

# **“Cultural Change Towards a Gender-Neutral Landscape in Science, Academia and Research in 2025”**

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Founded in 1963 by two prominent Austrians living in exile – the sociologist Paul F. Lazarsfeld and the economist Oskar Morgenstern – with financial support from the Ford Foundation, the Austrian Federal Ministry of Education, and the City of Vienna, the Institute for Advanced Studies (IHS) is the first institution for postgraduate education and research in economics and the social sciences in Austria. The **Sociological Series** presents research conducted in the Department of Sociology and aims to share “work in progress” in a timely manner prior to formal publication. As customary, the authors bear full responsibility for the content of their contributions.

Das Institut für Höhere Studien (IHS) wurde im Jahr 1963 von zwei prominenten Exilösterreichern – dem Soziologen Paul F. Lazarsfeld und dem Ökonomen Oskar Morgenstern – mit Hilfe der Ford-Stiftung, des Österreichischen Bundesministeriums für Unterricht und der Stadt Wien gegründet und ist somit die erste nachuniversitäre Lehr- und Forschungsstätte für die Sozial- und Wirtschaftswissenschaften in Österreich. Die **Reihe Soziologie** bietet Einblick in die Forschungsarbeit der Abteilung für Soziologie und verfolgt das Ziel, abteilungsinterne Diskussionsbeiträge einer breiteren fachinternen Öffentlichkeit zugänglich zu machen. Die inhaltliche Verantwortung für die veröffentlichten Beiträge liegt bei den Autoren und Autorinnen.

# **Abstract**

Austria has a long tradition of gender equality policy measures in science, academia and research. Since the 1980s, a mix of measures has been successively introduced to promote excellent female scientists and academics, establish women's and gender studies and remove the structural barriers for women. Accordingly, an increase in the share of women in all areas and functions in science, academia and research and the inclusion of gender studies in an increasing number of disciplines has been achieved in recent years. Despite this, the notion of the "scientific ideal" has remained almost unchanged, i.e. is still based on a typically male scientific career. This notion essentially considers a "good" scientist to be one who can devote his life totally to science and has no other restrictions on his time or commitments outside science. The question now is, what – and where – can we add to the existing policy mix to change this situation, i.e. to revise this notion of the "ideal".

At a series of workshops, researchers, academics and other experts used creative methods to develop their visions of a gender-neutral landscape in science, academia and research in 2025. These visions were then used to identify relevant fields of action for initiating cultural change. This paper summarises the results of this discursive process and outlines how the process that began with this project could now be continued.

## **Keywords**

gender equality, science and academia, research, visions, gender equality policies



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## 1 Introduction

Despite massive criticism – not only from a gender equality perspective – and a broad spectrum of implemented measures, scientific and academic culture in Austria remains oriented on a notion of ideal science described almost a century ago by Max Weber in his essay *Science as a Vocation* (*Wissenschaft als Beruf*; Weber 1919). According to this notion, the ideal scientist sees science not as an occupation but as a calling, can devote his/her entire life to science, has no other demands on his/her time and no other commitments outside science. Men correspond to this ideal more frequently than women, i.e. it has a clear gender bias.

Following Rosabeth Kanter (1977), it was long assumed that the prevailing culture would change and that the inherent gender bias would be removed with the increasing presence of women in science and academia. Yet despite the increasing participation of women and the establishment of structures to support women and gender equality, core practices in science, academia and research (e.g. assessment criteria, selection processes) have scarcely changed. This thus raises the question of how cultural change in higher education and research institutions could be initiated. Our underlying hypothesis is that capacity for reflection at both the individual and the organisational level is the basis for the necessary change in practices – and thus also for cultural change (Wroblewski 2014). Indeed, reflection on existing practices from a gender bias perspective is a prerequisite for the development and implementation of alternative practices.

From an organisational science perspective, there are two basic constellations for the instigation and intensification of change processes: the so-called “pressure of suffering” (*“Leidensdruck”*) and the so-called “pull of desire” (*“Lustsog”*). It goes without saying that the latter is the more attractive constellation for all participants: it allows them to commit to and – in a best case scenario – embrace these processes without resistance. The goal of the project described in this report, which was commissioned by the Austrian Federal Ministry of Science, Research and Economy (BMWFW), was to build on this “pull of desire” and to identify visionary starting points for the initiation, strengthening, promotion and development of a deliberate change in culture towards equality in the Austrian scientific, academic and research landscape. At a series of think tanks and workshops, relevant stakeholders would work together to develop a vision of a culture of science and academia in which the dominance of the male-connotated scientific ideal would be reduced and in which women and men of all groups would participate on an equal footing. The primary objective was not the development of additional structural measures, e.g. to break down barriers in recruitment and career development, to anchor a gender dimension in research content or to integrate women into decision processes. Instead, the project sought to identify starting points for reinforcing the measures that are already in place and ensuring that they “can be lived”, i.e.

are implemented in a way that allows gender equality goals (as formulated both at national and at international level) to indeed be achieved.

Accordingly, the project deliberately forewent a further in-depth evaluation of the current situation. After all, the various aspects, structures and relationships that inhibit, prevent or obstruct gender equality have already been adequately identified, analysed and interpreted in recent years – also with regard to science, academic and research organisations and structures (for a summary, see Chapter 2). However, the findings of such studies and the existing bundle of measures do represent the state-of-the-art and, as such, also establish the frame for the assessment and reflection on the findings of our project. (Which topics emerged as relevant in the process? Are these already included in the state-of-the-art or are they new topics? Which other relevant topics were not raised in the workshops?) Likewise, our description of the state-of-the-art takes account of the ongoing debates at both national and EU level.

The process described in this report purposely did not begin with a synopsis of existing measures or problems. It began instead with a look to the future. A heterogeneous group of representatives of selected organisations in the Austrian science, academic and research community worked together in so-called vision workshops, using creative methods to develop their visions for a gender-neutral landscape in science, academia and research in 2025. These visions then constituted the basis for the formulation of recommendations for action to support the existing moves towards cultural change in Austria and to strengthen or instigate gender equality and respect for diversity in science, academic and research institutions.

This report begins with a description of the status quo in Austria and a discussion of the ensuing open issues (Chapter 2). This is followed by an overview of the project design and its implementation (Chapter 3). Chapter 4 outlines the visions developed by the participants in the above-mentioned vision workshops. The resulting fields of action are subsequently described in Chapter 5 and translated into concrete recommendations for action in Chapter 5. The concluding summary then reflects on the process and its findings as a whole.

## 2 Background

Austria has a long tradition of gender mainstreaming and equal opportunities measures, whose roots date back to the 1980s (Wroblewski et al. 2007). In the decades that have followed, a mix of measures were developed to support women and establish gender equality. This includes measures specifically designed to promote women (e.g. habilitation grants for women) and women's and gender studies (e.g. coordination units in universities, chairs for gender studies) as well as measures designed to bring about structural change (e.g. gender equality working groups, gender mainstreaming, quota regulations for university bodies). Until the turn of the century, the driving force behind these measures was the respective ministry responsible for science and academia. Since the turn of the century, there has been an increasing rise in inter-agency cooperation in this field, e.g. through the implementation of measures funded by the European Social Fund (ESF) or the fFORTE (FEMtech) initiative. This has not only brought about the involvement of additional players, it has also served to expand the focus of efforts beyond academic research (universities) to non-university and industrial research.

The gender equality goals contained in the European Research Strategy correspond to those intended by the existing national policy mix in Austria, namely to break down the existing imbalance which disadvantages women and to bring about the following changes in particular:

- Increase the share of women in all areas of and at all levels of the hierarchy in science, academia and research
- Remove the structural barriers for women that prevent a career in science and academia (incl. an increase in the share of women in decision bodies)
- Promotion of the gender dimension in research in all disciplines and areas (incl. non-university/industry research)
- Improve the compatibility of career or a degree (science, academia and research) with family commitments and responsibilities.

These goals are also mirrored in the priorities formulated for the BMWFW under the new target-based federal budget principles recently been introduced in Austria.<sup>1</sup> The target for science, academia and research (WZ 4) is to establish a balanced gender ratio in management positions, on administrative bodies and among young scientists, academics

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<sup>1</sup> A 2009 Amendment to the Federal Budget Act (*Bundeshaushaltsrecht*) progressively introduced the principle of target-based budgeting – and thus also gender budgeting – from 2011, with the goal of increasingly orienting federal activities on measurable performance and target outcomes and improving the economic efficiency of the administration. All levels of the federal administration must now define targets – also with regard to gender equality – in their medium-term and annual budgets. These play a central role in budget allocation and control and must also be subjected to an audit. The current public administration targets are posted (in German) on the following webpage: [www.oefffentlicherdienst.gv.at/wirkungsorientierte\\_verwaltung/wirkungsziele/index.html](http://www.oefffentlicherdienst.gv.at/wirkungsorientierte_verwaltung/wirkungsziele/index.html)

and artists. The target for the Department of the Economy (WZ 3) is to increase the share of women working in research, technology and innovation.

## Measures

A range of measures have been introduced in recent years to extend the gender equality standards already applicable in universities to the non-university and industrial sectors. §19 of the Austrian Universities Act 2002 (*Universitätsgesetz*; UG2002) stipulates that universities must now set up units to coordinate (gender) equality tasks, to support women and for gender studies. In addition, the now mandatory equal opportunities working groups establish a forum which should serve to prevent all forms of discrimination in recruiting procedures (§42 UG2002). Universities must now also include a so-called Female Advancement Plan (*Frauenförderungsplan*) in their statutes (§19 UG2002). Gender equality developments are also monitored as part of the intellectual capital monitoring process (gender monitoring). In 2011, the Quality Assurance Framework Act (*Qualitätssicherungsrahmengesetz*; QSRG) established a legislative framework for gender equality and the promotion of women at universities of applied science and at private universities. This framework is based on the standards applicable in universities, but is less binding in nature (Tiefenthaler, Good 2011). To promote gender equality outside the immediate university context, the Austrian research grant institutions – or, more specifically, the Austrian Science Fund (FWF), the Austrian Research Promotion Agency (FFG) and the Technology Agency of the City of Vienna (ZIT) – introduced gender criteria into their application processes for research grants. Applicants must now demonstrate the relevance of gender aspects for their own specific research and the extent to which gender equality is supported and promoted in their respective institutions. This could provide non-university research facilities with a strong incentive to develop plans to promote women and implement concrete measures.<sup>2</sup> As a further incentive, non-university technology and natural sciences research facilities can apply for an FFG “FEMtech Karriere” (“FEMtech Career”) grant of up to 50,000 euros to fund the development and implementation of a plan and concrete measures to promote women.<sup>3</sup>

## Results

The trend regarding the integration of women in science, academia and research in recent years and decades is ambivalent. The presence of women has clearly increased, i.e. more women are now attending university, graduating and working in science, academia and research. However, little has changed with respect to gender-specific course choices (horizontal segregation): women remain in the minority in engineering subjects, but dominate in typically female sectors (e.g. teacher training or the humanities). Likewise, women are still

<sup>2</sup> For a detailed overview of the status quo of the anchoring of gender criteria in research see Wroblewski 2013.

