them. On average, the member organisations remained a few percentage points below their defined targets for the various career levels for the year 2013. This was most noticeable at the level of the habilitation and C4/W3 professorships. Actual attainments came closest to the targets at the level of students, doctorates, C3/W2 professors and junior professors.

The interviewees at the institutions reported that it was a challenge to achieve the desired

gender ratios. Changes could only be achieved slowly and with considerable effort, as it was extremely difficult to influence basic parameters such as the number of vacant posts available. In response to this, a retrospective “corridor model” was developed in the study for the years 2009 to 2014, which enabled a comparison between the theoretically achievable proportion of female professors and the figures actually achieved. In 2014, 21 percent of professors (not including junior professors) were women. By contrast, if equal numbers of women and men had been appointed at universities since 2009 (i.e. 50 percent each), this figure would be 25 percent. If the number of female appointments were based on the ratio found in the cascade in the levels below a full professorship, the proportion of women at junior professor level would be 22 percent and for habilitations 20 percent, 1 percentage point above and below the actual figure respectively.

4 Organisational Development Through Equal Opportunity Measures

In addition to purely quantitative targets, the Research-Oriented Standards on Gender Equality encourage universities to aim for fundamental change. The study examines whether the equal opportunity measures developed and implemented as part of the voluntary commitment have contributed to organisational development. The qualitative case studies based on 30 interviews show that the Research-Oriented Standards on Gender Equality were generally applied at the universities in the form of a centrally managed process. This is also illustrated by the participation of university bodies with respect to the approval of the final reports submitted by the 68 member organisations of the DFG (Figure 2). The evaluation shows that the vast majority of reports were approved by

