

# GenderTime: Evaluation of Measures for Women Encouragement in Science Organisations

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## ABSTRACT

The GenderTime project seeks to contribute to an organizational and structural change towards gender equality – a lasting transformation of institutional practices through the implementation of gender action plans. A formative and summative evaluation process accompanies the course of the GenderTime. Within this paper we present the results of the impact analysis after the second project year.

A prerequisite checklist on the organizational context, the gender equality status and gender-relevant measures was filled out by the 7 research institutions in the project. We present exemplary measures which are already implemented in the institutions and discuss how they can address known obstacles towards gender equality in science.

Additional interviews with representatives of the organizations brought up high expectations on the impact of GenderTime: The project is seen as a “motor” that triggers gender issues on management levels. This positive attitude is very promising for a sustainable implementation of gender actions.

## Keywords

Women in Science, Evaluation, Gender Equality, Structural Change

## 1. GENDERTIME

I hope that “we move beyond rhetoric! The outcome would be a nicer place to work. People feel that they are rewarded on the basis of their performance and their contribution“ answered one participant when asked about the expectations raised by the GenderTime<sup>1</sup> project.

The aim of GenderTime is to increase the participation and career advancement of female researchers in science institutions by implementing and monitoring self-tailored action plans.

The project consortium consists of ten research organizations<sup>2</sup> from eight different European countries. They are intentionally very different in terms of size, discipline, history, etc. in order to experiment with various situations, to create synergies between the scientific partners, and to allow for knowledge transfer from more to less gender-balanced disciplines (e.g., technical ones) and institutions. The GenderTime partners develop or improve self-tailored action plans that involve gender-relevant activities such as recruitment, retention and promotion policies, measures supporting work-life balance, updated management and research standards, and policies supporting dual careers-couples. A decisive role in the GenderTime project play the “transfer agents”: They are representatives of the organizations, who have a central position in management and shall guarantee successful implementation of structural change in the partner organizations and transfer beyond the project runtime.

The GenderTime project<sup>3</sup> goals are defined as followed:

- GenderTime contributes to an organizational and structural change and transforms institutional practices and culture in European research and scientific decision-making bodies through **real implementation of actions plans** in selected research and academic institutions to support gender diversity and equal opportunities for women and men.
- GenderTime aims to identify and implement the best systemic approach to **increase participation and career advancement of female researchers** in the selected institutions where realistic and effective self-tailored action plans are implemented.
- GenderTime deals with the implementation of **gender equality measures** on a cross-cultural level with the aim to develop a more gender-diverse scientific workforce in the participating institutions as a long term perspective.

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<sup>2</sup> IFZ: Interuniversitäres Forschungszentrum für Technik, Arbeit und Kultur, Austria; UNIPD: Università degli Studi di Padova, Italy; UGOT: University of Gothenburg, Sweden; UPEC: Université Paris Est Créteil, France; PUPIN: Mihailo Pupin Institute, Serbia; BUW: Bergische Universität Wuppertal, Germany; LOU: Loughborough University, Great Britain; TECNALIA: Fundacion TECNALIA Research & Innovation, Spain. Consortium Lead: Egalité des Chances dans les Etudes et la Profession d'ingénieur en Europe, France.

<sup>3</sup> GenderTime, Proposal, expected impacts listed in the work programme, p. 70ff.

## 2. CONCEPT OF EVALUATION

A formative and summative evaluation process accompanies the course of the GenderTime project and covers both the cooperation and collaboration within the consortium and the impact of GenderTime's objectives. The outlined process for this project was designed on the basis of recommendations and experiences from former European gender research projects [1]. The evaluation is aimed at the process of learning, accountability, and impact assessment; it involves all participants at certain stages of the project. An external team of evaluators, who are not involved in the project otherwise, ensures an unbiased view from the outside.

There is a twofold evaluation focus within the GenderTime project:

### A.) Process Evaluation

Within the process evaluation we analyse the project team's collaboration in regular feedback sessions and trigger reflection within the consortium.

