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## GENDER EQUALITY IN ENGINEERING THROUGH COMMUNICATION AND COMMITMENT (GEECCO)

WORK PACKAGE 4: Implementing GEPs: Focussing on Decision Making Processes and Bodies

# OVERVIEW ON IMPROVEMENTS AND PROCEDURES

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### GEECCO – Gender Equality in Engineering through Communication and Commitment. In a Nutshell

Scientific and technological innovations are increasingly important in our knowledge-based economies. Today STEM (Science, Technology, Engineering, and Mathematics) is literally everywhere; it shapes our everyday experiences. With technologies we choose e.g. structures that influence over a very long time how people are going to work, communicate, travel, consume, and so forth. It is thus both a question of competitiveness and justice, to achieve gender equity within science and technology institutions, including policy and decision-making bodies.

GEECCO with its project lifetime from May 2017 to April 2021 aimed to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs were located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies.

GEECCO pursued the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field:

- (i) Setting up change framework and a tailor-made GEP for each participating RPO;
- (ii) Implementing gender criteria in the activities of RFOs;
- (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances.
- (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project.

http://www.geecco-project.eu/

https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate

## Further resources developed by the GEECCO-project consortium

All public deliverables, resources and additional material can be downloaded on this website:

https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate

#### Public deliverables (in order of the related work packages)

- Postorino, Maria Nadia; Marino, Concettina; Suraci, Federica; Enzenhofer, Bettina; Lusa, Amaia; Costa, Carme Martínez; Pulawska-Obiedowska, Sabina (2018): Gender Analysis of Decision-Making Processes and Bodies. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Postorino, Maria Nadia; Marino, Concettina; Suraci, Federica; Enzenhofer, Bettina; Lusa, Amaia; Costa, Carme Martínez; Pulawska-Obiedowska, Sabina (2018): Overview on Improvements and Procedures. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Bryniarska, Zofia; Żakowska, Lidia; Enzenhofer, Bettina; Postorino, Maria Nadia; Marino, Concettina; Lusa García, Amaia (2018): Current Status of Women Career Development. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Enzenhofer, Bettina; Lusa García, Amaia; Sarnè, Giuseppe; Żakowska, Lidia (2020): Overview on How to Increase Female Visibility. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Knoll, Bente; Renkin, Agnes (2018): Analysis of Current Data on Gender in Research and Teaching. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Ratzer, Brigitte; Burtscher, Sabrina; Lehmann, Tobias; Mort, Harrie; Pillinger, Anna (2020): Enhanced Gender Knowledge and New Content. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Integrating Gender Dimensions in the Content of Research and Innovation. An Exhibition. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

- Lasinger, Donia; Nagl, Elisabeth; Dvořáčková, Jana; Kraus, Marcel (2019): Best Practice Examples of Gender Mainstreaming Funding in Research Organizations. GEECCO. Gender Equality Engineering through in Communication and Commitment (a H2020 project).
- Dvořáčková, Jana; Navrátilová, Jolana; Nagl, Elisabeth; Lasinger, Donia (2020): Guideline for Jury Members, Reviewers and Research Funding Organizations' Employees. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lasinger, Donia; Nagl, Elisabeth; Dvořáčková, Jana; Kraus, Marcel (2020): Overview and Assessment of Gender Criteria for Funding Programmes. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Kraus, Marcel; Dvořáčková, Jana; Lasinger, Donia (2021): List of Principles of Communication of Gender Criteria. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mergaert, Lut; Allori, Agostina; Ratzer, Brigitte; Enzenhofer, Bettina; Lusa García, Amaia; Marino, Concettina; Zakowska, Lidia; Bryniarska, Zofia (2020): Tailor-made Gender Equality Plans (GEP version 3.0). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Knoll, Bente (2021): Dos and Don'ts while Degendering the STEM Field. Learning Experiences of Four European Universities and Two European Research Funding Organisations. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mergaert, Lut; Knoll, Bente; Renkin, Agnes (2021): Final Report on Supporting Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Jorge, Irene (2021): Implementation of Dissemination Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Jorge, Irene (2021): Engagement Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lipinsky, Anke; Schredl, Claudia: Final Evaluation Report. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

#### Additional resources and literature reviews

- Knoll, Bente; Renkin, Agnes; Mergaert, Lut (2020): Additional resources (living document). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Burtscher, Sabrina (2019): Literature Review: Gender Research in Human Computer Interaction. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Pillinger, Anna (2019): Literature Review: Gender and Robotics. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mort, Harrie (2019): A Review of Energy and Gender Research in the Global North. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lehmann, Tobias (2020): Literature Review: Gender and Mobility. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

#### **Explanatory videos (available on Youtube)**

- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Humans & Computers. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <a href="https://www.youtube.com/watch?v=vrWx91RdmGo">https://www.youtube.com/watch?v=vrWx91RdmGo</a>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Robots in our society. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <a href="https://www.youtube.com/watch?v=bfXr29VAuwU">https://www.youtube.com/watch?v=bfXr29VAuwU</a>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2020): Energy for all. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <a href="https://www.youtube.com/watch?v=tIwrqsNVfW8">https://www.youtube.com/watch?v=tIwrqsNVfW8</a>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2021): Mobility for all. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <a href="https://www.youtube.com/watch?v=oMIfoI5-14M">https://www.youtube.com/watch?v=oMIfoI5-14M</a>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2021): Inclusive design why intersectionality matters. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <a href="https://www.youtube.com/watch?v=U4eRb1NM21A">https://www.youtube.com/watch?v=U4eRb1NM21A</a>, checked on 4/30/2021.

#### **Evaluation and monitoring tutorials**

Anke Lipinski and Claudia Schredl, both from GESIS, developed five online evaluation and monitoring tutorials.

- 1. GEECCO Data Monitoring Tool
- 2. GEECCO Infographic: Gender Equality Approaches and Their Impact on GEP Implementation
- 3. GEECCO Infographic: SMART Gender Equality Objectives
- 4. GEECCO Explainer Video: Gender Equality Plans in Technical Universities and the Use of Logic Models
- 5. GEECCO Log Journal

These tutorials can be downloaded on this website:

https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate

#### **Document versions**

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#### **Detailed Analysis for UNIRC**

#### Current Situation about decision-making composition

The current situation at UNIRC is characterized by an unbalanced representation of women in all the decision-making bodies. From one side, this unbalance is a further confirmation of the small percentage of women in the academic staff of the University, which is typical for SET (Science, Engineering, Technology) fields all around the world. From the other side, the unbalance is greater than the actual percentage of women in the academic and administration staff. Then, although there is a structured unbalance, this latter is larger than expected with regard to the University composition. Furthermore, it is worthwhile to note that the higher the power of the decisional body is, the lower the number/percentage of female representatives is.

The figures reported in the following tables depict the current situation for all the bodies at the two main decision-making levels (University and Department). Most of the current decision-making bodies have been in charge since 2015, with negligible variations in terms of gender composition.

