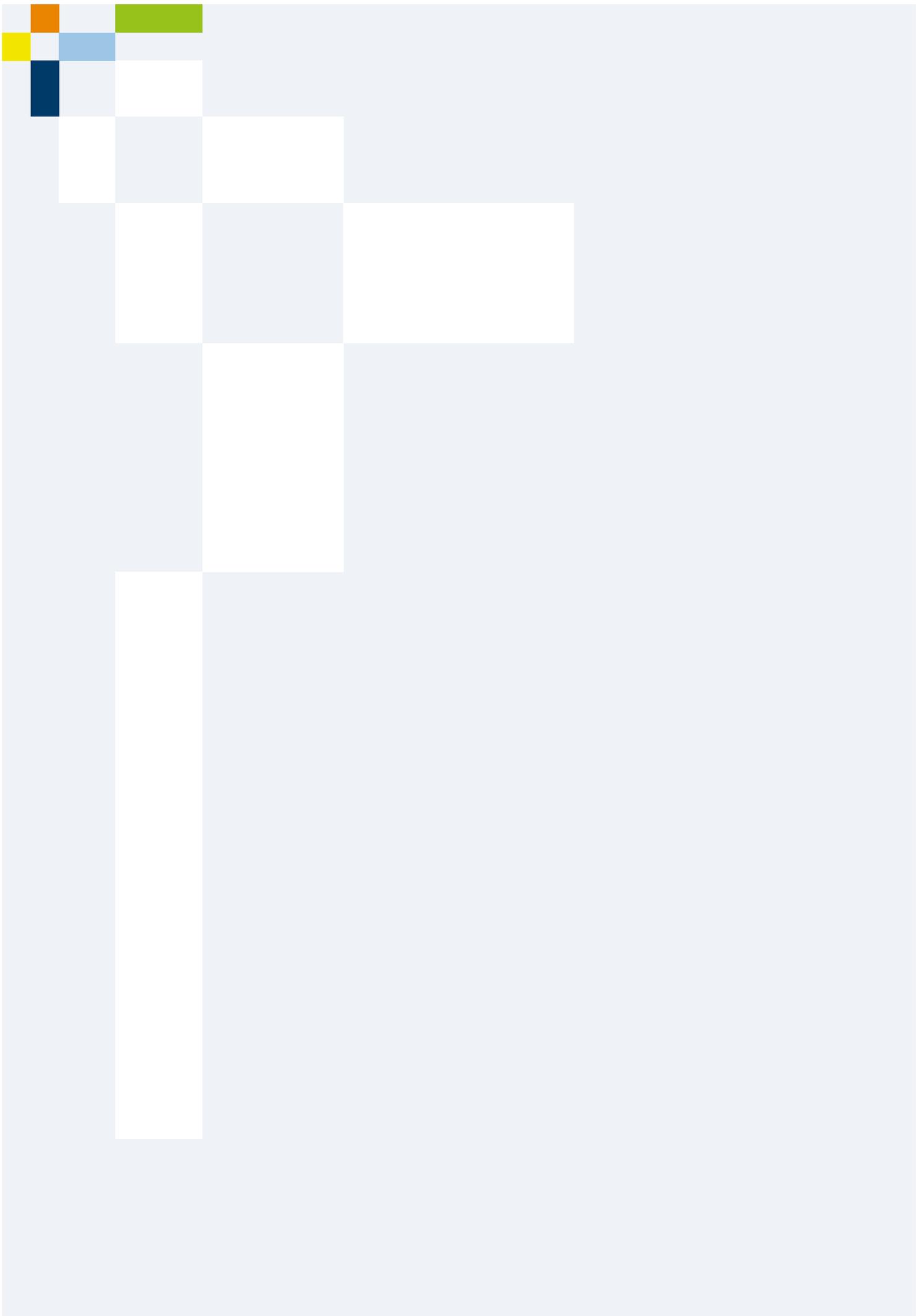




# Gender Equality Report and Action Plan for the Academy

acatech (Ed.)



# Gender Equality Report and Action Plan for the Academy

acatech (Ed.)