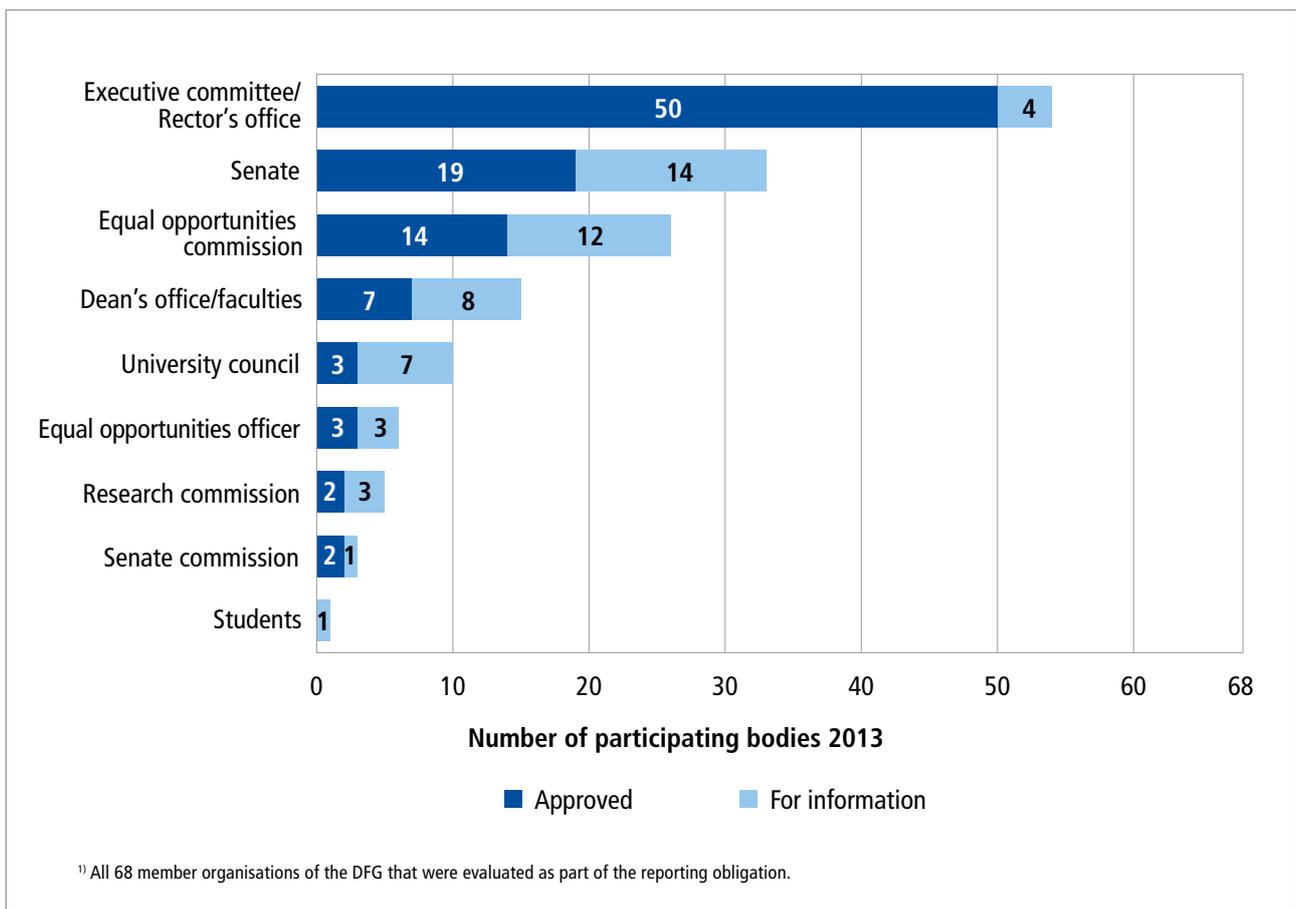


Figure 2: Formal participation by various bodies of the DFG member organisations in the preparation of final reports as part of the DFG's Research-Oriented Standards on Gender Equality

senior university administrators (executive committee/rector's office) and thus fell within their sphere of responsibility. However, in most cases the equal opportunity officers or heads of central offices were tasked with the actual implementation. These individuals coordinated activities and generally served as the central point of contact within the university. At only a few institutions were they also formally involved in the approval of the reports (21 percent) or receiving copies for information purposes (18 percent) through an equal opportunities committee.

The top-down approach was complemented by bottom-up components, with non-central bodies being more involved in the implementation process, to a differing degree at different universities. In some cases, this was accomplished through the senate, in which the dean's offices are normally represented. At 28 percent of institutions, the senate approved the final report and at another 21 percent it was provided with a copy for information purposes. Participation by dean's offices and faculties outside the context of the senate was only formally recorded at one in five institutions. At some universities, non-central departments were more actively involved through the participation of heads of faculties or non-central equal opportunity officers, for example. At some institutions, the faculties also drew up their own gender equality plans and defined mandatory equality targets for their particular areas. Overall, however, this evaluation and the qualitative case studies clearly confirm the embedding of gender equality as a central management task, while non-central bodies were more actively involved in the process at only a small number of institutions.

During the period in question, the greater focus on gender equality as a leadership task has clearly also been associated with a higher degree of planning and implementation of equal opportunity measures. The interviews suggested that the establishment and professionalisation of gender equality activities and the addition of

personnel to staff units and equal opportunity offices has resulted in the concentration and expansion of the planning, implementation and coordination of equal opportunity measures within universities. It can be observed on the basis of the initial, interim and final reports that between 2009 and 2013, many new measures were introduced and existing measures were expanded and optimised (Figure 3). In the initial report in 2009, an average of 49 planned or implemented equal opportunity measures were reported per institution; in the final report four years later it was 73 measures. The proportion of implemented measures increased substantially over time.