Decision-	Decision-making body/office		Number		Percentage			
Level	Name	Female	Male	Male Total		Male	Total	
	Rector		1	1	0%	100%	100%	
	Deputy Rector		1	1	0%	100%	100%	
University	Vice Rectors (Deputy Rector included)	3	9	12	25%	75%	100%	
	Academic Senate	1*	11	12	8%	92%	100%	
	Administration Board	1	9	10	10%	90%	100%	
	General Director		1	1	0%	100%	100%	
	Heads of Department	1	5	6	17%	83%	100%	
Department	Degree Courses Coordinators	6	13	19	32%	68%	100%	

<sup>\*</sup>student representative

#### **Swot Analysis**

Firstly, it is worthwhile to note that the current legislation – both at national level and within the Universities in line with their own Academic Statute – does not prevent women from reaching the highest positions within whatever decision-making body at the University. In fact, all the procedures ruling the access to every role – and the law they must comply with – are based on the equal opportunity principle. Theoretically, there is not any gender bias and "equal opportunities" have to be offered to both women and men in order to achieve high-power positions.

Nevertheless, the small percentage of women within the decision-making bodies of the University is a fact, and such percentage has not been improving during the years.

According to several studies and to the specific context of UNIRC, this result comes from a series of actual (e.g. little structured support to family life and organization) and mainly "cultural" obstacles. These latter particularly lie at the basis of the horizontal and vertical segregations characterizing the STEM field and involve both man and woman attitudes: the state of play is often perceived as something that cannot be easily changed or that, actually, does not need changes.

From this perspective, laws stating the equal opportunity principle— and their further statement in all the documents ruling the academic life and its organization, as the Academic Statute — paradoxically may represent a further obstacle preventing the problem to be really understood and hence solved. The general wisdom tends to be the following: if the law guarantees equal rights and opportunity to people regardless their gender, there is no need for further measures or new course of actions. This facet of the issue should be taken into account when planning either actions or measures. <sup>1</sup>

In this perspective, the main strength and weaknesses at UNIRC are listed and discussed below.

Strengths	Weaknesses					
<ul> <li>Legal framework at national and academic level towards gender equality</li> <li>Gender balance among the administration staff</li> <li>Relative high overall ratio of female students</li> </ul>	<ul> <li>Low female presence and representation in the academic staff</li> <li>Gender imbalance in higher and middle management</li> <li>Cultural climate and stereotypes tending to underrate the importance of gender issues</li> </ul>					
Opportunities	Threats					
<ul> <li>Elections of the Rector are going to be called at the University in the next future (2018): opinions concerning the chance of supporting and strengthening a more balanced representation of men and women within the decision making bodies might be requested as part of the electoral program of the candidates.</li> <li>The presence of a team working with the support of an H2020 financed project could be a feasible mean to make the University community aware of the importance of the topic and prone to consider gender equality as a value, warrant of democracy, quality and development.</li> </ul>	<ul> <li>Internal resistance is to be expected against most of any possible action addressing the unbalanced representation of women within every decisional body.</li> <li>Not only could these actions be seen as a menace to a well-stabilized and fairly efficient organization/structure but also the need of incorporating the gender perspective in the procedures addressing the constitution of the decisional body could be negated (being the principle of equal opportunity theoretically stated by the Statute).</li> <li>Given that this resistance would emerge from the bodies/offices that should approve/support/implement the planned actions, this is the main</li> </ul>					

#### Details of Strengths and Weaknesses

#### Strengths

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<sup>&</sup>lt;sup>1</sup> The percentage of female in STEM areas at UNIRC is relatively high if compared to other Universities in EU. For this reason, here it has been considered a "positive" issue that such percentage is not less than the Italian average and possibly better than the European one.

 Legal framework at national and academic level towards gender equality: At national level, the Department for Equal Opportunities of the Presidency of the Council of Ministers is the office of the Italian Government that deals with the coordination of regulatory and administrative initiatives in all matters concerning the planning and implementation of equal opportunities policies (http://www.pariopportunita.gov.it/ dipartimento/normativa/ normativa-nazionale/). The main national rule dealing with Equal Opportunity issues is the "Code of Equal Opportunities between men and women in accordance with Article 6 of the Law 28 November 2005" (D.lgs. 11 aprile 2006, n. 198). The Code is addressed to the implementation of measures addressed to eliminating any distinction, exclusion or limitation based on sex, which has as a consequence, or as a purpose, to compromise or prevent the recognition, enjoyment or exercise of human rights and fundamental freedoms in the political, economic, social, cultural, civilian or any other field. Furthermore, the Code resumes and coordinates in a single law the ordinances and principles of the Legislative Decree 23 May 2000, n. 196 ("Role and activity of the Advisor on Equal Opportunities and ordinances on matters of positive actions") and of Law 10 April 1991, n. 125 ("Positive actions for the realization of the equality between men and women at workplaces").

As for Positive actions issues (also known as Plans for Positive Actions, P.A.P.), art. 48, D. Lgs. 198, 2006, establishes the removal of obstacles that prevent the full realization of equal job opportunities between men and women. These plans, among other things, promote the rebalancing of the female presence in activities and in hierarchical positions where there is a gender gap greater than two thirds.

Other important rules refer to maternity/paternity rights, quotas for women and gender-based violence:

#### Maternity/paternity rights:

- Art. 14, Law August 7, 2015, n. 124, "Promoting the trade-off between professional life and leisure time in public bodies";
- D. Lgsl June 15, 2015, n. 80, "Measures to reconcile the needs of care, life and work, in implementation of Article 1, paragraphs 8 and 9 of the Law of 10 December 2014, n. 183";
- Article 4, paragraph 24, Law June 28, 2012, n. 92, "Ordinances on labor market reform with a view to growth";
- o D. Lgsl. March 26, 2001, n. 151, "Law on the protection and support of maternity and paternity, pursuant to Article 15 of Law No. 57 of March 8, 2000"

<u>Quotas for women</u> (mainly for political issues and administration boards of companies listed on regulate markets)

- L. 23 November 2012, n. 215, "Ordinance to promote the rebalancing of gender representation in local and regional councils. Ordinances on equal opportunities in the composition of evaluation committee in public bodies"
- Presidential Decree November 30, 2012, n. 251 "Regulations concerning the equal access to the administration and control bodies in companies, established in Italy, controlled by public administrations, pursuant to article 2359, first and second paragraphs, of the Italian Civil Code, not listed on regulated markets, in implementation of article 3, paragraph 2, of the law 12 July 2011, n. 120"
- Law July 12, 2011, n. 120 "Amendments to the text of the ordinances on financial intermediation, pursuant to Legislative Decree 24 February 1998, n. 58, concerning the equal access to the administration and control bodies of companies listed on regulated markets".