# Contents

<b>1 Objectives</b>	<b>5</b>
<b>2 Review of the current situation</b>	<b>6</b>
2.1 acatech's structure and working methods	6
2.2 Women in the Academy	6
2.3 Women in the Executive Board	9
<b>3 Evaluation of progress towards acatech's gender equality targets</b>	<b>10</b>
3.1 Evaluation of internal engagement	10
3.1.1 30% target for Academy candidate lists	10
3.1.2 More women in project leadership roles	10
3.1.3 More women from industry in the Senate	10
3.2 Evaluation of public engagement	10
3.2.1 "Women on the stage" at <i>acatech am Dienstag</i>	10
3.2.2 "acaLab" - identifying new themes for the Academy	10
3.2.3 Involving more of acatech's female scientists in media relations	11
<b>4 Measures</b>	<b>12</b>
4.1 Measures to increase the percentage of women in the Academy	12
4.1.1 30% target for Academy candidate lists	12
4.1.2 More women in project leadership roles	12
4.1.3 More women from industry in the Senate	12
4.2 More visibility for female experts	12
4.3 Incorporating the gender dimension into policy advice	12
4.3.1 Obtaining data for gender-sensitive policy advice	12
4.3.2 Implementation of Guideline 9 of the DFG Guidelines for Safeguarding Good Research Practice	13
4.4 Consolidating the measures through communication	13
4.5 Overview of the Academy's gender equality measures up to 2022	13



# 1 Objectives

In its “Principles for Gender Equality at acatech”, the Academy established the goal of equal treatment of women and men. In 2018, acatech published its first Gender Equality Action Plan which includes a commitment to review progress towards the plan’s targets, evaluate the measures that have been implemented and update the plan as necessary after a period of two years. As well as complying with the relevant federal and regional gender equality legislation, these measures reflect acatech’s conviction that it is necessary to consider as broad and balanced a range of perspectives as possible in order to promote technology in Germany in a manner that is in the public interest and in particular to strengthen public understanding of the importance of leading-edge technologies, as stipulated in acatech’s **statutes**.

As the National Academy of Science and Engineering, acatech is strongly committed to ensuring that technology is both inclusive and shaped by appropriate values. Accordingly, acatech believes that it is imperative for technology development to be informed by European values right from the outset, in keeping with a “values by design” approach (see acatech IMPULSE *European Public Sphere*, 2020). Such an approach naturally includes gender equality, an issue on which acatech is guided by the EU’s Gender Equality Strategy:

*“The Strategy pursues a dual approach of gender mainstreaming combined with targeted actions, and intersectionality is a horizontal principle for its implementation. While the Strategy focuses on actions within the EU, it is coherent with the EU’s external policy on gender equality and women’s empowerment.”<sup>1</sup>*

In its guidelines, the Academy commits to providing policy advice that reflects the scientific state of the art. This includes following

best practice guidelines for the scientific community. In the Deutsche Forschungsgemeinschaft’s new Code “Guidelines for Safeguarding Good Research Practice”, Guideline 9 explicitly calls for gender and diversity to be taken into account:

*“Researchers examine whether and to what extent gender and diversity dimensions may be of significance to the research project (with regard to methods, work programme, objectives, etc.). The context in which the research was conducted is taken into consideration when interpreting findings.”<sup>2</sup>*

As far as acatech is concerned, this means examining the relevant context in terms of gender and diversity, particularly when developing work programmes and objectives, using sources and interpreting findings.

The principles outlined above translate into two concrete objectives for acatech. Firstly, the proportion of women on all the Academy’s bodies and in particular in leadership roles should be increased to an initial target of 30%. And secondly, the gender perspective should be incorporated even more systematically into the advice that acatech provides to policymakers and the public.

Accordingly, the measures set out in this document are geared towards ending existing inequalities as soon as possible and continuing to leverage the potential of mixed-gender bodies to ensure the ongoing excellence of the Academy’s work and policy advice. To help identify and prioritise targeted measures for increasing the representation of women, Chapter 2 presents the latest figures on the percentage of women at acatech and the changes in these figures compared to the last report. Chapter 3 offers a critical evaluation of these changes. Finally, Chapter 4 sets out a series of concrete measures for implementing equal opportunities at acatech.

1 | See EU Gender Equality Strategy 2020-2025 (<https://ec.europa.eu/info/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy>) [Retrieved: February 15, 2021].  
2 | See DFG Code ([https://www.dfg.de/download/pdf/foerderung/rechtliche\\_rahmenbedingungen/gute\\_wissenschaftliche\\_praxis/kodex\\_gwp\\_en.pdf](https://www.dfg.de/download/pdf/foerderung/rechtliche_rahmenbedingungen/gute_wissenschaftliche_praxis/kodex_gwp_en.pdf)) [Retrieved: February 15, 2021].