<sup>3</sup> <https://www.ffg.at/femtech-karriere> (in German).

underrepresented among university professors and in university management (vertical segregation).

The trend and status quo regarding the presence of women differs greatly between the various sectors.<sup>4</sup> The share of women among tenured professors at universities has risen markedly in recent years (from 14.3 % in 2005 to 20.9 % in 2013). The share of women among non-tenured professors also rose in the same period from 21.3 % to 35.3 %. On the whole, the promotion prospects for women at universities have clearly improved. The Glass Ceiling Index lay in 2013 at 0.65 and was thus significantly higher than the comparison figure for 2005 (0.50). Yet, at the same time, women still have significantly lower prospects than men of attaining a professorship (a balanced gender ratio would be 1.0). Women have been in the majority among students and graduates for many years, and the share of women among third-party funded researchers and assistants lies at around 40 %. Despite this positive trend, gender-specific degree course choices have scarcely changed: in the 2012 winter semester, the share of women among first-time Bachelor students lay at 31 % for engineering courses and 76 % in the arts and humanities.

As a result of the introduction of the quota regulation in 2009, a clear change has been seen in the number of women on university decision bodies. 18 of 22 universities now meet the 40 % female quota for the rectorate, and only one lies under the 40 % quota for the university council. Far more women now also sit on other commissions than was the case four years ago: while in 2010 46 % of all appointment boards were made up to at least 40 % of women, the same figure applied in 2012 to two-thirds of all appointment boards.

The situation is different at universities of applied science (*Fachhochschule*). Women are clearly underrepresented here, even if the situation has improved in recent years. In the 2012/13 academic year, just over one third (34.8 %) of course directors were women, compared to one fifth (19.4 %) in 2004/05. The student gender ratio is balanced but does, however, demonstrate a clear gender-specific course choice trend (in the 2012/13 winter semester, 82.6 % of students on health sciences courses were women compared to 20.5 % for engineering courses). This segregation is even more pronounced than at universities, where the share of women on engineering courses lay at 27.9 % (winter semester 2012/13).

Women are most underrepresented in the non-university research sector, in particular in industrial research. 15 % of research staff in the corporate sector are women (compared to 34 % in the university sector, 41 % in the state sector and 42 % in the private, non-profit sector). Women are not only underrepresented in the non-university research sector, they

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<sup>4</sup> The figures presented here were obtained from BMWFW's monitoring statistics ([www.bmwfw.gv.at/unidata](http://www.bmwfw.gv.at/unidata)).

also have significantly lower chances of promotion here than men (Glass Ceiling Index: 0.3; share of women in executive management: 4 %).<sup>5</sup>

There are, however, efforts in place not only, for example, to increase the number of women in actual functions but also to involve women more strongly in selection processes. The introduction of the quota regulation has raised the share of women in university bodies. Attempts are now also being made to increase the share of women appraisers. In appointment procedures at Austrian universities, one in five of all appraisals is currently prepared by a women (Wroblewski, Leitner 2013), while the share of women among FWF appraisers also lies at 20 % (FWF 2013).

### **Burning Issues**

The situation at Austria's universities is characterised by a solid legal basis and established structures for promoting women and gender equality. This has initiated changes that are now evident in the increasing presence of women – also in management functions and among professors. Gender targets and guidelines are, however, frequently seen as bureaucratic aspects and are often really only followed to the letter. As a result, adherence to such targets and guidelines does not automatically bring about a change in practices and attitudes. This paradox is particularly evident in the female presence in decision bodies context: while the share of women in decision bodies did rise after the introduction of the female quota for university bodies, this development did not bring about a change in decision processes or criteria. → So how can we achieve a situation in which the rules are not only adhered to but also “lived”?

When taken as a whole, an extensive bundle of measures is now in place to promote gender equality in science, academia and research. Yet these measures are rarely synchronised across the different sectors. → So how can we go about developing cross-sector measures and what would be the advantages of doing so?

Experiences from the university sector demonstrate that pressure does lead to a change in practices (even if the intended targets are only partially reached). Attempts are now in place in the non-university sector to exert such pressure by integrating gender aspects into the award criteria for research grants and these have also proved successful in raising the presence of women here. However, the effects of these efforts on the integration of a gender dimension into research content cannot yet be determined. → So how can we create intrinsic motivation on the part of research institutions to actively pursue gender equality goals and recognise these as targets of their own organisation?

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<sup>5</sup> No evaluations of the consequences of the withdrawal by the Federal Ministry of Science and Research of basic subsidies for non-university humanities, social and cultural sciences research institutes are as yet available. However, since these areas traditionally had a strong female presence, it can be assumed that women have been particularly affected by these cuts.

Despite decades of feminist criticism of the traditional notion of science, the male-connotated image of the ideal scientist remains, on the whole, unquestioned. This feminist criticism is supported or augmented by the debates on health in the workplace and on working environments that support a good work-life-balance. ➔ So how can synergies be established between gender equality and other socio-political goals and how can these synergies then be put to use?

The strategy for changing the landscape in science, academia and research by supporting women continued to work as long as this sector was still expanding, i.e. as long as women were being integrated into an expanding system. Austerity measures in the science, academic and research system have brought this period of growth to an end and turned the debate into a redistribution discussion in which power issues assume increasing relevance. ➔ From a gender equality perspective, how can the effects of austerity measures in science, academia and research be analysed in line with gender budgeting premises?

Other factors that have to be considered in the reduced resources context are the career opportunities and career paths currently open to young scientists, academics and researchers. If subsequent generations are to serve as hope for cultural change in science, academia and research, adequate career opportunities must be created, which – in addition to providing long-term posts and resources – also incorporate gender equality aspects from the outset (compatibility and mobility, women in management positions, breaking down of horizontal segregation in disciplines, etc.). ➔ So, given the limited resources, how could HR measures and long-term support systems be used to make this sector more attractive in gender equality and diversity terms?

The central question that runs through all the above points is as follows: How can we make “doing” gender equality become standard practice in the way people think and act – thus making equal rights and gender equality no longer issues that need to be argued and legitimised but simply something we do as a matter of course?

### 3 Project Design and Realisation

After the project had been commissioned by BMWFW in January 2014, a kick-off meeting was held with the ministry's project steering group to present the proposed project design and discuss the project goals. This meeting was also used to discuss and determine which experts were to be invited to the first think tank (which would precede the vision workshops).

The first think tank, which was held in February 2014, focused on two aspects: discussing the design of the vision workshops and testing some of the methods to be used. This was considered important since, while the proposed methods had been successfully applied in other (corporate) settings, no experience had as yet been obtained with them in a science, academia and research system setting. The think tank also helped prepare the access to the field, i.e. it was used to establish the selection criteria for vision workshop participants, put together the list of people to be invited and ascertain whether the institutions represented would be willing to participate in and/or host such a vision workshop. Based on the results of this think tank, the design of the vision workshops was adapted and four such events organised. The four vision workshops were held on 28 April 2014 at the University of Graz, on 5 May 2014 at the University of Education in Salzburg, on 7 May 2014 at the Academy of Fine Arts and on 26 May 2014 at the University of Applied Sciences Campus Vienna. We would like to take this opportunity to extend our thanks and appreciation to these host institutions for their invaluable support in this project.



Chapter 4 of this report is based on the minutes taken at these vision workshops, which were attended by representatives of universities, universities of applied science, universities of education and non-university institutions from different disciplines and from different age groups as well as by representatives of science, academic and research policy at both state and federal level. The goal of these workshops was to establish and collate the participants' visions of "A Gender-Neutral Culture of Science, Academia and Research in 2025" in three steps using a range of different creative methods. In a first step, the participants were split into small groups and each asked to draw – without talking to each other – a picture that reflected their visions of such a gender-neutral culture of science, academia and research in 2025. They then worked in these small groups – all the while remaining in their thoughts in the year 2025 – to identify the positive and negative developments and activities that had retrospectively contributed to the realisation of their depicted visions. In a final step, the



participants were asked to look at the visions from today's perspective and consider which measures and changes would be needed to realise these visions by 2025.



On the basis of the discussions in these vision workshops, fields of action were identified (see Chapter 5) and presented at a second think tank to a group of experts, all of whom work in different institutions at the interface between university and gender equality policy and in the development of concrete implementation measures. The goal of this second think tank, which was held on 8 July 2014, was to discuss the recommendations for action that had been derived from these fields of action.



A list of all experts involved in the think tanks and vision workshops can be found in the Appendix (Chapter 9) to this report. We would like to take this opportunity to extend our thanks and appreciation to all these experts for their willingness to participate in this experiment and to discuss and work on the visions that emerged.

## 4 Visions of a Gender-Neutral Landscape in Science, Academia and Research

Given the developments in science, academia and research over the last 10 to 20 years, the visions drawn by the workshop participants must be seen from both a European and a national perspective. At European level, two of the main factors of influence here have been the development of the European Research Area and the Bologna Process. In Austria, the Universities Act 2002 has played a defining role in shaping the current situation. It brought about institutional reforms, such as the implementation of new public management and its accompanying control mechanisms, which are based primarily on quantitative indicators and oriented on international rankings. Lasting changes in working conditions and career opportunities in science, academia and research have been one consequence of these developments. Increased competition in science and academia has been another.

One aim of this project was to identify potential starting points for change processes which could support a change in culture towards greater gender equality and respect for diversity in science, academia and research. The method chosen for this purpose was vision building. In concrete terms, we asked the workshop participants to imagine it was the year 2025 and to each draw a picture that reflected the following statement: “It is the year 2025. Science, academia and research are gender neutral. How do you recognise that this is the case?” We hence assumed that the ideal situation had been reached, that gender equality had been achieved, and that everything that constitutes a problem at present had been resolved. As was our intent, this focus on the “pull of desire” had a defining influence on the visions.

### 4.1 Visions in pictures

The Austrian science, academic and research landscape in the year 2025 is colourful and eclectic; it is populated by people of all ages from all over the world. There are chill-out spaces and spaces for sharing. Networks in all directions testify to cross-border communication, links and bonds. It is a landscape full of opportunities: both women and men are imagined in all functions and in many different roles. They think and work both alone and in groups; they teach in various settings and locations, both indoors and outside; they withdraw to contemplate, take breaks or travel the world. Women and men head up the different knowledge production centres, again both alone or in teams. The communication paths to them are short; their



doors always open. A democratic wind blows through the halls of knowledge.

There are now various career options, and one-dimensional career hierarchies are a thing of the past. The rules and understanding of science and academia have also changed: cooperation, solidarity, team spirit among women and quality over quantity are established practice and act as catalysts of creativity.