The purpose of the process evaluation is to assist the project consortium and its manager continuously with feedback information to ensure effective and smooth running of the project and co-operation.

### B.) Impact Evaluation

The impact evaluation of GenderTime has two main levels: first the implementation of gender equality measures in all participating institutions and second the transfer of the acquired knowledge on successful measures towards gender equality to other organizations and stakeholders.

The purpose of the impact evaluation is to measure the progress each organization makes within the project by comparing the gender equality status at the beginning and end of the project, but also to allow transfer from more to less gender-balanced organizations. It provides feedback for the institutions by an "institutional benchmarking"; it allows to identify the status of the gender action plans and reflect, what has to be set up to reach the goals and what is missing; and it triggers learning and reflection within the organization itself.

In this paper, we present and discuss the results from the first phase of impact evaluation (see [2] for full results).

## 3. METHODOLOGY

To reach the aims of the impact evaluation, we chose a multi-method approach and strongly involved the seven transfer agents: These are nominated representatives of each organization's management who should guarantee the implementation of structural change in their institutions. The transfer agents overtake more than a symbolic role within the project: They are in charge of knowledge transfer (that is, to modify and implement measures in their own institution), they are devoted to the change process and they will support sustainable implementation within their organizations after the project runtime.

As first step of the impact evaluation, a **prerequisites checklist** was prepared aiming to check the gender equality status and prerequisites for implementing gender actions at every participating institution. The questions were aligned with the GenderTime goals. In addition, questions from the Athena Swan procedures [3] were adapted to be included in the checklist. With

this data we aim to analyze quantitatively and qualitatively each organization's gender equality status in the context of (1) career development, (2) flexibility and managing career breaks, (3) national context, (4) organizational context, and (5) sensitization for gender issues / a gender-sensitive culture.

These prerequisite checklists are complemented by structured **interviews after each project year** with the seven transfer agents and the five work package leaders, where the advancement of the implementation of gender action plans in the organizations is reflected.

The interviews with the *transfer agents* look into the personal and institutional situation of each agent and define the impact from their point of view, as well as their attitude towards GenderTime. Questions are, for example:

- "What is your position within your institution's management? Do you have responsibility for budget and resources?"
- "What was your motivation to act as a transfer agent in GenderTime? Was it fulfilled so far?"
- "How much (working) time do you personally invest on gender activities?"
- "What expectations are raised by the GenderTime project? What impacts do you / does your organization expect?"
- "How has GenderTime influenced your organization so far?"

The interviews with the *work package leaders* seek to reflect the project impact from the view of their work package, the value of the work there, their share in the goal of the project. Other questions address the cooperation and knowledge sharing within the consortium, for example:

- "How do you think the organizations so far benefited from the GenderTime activities? How did GenderTime influence the organizations so far?"
- "What about the GenderTime team and content – is there input from the different partners? Information exchange between them? What about knowledge transfer amongst the organizations? How is it provided?"

## 4. RESULTS & DISCUSSION

To better understand the gender equality status quo in the different organizations, the organizational context has to be taken into account. The seven institutions are highly different in staff size: They range from small organizations with 18 employees (O1) to medium sized organizations (O6: 146, O4: 404 employees) to large universities (O2: 2088, O3: 2629, O5: 3081 employees). Furthermore, the GenderTime institutions not only differ in size, but also in their academic background and organizational form (see table 1).

All involved organizations start from an advanced level of gender equality politics: Even when a gender action plan did not exist at the beginning of the project, most organizations have already implemented some measures towards gender equality before GenderTime. Some organizations started to develop a plan at the beginning of the project in accordance with their local, national, and legal contexts (see table 1).