## 2 Review of the current situation

### 2.1 acatech's structure and working methods

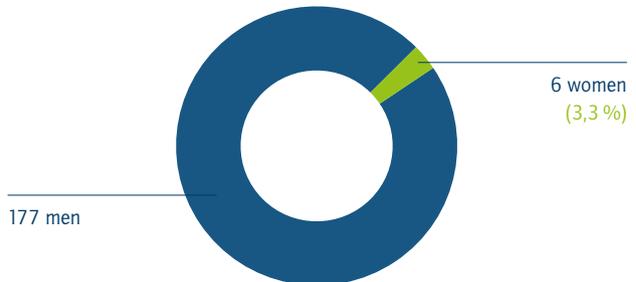
acatech sees itself as a flexible working academy comprising a network of members from the scientific and business communities. It is composed of various bodies, each with their own structure: the committees, the Executive Board, the Board of Trustees, the General Assembly, the Senate and the Secretariat. The mission of the Academy as a whole is to add value for citizens by providing policymakers and society with independent advice that is in the public interest, promoting cooperation between science and industry, representing the technological sciences at home and abroad and fostering young talents in the STEM subjects. A broad spectrum of different perspectives is key to the provision of balanced advice, and acatech has followed this principle in the composition of its project groups and networks ever since it was founded.

The first pillar of the Academy comprises the scientific Members, who are invited to join acatech because of their outstanding scientific achievements and high professional reputation. They are drawn from the fields of engineering, the natural sciences and medicine, as well as related fields in the humanities and social sciences. New Members are invited to join acatech with the specific aim of bringing new ideas and perspectives to the Academy. The second pillar of the Academy is the Senate, whose members are leading figures from technology companies and organisations, as well as the major science organisations. acatech's Members and Senate work on an unpaid basis in thematic networks and project groups. Meanwhile, different stakeholders from civil society are represented on the Academy's management and supervisory bodies (the Executive Board and Board of Trustees). The Secretariat supports the voluntary work undertaken by the Members in developing, carrying out and managing the Academy's projects.

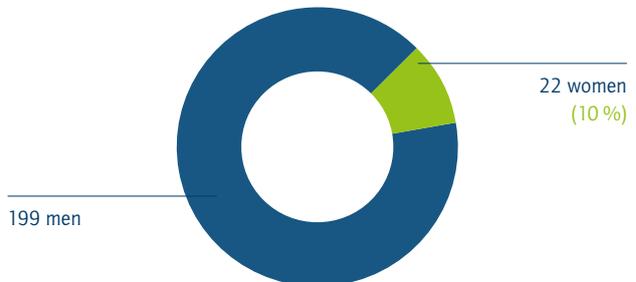
### 2.2 Women in the Academy

acatech is committed to bringing the percentage of women among the Academy's members into line with the proportion of female professors in the STEM subjects and other innovation-oriented

183 members freed from duties (aged >72)



221 members aged 60-72



140 members aged 50-60



25 members aged 40-50

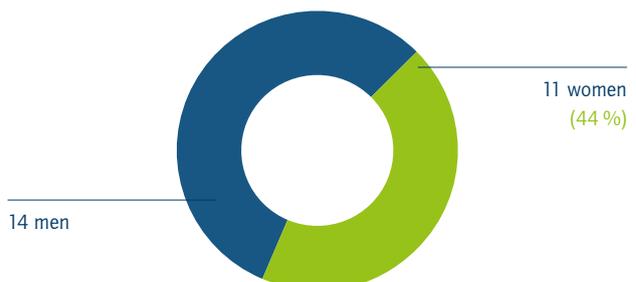


Figure 1: Breakdown of members 2020 (July 2020)

research fields. Since acatech wishes to act as a role model on this issue within the technological science community, it is particularly committed to increasing the number of women in prominent positions and ensuring their visibility.

As of December 2019, 13.5% of all acatech's Members were women. This constitutes a slight increase of 1.5%. However, major differences continue to exist across the different age groups (Figure 1, see previous report). The proportion of women in the over-72 age group rose slightly to 3.3% in 2019. Meanwhile, the highest proportion of women continues to be found among the under-50 age group, although the figure of 44% is slightly lower than in 2017. The youngest age group is the smallest group of Members overall. A comparison with the previous report reveals that this group has grown even smaller since 2017, meaning that there has been a much larger decline in the number of female Members under the age of 50. The overall proportion of women among the Academy's ordinary Members who are not freed from duties stood at 19.3% in December 2019, a 2.4% increase compared to 2017.

acatech's Members carry out the Academy's work on an unpaid basis in thematic networks and working groups. Only one of these 14 groups is chaired by a woman, equivalent to just 7.1%. There is still significant variation in the percentages of women across the different working groups.