The case studies illustrated that the key objectives of the (newly) established measures included increasing the proportion of women at the university and improving career opportunities for women. However, the measures designed to achieve these aims took very different forms. The study distinguishes between different dimensions and action areas, with a large variation being evident in the equal opportunity measures implemented up to 2013 (see DFG 2017a, p. 72). A large proportion of implemented measures – approximately one third – come within the dimension of "staff and early career researchers". Typical action areas in this dimension include financial support measures (e.g. fellowships or research and staff funding for women at various career levels), mentoring, coaching and advanced training. The second main focus, at 29 percent, is on measures designed to make it easier to balance a research career with family commitments. This includes childcare facilities such as university daycare, short-term care for emergencies, special events or holidays, and childcare agreements with local agencies. It also encompasses services designed to improve working conditions, as well as information and advisory services. These generally well-established, almost "traditional" equal opportunity measures are, however, accompanied by measures directed specifically at organisational development (15 percent). These include policies in the form

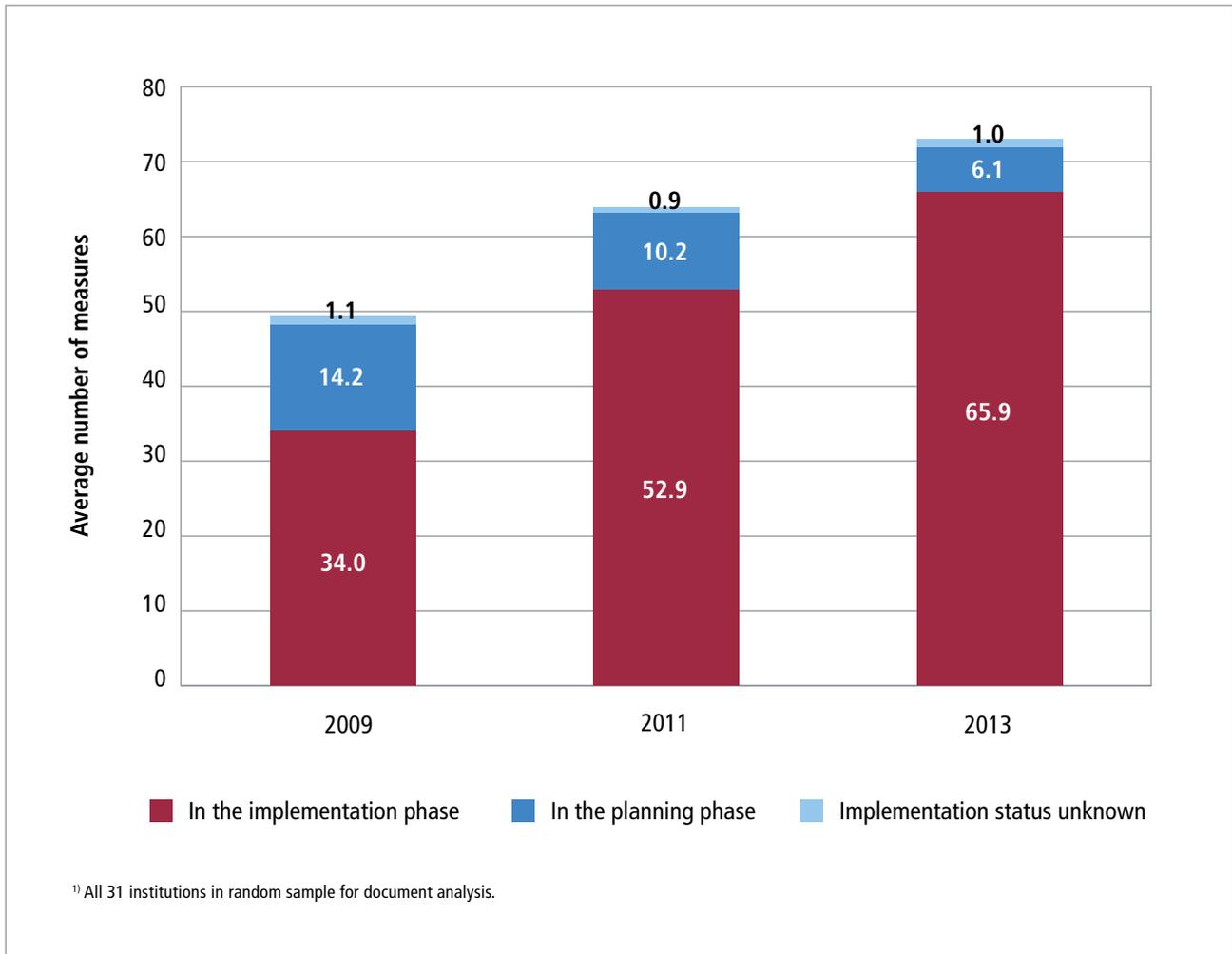


Figure 3: Average number of measures per institution in the 2009, 2011 and 2013 reports¹⁾