**Table 1. Overview on GenderTime institutions**

	<i>Academic Background</i>	<i>Organizational Form</i>	<i>No. of Measures</i>	<i>Gender Action Plan</i>
O1	interdisciplinary, ICT	small research association (partially university, partially non-university)	11	Since 2013
O2	Multiple	major university	15	Since 2013
O3	Multiple	major university	40	Planned
O4	ICT	mid-size R&D institution at university	23	Since 2012
O5	Multiple	major university	11	Since 2013
O6	School of Engineering	small university	34	Since 2013
O7	sustainable development; industry & transport; ICT; health; society & innovation	applied research center	12	Planned

All organizations have a **national policy** for gender equality. The kind of these national policies and the effect for the organization however is very different: It ranges from a “law of equal treatments”, which sometimes has almost no direct mission for the university itself (O4), to the situation that the state funding is linked to gender equality indicators (e.g., additional female professor positions are financed when the university’s gender concept is positively evaluated at O5).

A best practice case for a gender-sensitive policy is the German Research Foundation DFG, which committed its member institutions since 2008 to a set of structural and personal guidelines whose implementation is voluntary but a condition for funding [4]. The progress is visible at most DFG member institutions: They implemented transparent, structured and formalized procedures for the unbiased evaluation of scientific quality and the hiring of professors.

To be aware of gender imbalances, most organizations already implemented an internal **gender monitoring** by designated committees (O1, O2, O4, O5, O6), at O5 and O6 additionally an external monitoring exists. An external evaluation is especially important, when the gender equality status is linked to rewards (like additional positions) or is defined as prerequisite for project funding.

Mühlenbruch and Jochimson [4] argue that only regulations and quotas will effectively bring change to the share of women in decision-making committees. So to make gender a topic, women should be equally included in **decision making committees**. Our data show that most GenderTime organizations have around one third female committee members; in one case it is 7 % (O7) and only in O1 it is as high as 50 %. At O3 a minimum quota of 33 % women in all committees was set by the university.

But independent from this status, all transfer agents interviewed emphasized that the GenderTime project initiated further organizational development: GenderTime was often described as a “motor”. It makes gender equality a topic for management once again and can trigger new measures and activities, which is important for sustainable developments.

Different **organizational procedures and processes** are handled in a gender-sensitive way at our organizations: The most frequent ones are processes for recruitment (O1, O2, O4, O7). To pay attention to gender in recruitment processes seems to be especially important, as an experimental study shows systematic preference of male applicants to a university position [5].

Gender biases are implicitly present in the academic culture, but we can reduce their influence if we raise their level of awareness [6]. Therefore, measures are important that sensitize for gender biases and **raise awareness on gender issues**. O5 and O6 developed gender equality trainings to sensitize their staff for gender biases. Also most organizations implemented measures to disseminate gender knowledge within their organization and beyond: Examples include a gender magazine (O5), a gender report (O1), and focus groups (O4). But also gender lectures can raise awareness on gender issues at all levels (O5).

A frequent obstacle to women’s careers in science are what Husu calls “non-events” [7]: That is, that female scientists are often not seen, not supported, or taken into account. Organizations O4, O5 and O7 consequently focus their measures on **career advancement**, they offer gender support through mentoring / coaching programs and personal development trainings, opportunities for networking, and leadership training.

It was found that the decision to have a family likely leads to abandoning a research career [8]. Therefore, measures for the reconciliation of science and family life are especially important for female scientists. All organizations have already implemented measures to support **work-life balance** (cf. table 2). The most frequent ones are on job flexibility (e.g., flexible working hours, teleworking), part-time possibilities and parental leave: Whereas flexible working hours are part of academic culture and affect all scientists, only those with families benefit from parental leave policies (e.g. adoption leave, keeping in touch days, time off to care for dependents). But also other measures can support reconciliation of work and family life: There are initiatives to provide nursery beds (O3, O4, O6) or a kindergarten near the campus (O3, O5, O6). Additionally, O5 and O6 offer childcare during school holidays. At O6 childcare vouchers are given out, which is a government-approved, tax-efficient way of paying for all types of childcare for children up to 16 years. As only organization O5 offers workshops on work-life balance which are organized twice a year in order to support academics with children as well as the planning of a family and the reflective handling of the topic for persons without children.