There are many children playing in the halls of science, academia and research and they are clearly welcome in this society. They are in view, safe and well looked after in dedicated spaces. Men look after children, push prams or care for them in some other form. Work sharing between partners is the rule.



Clocks are a recurring element in all pictures; they show that working hours have boundaries. They also serve as a signal that there is a life outside science, academia and research, that there are limits to strength and that a high value is placed on health. It is possible to achieve a good work-life-balance and to reconcile work and family commitments. Doing so makes people happy.

Money, whether symbolised by banknotes, dollar signs, a green field, moneybags or flows of cash, is also a recurring theme in the pictures. Being able to live well and earn a living wage from a career in science, academia and research is an aspect that must apply equally to both genders and all age groups. The flows of cash, which “water” the different beds in equal measure, stand for equality in the distribution of funds across the different disciplines and the different sectors. Social status is no longer an exclusion factor; there are plenty of resources to go round, which in turn encourages greater creativity and diversity.

The science, academic and research landscape is an oasis of well-being; there is music in the air, men and women laugh, get caught up in intense debate and work on a level playing field. The working environment is comfortable and productive.





Science, academia and research are conducted in egalitarian structures. Everyone – regardless of their area or sector of work – is valued and considered equal. Gender-neutral language is par for the course and serves as a symbol of barrier-free, non-hierarchical world of science and academia.

Equality is anchored not only in people's minds but also in their hearts. It is viewed, embraced and “lived” as normal, everyday practice. The former “equal opportunities working groups” have been replaced by centres for health and well-being.

Science, academia and research is no longer practiced in a vacuum, it is embedded in society and the world as a whole. Quasi semi-permeable walls link the research landscape with the outside world: scientists work on the problems that affect this world, generate solutions that contribute to the well-being of the people and are open to everything around them. Communication works in all directions, both internally and with the outside world.

Output is huge, innovative ideas abound, and Austria occupies a strong position on the international knowledge stage.



## 4.2 Summary of the visions

Many different desired changes are depicted in the pictures that the participants drew of a gender-neutral future landscape of science, academia and research. These pictures serve as testimony to their discontent with the way this sector is currently understood, practiced and experienced. A desire for a change in structures, practices and the attitudes of all people involved is a recurring theme in the pictures. The establishment of gender equality and respect for diversity is a key starting point for the necessary structural change that will promote and is a prerequisite for cultural change.

It is also evident that the current hegemonial understanding of science, academia and research and the standard practices in these fields have become worthy of question and debate. Transparency, inclusion, networking, interdisciplinary communication and barrier-free, non-hierarchical dialogue and social responsibility shape the visions of a new culture of science and academia. They give it meaning and have beneficial effects for all. At the same time, the participating experts reject an autocratic, competition-based system of science,



academia and research that reproduces old norms and structures. If a gender-neutral culture in this sector is genuinely the goal, this system must be reformed.

As a social good, science, academia and research must address the burning issues in society and bid farewell to the “art for art’s sake” attitude. Scientific work should be (allowed to be) fun again. The desire to be inventive, to step out of the box in research and to basically enjoy a good life in the academic and research workplace is a vision shared by all participants. This essentially means that the hitherto dominant opinions of what constitutes “good science and research” will also have to be revisited and reconsidered. The hierarchical understanding and practices it encourages have to be removed. They should be replaced by inclusion and non-hierarchical, equal status and funding for the different institutions and production centres of knowledge – to the benefit and advancement of society as a whole. Communication “vessels” need to be created in all possible directions: between the institutions, between the different fields of society, and on a regional, national and international level.

Totally new, sustainable, long-term career models need to be developed, which allow scientists, academics and researchers to be productive and make an impact throughout their entire working lives. A career in science and academia must be compatible with family commitments and personal interests – throughout the different phases of life and across all circumstances. The demand that quality be at last given precedence over quantity in academia supports this reframing and realignment of the sector.

### **4.3 Feasibility of the visions**

The visions of a gender-neutral landscape of science, academia and research in 2025 developed in the workshops appear at first glance to require fundamental changes or, as one participant put it, suggest that “no stone should be left unturned”. However, a closer look relativises this impression. In fact, it is primarily the conditions under which men and women in science, academia and research are forced to work that are being questioned and to which far-reaching changes are (to some extent) considered necessary. The core institutions in this system are themselves not called into question. While the various sectors of the scientific, academic and research landscape (universities, universities of applied science, teacher training colleges, non-university research institutes, industrial research) are, for example, not questioned, transparency between these sectors is seen as a central issue. The need for different disciplines is also still considered relevant, although the hierarchy of disciplines is seen as a problem. The three-tier degree structure is likewise not questioned, in particular the need for a doctorate as an entry requirement for a career in science, academia and research. The *habilitation* as a required qualification for professorship is also not even mentioned in some of the workshops, and only indirectly in others – in particular in the call for recognition of qualifications obtained outside the university setting.

The way the exercise was formulated in the workshops meant that the visions produced focussed on science, academia and research as a career and, thus, on a medium-term perspective (i.e. the year 2025). This – as was the intent – contributed to the outcome that the participants did not formulate utopian demands, but instead developed scenarios which could be achieved by adapting the existing system. This focus on the career aspect also meant that some topics which we had assumed in the run-up would be addressed, were in fact hardly mentioned – presumably because the workshop participants did not consider them to be key components of their field of employment. These included, for example, teaching and university entry requirements. This was surprising insofar as the vast majority of the workshop participants work not only in a research but also in a teaching capacity – either as university lecturers, lecturers at universities of applied science or external lecturers. This is presumably more an indication of the significance of teaching in their own job profiles than of the relevance of teaching for the development of a gender-neutral landscape in science, academia and research as a whole. Gender as a cross-cutting issue in science, academia and research does, however, feature in all the visions produced and is considered a key characteristic of a gender-neutral culture of science, academia and research.

Aside from the above-mentioned unquestioned aspects, it is also evident that the participant's visions do not relate solely to science, academia and research but also extend to the notion of what constitutes a “good life” in general. Key issues here include the compatibility of a career/degree programme with other areas of life (in particular family and care responsibilities) and the call for a general reduction in working hours in society as a whole to raise the quality of life (keyword: healthy working environment). These aspects of the visions could also apply to all other occupation. This was subsequently mirrored in the needs for action formulated, which include both recommendations for issues specific to the field of science, academia and research and suggestions that address issues which affect society as a whole.

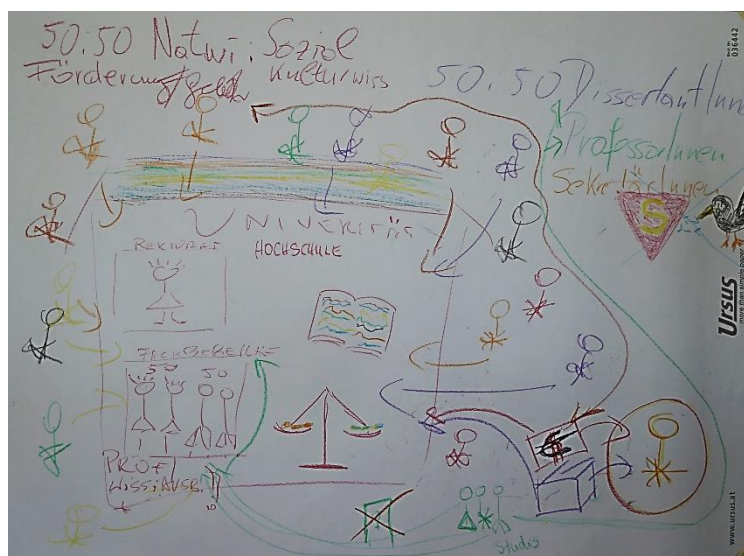
## 5 Fields of Action Identified in the Vision Workshops

In this chapter, we describe the various action approaches and directions of activity that were identified in and from the four vision workshops. For purposes of clarity, we have grouped these approaches and activities into 10 major topics. Each topic begins with a brief summary of the intended direction that the corresponding actions should take. These are followed by individual descriptions of each approach (in varying detail), outlining in each case – again in varying detail – the reasons why it was proposed by the workshop participants. It should also be noted that the various topics do, in some cases clearly overlap.

### 5.1 Strategic planning of future science, academic and research policy with a systematic consideration of gender equality and diversity

The question of how equality goals could be used to systematically guide the actions of organisations and actors in science, academia and research was discussed intensely in all workshops and various meta-level measures were suggested.

Guiding principles for science and academia: General guiding principles for science and academia in Austria should be defined and should constitute the framework for the public funding of science, academia and research and for the sector as a whole. As with the European Research Strategy, the focus should lie on the relevance of science, academia and research for society. Likewise, binding principles should be formulated for the award of research funding and grants (e.g. gender equality, diversity, sustainability).



Comprehensive plan for higher education: The development of the higher education sector should be based on a clear strategy and plan, which explicitly covers all sub-sectors of public higher education (universities, universities of applied science, teacher training colleges). A

comprehensive plan for higher education should merge the separate development plans for universities and universities of applied science that are currently in place and should also be extended to the other sectors. This comprehensive plan should be subject to a systematic check for its adherence to equal opportunities (gender and diversity) criteria.

Professional management training for science and academia: The relevance of management is becoming increasingly importance in all areas of science, academia and research. It was pointed out in the workshops that traditional management training courses are frequently either not or only inadequately compatible with many of the structures in science and academia. As a result, specific curricula need to be developed for this sector, with the systematic consideration of gender and diversity criteria also forming an integral component here. Evidence of such qualifications should be supplied in application procedures (see also Section 5.9).

## **5.2 Funding of science, academia and research**

The funding of science, academia and research was a central topic in all the workshops. In addition to the need to raise the funding available for this sector and reverse austerity measures, particular emphasis was placed here on the fair distribution of funds and the design of the funding allocation process. The reformulation of assessment criteria for research work and scientific excellence was also discussed in this context. The funding available for science, academia and research should be distributed fairly across the disciplines as well as on a gender-neutral basis.

Raise the funding available for science, academia and research: The participants called for a massive increase in the amount of funding for science, academia and research, which should be divided equally between universities, universities of applied science, teacher training colleges and non-university institutes. Concrete proposals here were a legislatively defined allocation of a specific percentage (to be defined) of GDP to science, academia and research and the establishment of a cross-sector pot for science, academia and research that is fed by a tax on corporations. These calls can also be seen as a response to perceived or feared austerity measures in the education, science, academia and research sectors.



Additional funding for interdisciplinary/transdisciplinary and participative research: The participants stressed that the required change in the understanding of science and academia (see also Section 5.10) cannot just happen on its own, it will have to be brought about in a targeted manner. To achieve this, the establishment of separate interdisciplinary and transdisciplinary research focal points at research funding organisations was proposed.