At University level, the Academic Statute establishes some general principles to promote balance in academic key positions and committees, in compliance with national laws stating gender equality principles. Articles 16, 18, 19, 21, 33 of the Academic Statute address

- explicitly the "equal opportunity" principle referring to balance in decision-making compositions, voting procedures and committees dedicated to the issue.
- Gender balance among the administration staff: as for the administration staff, here women are well represented (54.2%) at several levels of the hierarchy. They cover roles at many levels included high-ranked positions such as responsible for International issues, Student administrative procedures, Data analysis and support to the Internal evaluation Board. However, there are no women in the Academic Senate or in the Administrative Board coming from administrative staff, although in principle they could have the same opportunity as men as they represent more than fifty percent of the whole administration staff population.
- Relative high overall ratio of female students: female students are well balanced (about 45%) for the whole University, although with different percentages for the four scientific areas (Agricultural sciences, Architecture, Law and Economics, Engineering). More specifically, girls are more than 60% at Law and Economics, about 50% at Architecture, almost 30% at Agriculture and Engineering). The percentage of female students in the STEM area is relatively high if compared to other Universities in EU. For this reason, we considered a "positive" issue that such percentage is in line with the Italian average and possibly better than the European one.
- The good female student presence could play an important role to gain leverage with the decision-making bodies — mainly at Department level — and realize a more friendly environment in all the four scientific areas.

#### Weaknesses

- Low female presence and representation in the academic staff: the underrepresentation of women is a common problem to SET fields and technical Universities. At UNIRC, the percentage of women in academic roles is rather low and in some of the teaching areas is about 25% or even less. As for highest positions (full professor), the percentage is much lower and for the engineering area is about 6%. The scarcity of women, especially in the highest positions, is often at the root of the problem widely discussed of the marginalization of women in research networks, which are essentially based on informal relationships (so-called "old boys networks"). This phenomenon produces forms of (self-) segregation of women. Furthermore, activities related to the need to maintain a balance between life and work and career interruptions caused by motherhood undoubtedly have a bearing on reducing the time women can spend on informal and networking activities. Their limited presence in social activities occurring among (male) colleagues not only lowers the level of mutual exchanges within the departments, but also deprives women of fundamental tools for the advancement of their careers.
- Gender unbalance in higher and middle management: high representation of men and low representation of women in higher levels of hierarchy independently on the share of the reference population is another common problem to SET Universities. At UNIRC this problem is also more evident, as not only the percentage of female full professors is low, but also they are very underrepresented at all the high hierarchical level of the decision-making bodies. Apart from the generic principle about equal opportunities stated in the Academic Senate, actually there is not any specific procedure addressed to guarantee the representation of women at decision-making bodies. At least, the same share of women and men could be expected at decision-making bodies. However, the current percentage- for all the academic bodies is almost negligible.

Cultural climate and stereotypes tending to underrate the importance of gender issues: one
of the most relevant obstacles to the reduction of gender unbalance at SET Universities like
UNIRC is the (implicit) cultural resistance based on stereotypes. More in detail, stereotypes
refer to the (consolidated) opinion among men that not only they are more talented at SET
fields than women are, but also they are better decision-makers able to manage and develop
the University complex system. In this perspective, one of the most resistant stereotypes is
the certainty that they cannot expect total devotion to the job from women and these latter
are then unsuitable for scientific careers and high-level positions.

Work-life issues remain another key element in achieving gender equality. "There is not just a 'glass ceiling' but also a 'maternal wall'" (She Figures 2012 - Gender in Research and Innovation report). This statement was based on the analysis of several European countries and it applies as well to UNIRC situation. Despite there are many national laws that should guarantee maternity and career, however women cannot confirm continuity at the workplace during their pregnancy and the first months of life of their child. Therefore, in a male-dominated environment, men prefer to give them roles of secondary importance in the belief that women could not assure good performances and contribution to the academic life.

#### Possible actions to improve decision-making procedures for *UNIRC*

#### Promoting change of the cultural climate

- The problem connected to imbalanced representation of women and man inside the UNIRC decisional bodies is often neglected. Therefore, undivided attention should preliminary be payed to this aspect.
- Structural training processes addressing the drawbacks or the negative consequences of this attitude in terms of lack of democracy, obstacle to development and success should be planned with a long-term vision.
- Male participation in such events/policies is very important for several reasons: 1) try to make men aware about the right to balance life and work; 2) make actions acceptable when laws and regulations on how to reach gender balance are not clear and then acquired rights could be rediscussed; 3) encourage men to take responsibility for family care; 4) reduce gender stereotypes.
- To enhance the awareness of the personnel and underline the presence of a real structural problem, the situation of women and men at UNIRC could be made more visible.
- To fulfil the above goal, a specific structure in charge of the data collection and dissemination could be implemented. This structure could also be committed to evaluating and measuring the possible improvements caused by the actions designed to promote equality.
- In addition, an analogous structure could be created to support and design mentoring activities aimed at boosting participation of women in the various governing, managing and representation body.

#### Promoting the creation of structures to support gender equality

- The structure should be in charge of routine revision of any text, communication, images, from a gender equality and diversity standpoint. It should have advisory commitment regarding the political strategy of the University.
- This structure should be part of the University organization system. Therefore, amendments to the Statute (or the Academic regulation documents) are needed.
- Careful analyses of the informal layer at UNIRC are crucial to implement policies transforming decision-making practices, which are often based on implicit discrimination towards women.

• Periodic meetings with the UNIRC governance should be planned.

#### Promoting changes in procedures leading to decision-making bodies composition

- Amendments to the University Statute or other regulatory system could be needed.
- The introduction of mandatory "quotas", consistent with the women share within the academic and administrative staff at UNIRC, could be a possible course of action in some cases.
- Some of the roles are assigned without election procedures, so the institution of "quotas" is not completely possible, although the choice /selection should comply with the principle of equal opportunities.
- The opportunity to introduce the gender perspective in the voting procedures or the candidates' list should be analysed carefully, in order to meet Constitutional requirements and current legislation.

#### Detailed Analysis for TU Wien

#### Current Situation about decision-making composition

Decision	al body/office								
Level	Name	20:	14	20:	15	20	16	20	17
		m	f	m	f	m	f	m	f
	Rector	0	1	0	1	0	1	0	1
	Vice-Rector	3	1	3	1	3	1	3	1
				18	8	20	6		
University	Senate	18	8	Since July 1 <sup>st</sup> : 20	Since July 1 <sup>st</sup> : 6	Since October 1 <sup>st</sup> : 15	Since October 1 <sup>st</sup> : 11	15	11
	University council	4	3	4	3	4	3	4	3
	License to teach committees	112	41	162	54	159	46	n.a.	n.a.
	Appointment committees	73	26	86	40	93	42	n.a.	n.a.
	Curriculum committees	160	56	160	56	145	65	145	65
Faculty	Faculty councils	110	33	109	35	n.a.	n.a.	95	49
	Deans	8	0	8	0	8	0	8	0
	Deans of studies	13	1	13	1	13	1	13	1

#### **Swot Analysis**

Bodies at TU Wien are organized along different curiae: the curia of the professors, the curia of associate professors and academic research and teaching staff ("Mittelbau") and the curia of the students. The perpetuation of the old model of structuring a university along curiae gives evidence of still strong hierarchical thinking. Depending on the committee the curia of the professors can also numerically be the strongest – while the curiae within the curriculum committees are equally represented, this does not apply for the senate, license to teach committees ("Habilitationskommission") or appointment committees ("Berufungskommission") where the curia of the professors outnumber the other curiae. The organization along three curiae can be of advantage if decisions of one curia are not supported by the other curiae, but as a matter of course e.g. the

members of the curia of the professors often have different opinions among themselves. The chair of the committees is entitled to more rights and has power by conducting the meetings.