On a positive note, the percentage of women in 2019 was higher than in 2017 in six of acatech's working groups (WGs) and thematic networks (TNs): WG Basic Questions in Science and Engineering, TN Society and Technology, TN Safety and Security, TN Nanotechnology, TN Energy and Resources and TN Mobility, Logistics and Aerospace Engineering. However, the target of at least 30% women in all acatech's bodies and working groups was only met in WG Education (50%) and TN Healthcare Technologies (just over 30%) (see Figure 2 and Figure 3).

A comparison with the percentages of women studying the corresponding subjects reveals that several of the TNs and WGs have room for improvement. For example, while just under 70% of Communication Studies and Health Sciences students are women, the proportion of women in the corresponding acatech bodies is just 20% in WG Technology Communication (a decrease compared to the figure of 25% in 2017) and 32.1% in TN Healthcare

Technologies (also a slight decrease compared to the figure of 33.3% in 2017; see Figure 3).

In summary, it is clear that these and some of acatech's other TNs and WGs still have some work to do before they achieve the minimum target of 30% women. Furthermore, their efforts should be guided by the percentages of women on the corresponding study courses, since these provide an up-to-date picture of the percentages that are achievable in the different fields, in line with the cascade model.

The TNs and WGs establish project groups in which the Academy's Members collaborate on an unpaid basis with external experts from science and industry. Given that just 19.3% of acatech's active Members (i.e. those under the age of 72) are women, it is evident that the female scientists elected to the Academy show a disproportionately high level of active engagement in the working groups and as experts. On the other hand, hardly any of the working groups or thematic networks are chaired by women. Passage in Klammern mit Verweis auf nicht vorhandenen Anhang entfernt. Increasing the visibility of those women who are already involved by giving them more leadership roles could help to encourage more women to volunteer their services.

Thematic networks and working groups	% women (2017)	% women (2019)
TN Mobility, Logistics and Aerospace Engineering	12,1 %	13,9 %
TN Healthcare Technologies	33,3 %	32,1 %
TN Biotechnology and Bioeconomy	15,4 %	14,0 %
TN Energy and Resources	7,6 %	8,2 %
TN Information and Communication Technology	18,9 %	17,7 %
TN Nanotechnology	9,4 %	11,8 %
TN Materials Science and Engineering	11,9 %	10,4 %
TN Product Development and Production	11,1 %	10,5 %
TN Safety and Security	16,7 %	21,1 %
TN Society and Technology	17,2 %	17,6 %
WG Education	50,0 %	50,0 %
WG Basic Questions in Science and Engineering	14,3 %	18,8 %
WG Economics and Innovation Research	18,8 %	18,8 %
WG Technology Communication	25,0 %	20,0 %

Figure 2: Percentage of women in acatech thematic networks and working groups (December 2019)