Additional funds could be created specifically for these focal points, e.g. from structural resources for higher education other than the research funding institutions (“higher education billion”).

Fair distribution across disciplines: The fairness of the distribution of funding across disciplines was discussed in various contexts. There were calls, for example, for equal access to funding for all disciplines and for the extension of third-party funding programmes to all disciplines. All disciplines should basically be treated equally in the allocation of funds. Such measures would serve to reduce the dominance of male-dominated sectors in third-party funded research.

Transparency and equality in the allocation of funding: With regard to the allocation of funding, there were calls to adapt the review process and quality assessment criteria and for priority to be given to anchoring mandatory gender criteria in the award process. This should extend not only to the gender make-up of research teams, but also to the inclusion of gender aspects in the research itself, both of which should be explicit requirements in the application process. Adherence to such requirements should be a knock-out criterion for funding applications. Greater transparency in funding decisions (i.e. in the reasons given for such decisions) was also deemed necessary.

Development of alternative assessment criteria: It was stressed that the assessment of scientific and academic excellence should be based more strongly on quality than on quantity, whereby interdisciplinary/transdisciplinary cooperations and approaches should be seen as particular indications of quality. The criteria currently used to assess scientific and academic output – of individual scientists, academics, institutions or research projects – are considered unfit, because they are based primarily on quantitative indicators, tie up resources and are fairly meaningless. Terms used to describe the current set-up included “indicator mania”, “form-filling hype” and the “third-party funding myth”. The participants also criticised the focus on (economic) usability and applicability in the funding of science, academia and research, which makes it more difficult, for example, to obtain funding for arts and humanities research.

Link funding to equal opportunities: The funding of universities and research institutes – both as a whole and within the individual institutions themselves – should be dependent on their respective levels of equality. The more balanced the composition of its staff in gender and diversity criteria terms, the more funding an institution should receive. Conversely, non-adherence to equality targets should have financial consequences. One concrete proposal here is the introduction of a bonus-malus system. Equality indicators should be increasingly deployed as funding control instruments. Equality is understood here in a broader sense (i.e. includes gender, social background and other aspects of diversity).

Consistent implementation of gender budgeting: Strict and transparent gender budgeting is needed in the distribution of resources, and gender budgeting principles should be considered in austerity measures and in the cancellation of grants and/or projects.

Access to resources: Barrier-free, equal access to resources such as time, funding, infrastructure or training – a call supported through all the described measures – should be granted to everyone working in science, academia and research – regardless of gender or other equality criteria such as disability, social circumstances or social background.

### **5.3 Employment, tenure and career models**

The development of new career models as an alternative to the traditional academic career path, which is linear and ultimately leads in a successful scenario to a professorship, is considered important for several reasons, namely to avoid the creation of an academic proletariat, to promote permeability between the different sectors, and to differentiate and reassess



the different functions in science, academia and research from a career path perspective (e.g. in academic management). A differentiation of this kind requires a reformulation of the assessment criteria for scientific and academic excellence. The goal here would be a departure from the notion that uncertainty incites high performance and the establishment of an image of a career in science and academia that allows upward and sideways moves yet is still economically viable and provides a living wage.

Living wage; economically viable employment: The removal of precarious employment situations was a topic raised in all four workshops, whereby two issues were considered of particular relevance, namely short-term contracts which do not provide a living wage and the increasing number of scientists and academics now working in a one-person-enterprise (OPE) setting. There were also calls for the development and creation of more well-paid staff positions and the extension of contracts for staff who receive positive appraisals.

Permeability between sectors: Transferring between sectors, e.g. between universities, universities of applied science, non-university research institutes or industry, should be seen as beneficial to a career and not put people at a disadvantage. Permeability between the sectors must be actively promoted, e.g. by specifically looking to recruit people from other sectors. This would not only expand the career opportunities open to scientists, academics and researchers, it would also benefit research content (see also Section 5.10).

Departure from traditional career norms: *Habilitation* (which is more difficult for women to achieve than men) as part of the traditional scientific and academic career path now seems to have been deemed worthy of discussion as *de facto* requisite qualification for a professorship. The participants also criticised the fact that the current criteria used to assess scientific and academic excellence are based primarily on quantity not quality. There is also a lack of adequate management competence (particularly in the case of team-based management) and interdisciplinary/transdisciplinary assessment criteria.

Positive recognition of alternative careers and civic engagement: Permeability between sectors should not only be specifically promoted through corresponding tenders, etc., it should also lead to positive recognition and assessment of alternative careers and civil engagement. Work in an NGO or as an aid worker abroad should be considered positive aspects in the assessment of an applicant's CV and not seen as career breaks or an indication of reduced time available for science and academia. Science, academia and research profit from experience gained outside this domain, e.g. through the acquisition of social competences and the ability to deal constructively with other cultures and perspectives (see also Section 5.10). These benefits should not only be made visible, they should also be considered to be of value.

Allow (temporary) specialisation: Permeability is needed not only between the sectors, but also with regard to transferring between different functions and duties. Depending on their propensity or career level, academics should be able to concentrate on teaching, research or administration, without suffering any disadvantages for doing so.

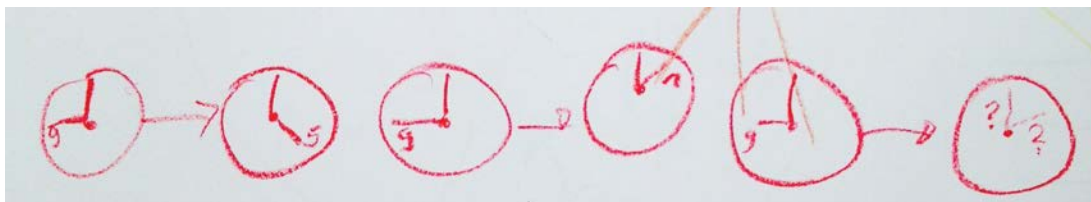
Academisation of training for nursery school teachers: The teaching of infants is of central relevance in the education system and is frequently even considered to be the most important phase in education. This situation should at long last be taken into account by a measure to academise the training of nursery teachers. In addition to providing them with better training, this would also improve the earnings of such teachers and, thus, raise the profile of this occupation in society. Gender equality and respect for diversity would, of course, have to form an integral part of this measure.

Role models: Countering the ever more streamlined development of our society, which is also increasingly apparent in science, academia and research (e.g. in the university entrance exams) was also seen as an important starting point. Good practice models (role models) in science, academia and research should be openly promoted and publicised. It is, however, important that these role models themselves do not then become stereotyped, i.e. that people with different career paths are recognised as role models and that gender is “de-dramatised”. Such role models could range from a mother of four who heads a major research institute, a transgender person in a management role to someone who had returned to academia after working in a non-scientific capacity with a charity for a longer period of time, e.g. with an NGO in India. At present, applicants actually even choose not to

mentions such activities on their CVs, even though they are of immense significance – in the self-reflection process context – for our values and norms and for understanding relations in society as a whole and, thus, transverse the main/male-stream understanding of science, academia and research.

## 5.4 Working hours

Three central requirements were formulated with regard to working hours, all of which should lead to a change in work, performance and attendance cultures: a reduction in actual working hours, a change to the full-time standard and associated culture of attendance, and the admissibility of different working hours models.



Reduction in actual working hours: The fact that people who can work excessive hours have more chance of success than those with limited time budgets was seen by the workshop participants as one of the central barriers to gender equality in science, academia and research. A reduction in actual working hours was thus formulated as a prerequisite for gender equality. This includes not only a reduction in contractually agreed working hours but also the establishment of real limits to these hours, i.e. the avoidance of overtime or additional work beyond the agreed hours. It was also proposed in this context that working hours models should be “realistic”, i.e. should cover all tasks and duties involved in scientific and research work (e.g. should also include time for reading).

General reduction in working hours: A general reduction in working hours, whereby the workshop participants discussed a concrete reduction from a 35 to a 30-hour working week, would send a clear signal of an intent to reduce actual working hours. It was emphasised that this should not be restricted merely to science, academia and research, or indeed to Austria, and that corresponding developments were needed on an international level.

“Scandinavisisation” of the working hours standard: A main criticism voiced by the participants was the expectation that scientists, academics and researchers will be available and contactable round the clock. To make science, academia and research viable for men and women equally, a new working hours standard – one which allows people to set limits to their availability – needs to be developed. Scientists and researchers should be able to go home at a fixed time or not be required to work at weekends. Concrete suggestions included a “core time from 10 am to 3 pm”, no network activities after 6 pm and not being expected to be available outside normal working hours (9 am to 5 pm).

Flexibility: A normal working hours framework (laws, collective agreement, internal agreement) and working hours standards should also allow the flexibility to adapt individual working hours to accommodate individual circumstances. The aim here should not be to prevent people from working at weekends if they so wish but to avoid an excessive extension of working hours through evening, night or weekend work.

Variety in working hours models: A watering down of the full-time standard should also be reflected in the variety of available working hours models, each of which is considered equal and can replace each other as required throughout the course of a person's career. The admissibility of different models should already be indicated in job adverts, which could forego stipulating concrete working hours and replace this information with an indication of the possible range of working hours.



Avoidance of part-time work as a means of reconciling family and career commitments: A general reduction in working hours, cutback in excessive working hours and corresponding change in working hours standards would also reduce the necessity of part-time work as a means of reconciling family and career commitments. Decoupling part-time work and the reconciliation issue is also a prerequisite for a redistribution of unpaid work between the genders. There were also calls for a reduction in traditional incentives to switch to a part-time contract and for a coupling of parental leave to the fair distribution of this time between both parents. Re-entry models should be replaced by “stay here models”, which support parents in sensitive phases of their careers.

## 5.5 Locations

Location assumes multiple meanings in a scientific, academic and research work context. In addition to the workplace, work environment and nature of the locations used for teaching, mobility aspects and spaces for scientific exchange and networking are also relevant here. Key aspects raised in the workshops from a workplace perspective included the design and equipment of the actual workplace itself and flexibility in the choice of workplace location. The obligation to mobility with regard to workplace location and the problems this raises for the reconcilability of career and family commitments was one of the main topics discussed here. Calls were also made for the creation of spaces for exchange between different science, academic and research institutions and between different disciplines.

Conducive working environment: The working environment (workplace, professional surroundings) should be designed in a way that “makes research fun” and ensures that “everything is not tedious and difficult”.

Flexibility in location: Technology now essentially allows us to work from any location, i.e. on-site physical presence is becoming increasingly less important. Accordingly, researchers should be able to decide for themselves where they work, i.e. the workshop participants unanimously rejected the need for fixed hours during which they are required to be on site.

Teaching locations: Teaching locations need to be reconfigured to provide space for new forms of teaching and learning. Transparency, openness, flexibility, barrier- and hierarchy-free communication between teachers and students should be ensured in order to permit a clear focus on dialogue.