Non-academic university staff is represented with one person in the academic senate and the faculty councils while no non-academic university staff is included in license to teach committees or appointment committees.

Strengths	Weaknesses
Strong support of gender equality by the RPO top;	<ul> <li>Since there are only few women in top positions, the existing quota leads to an excessive work load for them;</li> </ul>
Strong legal framework towards gender equality;	<ul> <li>Only some decision-making bodies meet the quota;</li> </ul>
TU Wien makes the gender situation visible by publishing gender disaggregated data yearly;	Informal procedures and networks;  The higgsystem is between the suries has
Strength of the independent committee on equal treatment which has top level support;	<ul> <li>The hierarchy in-between the curiae has more power than gender;</li> <li>There is no formal procedure set</li> </ul>
Relevant decision-making processes are set formally;	regarding how people are nominated for working in a committee;
Women belonging to <i>curiae</i> get compensation for disproportional	<ul> <li>There is no awareness for gender issues in the committees;</li> </ul>
<ul> <li>Since 2017 "criteria to prevent conflict of interest" is part of the statute of TU Wien;</li> </ul>	<ul> <li>Typically members of appointment committees are not trained how to perform the appointment procedure professionally, which implies that implicit</li> </ul>
The procedure for the appointment of professors was renewed in 2017 and includes a new step.	bias e.g. leads to stereotype questions.
Opportunities	Threats

- The Austrian Federal Ministry of Science and Research is working on the extension of gender competence in higher education processes.
- Currently TU Wien is working on improvements regarding appointment procedures.
- Determining research focal areas at TU
  Wien has gender implications. According
  to UG 2002 the rectorate is responsible
  for preparing a university development
  plan for submission to the senate and the
  university council in which the research
  focal areas are defined. Depending on the
  gender competence of the actual
  governing bodies this top-down-strategy
  can be of advantage or not.

#### Details of Strengths and Weaknesses

#### Strengths

- Strong support of gender equality by the RPO top:
  - Female representation on highest hierarchy level (female rector)
  - o Vice rector for human resources and gender who has gender competence
  - TU Wien makes the gender situation visible by publishing gender disaggregated data yearly
  - Strength of the independent committee on equal treatment which has top level support: controls procedures for the appointment of professors and other recruitment procedures; right to approve/reject nominations for collegial bodies if the quota is not met; right to reject nominations for the rector on the grounds of discrimination on the basis of gender
  - o Office for Gender Competence provides evidences and tools.
- Strong legal framework towards gender equality:
  - Federal Constitutional Law, Article 7: The state, provinces and municipalities subscribe to the de-facto equality of women and men. Measures to promote de-facto equality between women and men, especially by eliminating existing inequalities, are admissible.
  - Federal Equal Opportunities Act, § 11: If women are underrepresented as permanent employees and functionaries, the federal government shall treat them as a priority in order to achieve gender balance. Underrepresentation: proportion of women < 50%</li>
  - Statutory quota: Federal Act on the Organisation of Universities and their Studies (Universities Act 2002 – UG 2002): § 20a Gender-Equal Composition of Collegial Bodies: Collegial Bodies shall consist of at least 50% women.
  - UG 2002 stipulates that universities have to create a Career Advancement Plan for Women as well as an Equal Opportunities Plan.
  - Career Advancement Plan for Women at TU Wien, § 6 The duty of promoting the career advancement of women: (1) The objective of the Career Advancement Plan is to increase the proportion of female staff members in all organisational units, at all hierarchy levels and in all management positions and activities at TU Wien, both in fixed-term and permanent employment relationships and in training relationships, to at least 50%, regardless of the duration of such employment and training relationships.
  - Career Advancement Plan for Women at TU Wien, § 41 Composition of committees: (1)
     As a principle, with regard to the composition of committees, advisory boards, collegial

bodies, working groups and similar non-permanent decision-making and advisory bodies, a balanced distribution of women and men shall be considered, and the duty of promoting the career advancement of women shall be observed. This shall also apply to the appointment of the chairperson. (2) Committees appointed by the senate (curriculum committees, license to teach committees, appointment committees for professors), the senate itself, and the rectorate shall be subject to a compulsory proportion of women pursuant to UG, as amended. (3) When appointing members for inter-university study committees, attention shall be paid to fulfilling this quota. (4) When appointing experts in appointment procedures for professors, attention shall be paid to a balanced representation of women and men.

- Relevant decision-making processes are set formally:
  - Process of procedures for the appointment of professors
  - o Process of procedures for the awarding licenses to teach
  - o Guideline for constructing or changing curricula
  - o Internal regulations for rectorate, university council and collegial bodies
  - If a formal mistake is made (e.g. a deadline was not met), every member of a committee will consider that critique, even if the criticising person is not a member of the curia of the professors.
  - Process of setting up strategic documents (compulsory are a 3 years development plan and a performance agreement with the federal ministry for 3 years) is standardised since all governing bodies (rectorate, senate and university council) have to agree upon the documents.
  - Rectorate has yearly performance agreements with the deans/faculties.
- Women belonging to curiae get compensation for disproportional burden: Women who belong
  to the curia of the professors or the curia of associate professors and academic research and
  teaching staff can take research leave of one semester if they are working very actively in
  collegial bodies (i.e. compensation for disproportional burden).
- Since 2017 "criteria to prevent conflict of interest" is part of the statute of TU Wien. Members of the appointment committees as well as the reviewers must not be close to the applicants.
- The procedure for the appointment of professors was renewed in 2017 and includes a new step: Even before the professorship is announced, a special committee (at least three members, one of them a woman) is in charge of searching specifically for qualified candidates respectively investigating the pool of potential applicants.

#### Weaknesses

- Legal Framework:
  - The few women in high positions (11% female professors at TU Wien) have to sit on many committees, and more often than their male colleagues. This limits the amount of time that they can invest in research, and penalizes them in terms of scientific output.
  - Only some decision-making bodies at TU Wien meet the quota: university council, rectorate and committee on equal treatment accomplish the legal demand. Other bodies such as the senate and collegial bodies (license to teach committees, appointment committees, curriculum committees) do not meet the quota. Especially the curia of the professors has difficult framework conditions for its women. Though that problem does