**Table 2. Measures to improve work-life balance**

<i>Measures in ...</i>	<i>O1</i>	<i>O2</i>	<i>O3</i>	<i>O4</i>	<i>O5</i>	<i>O6</i>	<i>O7</i>
Parental leave policy	✓	✓	✓	✓	✓	✓	✓
Work-life balance	✓			✓	✓		✓
Part time possibilities	✓		✓	✓	✓		✓
Job flexibility	✓	✓	✓	✓	✓	✓	✓

These first results show that the GenderTime partners already implemented gender-relevant measures which meet known obstacles towards gender equality. Consequently, also the **knowledge transfer between the project partners** is appreciated: Some transfer agents see the GenderTime project as a kind of *supervision on gender-related issues*: They question the existing measures at their own institutions, reflect them and compare them to the experiences of other organizations. Consequently, all interviewees (transfer agents and work package leaders) appreciate the *knowledge transfer* and learning experiences within the consortium. The work package leaders regard it as an important success factor of GenderTime that the exchange between the organizations is even intensified; for example, by onsite-visits, working groups and workshops at the project meetings, as well as networking with other European gender projects.

Overall, the evaluation of the current status shows a positive attitude towards GenderTime within the project team and furthermore also the transfer agents see high benefits, which is promising due to their key position for a sustainable implementation of gender actions. At the end of the project it is planned to finally compile a gender equality checklist for each institution (including final interviews about the implementation status and future activities) to see whether all planned activities have been carried out and what progress the institutions made.

## 5. CONCLUSIONS

“I note that women are still under-represented in both the public and private research sectors, where only one third of European researchers are women.” Máire GEOGHEGAN-QUIN is quoted in her foreword to the She.Figures 2012 [9], and she concludes that “This is not just a ‘numbers game’ in terms of unused potential. The under-representation of women deprives them of the opportunity to contribute towards research and innovation on an equal footing”.

Gender equality is an important topic for science organizations – not only, but especially in technical disciplines. However, as seen in other European projects, in order to guarantee sustainable implementation the organizations’ management has to be aware of gender topics and has to be involved from the beginning. The conducted interviews showed that to take new actions, the management needs occasions (like binding regulations [4] or this project), which act as a “motor” and put new procedures into operation.

To achieve lasting equality, science needs a culture that is sensitive to gender and diversity in all its endeavors: individual and social, structural, institutional and political [4]. Consequently, attention is shifting from gender sensitization towards encouraging structural changes in research organizations, which means also a change of organizational processes: We found that some of these processes (like job flexibility or parental leave) are more likely than others to be handled in a gender-sensitive way. But we should always ask which obstacles towards gender equality can these measures address? Especially, the implicit biases present in science [5][6][8] are a major roadblock on the way towards more gender balanced science organisations. Measures on sensitization can trigger change processes in the academic culture and the implicit biases present within.

In this paper we presented different measures towards gender equality. These may serve as examples how known obstacles like incompatibility of family and career [8], implicit discrimination [5], or non-events [7] can be addressed by gender-sensitive management processes.

However, we have to constrain that these actions will not bring change at once, but only in the long run. Also, it is nearly impossible to isolate the effects of the different measures presented in this paper and identify those measures most effective in terms of promoting gender equality. Still, at the end of the project we will publish a gender equality checklist, where we evaluate the different measures in terms of which were easier to apply, which confronted opposition by the management, and also which were (under)used or underestimated. In doing so, we hope to provide a critical analysis of measures that are promising for more gender balanced science organizations. On this basis also other organizations can improve their action plans or adapt their practices and gain impulses for knowledge transfer as well.

## 6. ACKNOWLEDGMENTS

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