Reduction in compulsion to mobility: The increasing flexibility provided by technology should not, however, lead to scientists and academics being increasingly compelled to be mobile. Instead, the participants called for a reduction in the hyper-mobility currently demanded in this sector, e.g. through concepts which make use of the improved infrastructure and permit international networking without geographic mobility. They also assumed that international presence and networks could be established and maintained with fewer conference visits.

Create spaces for exchange between universities and other research places/institutions: The participants emphasised the potential that is inherent in cooperation between different science, academic and research institutions and different disciplines. Accordingly, spaces need to be created or provided for transdisciplinary research, cooperation and teaching. They also stressed that science, academia and research can only progress and develop through exchange and discourse with the “world outside science”. New ideas emerge not only through exchange and discourse within science and academia, but also above all outside such institutions.

Network structures: Local, national and international networking structures specifically for women remain of great relevance, particularly given the continued underrepresentation of women in science, academia and research (especially in management functions). There is also a need to involve other disadvantaged groups – e.g. as a result of ethnicity or disability – in networks. These networking structures can be either formal or informal in nature. Yet whatever the format, participation in such structures demands both time and material resources. These resources need to be made available and participation in such networks encouraged to strategically and effectively counter the continued dominance of “old boys networks”.



hierarchy and in all areas of science, academia and research. In order to achieve this, a stronger level of obligation must be attached to equality policy.

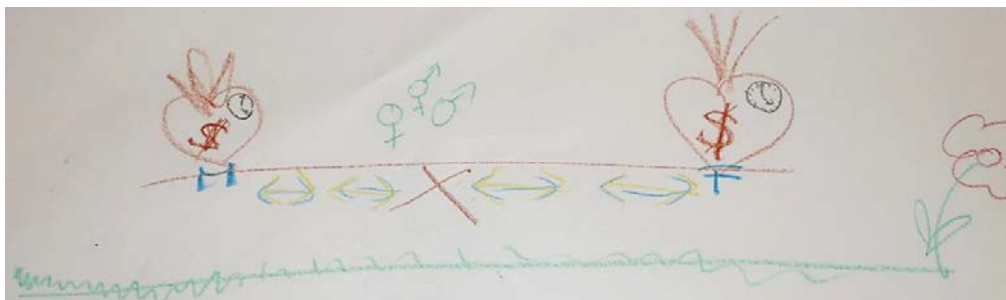
Mandatory gender and bias training for management and decision-making posts: This higher level of obligation is illustrated in the call to include gender competence as a “must have” qualification in applications for management and decision-making posts. Existing positions should be subject to compulsory participation in gender training, and gender competence should be included as an integral part of selection procedures for future posts.

Expansion of the focus on women: The current focus on women in equal opportunities policy should be expanded to other disadvantaged groups. In concrete terms, gender and other aspects of diversity should be combined and serve as the basis for the discussion on the underrepresentation of specific groups.

Quota regulation: The discussion on the quota regulation for university bodies was ambivalent. While it is seen as a prerequisite for increasing the share of women in management and decision-making positions, the way it is currently being implemented is nonetheless considered somewhat “tame”. The obligation to adhere to the quota regulation should be raised, and sanctions introduced for non-adherence. The participants also proposed raising the quota from 40 % to 50 % (which would have budgetary consequences) and extending the quota regulation to other marginalised groups.

Mandatory equality policy at universities of applied science: The equality requirements for universities of applied science should be raised to those applicable at universities. Core issues here include raising the level of obligation of existing rules (e.g. the quota regulation) and introducing a mandatory policy mix comparable to the one in place at universities (female advancement plan, equal opportunities working group, coordination unit, etc.).

Equal opportunities policy as multi-dimensional approach: The planning of equal opportunities policy for science, academia and research has to follow a multi-dimensional approach which, in addition to supporting women (or other marginalised groups), also seeks to change research content. The importance of this aspect was stressed above all for those areas where equal opportunities measures are not comparable to those at universities.





Continuation of individual measures: Individual measures like university mentoring programmes, grants or other targeted measures (e.g. children's universities) for underrepresented groups (e.g. migrants, students from low-education backgrounds) are viewed as an important part of an equality measures mix. The departure from an approach which essentially focuses on deficits – and thus has a stigmatising effect for women – was also considered an important point for the development of further support measures.

Involvement of and commitment from all stakeholders: If existing equal opportunities policies are to be successfully implemented, all stakeholders in all institutions (e.g. universities and non-university research institutes, research funding agencies, local and national government policy offices) must accept, support and actively follow the same equal opportunities goals. The discussions on this topic in the workshops centred on the assumptions that “equal opportunities has to be firmly anchored in the minds of all stakeholders”, that “equal opportunities must take priority for everyone in a management position” and that it is possible to involve men in this process.

Gender-neutral language: The continued lack of use of gender-neutral language was a frequently raised topic, and the workshop participants felt that targeted measures were needed to remedy this situation. However, it remained unclear which measures could actually serve here to produce the desired effect.

Equal and transparent pay scales: There is a particular need for action to close the gender pay gap, with income transparency viewed as a prerequisite in the pay gap debate. Likewise, there is a particular need for action with regard to the recognition of prior service and work.

## **5.8 Building competences – gender and diversity**

The need for a greater level of obligation in equal opportunities policies also shaped the discussion on the building of gender and diversity competence among all stakeholders, in particular those with management and decision-making roles in science and academic (universities, universities of applied science, teacher training colleges) or research funding institutions. Three concrete areas were identified in which gender competence needs to be built up and anchored across all disciplines: recruiting, teaching and research. The biggest risk seen here was that reality does not change despite the introduction of additional bureaucratic (formal) hurdles. i.e. that people still do not reflect on their everyday practices. Accordingly, they will also have to be shown how to do so and how to put this ability to reflect to proper use.



Gender/diversity competence as selection criterion: Proof of gender/diversity competence should be required by default in all job adverts, selection procedures for management and decision-making roles and all other personnel decisions. Applicants should be required to clearly demonstrate their gender competence, e.g. through expertise in gender studies or participation in training courses. Bias training should be a mandatory requirement for members of appeal boards. Likewise, gender competence should be considered an absolute must for rector appointments.

Gender/diversity competence in teaching: Gender studies should become a compulsory component of all curricula. This should be achieved not only by the provision of compulsory gender/diversity lectures, but also through the creation of gender/diversity professorships in all disciplines. Teaching practice must also be changed to remove stereotypes and instigate reflection on such practices and attitudes. This need was raised in particular in the teacher and nursery school teacher training context.

Gender/diversity aspects in research: The anchoring of gender/diversity aspects in research should be expedited and reinforced by research funding. All research projects should be required to demonstrate their own gender relevance, include proven gender competence in the (project) team and develop this competence throughout the research (project). This will require not only the building up of gender/diversity competence in research funding organisations but also a realignment of the peer review process or development of alternatives to this approach.

## **5.9 Management**

The current management structures in science, academia and research were questioned strongly in all four workshops, where the related discussions centred on five aspects in particular: new decision-making structures in universities, team-based management, professional academic management, recognition of participation in management tasks, and hierarchy-free communication.

New decision-making structures in universities (faculty model): The current *curia* system was described at all workshops as a barrier to equality, since it establishes and reinforces hierarchical structures. New decision-making structures replacing the current *curia* system should represent all members of faculty equally and reduce the current dominance of professors in decision-making bodies.

Team-based management: Decision-making functions should no longer be exercised by individuals but by teams, i.e. autocratic policymakers should be replaced by teams. Gender should no longer play a role in the constitution of these teams, which should be made up of the best qualified people for the role. New teamwork performance assessment criteria will

need to be developed, since performance will then no longer be ascribed to individuals but to teams.

Professional academic management: Concrete job requirements profiles should be formulated for university management functions and should include gender/diversity competence. The goal here would be to establish academic management as a professional field with its own training programmes designed specifically to develop the management competences required for science, academia and research. Evidence of such qualifications should be supplied in the application process, particularly for appointments to university management positions.

Recognition of participation in management tasks: The assumption of management functions in science, academia and research should be rewarded with the same level of recognition and pay as other tasks carried out by academics. The voluntary assumption of management tasks was viewed as a problem by the participants, since these were considered to be of lesser value than other tasks (e.g. research, publication) and are not distributed equally across the genders (e.g. women do a disproportionate amount of work in university bodies as a result of the quota regulation).

Hierarchy-free communication: The creation of new forms of communication in the university governance context was also proposed. This would establish gender-neutral networks between all levels of the hierarchy and allow them to communicate on eye level. The need for equal, gender-neutral communication between universities and other science, academic and research institutions as well as between the different disciplines was also stressed.

### **5.10 Science, academia and society**

A new understanding of science and academia needs to be developed to promote and expedite equal opportunities in science, academia and research. The workshop participants proposed focussing here on three specific topics: the dismantling of hierarchies in science and academia, the promotion of permeability between the different academic fields, and the establishment of stronger networks between science/academia and society.



Dismantling of hierarchies: Calls for the dismantling of hierarchies were voiced in different contexts. Academics need to be able to communicate with each other and share/discuss their work regardless of their position in the hierarchy (removal of the dominance of professors). They also need to be able to do so across the disciplines (*hard* versus *soft sciences*). This goes hand-in-hand with a removal of access barriers to the academic system, which women encounter in the form of a glass ceiling and which lead to an underrepresentation of educationally disadvantaged groups in universities.



Permeability between university and non-university research: Permeability between the different sectors is required not only in the context of career options for scientists and academics but also with respect to the development of a new understanding of science and academia. Communication and exchange between university-based researchers and researchers working in other settings needs to be established and viewed as a quality criterion. The need for (more) interdisciplinary and transdisciplinary research is a further demand raised in this context.

Networking of science, academia and society: The participants stressed that science, academia and society could profit more from each other and that the needs and problems of society should be given more emphasis in academic and scientific debate. Universities should concentrate more on their social mandate. Likewise, science and academia should focus less on economic usability and more on sustainability and on being child, user and consumer friendly. The participants assumed that the establishment of stronger networks with society would also raise the general opinion of science and academia, and that this would ultimately also raise the willingness to invest in science, academia and research. This applies both to the natural and engineering sciences as well as to the arts, humanities and social sciences and would serve, in particular, to foster interdisciplinary and transdisciplinary research. It could be supported and promoted through marketing campaigns, which would communicate the great value of science, academia and research for an egalitarian, inclusive society in clear and precise terms. These calls were formulated in particular with regard to feminism and feminist research. Concrete demands included targeted PR and marketing to support equal opportunities issues and the feminist debates. Essentially, the value of reflecting on (gender-specific) norms and roles needs to be communicated to a broad audience.