- not apply to the "Mittelbau"-curia (27% women), the working contracts of most of these women are not permanent which implies that these women will rather not work on committees because they need to advance in their scientific career.
- Women or any underrepresented group on a committee may be faced with a dichotomy of role that those in the majority do not have; for example, women may be expected to be a proponent for women's interests as well as an impartial judge of scientific merit.
- The hierarchy in-between the curiae has more power than gender: As the curia of the professors is the strongest, it's not taken for granted that members of the other curiae (especially young members) will contradict them. Members of the "Mittelbau" curia are often dependent on the professors. The curia of the students is not taken seriously by the curia of the professors: that strongly applies for pre-docs (and here especially for female pre-docs), while post-docs are taken more seriously. This has an effect on how these committee members play a part in the debates. Also, new members of committees will rather not question actions of the chairperson.
- Informal procedures and networks: Although relevant decision making processes are set formally, often the really relevant decisions do not follow these rules. It is possible that decision making processes appear to be done correctly while being subverted, e.g. regarding the choice of the reviewers or the content of the job announcement (that can be tailored to a certain person). More important than the formal regulations are the individual people who are in charge of decision making. Often one can describe them as "old boys network" that will favor those who are similar and they have sympathy for while considering others as inconvenient and not nominating them.
- There is no formal procedure set regarding how people are nominated for working in a committee. It is the privilege of each curia to nominate representatives of their group for the respective curia of the collegial bodies (e.g. the representatives of the professors in the senate nominate the representatives of the professors in the committee for the awarding licenses to teach). While the number of the professors of TU Wien is manageable and professors just talk to each other in order to nominate someone, this procedure is not possible for the members of the "Mittelbau". Within this group the process of nominating people is done very differently: while it can happen that the spokesperson of the curia at each faculty sends an email to all "Mittelbau" members, it's also possible that the spokesperson will not inform these members. Some spokespersons ask women if they want to work in a committee, some don't. There is the observation that shy people will rather not be nominated. Also, there is the belief that only some women want to work in committees.
- There is no awareness for gender issues in the committees (e.g. relevance of gender content in curricular commissions) and hardly any knowledge about implicit bias (which can lead to biased recruitment processes). Occasionally there is a misunderstanding that only the committee on equal treatment is responsible for gender issues.
- Typically, members of appointment committees are not trained how to perform the appointment procedure professionally, which implies that implicit bias e.g. leads to stereotype questions.

#### Possible actions to improve procedures for *TU WIEN*

- Committees shall be gender balanced. A more diverse committee could broaden the points of view in committee discussions. Also, more women on a committee could reduce isolation and tokenism.
- In order to raise the number of potential female committee members, TU Wien shall hire more women and provide tenure track positions for women.
- Responsibility for gender equality shall be distributed to all relevant actors.
- In each committee there should be at least one person who is trained in gender/diversity issues and who will train the committee on that topic. This would lead to new perspectives, different ways of evaluating documents and more discussion. As the curia of the professors will not favor that someone of the other curiae explain gender issues to them, maybe they will attend a gender/diversity training by their own choice. Aside from committees, awareness raising activities that focus on implicit biases are important for all university members.
- Committee membership shall be more transparent. Committee members shall be advised of their responsibilities and of their power in taking certain measures. In particular new members often don't know which measures they could take. Committee members shall be appreciated for their work.
- Regarding the non-existing formal process of nominating committee members, a guideline for a
  recommended process could be prepared. It shall contain an explanation why this certain
  process is recommended and include support, e.g. how an email regarding the search for
  committee members could be framed in a gender competent way.
- Appointment procedures shall be standardized, e.g. it could be determined that one person is
  responsible for all appointment procedures, attends all relevant situations, conducts all
  interviews etc. As long as appointment procedures are not standardized, support in order to
  evaluate applications standardized shall be given, e.g. a catalogue of questions, possible answers
  and their evaluation shall be created.
- An independent (gender) observer at recruitment and appointment committees could weaken potential bias in discussions and decision making.
- Minutes of all decisions and meetings shall aim at a high standard and e.g. not only summarize election results but explain how the election/decision took place.
- Criteria taken into account during recruitment procedures shall be transparent.
- The definition of scientific excellence shall be revised.
- During research leave, the tasks of the respective person shall be fulfilled by someone else.

#### Detailed Analysis for UPC

#### Current Situation about decision-making composition

Below there is a summary of the data gathered up to now. Data regarding previous years and some decision bodies is still to be received.

Decisional body/office		2014					2015				
Level	Name	W	М	Total	% W	% M	W	М	Total	% W	% M
	Rector	0	1	1	0%	100%	0	1	1	0%	100%
	Vice-rectors	1	6	7	14%	86%	2	6	8	25%	75%
	General secretay	0	1	1	0%	100%	0	1	1	0%	100%
	Manager	1	0	1	100%	0%	1	0	1	100%	0%
University	Board of trustees	-	-	-	-	-	-	-	-	-	-
	Governing Council	16	37	53	30%	70%	16	33	49	33%	67%
	University Senate	95	192	287	33%	67%	90	192	282	32%	68%

Decisional	Decisional body/office		2016						2017			
Level	Name	W	М	Total	% W	% M	W	М	Total	% W	% M	
	Rector	0	1	1	0%	100%	0	1	1	0%	100%	
	Vice-rectors	3	5	8	38%	63%	2	6	8	25%	75%	
	General secretary	0	1	1	0%	100%	0	1	1	0%	100%	
	Manager	1	0	1	100%	0%	1	0	1	100%	0%	
	Board of trustees	_	-	-	-	-	5	13	18	28%	72%	
	Governing Council	15	30	45	33%	67%	13	35	48	27%	73%	
University	University Senate	78	176	254	31%	69%	86	169	255	34%	66%	
	Academic Council						9	45	54	17%	83%	
	Appeals Committee						2	5	7	29%	71%	
	Teaching and Research Staff						3	8	11	27%	73%	
	Recruitment and											

Assessment					
Committee					

Decisiona	l body/office	2017						
Level	Level Name			Total	% W	% M		
	Director/Dean	4	12	16	25%	75%		
Fo outher	Academic Secretary	6	10	16	38%	63%		
Faculty	Vice- directors/Vice- deans	28	67	95	29%	71%		
	Director	3	13	16	19%	81%		
Department	Academic Secretary	4	11	15	27%	73%		
W: Women	Vice-directors  M: Men	4	15	19	21%	79%		

#### Swot Analysis

•	UPC	has	the	neces	sary	gend	ler	EO
	struc	ture (	(Comr	nittee,	equa	lity u	nit)	and
	the S	Statut	tes co	ollect E	О рі	rincipl	es	and
	balar	nced	prese	nce in	col	legial	bo	dies
	and s	taff r	ecruit	ment c	omn	nittee	۲.	

Strengths

- UPC has its third Gender Equality Plan;
- UPC makes the gender situation visible by publishing some gender disaggregated data yearly;
- Career development policies (e.g. mobility, promotion) include some (although few) positive action;
- Some years ago, gender indicators were included in the strategic plans and in the setting of objectives and KPI of the academic units (departments, institutes, schools and faculties);
- UPC can take advantage of the fact that now there are some women in most UPC research fields and, hence, the number of