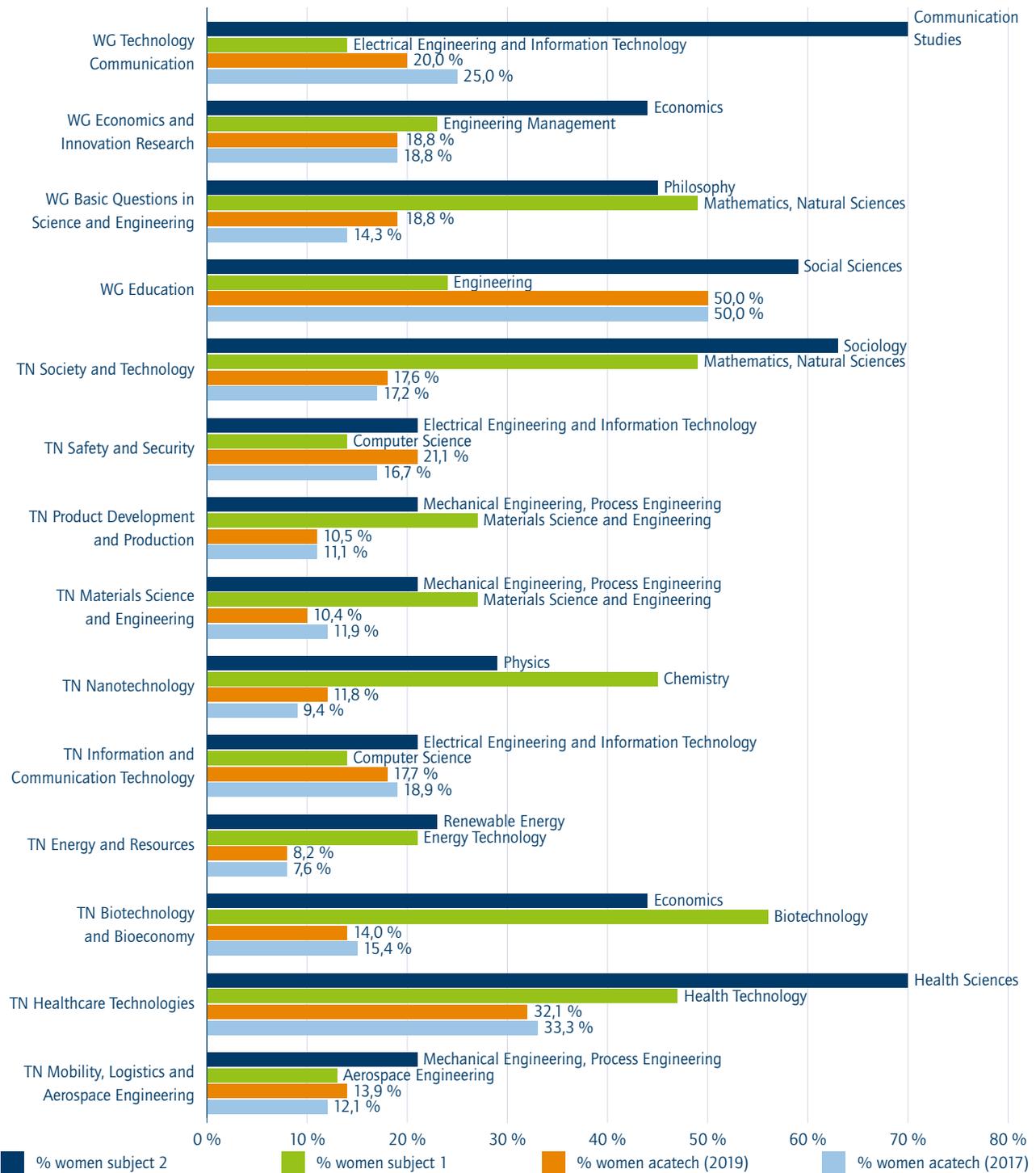


Figure 3: Percentage of women in acatech WGs and TNs compared to percentages for corresponding courses in winter semester 2018/2019. To create the bar graph, two corresponding groups of subjects or individual subjects were selected for each acatech TN and WG. The subjects were selected on the basis of their relevance to the technical focus of the acatech WGs and TNs. (Source: "Students by subject groups", "Students by semester, nationality, gender and subject", winter semester 2018/2019, in: Destatis [https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/\\_inhalt.html](https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Hochschulen/_inhalt.html) [Retrieved: 26 August 2020])

## 2.3 Women in the Executive Board

The Executive Board is responsible for the Academy's scientific leadership. Its members are elected by the General Assembly and the Senate. acatech's Secretary General and Managing Director also serve as non-voting ex officio members of the Executive

Board. A maximum of twelve members are elected from the General Assembly and up to six are elected from the Senate. Among the Executive Board's 20 current members in 2020 only four are women (20%). We must therefore continue to focus strongly on increasing the representation of women on the Executive Board in order to meet the desired 30% target.



## 3 Evaluation of progress towards acatech's gender equality targets

The Academy's efforts to increase the percentage of women were recognised when it was awarded the Total E-Quality Award in 2019. acatech also hosted the official awards ceremony, further increasing the visibility of its achievements in this area.

It is pleasing to report that the Academy has made progress in almost all of the evaluated areas and that there is a high level of commitment to achieving the relevant targets among its Members.

### 3.1 Evaluation of internal engagement

#### 3.1.1 30% target for Academy candidate lists

68 new Members joined the Academy in 2018/2019, including 14 women (20.6%).

The figures relating to the age structure of the Academy's Members show that in the second youngest age group of 40-50 year-olds, the proportion of female Members (currently 44%) and female candidates (40%) is much higher than the proportion of women holding professorships of the W3/C4 pay grade in Germany (25% in 2018). It should be noted that only 17% women were among the candidates in the 50-60 age group, which accounts for most new Members. Also, there were no women under the age of 40 on the list of candidates.

Despite the progress in increasing the percentage of women in the Academy, acatech is of the opinion that further action is required. The longer-term aim is for women to make up 30% of the members of all acatech's bodies. In order to achieve this goal, as well as setting a target for new Members, additional measures are being introduced regarding the composition of new thematic networks, working groups and project groups. These measures are described in Chapter 4.

#### 3.1.2 More women in project leadership roles

The Academy has achieved the concrete objective of increasing the percentage of women in project leadership roles (2019: 8.4%). Of its 34 project groups, one is chaired by a woman and a further three have female co-chairs (2018: 2). Despite this 100% increase, further efforts will be required to achieve the longer-term aim of ensuring that 30% of project leadership roles are occupied by women. To this end, acatech will refer to the 30 percent target in the guidelines for establishing project groups.