Increased dissemination of scientific and research information is one of the aims of the “open access” movement, which promotes free access to academic literature on the internet and

advocates maximum reuse and further use. This, in turn, helps to dismantle barriers and hierarchies and provides (above all) younger generations and young scientists with increased opportunities to expand their knowledge and skills. It also generates publicity and encourages debate.

Barrier-free access to (higher) education: Barrier-free access to education in general and, thus, also to higher education was discussed both from a physical infrastructure perspective and with regard to social origins. The participants called for the removal of social selection mechanisms in the school sector as a prerequisite for equality in science, academia and research. The Bologna Process, which the participants felt has reinforced access barriers to education and led to restriction of individualism in education, was also discussed in this context.

In connection with a revaluation of science, academia and research in society, the participants also proposed the need for a general revaluation of work itself, to bring about a situation in which academic and manual work were accorded equal value and respect.

## 6 Recommendations for Action

The recommendations for action formulated below are based on the results of the vision workshops and think tanks described in the above chapters. We would like to point out again at this stage that the participants at these events were consciously selected for their affinity to gender issues and for their ability and willingness to reflect critically on the existing system from this perspective. The recommended actions cover different timeframes (short, medium and long term actions) and address different target groups. Since BMWFW commissioned this project, these recommendations are initially addressed to this ministry, even if the responsibility for implementing some of them might lie elsewhere or be shared by multiple actors. The recommendations are always cross-sectoral in nature, i.e. are intended to be viewed independently of ministerial authority and to apply across the board to universities, universities of applied science, teacher training colleges and non-university research institutions. We assume that a move towards cultural change will require the addressing of multiple fields in parallel and action to be taken simultaneously on several “fronts”. If the challenges are to be successfully addressed, the necessary resources will also have to be made available.

### 6.1 *Continued development of the existing policy mix*

A number of the fields of action identified in the vision workshops are linked to calls to raise the obligatory nature of the existing policy mix. Ultimately, the proposed focus lies not primarily on developing new and additional measures but on making the existing measures more binding and/or introducing and applying sanctions for non-adherence to equality goals. Some of the existing policies are based on solid legal foundations, while others are to all intents and purposes voluntary. Clear differences are evident in the level of sincerity with which such measures are implemented in the individual institutions, even those which are essentially obligatory.

The following starting points for developing the existing policy mix further could be identified:

- Extension of the existing legislative measures applicable for universities to universities of applied science, teacher training colleges and publicly (co-)funded non-university research institutions (obligation to publish a female advancement plan, establishment of coordination units and equal opportunities working groups, quota regulation for governing bodies, integration and monitoring of equality goals in management instruments, etc.).
- Extension of existing measures and increase in their level of obligation (a point raised with particular frequency in a research funding and gender budgeting context, especially with reference to existing requirements to integrate gender into research content): While gender criteria are integrated into some research funding areas, this does not apply

across the board and does not constitute a knock-out criterion. The relevance of gender criteria must be raised, and non-adherence coupled to noticeable financial loss. An increase in the obligatory nature and exercising of sanctions for non-adherence is also required for equal opportunities goals defined in performance agreements. This should serve to raise the pressure on those institutions and/or individuals who ignore or simply pay lip service to equal opportunities goals to reflect on their attitudes and practices to and address the situation accordingly.

- Specification and implementation of gender budgeting: The gender budgeting obligation should be extended to all publicly funded institutions and implemented in a quality-assured manner. Accordingly, gender budgeting implementation guidelines should be developed and issued to guarantee uniform standards. In addition to the analysis of adherence to gender criteria in the use of funds, the gender-specific effects of austerity measures should also be examined.
- Previously voluntary measures should now become obligatory: This call was raised, for example, in connection with gender and gender-bias training for decision-makers and scientists/academics. Voluntary measures are typically taken up first and foremost by those people who already embrace or are sensitive to gender issues, not by those who have so far shown no interest in this direction. If such training courses were obligatory, they could/should also become a required minimum qualification in job applications.
- Move from the focus on gender equality to a consistent consideration of other forms of diversity: Even if the Federal Equal Treatment Act (*Bundes-Gleichbehandlungsgesetz*) aims to establish equality with respect not only to gender but also to age, religion, ethnic background, sexual orientation, etc., the focus of the implementation of such equal opportunities policies in science and research currently still lies on gender. Concrete approaches (e.g. pilot projects) need to be developed in the coming years to incorporate further diversity aspects alongside gender into the conception and realisation of equal opportunities policies and into the corresponding monitoring and evaluation processes.
- Clarification of a holistic understanding of equal opportunities and emphasis of the relevance of cultural change in this context: There have been three pillars to gender equality policy in science, academia and research since the 1980s – increasing the share of women in all areas and on all levels of the hierarchy, establishing and reinforcing women's and gender studies, and changing the structures that constitute a barrier for women. If goals are pursued consistently in all three of these dimensions, cultural change should be unavoidable – both on the institutional level and with regard to the prevailing understanding of science and academia. However, the goal of raising the share of women continues to dominate both in practice and in the discussion process (cf. the debate on the quota regulation for university bodies). Accordingly, this holistic understanding of equality and equal opportunities should be accorded greater emphasis in the conception and realisation of equal opportunities policies.

## **6.2 Guiding principles for gender equality and respect for diversity in science, academia and research in Austria**

A cooperative process to develop guiding principles which apply to all sectors of science, academia and research is a fundamental element in the active and lasting promotion of cultural change. Working in line with international goals and trends<sup>6</sup> and in cooperation with BMVIT (Federal Ministry for Transport, Innovation and Technology) and BMBF (Federal Ministry of Education and Women's Affairs), the two other ministries responsible for this sector in Austria, BMWFW seeks here to initiate a broad dialogue process. The guiding principles developed in this process should represent a new understanding of science and academia and contain the core elements identified in the vision-building process described above: de-hierarchisation of the academic system, permeability of sectors and functions, diversification in career opportunities, adaption of assessment criteria and selection processes (quality over quantity), transparency (in decision-making), adequate resources and the lasting integration of gender research.

These guiding principles should form the basis for gender and diversity budgeting in the public funding of academia and research and should be applied both to the funding of research and to the financing of university and non-university institutions. In combination with clearly defined goals, these guiding principles would provide orientation for strategy development in the participating institutions and organisations and, thus, for the realisation of equal opportunities in science, academia and research in Austria as a whole.

A broad, open policy is required to do justice to, strengthen and communicate variety and diversity in science, academia and research. This policy should clearly demonstrate the benefits of such a far-reaching participatory process and the resulting guiding principles. The following aspects would be of benefit in this regard:

- The involvement of key opinion leaders as role models in the cultural change process (both high-ranking people and active players in science, academia and research).
- The securing of commitments from all stakeholders in the various national and international institutions, faculties, hierarchies and generations to participate in the process, base their future activities on these shared principles, and examine their existing activities for compatibility with these principles (and adapt them if necessary).
- An incentive system to encourage participation by academic, research and business institutions, e.g. in the form of additional/conditional funding or PR activities.

Experiences from prior national initiatives and processes (e.g. GENDERA, Forum Hochschule der HochschülerInnenschaft, Hochschuldialog), etc.) should be incorporated into the development process wherever possible and appropriate.

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<sup>6</sup> In particular, the ERA equal opportunities goals, the European Charter for Researchers and Horizon 2020.



### **6.3 Curriculum for gender equality and respect for diversity in academic management**

Higher education and research institutions like universities or universities of applied science differ from other types of organisations in certain key aspects. Firstly, they are so-called “matrix organisations”. As Ada Pellert and Andrea Widmann (2008: 22) note, there are two systems at play here: the subject-based system of the respective disciplines/professions and the social system of the organisation as a whole. Management functions in these so-called “professional bureaucracies” (Mintzberg 1992) are traditionally assumed by highly qualified researchers and/or lecturers, i.e. by “knowledge experts” (Pellert, Widman 2008: 11). Only in a very few cases do these people have specific management and leadership qualifications. And if they do have such qualifications, they are generally not explicitly relevant to the specific structures, processes and cultures in academic and research organisations.

“Experts” tend to focus their attention on and identify with their own discipline/profession – both on a national and indeed on an international level – and not on the organisation *per se*. Lecturers and researchers are driven more by curiosity, thirst for knowledge and a career in their respective subjects and less by what they can achieve on the organisational level. As Pellert and Widman (2008: 22) point out, innovations are a regular occurrence at disciplinary or subject level, while universities on the whole are extremely sluggish organisations.

Although administrative and management tasks form part of the job description for researchers and lecturers alongside research and teaching, they are not only extremely unpopular tasks (*ibid.*) but are also seen to keep such experts from doing their “real” work. Indeed, it is often only academic support staff who actually show any interest in developing the organisation as a whole. These contradictory roles assumed by “experts” and administrative staff are a fundamental characteristic of expert organisations (Wroblewski et al. 2007: 44).

At the same time, management and leadership nonetheless make a decisive contribution to organisational development, e.g. in the way working conditions and processes are configured, in how communication structures are developed and in the values that are embraced and lived by the organisation and its members. And leadership is – as long-term studies in Finland notably confirm (e.g. Ilmarinen, Tempel 2002; Tempel, Ilmarinen 2013) – a significant factor in determining whether employees become ill or whether they remain healthy until – and beyond – the end of their working lives. While staff management is a component of job descriptions for researchers and lecturers with management functions, only a very few actually have specific training or qualifications in this field.

Topics like institutional goals, strategy development, reflection on organisational issues or quality assurance tend not to be the central focus of attention for managers in higher

education establishments. Yet, according to Pellert and Widmann (2008: 18), such goals can and will only be achieved in (higher) education and research organisations if they are accepted and lived by the organisation's experts. This is currently one of the core challenges facing this sector.

If these challenges are to be met and mastered in scientific, academic and research institutions, change processes must be launched on three levels: at the individual level, at the group level and on the level of the organisation itself (Pellert, Widmann 2008: 18). To achieve this, managers in such organisations must be given specific training and qualifications in academic management, gender and diversity to support them in their management roles and tasks.

An academic curriculum for gender neutral academic management that respects diversity would equip current (and future) managers in scientific, academic and research organisations with the necessary competences and qualifications and, thus, also support them in their management roles and tasks. Such a curriculum should be developed in a participatory, cross-sector and interdisciplinary process led by BMWFW, which gives due consideration to the courses currently available<sup>7</sup> and involves both key opinion leaders as well as representatives of various levels of the hierarchy in science, academia and research. The target group for this curriculum would be all current and future managers with responsibility for staff at universities, universities of applied science, teacher training colleges and non-university research institutes.

Competence in gender and diversity issues should be defined alongside academic/scientific (culture) competence as a requirement for managers in science, academia and research. Evidence of such competence should be a compulsory requirement and should be verified specifically in application procedures. Completion of the above-mentioned programme would be one example of evidence of such competence.