#### Gender Equality is not at the core issues assigned to a vice-rector (currently, gender equality falls into the

responsibility of the Vice-Rector of

Weaknesses

- International Affaires).
- Decision making bodies are not gender balanced;
- In spite of what is said in the statutes, there is no supervision that the committees are gender balanced;
- There is no permanent observatory to systematically collect and analyze the data of the institution (e.g., composition of the collegial bodies) disaggregated by gender;
- The evolution of the data is not favorable; the proportion of women seems stagnant;
- More promotional measures are lacking for women to apply for high positions in the institution (e.g., coaching,

women that could be part of the different decision bodies is higher.	mentoring). Reluctance of women to stand for high positions;
	<ul> <li>Few women as directors or deans of all academic units (faculties, schools, departments and research institutes).</li> <li>Women occupy a second role as vice- deans or vice-directors;</li> </ul>
	<ul> <li>The organizational culture is not favorable. Having few women in some groups (e.g., researchers), propitiate a male culture;</li> </ul>
	There is a lack of gender mainstreaming in decision-making bodies.
Opportunities	Threats
With the new Rector and vice-rectors team, the institution has the opportunity to give the same or even more impetus to equality. The success of equality policies and actions and the degree of institutional committee and the degree of institutional committee and the committee	If the new Rector and his team do not commit themselves highly to the Equal Opportunities, the institution may regress in terms of gender Equality;
institutional commitment will depend, to a large extent, on the person designated by the Rector as responsible for gender equality;	<ul> <li>The social and cultural environment of the country is not favorable to achieving real gender equality. Stereotypes persist;</li> </ul>
The improvement of the economy can lead to a greater number of staff stabilization	<ul> <li>If there is no change in the perception that society has of the engineering and technical professions, it will hardly be</li> </ul>

#### Details of Strengths and Weaknesses

and promotion positions.

#### Strengths

• UPC has the necessary gender EO structure (Committee, equality unit) and the Statutes collect EO principles and balanced presence in collegial bodies and staff recruitment committees: After the first Equality plan (2007-2011) was approved, the UPC created several units involved to the implementation of the UPC Gender Equality Policy. A Vice-rector with responsibility for equality was nominated in 2008 and since 2007 the UPC has also had the Equal Opportunities Commission and the Equal Opportunities Office. In 2016 the units of the UPC's Equality Unit and Equality Committee were renewed, and their competences defined (Decision no. 34/2016 of the Governing Council and Decision no. 35/2016 of the Governing Council). Additionally, there is a Network of Equality Officers, which is composed of an Equality coordinator in each academic unit (department and school/faculty), and the Research Group for Equal Opportunities in Architecture, Science and Technology (GIOPACT).

possible to attract more women in the

students' body.

Likewise, the Statutes of the Universitat Politècnica de Catalunya collect in Article 6, the principle of Equal opportunities between women and men: "The University shall guarantee equal opportunities between women and men in all areas of the University and the right to non-sexist treatment. It shall also promote a balanced presence in collegial bodies and staff recruitment committees."

- UPC has its third gender Equality plan: After the first and second equal opportunity plans, which covered the periods 2007-2011 and 2013-2015, respectively, the Universitat Politècnica de Catalunya (UPC) has the third Gender Equality Plan (GEP) covering the period 2016-2020. The aim of this plan is to continue promoting gender equality, focusing on 10 strategic lines drawn up following the recommendations of the Conference of European Schools for Advanced Engineering Education and Research (CESAER). The third GEP has been approved by the Governing Council in July 2016.
- UPC makes the gender situation visible by publishing some gender disaggregated data yearly and presenting them to the annual meeting of the University Senate;
- Career development policies (e.g. mobility, promotion) include some (although few) positive action: Over the years, actions have been carried out under the plans and various regulations have been approved that include some (although few) positive action in order to improve the gender equal opportunities.
- Related to the procedure for promotion to full professors, the Article 11 about Measures of gender equality (Agreement No.80 / 2017 of the Governing Council) regulating the UPC Chairs program stablishes that: "The university considers that it is necessary to offer opportunities for promotion to women, which at UPC have not yet achieved the most advanced positions of the academic career in the same proportion of their global participation". The measure that is applied in this program tries to alleviate the difference between the proportion of women with permanent linkage of the professional categories of grade B (e.g., associate professors) and those belonging to categories of grade A (e.g., full professors) and men who reach the same level.

Specifically, the algorithm used is the following:

- 1. The relationship between grade A and grade B male academic staff is calculated.
- 2. This same relationship is calculated for the female gender academic staff
- 3. If the ratio between the value obtained in step 1 and that obtained in step 2 is greater than 1.2, the global evaluations obtained by women will be multiplied by a factor greater than or equal to 1, until 35% of people who pass the program are women. This factor may not exceed 1.15 in any case
- 4. If the quotient between the value obtained in step 1 and that obtained in step 2 is less than 1.2, no evaluation will be modified.

The regulation for external mobility permits of academic staff 2018 (agreement no. CG / 2017/06/15 of the Governing Council) pay attention to gender equal opportunities. This regulation establishes that 3 extra points are given, in the case of women, and people with a disability greater than 33%.

 Some years ago, gender indicators were included in the strategic plans and in the setting of objectives and KPI of the academic units (departments, institutes, schools and faculties): During the years after the implementation of the first equality plan, all the academic units of the UPC had to elaborate its strategic plan, where gender indicators were included in the setting of objectives and key performance indicators (KPIs). A part of the annual budget of each unit depended on the results of the KPIs. This was a way to make visible the commitment of the institution to equality and to promote that gender perspective is incorporated in all policies at all levels and all stages. This measure is a reference but dissapeared few years ago and, also, the units could choose not to include it in their strategic plan (was not compulsory); it would be desirable that it continues in the coming years in order to achieve gender equality in the institution.

• UPC can take advantage of the fact that now there are some women in most UPC research fields and, hence, the number of women that could be part of the different making decision bodies is higher: The first female industrial engineer in Catalonia (and second in Spain) finishes her studies in UPC in 1949, and the second in 1963. Since the 1970's the number of women increases in almost every degree. In the past one of the main excuses for not nominate women in a committee was that there was not, but now, although few, they can be found in all areas and in most UPC research fields. The university can take advantage of this fact, and identify and propose women to be members of the different decision bodies and academic committees.

#### Weaknesses

- It does not exist the figure of Vice-Rector of Gender Equality (or Equal Opportunities); instead, this issue is always given, additionally, to a Vice-Rector whose core issues have not much relation to Gender Equality (for example, currently Gender Equality falls into the International Affaires Vice-rectorate).
- Decision making bodies are not gender balanced: As well as other technical universities, women are underrepresented in the student body and in their academic staff. The proportion of women in the undergraduate students is less than 26% (exactly 25.4% in the course 2016-17) and students 28% in master same course (https://gpag.upc.edu/lldades/indicador.asp?index=1 1 5, https://gpag.upc.edu/lldades/ indicador.asp?index=1 3 3). The proportion of women in the academic staff is rather low, 24.8% in global in 2016, but in some of the teaching areas is even less. Furthermore, the proportion of women decreases in higher categories (https://gpaq.upc.edu/lldades/ indicador.asp?index=3 1 1). This fact could be one of the reasons explaining the small percentage of women within the decision-making bodies of the University. However, other factors contribute to have a decision making bodies not gender balanced. The data shows that the proportion of women in most decision making bodies is short and below the one that would be necessary to be a critical mass (around 30% according to experts).
- In spite of what is said in the statutes, there is no supervision that the committees are gender balanced: Although the statutes propose a balanced presence in collegial bodies and staff recruitment committees, currently there is no supervision that this occurs. Therefore, there is a need to have a procedure that ensures that committees are gender balanced.
- There is no permanent observatory to systematically collect and analyze the data of the institution (e.g., composition of the collegial bodies) disaggregated by gender: One of the measures implemented in the first plan was the systematic collection of the main indicators by gender. These data are presented annually in the UPC Senate. However, this implies to have the information about staff and students disaggregated by gender. This is not enough. It is also necessary to have information on the composition of collegial and decision making bodies. Furthermore, there is a need to have a permanent observatory to systematically

collect and analyze the data of the institution disaggregated by gender, in order to measure the effectiveness of Equality plan actions. All information must be transparent and be available on the website of the UPC.