of centrally embedded guidelines, concepts or strategies, such as a requirement to advertise posts in areas where women are under-represented. Up to 2013, other measures were implemented in the dimensions of “gender in research and teaching” (11 percent) and “quality assurance and research culture” (6 percent).

The case studies showed that the implementation of the Research-Oriented Standards on Gender Equality also saw the exploration of new action areas where universities have not been significantly active so far. To track this dynamic, the study evaluated for each action area the proportion of institutions which reported at least one implemented measure in this area in the period between 2009 and 2013 (Table 1).

The overall picture shows an increase in the coverage of action areas with corresponding measures at the universities between 2009 and

2013. Particularly noticeable growth can be identified in certain areas. For example, in the area of family/career balance, in 2009 just under 10 percent of universities had introduced measures to address the topic of caring for relatives, while just four years later the figure was almost 50 percent. Similarly dramatic increases were observed in relation to dual careers – although starting from a higher initial level – and the evaluation of measures. At many institutions, the areas of evaluation, monitoring and gender controlling were expanded. The case studies reveal that the establishment and expansion of internal monitoring systems to document the proportion of women at different career levels in academic departments and faculties is largely due to the introduction of the cascade model and reporting to the DFG on targets and actual figures relating to gender ratios.

Dimension	Action area	Institutions with at least one implemented measure in the action area		Growth in % points between 2009 and 2013
		2009	2013	
Staff / Early career researchers	Staff development	38.7%	77.4%	38.7 PP
	Recruitment	71.0%	96.8%	25.8 PP
	Mentoring / Coaching	87.1%	100.0%	12.9 PP
	Professional training	83.9%	96.8%	12.9 PP
	Networking	74.2%	87.1%	12.9 PP
	Degree / Career choice	80.6%	90.3%	9.7 PP
	Funding opportunities	87.1%	96.8%	9.7 PP
Work / Life balance	Dependent care	9.7%	48.4%	38.7 PP
	Dual career	51.6%	87.1%	35.5 PP
	Study conditions	67.7%	90.3%	22.6 PP
	Working conditions	77.4%	100.0%	22.6 PP
	Family services	48.4%	64.5%	16.1 PP
	Returning to work	67.7%	77.4%	9.7 PP
	Information / Guidance	83.9%	93.5%	9.7 PP
	Childcare	96.8%	100.0%	3.2 PP
Research / Academic culture	Awareness	35.5%	61.3%	25.8 PP
	Work / Study culture	22.6%	41.9%	19.4 PP
	Visibility	71.0%	90.3%	19.4 PP
Organisational development	Institutionalisation	54.8%	96.8%	41.9 PP
	Steering instruments	71.0%	90.3%	19.4 PP
	Policies	87.1%	100.0%	12.9 PP
	Gender mainstreaming	38.7%	48.4%	9.7 PP
Gender in research & teaching	Knowledge transfer	54.8%	77.4%	22.6 PP
	Posts / Fellowships	64.5%	77.4%	12.9 PP
	Research support	58.1%	71.0%	12.9 PP
	Teaching / Courses	77.4%	87.1%	9.7 PP
	Prizes / Awards	16.1%	22.6%	6.5 PP
Quality assurance	Evaluation	35.5%	64.5%	29.0 PP
	Gender controlling	19.4%	45.2%	25.8 PP
	Monitoring	58.1%	83.9%	25.8 PP
	Needs analysis	38.7%	48.4%	9.7 PP

¹⁾ All 31 institutions in random sample for document analysis.