An additional, compact curriculum, which focusses on academic management and on gender equality and respect for diversity in academic management and leadership tasks, could be developed from the above-mentioned modular curriculum for those people who already hold such management and leadership functions. Attendance at and completion of this compact course could, for instance, become a stipulation for publicly financed higher education and non-university research institutes and could be included as such in their performance agreements with BMWFW (e.g. by defining the percentage of managers who must obtain this qualification in a five-year period).

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<sup>7</sup> For example, the Master's programme in "Higher Education and Academic Management" at the Danube University Krems, Austria: <http://www.donau-uni.ac.at/de/studium/hochschulmanagement/> (in German).

#### **6.4 Development of new career models**

The development of new career options would offer an alternative to the traditional career in academia, which is characterised by fragmentation and uncertainty, provides few cross-sector career models and offers no other option than climbing the academic career ladder. Accordingly, calls for career opportunities which offer a living wage and clear prospects, are secure and compatible with other commitments, and which reflect, recognise and accord equal value to the links between different sectors and between the different functions in research, teaching and management, dominate – particularly among young scientists and academics and the younger generations. These new career models (e.g. in subject-related and/or management positions) or career options which facilitate the transition between university and non-university or industrial research, would support a changing understanding of science and academia. Particular care should be taken in the creation of such models or options to afford equal access to women and men. The availability of different career models would also counter the brain drain by offering Austria's academics suitable and desirable opportunities to pursue their careers in the country's academic and research landscape. Likewise, it would also significantly raise the attractiveness of Austria as a work destination for foreign scientists, academics and researchers.

Yet the calls for diversified, inter-sector employment opportunities are confronted at present with an institutional framework that resists such change. BMWF's initiation of an interdisciplinary project to identify potential new career paths could, with the support of the different sectors and if accompanied by a legal assessment clarifying the barriers, eligibility requirements and co-determination options, establish the basis for the development of alternative career models. This legal assessment could also determine the legislative amendments (e.g. to the Universities Act 2002 or the collective agreements) which would be required to implement such alternative career models.

Systematic support for new and diversified career paths requires both an equal opportunities based personal development policy and a corresponding academic management strategy. Accordingly, the proposed interdisciplinary research project could also be used to determine the status quo, to identify the HR and organisational development changes that would be required at Austrian academic and research institutions and to study the possibilities for a cross-sector academic management strategy.

#### **6.5 Continuation of the discourse on cultural change in science, academia and research**

The now completed project – in particular the vision workshops and its inclusion of representatives of different sectors of academia and research – met with wide approval and support from all participants. The exchange between representatives of the different sectors

was – despite or perhaps because of their different demands and contexts – perceived by all to have been stimulating and enlightening. This indicates and confirms the need for an established discussion forum on equal opportunities in science, academia and research, as provided, for example, until the turn of the last century by the Austrian *Wissenschaftlerinnentagung*<sup>8</sup> (“Conference of Female Academics”). The presentation and discussion of the findings of this study could serve as the first step towards establishing such a forum.

The discussion process launched by such a presentation should be moderated and documented. Likewise, the results and insights it produces should be added to this documentation on an ongoing basis. The discussion process itself could be made up, for example, of a combination of one large event every two years and smaller events on specific topics (workshops) in between. Where appropriate, a forum of this nature should be used to support the recommendations for action detailed in this report by raising awareness of the individual topic(s) and establishing a platform for discussion and for addressing fears or resistance.

Efforts to raise the obligatory nature of equal opportunities policy will extend the need for discourse and exchange to other groups beyond those interested in equal opportunities issues or involved in establishing equal opportunities policy. Accordingly, the potential introduction of sanctions should be integrated into a discussion process that looks at corresponding measures and their links to equal opportunities. The extension of those measures currently applicable primarily in the university context to other sectors should also be discussed in a moderated process, which examines both the objectives of these measures, experiences to date and any potential resentments on the part of the intended recipients.

## **6.6 Fields of action with an impact on society as a whole**

Many of the necessary changes and challenges addressed in the vision workshops concern society as a whole and are not restricted merely to the academic and research sector, even if they will also clearly have an impact here. BMWFW could assume an initiating role with respect to various challenges in society and establish ties between the corresponding development processes and academic research, as the following virulent examples show.

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<sup>8</sup> The first *Wissenschaftlerinnentagung* was held in 1989 with the aim of encouraging exchange among female academics and obtaining “external” input for political strategy that was proposed and supported by dedicated women in academia (BMBWK 2002: 10). A catalogue of demands was produced by the delegates at the end of each conference and submitted to the relevant policymakers (in particular the government ministers). Conferences were held in 1991, 1992, 1996, 1998, 2001 and 2003, with each one organised by a different institution. The 2003 conference was organised by *IG Externe LektorInnen* (Association of External Lecturers).

Balancing career and family commitments, for example, is a particular challenge for academics and researchers, and especially for women working in this field. The continued lack of public childcare facilities (especially for children under the age of three as well as in the afternoon, at night and at weekends) and care options for other dependent family members poses a clear obstruction to an academic career. Public sector efforts to expedite the removal of these deficits and to establish a high quality care infrastructure should be strengthened and intensified. BMWFW should work with the Ministry for Family and Youth to develop innovative, tailor-made models to support academics in balancing their career and family commitments and with local and regional authorities to implement these measures.

The call for a reduction in normal working hours – e.g. reduced full-time hours at current wage levels (for a 30-hour or 35-hour week) – is addressed to the federal government and to the employer and employee associations in general. If implemented, it would not only benefit the health of the workforce, it would also help to significantly reduce the time constraints caused by multiple roles. An interdisciplinary research programme initiated by BMWFW could serve here to initiate and strengthen evidence-based and solution-oriented discourse. In addition to the groundwork (e.g. economic research), new working hours models could be developed, which accord particular relevance to age equality and the promotion of health in the workplace especially in the science, academic and research sector.

Increased efforts also need to be made to break down the continued strong influence of role stereotypes in Austrian society. This is a prerequisite for diversification in career and degree choices and, thus, for breaking down vertical and horizontal segmentation. BMWFW could also provide considerable input to this debate by financing corresponding research projects. A nationwide study could, for example, assess gender awareness in early childhood education in nursery schools and kindergartens. A cooperation project between BMWFW and BMBF could be established to incorporate gender equality and respect for diversity into teacher training at all universities of education across the country. Furthermore, funding could also be provided to allow increased cooperation between schools with pilot gender/diversity projects and the universities, universities of applied science or non-university institutions evaluating these pilot projects and to ensure that the experiences gained in the process are made accessible to a larger audience.

There is also a vital need to raise the profile of kindergarten and primary school teaching, a situation which needs to be resolved, e.g. by significantly raising the salaries paid to such teachers. To achieve this, BMWFW and BMBF could assume a stronger role in the debate on the academisation of these professions and, thus, accelerate a corresponding political decision in its favour.

Last, but by no means least, the decision on the value to the Austrian people of investments in education, science, academia and research can ultimately only be taken at the political level. In times of austerity, it should be all the more important to identify ways of allocating

the necessary budgets to science, academia and research as guarantors of innovation and (future) competitive strength.

## 7 Summary

### 7.1 Core findings

The open design of this now completed project permitted all manner of possible outcomes, i.e. there was a certain risk attached to the assignment given us by BMWFW in that it was not clear where the journey would ultimately take us. In retrospect, the vision-based approach proved to be both well suited to our goal and very compatible with academic culture. Working with visions expanded the horizons and led to the inclusion of more – and different- topics and areas of focus than would probably have been the case in an interview or focus group setting. The participants implicitly – and subsequently also explicitly – reflected on the situation in science, academia and research from a gender perspective and identified alternative scenarios. The project itself thus became an example of applied reflective practice.

The pictures drawn of a gender-neutral academic and research landscape that embraces diversity in the year 2025 were colourful and eclectic and were characterised by alternative assessment criteria, transparency, a removal of hierarchies and permeability between the different sectors. The concrete proposals regarding what would be needed to turn these visions into reality were translated in the vision workshops into a range of desirable measures in ten specific fields of action (see Chapter 5).

Most of the measures to achieve gender equality and respect for diversity proposed in the vision workshops are directly compatible with the existing system and do not ultimately question the basic substance of this system. Instead, they support BMWFW's gender mainstreaming goals. In other words, the starting points identified are neither revolutionary nor entirely new, but the calls for a more systematic realisation of these goals, for a coordinated procedure between the different sectors and stakeholders, for greater priority for equal opportunities issues and for a clear – and lived – commitment from all involved are clear and distinct. What is ultimately needed is not additional measures but a general rise in the obligatory nature of the measures in the current policy mix, the exercising of clear sanctions for non-adherence to equal opportunities goals and an extension of the existing measures that are primarily directed at universities to other sectors.

A strategy which follows and implements these aspects in earnest would meet the calls for a fundamental change in practices in academia and research that were voiced by the participants in our vision workshops and bring about a change in attitude in all stakeholders. This would accelerate and raise the intensity of the desired change in structures and culture. Gender and diversity mainstreaming are important starting points for this process and stand for an innovative understanding of science, academia and research and the practice thereof. Ultimately, the shared vision of a culture of science, academia and research that affords

equal opportunities to all is characterised by transparency, inclusion, networking, cross-border communication, barrier-free, non-hierarchical dialogue and meaningful, value-creating social responsibility.

A change in culture in the sense outlined above calls for a new understanding of science, academia and research as a social good that can be used to address the burning issues in society. There is also a need to establish working conditions that make working in science and academia fun again and indeed allow this to be the case. A desire to be inventive, to step out of the box and to basically enjoy a good life in the academic and research workplace is seen by all as a prerequisite for innovation and creativity. Both genders would ultimately profit from this change in working conditions. Nonetheless, there is still a gender perspective to be considered here, insofar as the standards and standardisation processes that have hitherto shaped the notion of “good science and research”, and which contain a gender bias, need to be rethought.

The following six concrete recommendations for action were developed on the basis of the results of the vision workshops and the two think tanks.

The most immediately achievable recommendation is the **consistent ongoing development, broadening and binding implementation of the existing policy mix**. Several different examples were provided here to demonstrate how cultural change could be achieved by raising the obligatory nature of existing measures.

Cross-sector **guiding principles for gender equality and respect for diversity in science, academia and research** developed in a cooperative process would serve as the basis for the active and sustainable facilitation of cultural change. With clearly defined goals and benefits, these guiding principles could provide orientation in the strategy development process in the participating institutions and organisations and ensure that public funding for science, academia and research is gender neutral and respects diversity. These guiding principles should also ensure that gender budgeting forms the established basis for the allocation of research funding and the financing of university and non-university academic and research institutions.