#### 3.1.3 More women from industry in the Senate

In 2019, the percentage of women nominated by Senate companies for membership of the Academy rose slightly to 10.4%. However, it continues to prove difficult to increase the number of prominent female figures from industry in the Senate, since the percentage of female leaders in industry remains very low. The longer-term goal is for the representation of women in the Senate to increase in line with the percentage of female leaders in industry.

## 3.2 Evaluation of public engagement

#### 3.2.1 "Women on the stage" at acatech am Dienstag

The last report set a 30% target for female speakers and moderators at the public *acatech am Dienstag* (aaD – acatech on Tuesday) events. In 2017, 23.7% of those on the stage at these events were women (14 women out of 59 people in total). Although this figure rose to 25% in 2019, it still fell short of the 30% target. There has been very little change in the percentage of female speakers and moderators over the last three years, with figures ranging between 22.2% and 25.0%. However, it is pleasing to note that women have made up around 40% of the audience at these events for several years.

#### 3.2.2 "acaLab" – identifying new themes for the Academy

The "acaLab" concept was also intended to promote public engagement. Unfortunately, however, it was not possible to take this initiative forward as planned. One of acaLab's goals was to choose

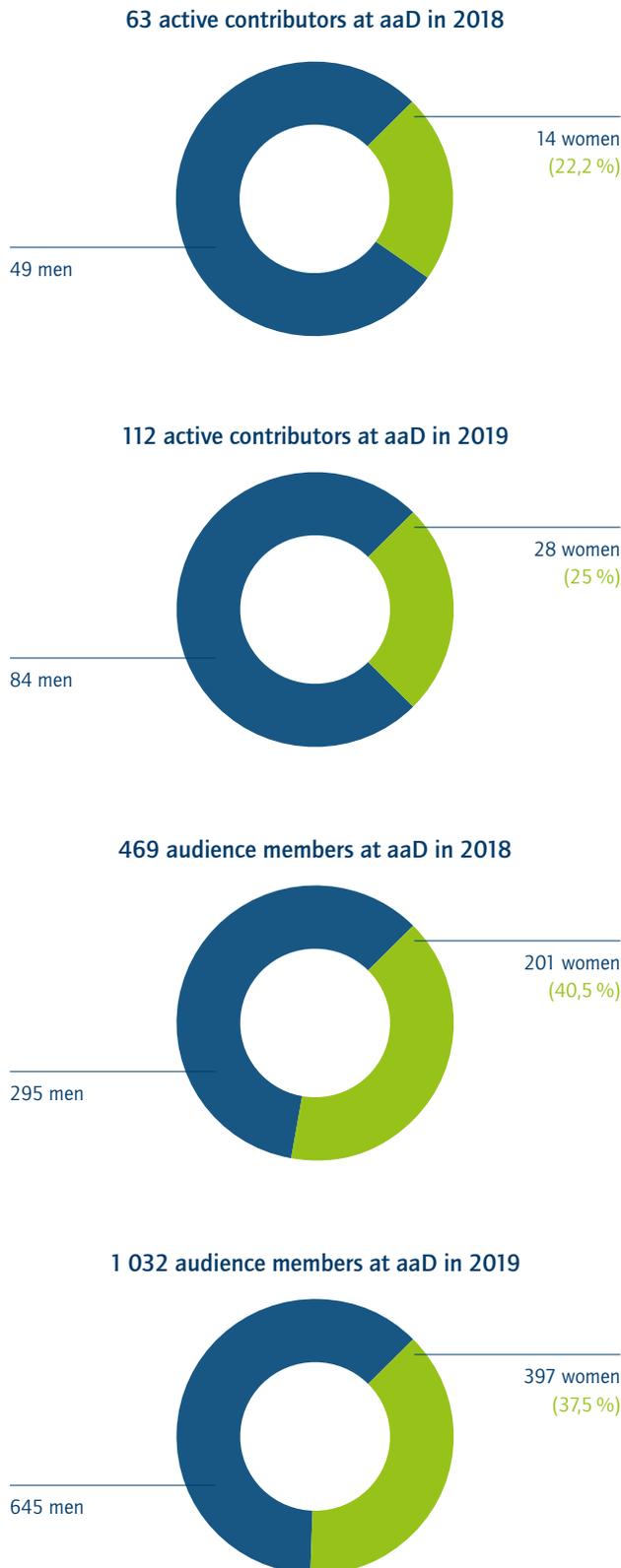


Figure 4: Percentage of female participants at acatech am Dienstag (aaD) events.

more topics that are of particular interest to women. This goal was therefore included in the format of the acatech HORIZONS publications. The acatech HORIZONS series is aimed at the general public. Making particularly extensive use of graphics, this new publication format seeks to provide a concise overview of complex topics that the public is not yet familiar with.