- The evolution of the data is not favorable; the proportion of women seems stagnant: As it has been mentioned, since 1970 the number of women in the student body of UPC has been increased over the years. In 1997, the UPC created a program named "Programa Dona" (Woman Program) offering a series of activities to secondary students, with the aim of increasing the number of women enrolled in its studies, especially in the engineering degrees. Since then, the proportion of female graduates increased in all cases except for computing science field. Nevertheless, the proportion of women seems stagnant in recent years. Likewise, the proportion of female graduates is very low compared with the proportion of women of all Spanish university graduates.
- More promotional measures are lacking for women to apply for high positions in the institution (e.g., coaching, mentoring). Reluctance of women to stand for high positions: According to research in this field, women in general are more reluctant to stand for high positions. Different factors cause this behavior, among others, low self-esteem and self-confidence, cultural and stereotype obstacles, difficulty in accessing networks of influence and engage in informal relationships, and difficulty to work-life balance. Therefore, it is necessary that the institution offers more work-life balance and promotional measures (such as coaching and mentoring programs), to enhance the presence of women in high positions, managing and representation bodies.
- Few women as directors or deans of all academic units (faculties, schools, departments and research institutes). Women occupy a second role as vice-deans or vice-directors: Even if women are involving themselves in decision making bodies, often they remain in a background, for example, acting as academic secretaries. The proportion of women that are director or dean of a center is 25% in 2017, and the proportion of women director of department is even smaller, 19% in 2017. Women are in greater proportion in a second line of authority, as academic secretary in center and department (38% and 27% respectively in 2017).
- The organizational culture is not favorable. Having few women in some groups (e.g., researchers), propitiate a male culture: The situation of women (both students and academic staff) in a technical university as the UPC is characterised by a male environment in most of their units (centers, departments and research institutes) and male dominated fields. Having few women in some groups propitiate a male culture and an invisibility and isolation (even marginalization) of women. Furthermore, this type of culture, based on stereotypes, encourages the existence of subtle discrimination, and differences in treatment.
- There is a lack of gender mainstreaming in decision making: The male dominated decision
  making bodies as well lack of sensitivity and training in gender issues of the decision makers,
  does not guarantee that the gender perspective is included in the decision making process.

#### Possible actions to improve procedures for *UPC*

- Analyse the possibility of including gender quota in some decision-making bodies.
- Check systematically the composition of the different decision-making bodies to guarantee that gender balance is achieved or, at least, considered.
- Include gender mainstreaming in all decision-making procedures. This means modifying the regulations of the different decision-making bodies to make the analysis of the gender dimension systematic.
- Develop and organize trainings for decision makers on gender bias and gender mainstreaming.
- Gather and monitor systematically the composition of decision-making bodies regarding gender balance; analyse the possibility of including some of these data in the gender equality website, within an observatory section.
- Design and develop actions for improving work-life balance so more women are willing to get involved in high positions of decision-making.
- Design and organize mentoring and/or coaching plans to empower women.

#### Detailed Analysis for RPO at PK

#### Current Situation about decision-making composition

The Senate consists of 60 members, including: Rector, Vice- Rectors, Deans, representatives of teachers, students, PhD candidates and administration workers. The Senate is responsible for appointing permanent and ad hoc committees. The task of these committees is to pass opinions and prepare materials for the Senate deliberations. The tables and figures presented below show the details of the current numbers of decision-making body members at different levels, with female members share.

The Senate and Commission at university Level:

	Term of office				
	2012-2016 2016-2020				
Number of members	60	60			
Male	48	46			
Female	12	14			
Share of female	20,0% 23,39				
Number of participants of Senate with					
advisory voice (Additionally)	13	13			
Male	10	12			
Female	3	1			
Share of female	23,1%	7,7%			

#### **Decisional bodies/offices**

Decis	sional body/office	Number		Percentage			
Level	Name	Female	Male	Total	Female	Male	Total
Linivorsity	Rector	0	1	1	0%	100%	100%
University	Vice-rector	0	4	4	0%	100%	100%
	Dean	0	7	7	0,0%	100%	100%
	Vice-dean	8	19	27	29,6%	70,4%	100%
Faculty	Head of institutes	4	32	38	10,5%	89,5%	100%
	Head of laboratory/chair/section	21	94	115	18,3%	81,7%	100%

Note: For more information about other bodies and offices, see Annex 1.

#### **Swot Analysis**

Strength	Weaknesses
<ul> <li>The number of women at management positions is increasing</li> <li>Legal framework that theoretically prevents discrimination</li> <li>Increase of inequality awerness among young women</li> <li>Existence of role models</li> </ul>	<ul> <li>Men-dominated groups make crucial decisions at the university level;</li> <li>Lack of visibility of achivements</li> <li>Stereotypes and cultural background</li> <li>Lack of awarness of equity issues</li> </ul>
Opportunities	Threats
<ul> <li>Enhancing and emphasizing the role of women in social, political, and cultural life as well as in science;</li> <li>The development, globalization of the economy and establishment of the headquarters of large corporations in Poland contributes to transfer of good practices in the field of equal participation of women in management;</li> <li>Various founding programmes are required in order to prove the equality politics implemented in research and management.</li> </ul>	<ul> <li>Present political situation supports antigender issues/movements;</li> <li>The need to fulfill dual social roles: carrying professional and family life;</li> <li>Family and school education that deepen stereotypes and inequalities;</li> <li>The reluctance of women to take managerial positions, expressed by both, women and men;</li> <li>A dismissive attitude to women in everyday life.</li> </ul>

#### Details of Strengths and Weaknesses

#### Strengths

- More and more women at lower management positions at Faculty level, women constitute 29,6% among Vice-Deans and 16,3% among lower level heads (Institutes or Sections). We have also observed a slight increase in the share of women in the structure of the Senate in former term, the share of women was 20%, currently (2016-2020) we can observe an increase by 3%. There is a rising awareness of women under-representation in higher positions at PK, and in decision making bodies. Additionally, Horizon2020 project states the problem of gender equity and equal treatment.
- Existence of role models we have some examples of women who have been successful in power positions in the past (eg. Former Dean in the Faculty of Environmental Engineering).
- Increasing awareness among women of equity related issues and willingness to achieve, implement changes. Women feel that they are the same as men and they have enough power to take responsibility at various levels of decision making bodies. They are educated,

- experienced, they have a sense of responsibility and vision of the future and of possible developments. Young girls decide to study in conscious way, as they know that the law supports equity and that they have the right to take the same engineering positions at work as men. At the university level they compete with men getting very good results as students. Young women do not want to follow the role of previous generation, they do not want to stay in the shade.
- Legal framework that prevents discrimination the most important document, the status, includes general statements ensuring equal treatment of different groups, men and women. Furthermore, the existence of the Senate Ethics Committee, which is responsible for handling complaints. Luckily, no issue has been discussed by the committee for the last two years.