Database and sources:

Deutsche Forschungsgemeinschaft (DFG, German Research Foundation): initial and final reports. Data compilation by CEWS. Calculations by the DFG.

Table 1: Growth in proportion of institutions ¹⁾ with implemented measures in the initial and final report

A strong dynamic can also be noted in the area of organisational development. Measures aimed at institutionalisation saw the greatest increase among the member organisations: In 2009, slightly more than half of institutions had already implemented equal opportunity measures in this area, rising to almost all institutions four years later. Examples of measures in this

area include the establishment of permanent equal opportunity offices, centres and committees and the embedding of gender equality in rules and regulations, mission statements and agreed aims. This demonstrates that as the implementation of the standards progresses, gender equality is increasingly being recognised and centrally embedded as a leadership task.

5 Impacts, Recommendations and Outlook

The insights outlined above into the development of measures and the organisation of the universities demonstrate that the Research-Oriented Standards on Gender Equality have made an important contribution to equality-related organisational development within the member organisations.³

The fact that the DFG's Research-Oriented Standards on Gender Equality were adopted by the member organisations as a voluntary commitment with a high degree of approbation contributed to high acceptance and obligation for the associated implementation process. In particular, as shown by the case studies, the standards have changed the discourse on gender equality at universities. Gender equality has increasingly come to be regarded as a prerequisite for innovative and excellent research and no longer primarily as a "women's issue" or a "justice issue". Gender equality has become a characterising feature for the institutions and thus a matter for the most senior administrative level. According to the statements in the case studies, the publication of the evaluation of the reports by the General Assembly working group also contributed to the fact that university administrators and other key players regard successful gender equality policy as being linked to the prestige and competitiveness of the university.

The Research-Oriented Standards on Gender Equality have triggered an organisational transformation among the member organisations and in the research landscape as a whole,

as is clearly demonstrated by the results of the document analysis and the interviews in the study. With regard to the question of how much this has causally influenced trends in the representation of women in terms of actual changes in the gender ratio, the results must be interpreted with caution. Due to the variety of relevant programmes and initiatives begun during the period under investigation, such as the Women Professors Programme (CEWS 2017), it is difficult to assert a clear causal relationship with the implementation of Research-Oriented Standards on Gender Equality.

The "corridor model", which compares the potential trend in the proportion of women with the number of vacant professorships, has also been used in other contexts, such as the monitoring report prepared in connection with the Pact for Research and Innovation (where it is referred to as "action spaces") (GWK 2017). In the DFG's most recent report "Monitoring Equal Opportunity 2017" (DFG 2017c), it was also applied in a forward-looking manner. On the basis of a predicted increase in the number of posts and the departure of individuals reaching the age limit, possible trends in the proportion of female professors at German universities were calculated for different scientific disciplines. This approach allows a realistic development of targets and illustrates the framework within which short- to medium-term developments are possible.

In 2017, the DFG General Assembly opted to introduce another qualitative, albeit streamlined, reporting system, adequate to the needs of science, in accordance with the recommendations of the Research-Oriented Standards on Gender Equality working group, which assisted with the study (DFG 2017d). It is intended that this will promote the sharing of experiences and a framework in which universities learn from each other. To achieve lasting changes in the system, the results of this study demonstrate once again that extensive long-term efforts are required which address different areas and take a range of different factors into account.

³ The importance of the standards to university development and equal opportunity policy is also confirmed by other studies: Feldmann (2015, p. 177), for example, reports on the results of a standardised questionnaire completed by university presidents and rectors in 2012, in which they were asked, among other topics, about the impact of university policy developments, requirements and programmes on equal opportunity policy at universities. The greatest influence is attributed to the Research-Oriented Standards on Gender Equality (50 percent of respondents said that it had a "significant positive influence"), ahead of the Women Professors Programme (30 percent), the Excellence Initiative (24 percent), gender equality objectives agreed between federal state and university, and the performance-based awarding of gender equality funding between federal state and university (both 9 percent).

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