The first publications in the series are targeted at interested groups, with formats specially tailored to the topic in question. In accordance with Guideline 9 of the DFG (Deutsche Forschungsgemeinschaft) Code, each topic is also examined to determine whether it has a gender dimension. If a gender dimension is identified, it is incorporated into the publication. In the content creation process as well as in communications and at events a special focus is placed on addressing women and girls.

In 2018 and 2019, the Academy produced three acatech HORIZONS publications on the topics of blockchain, cybersecurity and sustainable agriculture. We are pleased to report that the percentage of women involved in the acatech HORIZONS panel discussions, publications and round tables on the corresponding themes rose from 37% in 2018 to 47% in 2019.

### 3.2.3 Involving more of acatech's female scientists in media relations

The principle of strengthening the profile of female scientists is firmly established in the Academy's media relations work. However, acatech's influence is limited, since it is up to the media to choose which, if any, of our suggested interviewees they speak to. As we continue to develop our communication strategy, a stronger focus on female Academy Members in the communication delivered via acatech's digital channels (social media, website) can help to increase women's media visibility.



## 4 Measures

### 4.1 Measures to increase the percentage of women in the Academy

The following measures are designed to increase the percentage of women in the Academy. acatech also wishes to increase the percentage of women leading projects and thematic networks so that it is in line with the overall percentage of women in the Academy, thereby increasing the visibility of its female scientists.

#### 4.1.1 30% target for Academy candidate lists

A temporary target is currently in place, according to which at least 30% of the candidates proposed for Academy membership should be women. Progress on this front is being monitored by the Executive Board. The Academy remains committed to encouraging established female scientists to develop an interest in working with acatech from as early an age as possible so that they can subsequently join the Academy. acatech will support the Members in this regard and ensure that they are regularly informed about the targets and proposed measures.

#### 4.1.2 More women in project leadership roles

The Executive Board is strongly committed to attracting more women and ensuring that more women occupy visible roles such as the chairs of thematic networks or project groups. The inclusion of this goal in the guidelines for the establishment of project groups and thematic networks will ensure that everyone involved is regularly reminded of its importance. Through this targeted measure, acatech is also helping to overcome biases among acatech's Members and project partners. acatech is also creating dual leadership positions as a stepping stone towards bringing the percentage of women leading project groups and thematic networks into line with the overall percentage of women in the Academy.

#### 4.1.3 More women from industry in the Senate

The Executive Board is also strongly committed to increasing the number of women in the Senate. Transparent communication of acatech's gender equality goals to the Senate companies supports the Executive Board in this endeavour.

### 4.2 More visibility for female experts

One of acatech's goals is to inform the public about new technologies from an early stage and discuss the fundamental issues regarding their introduction. The Academy understands that when new technologies are addressed in policy advice documents, at events and in the media, female contributors, speakers and discussion participants are particularly important role models. It is thus important to continue the progress in increasing their representation that has been achieved over the past two years.

In order to further raise the public profile of female experts, acatech will make a targeted effort to include more women on lists of proposed contributors, for example speakers for different event formats such as round tables, panel discussions, etc.

The Academy will also redouble its efforts to put forward more female experts for media interviews and promote media awareness of their expertise through their presence on acatech's digital channels.

### 4.3 Incorporating the gender dimension into policy advice

acatech is committed to reflecting the different realities encountered by women and men in some aspects of their everyday lives in its choice of policy advice topics, the development of policy advice content and the presentation of the results.

#### 4.3.1 Obtaining data for gender-sensitive policy advice

After awareness of this issue was raised in the Academy at events such as the Banz Abbey strategy meeting in 2018, it became apparent that – with the exception of SDG 4 (Quality Education) – hardly any gender-sensitive data are available for the areas that provide the focus of acatech's work (i.e. Sustainable Development Goals/SDGs 4, 8, 9, 11, 12, 13). This is confirmed in the latest OECD report<sup>3</sup>.

It is necessary to find ways of identifying, analysing and communicating data for gender-sensitive policy advice in these different areas. Various methods and approaches will be developed and tested to this end over the coming years.

3 | See *Applying a gender lens on the SDGs. How are women & girls doing?*, OECD, March 2020 (<https://www.oecd.org/sdd/applying-a-gender-lens-on-sdgs-oecd.pdf>) [Retrieved: February 15, 2021].