#### Weaknesses

- Men-dominated groups make crucial decisions at the university level The top management consists of men only Rectors and Vice-Rectors are men. Also the Senate is highly men dominated (around 80% of the Senate members are men). Moreover, the people taking the highest university positions (Rector, Vice-Rectors) are perceived as inaccessible. There is no awareness of gender issues in the committees (e.g. relevance of gender content in curricular commissions) and hardly any knowledge of implicit bias (which can lead to biased recruitment process). Occasionally, there is a misunderstanding that only the committee on equal treatment is responsible for gender issues. Data published at PK, for internal use only, do not refer to gender issues, although the data that are submitted by PK to the national authorities indicate the participation of women in university structures. There are no regulations and measures that could clearly and strongly state that the under-representation of women should be eliminated from all university bodies, including decision-making bodies, created during election (by election).
- Lack of visible successes achieved by both women and men. Role models are not visible.
- Existence of the stereotypes that good, "true" engineer is HE not she. Women are tired and frustrated because they must constantly prove their ability to perform the same tasks as men, when asked about their ambitions and willingness to achieve higher levels in the university structure, they say "what is it all for".
- Managers deliver public speeches in which they express confidence that there is no problem
  of inequality or discrimination, because it is legally confirmed that both sexes are equal. Men
  who are in power of decision-making neglect the gender issue openly, advocating that we have
  equal rights so the better person is the winner. There is no awareness of gender issues among
  researchers and among women researchers as well.

#### Possible actions to improve procedures for PK

- Increase the visibility of women and their successes by means of several publicity forms at university and faculty levels — including GEECCO short reports periodically into internal magazines, VMS screens, presenting notes on glass-cases and organising occasional exhibitions during university events.
- Organizing meetings for students, in form of open-air picnic or concerts at university campus, an information action during which students may read newsletters, discuss about the gender and ethical issues with GEECCO representatives and with invited academics.
- Prepare and distribute the polish language brochure to enhance the awareness among researchers and other staff of the presence/share of women and man in the real structure of PK staff and student division.

- Discuss with Senate members the need to prepare changes/amendment to PK statutory documents to reflect the real structure of staff and students in any elected bodies.
- Develop and organize trainings for decision makers on gender bias and gender equality at PK
- Gather and monitor systematically the composition of decision-making bodies as for gender balance; analyse the possibility of including some of these data in the gender equality website; analyse the transparency of their decision making processes as well as data on diversity of staff and students structure, their achievements and publish these data in the website in the way that is easy to make comparisons and observe trends.
- Design and develop actions for improving work-life balance so more women are willing to get involved in high positions of decision-making.
- Organising trainings to encourage women to play decision-making roles and not only to work
  as secondary staff but as real partners who could be and should be responsible for essential
  problems.
- Arrange and organize mentoring and/or coaching plans to empower women and men toward their rights and unique skills and competences.
- Organizing meetings with rectors to create institutional, gender balance and trained in gender/diversity issue body, which would be responsible for equality issues in institutional structure and representation of academic and administrative staff and students and their right in gender issues and give opinions if the equality rights are treated according to national and university law.
- Negotiate the PK position of an independent (gender) observer at recruitment and appointment committees could weaken potential bias in discussions and decision making
- Organising trainings to encourage PK advisory boards to represent real gender balance structure of representatives.
- Empower women in Senate to ask for inclusion of gender mainstreaming in all decision-making procedures. This means modifying the regulations of the different decision-making bodies to make the analysis of the gender dimension systematic.
- Cooperate with PK organizations (students, researchers) to reach "quotas", and this opportunity should be amended in description of procedures beginning from lower staff positions and going up after every few year to create the proper institutional structure.

At the level of academic society (staff and students):

- encourage men to take responsibility for family care through trainings and workshops that raise awareness,
- reduce gender stereotypes among women and men on fields of study that are recommended for women, types of works that could be successfully played, management aspirations and ambitions among men and women, feature that are pros and cons for them
- accept and promote situation that both women and men represent different abilities, social
  competences, point of view that give special synergy aspects and added value in solving any
  scientific or organizational problem so any structural bodies and scientific teams gain in
  balance representation of both gender representatives,
- develop actions (presenting role-models from the other universities and international bodies) for improving work-life balance so more women are willing to get involved in high positions of decision-making.

#### ANNEX 1 – Some figures at PK

Statuatory Commisions								
	Number of members in total	Ma le	Fem ale	Share of Female	The chairman (M/F)			
Human Resources Development Committee	12	10	2	16,7%	M			
Committee for didactics	12	9	3	25,0%	M			
Commission for the economy,								
budget and finance	12	10	2	16,7%	M			
Statutory committee	12	10	2	16,7%	M			
Ethics committee	10	8	2	20,0%	M			
Konvent of dignity	4	4	0	0,0%	not applicable			
Commission for the quality of								
education	12	3	9	75,0%	F			

Rector Commissions							
	Number of	M	Fe	Ob and of	The		
	members in total	al e	mal e	Share of Female	chairman (M/F)		
Committee for Distinctions	14	14	0	0,0%	` '		
Award Committee for Academic Teachers	13	13	0	0,0%	М		
Committee for Health and Safety at Work	12	တ	3	25,0%	М		
					no		
					chairman		
Investment and Renovation Committee	12	9	3	25,0%	indicated		
					no		
Committee responsible for issuing applications					chairman		
for granting of seats in the PK Assistants' Home	5	2	3	60,0%	indicated		
Committee of awarding the Rector for the							
creation of e-courses on the PK	9	5	4	44,4%	M		

Rector Council	Number of members in total	M al e	Fe mal e	Share of Female
Consist of: Rector, vice rectors, deans, chancellor, quaestor and 4 members representing employees and students	18	16	2	11,1%

University Commissions								
	Number of members in total	Ma le	Fem ale	Share of Female	The chairman (M/F)			
University Inventory Commission	13	6	7	53,8%	M			
University Liquidation Commission	10	9	1	10,0%	M			
Company Social Benefits Committee	15	9	6	40,0%	M			
University Appeals Committee for Ph.D.	8	5	3	37,5%	М			
University Conciliation Commission	4	4	0	0,0%	no chairman indicated			
University Electoral Commission	10	7	3	30,0%	М			
University Commission on Technical Reviews of PK Objects	13	10	3	23,1%	F			

Disciplinary Commissions								
	Number of	Ma Fem		Share of	The chairman			
	members in total	le	ale	Female	(M/F)			
Disciplinary Commission for								
Students	10	8	2	20,0%	M			
Appeal Disciplinary Commission								
for Students	10	3	7	70,0%	M			
Disciplinary Committee for PhD								
Students	10	4	6	60,0%	F			
Appeal Disciplinary Committee for								
PhD Students	10	5	5	50,0%	F			
Disciplinary Committee for								
Academic Teachers	12	7	5	41,7%	F			