A change in culture in line with the above-mentioned understanding of science and academia will also require the **development of new and sustainable employment opportunities**, which foresee not just ONE “successful career path” – namely the linear progression to a professorship – but permit and support a variety of career options, i.e. a move between institutions, sectors and/or functions (e.g. teaching, research, administration, voluntary work) should be not only possible but also seen as an enrichment. Such an understanding would allow academics to pursue a productive, lifelong career in science, academia and research and to balance this career with their personal commitments and interests. An interdisciplinary



project to identify possible alternative career paths and evaluate their inclusion in the current status quo would constitute a first step in this direction.

To enable them to master these challenges and support them in their management and leadership roles, managers in science, academic and research institutions must have (or be provided with) appropriate training and qualifications in addressing the gender and diversity issues in this sector. An obligatory **curriculum for gender equality and respect for diversity in academic management** should be developed for this purpose in a participative, cross-sector and interdisciplinary process and with due regard to the courses that are already available.

Many of the necessary changes addressed in the vision workshops concern society as a whole and are not restricted merely to the academic and research sector, even if they will also clearly have an impact here. BMWFW could assume an initiating role with respect to various challenges in society and establish ties between the development processes and academic research, for instance with regard to compatibility, working hours and the professionalisation of primary and nursery school teaching.

A further key aspect will be to ensure that the process started by this now completed participative project leads to a **sustainable and sustained debate on a change in culture in science, academia and research**, a debate which continues to actively bridge the gap between sectors, institutions and disciplines, and which makes recourse to the manifold experiences already obtained through previous equal opportunities work in ongoing and future process and organisational development efforts.

## **7.2 Food for thought**

Despite the great variety and complexity of the measures proposed in the vision workshops, there are still some gaps in the visions. A number of increasingly important socio-political fields of action which are gradually being actively addressed in many private sector enterprises were, for instance, not even mentioned. These include, in particular, corporate health promotion and generation management strategies in the academic management context. While these aspects might be covered implicitly in the vision of a “good life in the academic and scientific workplace”, it is nonetheless interesting that they were not mentioned as important issues for the future. In our view, measures appropriate to the academic and scientific sector are required to raise awareness of and provide more information on these issues.

Although the situation in non-university based research institutions is considered in many of the proposed measures, especially with regard to the lack of equality in the distribution of resources across the different disciplines, the situation regarding humanities, social and

cultural research in such institutions was only referred to in a few limited cases. Accordingly, we feel it is important to draw attention here to the need to resume the provision of support in these areas in the non-university research sector. There are, for instance, already some implementable performance agreement proposals on the table which support academic policy goals and incorporate the gender and diversity perspectives.

Another clear gap is that the visions of the younger generations, and above all of students, are (or could not be) included to the desired extent. One reason for this was that only some of the invited student representatives actually participated in the workshops. It also became clear in the workshops that students only really begin to consider a career in science, academia and research when they reach PhD level. It would therefore appear that our workshop design needs to be modified to specifically include the student perspective. This could be done as a follow-up project, which specifically and exclusively targets this group.

It should also be noted in this context that teaching and didactics were raised as issues with comparative infrequency. This is conspicuous insofar as the majority of the participants in the vision workshops do also have a teaching role. However, one possible reason for this outcome could have been the focus in the workshop design on the everyday practices of academics and researchers, practices which they evidently do not primarily associate with teaching.

The inclusion of the teacher training colleges also proved a more difficult undertaking. Indeed, the workshop participants from these institutions struggled at times to establish a correlation between their own area of work and science, academia and research in general. Reaching the representatives of industry research likewise proved more difficult. Accordingly, special attention must be given to these sectors in any continuation of the process.

### **7.3 Outlook**

The current discussions on Austria's position in the international science, academic and research landscape (e.g. its position in international university rankings) indicate a clear need for action if the existing potential for innovation and creativity is to be put to good use. The development and promotion of a culture of science, academia and research that is both gender neutral and respects diversity represents a game-changing strategy for improving the attractiveness of the sector as a whole and for preventing drop-out or a brain drain to other countries.

Driving forward cultural change in science, academia and research in Austria is clearly not without its challenges. The fact that there is a strong existing policy mix to build and expand on – and which has already created and implemented the relevant structures for gender equality and diversity in most sections of this landscape – is a key supporting factor. While

there are still some isolated gaps in this policy mix that will need to be filled, the main challenge lies in implementing these existing policies more effectively and on a broader scale. More precisely, it lies in linking the structures that have already been created and the corresponding rise in the participation of women in science, academia and research to a change in practices and, thus, to cultural change. It will be imperative in such a process to work with all stakeholder groups, to reflect on existing equal opportunities structures and practices and to develop – and subsequently implement – alternatives where necessary. This requires a willingness and an ability to reflect both at the institutional as well as the individual level and calls for a mandatory anchoring of gender and diversity criteria in all research content.

Equipping all stakeholders in science, academia and research with the necessary sensitivity, gender knowledge and ability to reflect will be a continual, discursive process – and one that needs to be planned, steered and moderated centrally. This will be a long-term process, and while it might have been initiated by BMWFW, it should ultimately be seen and understood as an inter-ministerial project and be run with the involvement of all stakeholders.

The involvement of all stakeholders will also allow their respective fears and resistance to be actively addressed. At the same time, the heterogeneity of the actors and their interests, backgrounds and areas of work poses a challenge for the process. “Gaps” in the visions have already been mentioned, especially the difficulty involved in incorporating both the student and industry research perspectives. Administrative staff in scientific and research institutions are also a primary target group when it comes to the implementation of alternative practices and need to be involved explicitly in the process.

As already indicated in the recommendations for action above, we therefore recommend that the current process be continued and that active use made of the large potential for cultural change. Some of the points raised in the recommendations for action could be realised by BMWFW alone. However, the majority of these recommendations will require cooperation between ministries and across sectors, which in itself constitutes a change in culture.

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 Haubenwallner, Sabine, Head of Staff Unit for Gender Issues, Austrian Science Fund (FWF)  
 Hertgen, Sabine, Department of Basic Research (STEM) and Research Infrastructures, Federal Ministry of Science, Research and Economy  
 Hey, Barbara, Coordination Centre for Women's Studies, Gender Research and Equal Opportunities for Women, University of Graz  
 Meixner, Wolfgang, Vice Rector for Human Resources, University of Innsbruck  
 Plettenbacher, Ulrike, Secretary General, Austrian Science Board  
 Schaller-Steidl, Roberta, Chairwoman of the Office of Gender and Diversity Management, Federal Ministry of Science, Research and Economy  
 Sturn, Dorothea, Managing Director, Austrian Science Fund (FWF)

### **Vision Workshops**

Appelt, Erna, Professor of Political Science, University of Innsbruck  
 Bogner, Alexander, Senior Scientist, Austrian Academy of Sciences  
 Bonderman, Diana, Department of Internal Medicine II, Medical University of Vienna  
 Braidt, Andrea, Vice Rector for Art and Research, Academy of Fine Arts Vienna  
 Brunbauer, Cornelia, gendup - Center for Gender Studies and Gender Equality, University of Salzburg  
 Cerny, Doreen, Scientific Director of the Department of Research, University of Education Salzburg  
 Dörler, Tobias, Professional Development in Education, University of Graz  
 Eckstein, Kirstin, Coordination Centre for Women's Studies, Gender Research and Equal Opportunities for Women, University of Graz  
 Ehrlich, Veronika Anna, Researcher, Baxter Innovations GmbH  
 Fleischmann, Alexander, Network for the Advancement of Women, Academy of Fine Arts Vienna  
 Geckl, Melanie, Adviser for Feminist Politics, Austrian Students' Union of the University of Graz  
 Goisauf, Melanie, Guest Lecturer at the Department of Sociology, University of Vienna  
 Gössl, Martin J., Equality and Diversity, University of Applied Sciences FH Joanneum  
 Günther, Elisabeth, Research Assistant, Vienna University of Technology  
 Gutschner, Peter, Head of Higher Education, Science and Future Issues, Federal State of Salzburg  
 Hahn, Sylvia, Vice Rector of International Relations and Communication, University of Salzburg

Hartl, Martina, Department II/6, Federal Ministry of Science, Research and Economy

Haubenwallner, Sabine, Head of Staff Unit for Gender Issues, Austrian Science Fund (FWF)

Hauch, Gabriella, Professor of Modern History - Women's and Gender History, University of Vienna

Herz, Barbara, Head of the Office for Gender Equality and Advancement of Women, Graz University of Technology

Hey, Barbara, Coordination Centre for Women's Studies, Gender Research and Equal Opportunities for Women, University of Graz

Hojnik, Sylvia, Lecturer, University of Applied Sciences FH Joanneum

Holztrattner, Verena Birgit, Study Assistant, University of Salzburg

Innreiter-Moser, Cäcilia, Institute for Women's and Gender Studies, University of Linz

Jäger, Johannes, Economics Coordinator, University of Applied Sciences bfi Vienna

Kofler, Barbara, Head of Research and Routine Laboratories, Paracelsus Medical University

Kuckenberger, Verena Chiara, Head of GENDER:UNIT, Medical University of Graz

Lechner, Ferdinand, L&R Social Research, Vienna

Lehner, Erich, Lecturer and Freelancer, University of Klagenfurt

Lengauer, Lukas, Technology Agency of the City of Vienna (ZIT)

Lutter, Christina, Professor of Austrian History, University of Vienna

Mader, Katharina, Habilitation Assistant, Vienna University of Economics and Business

Maier-Rabler, Ursula, Academic Director (ICT&S), University of Salzburg

Maurer, Margarete, Science Coaching and Applied Philosophy, Vienna

Meusburger, Christine, The Greenhouse - Communication and Organizational Development, Vienna

Preitschopf, Alexandra, PhD Student, University of Salzburg

Priour, Jacqueline, Working Group for Equal Opportunities, University of Education Salzburg

Ratzer, Brigitte, Head of Office for Gender Competence, Vienna University of Technology

Sardadvar, Karin, Researcher, FORBA

Scherke, Katharina, Head of Working Group for Equal Opportunities, University of Graz

Schrattenecker, Inge, Researcher and Project Manager, Austrian Society for Environment and Technology (OGUT)

Severin, Sven, Head of Working Group for Equal Opportunities, University of Education Vienna

Traunsteiner, Bärbel, Coach and Scientist, Association for the Development of Feminist Educational and Teaching Models (EfEU), Vienna

Vater, Stefan, Educational and Research Assistant, Adult Education Centres in Austria

Veronig, Astrid, Head of Kanzelhöhe Observatory for Solar and Environmental Research, University of Graz

Vogtenhuber, Stefan, Senior Researcher, Institute for Advanced Studies (IHS)

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Wageneder-Schmid, Carmen, Coordinator Research, University of Applied Sciences FH Salzburg

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Widmann, Andrea, Independent Organisational Consultant, Graz

Winhofer, Yvonne, Working Group for Equal Opportunities, Medical University of Vienna

Wlasak, Petra, Department of Geography and Regional Science, University of Graz



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