### 4.3.2 Implementation of Guideline 9 of the DFG Guidelines for Safeguarding Good Research Practice

In accordance with Guideline 9 of the DFG (Deutsche Forschungsgemeinschaft) Guidelines for Safeguarding Good Research Practice, in future the Academy will routinely take the gender dimension into account in its project and working groups, evaluate the relevant topics, content and outputs in terms of the gender dimension and, where relevant, include the gender dimension in its publications.

The Academy plans to strongly advocate the incorporation of the gender dimension into policy advice at the Munich Gender Summit in 2021, having already done so through the participation of Prof. Martina Schraudner in the 19th Gender Summit in Seoul, which was held virtually due to the coronavirus pandemic. The 20th Gender Summit in Munich will be hosted in conjunction with the DFG and the Alexander von Humboldt Foundation.

## 4.4 Consolidating the measures through communication

The rising percentage of women in the Academy and the progress achieved with regard to the public visibility of female experts bear witness to acatech's initial success in raising awareness among its Members. Nevertheless, the lessons learned from the first Action Plan point to the need for continuous communication to remind

people of the goals and measures. This is key to ensuring that both the short-term targets for the next evaluation and the longer-term goals can be achieved within an appropriate timeframe.

The first step will be to publish the goals in the Gender Equality Action Plan approved by the Executive Board and communicate them both internally and externally. The bodies and functions that are key to meeting the targets will receive ongoing support in their efforts and will be kept informed of the progress achieved.

## 4.5 Overview of the Academy's gender equality measures up to 2022

The table below provides an overview of the different categories of gender equality actions.

Internal measures	External measures
Increase percentage of women among Academy's Members	More visibility for female experts
Increase percentage of women leading projects and thematic networks	Incorporate gender dimension into advice for policymakers and the public
Raise awareness of need to take gender dimension into account	Recognise importance of broad range of perspectives
Regular communication of goals	Communication of goals

Figure 5: The Academy's gender equality measures up to 2022.





## About acatech – National Academy of Science and Engineering

acatech advises policymakers and the general public, supports policy measures to drive innovation, and represents the interests of the technological sciences internationally. In accordance with its mandate from Germany's federal government and states, the Academy provides independent, science-based advice that is in the public interest. acatech explains the opportunities and risks of technological developments and helps to ensure that ideas become innovations – innovations that lead to greater prosperity, welfare, and quality of life. acatech brings science and industry together. The Academy's Members are prominent scientists from the fields of engineering, the natural sciences and medicine, as well as the humanities and social sciences. The Senate is made up of leading figures from major science organisations and from technology companies and associations. In addition to its headquarters at the acatech FORUM in Munich, the Academy also has offices in Berlin and Brussels.

For more information, please see [www.acatech.de](http://www.acatech.de).



**Editor:**

**acatech – National Academy of Science and Engineering, 2021**

**Munich Office**

Karolinenplatz 4  
80333 Munich | Germany  
T +49 (0)89/52 03 09-0  
F +49 (0)89/52 03 09-900

**Berlin Office**

Pariser Platz 4a  
10117 Berlin | Germany  
T +49 (0)30/2 06 30 96-0  
F +49 (0)30/2 06 30 96-11

**Brussels Office**

Rue d'Egmont/Egmontstraat 13  
1000 Brussels | Belgium  
T +32 (0)2/2 13 81-80  
F +32 (0)2/2 13 81-89

info@acatech.de  
www.acatech.de

Board acc. to § 26 BGB: Prof. Dr.-Ing. Dieter Spath, Karl-Heinz Streibich, Prof. Dr.-Ing. Jürgen Gausemeier, Prof. Dr. Reinhard F. Hüttl (currently on leave of absence), Dr. Stefan Oschmann, Prof. Dr. Christoph M. Schmidt, Prof. Dr.-Ing. Thomas Weber, Manfred Rauhmeier, Prof. Dr. Martina Schraudner

**Recommended citation:**

acatech (Ed.): *Gender Equality Report and Action Plan for the Academy*, Munich 2021.

Bibliographical information published by the Deutsche Nationalbibliothek.

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographical data is available online at <http://dnb.d-nb.de>.

This work is protected by copyright. All rights reserved. This applies in particular to the use, in whole or part, of translations, reprints, illustrations, photomechanical or other types of reproductions and storage using data processing systems.

Copyright © acatech – National Academy of Science and Engineering • 2021

Coordination: Prof. Dr. Martina Schraudner

Translation: Joaquin Blasco

Layout-concept: Groothuis, Hamburg

Conversion and typesetting: Fraunhofer IAIS, Sankt Augustin

The original version of this publication is available at [www.acatech.de](http://www.acatech.de).

