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Executive summary

This document corresponds to deliverable D10.3-2 V4 "Gender-action-plan report". It belongs to task 10.3 Establishment of European Competence Group, from work package 10, Exploitation and Dissemination.

This is the fourth and last update report on gender issues for VAN project and aims to show the progress achieved during last year by VAN partners towards reaching an acceptable participation of women inside the project, as well as giving an overview of the evolution all along these four years. The first version (D10.3-2 V1) was delivered three years ago and introduced the methodology and objectives, together with the situation regarding women participation inside VAN at that time.

After the introduction, chapter 2 gives an overview on the general outcomes from a recent conference held in Prague during last May. Then, chapter 3 presents some conclusions extracted from a recent report about equality between women and men, issued by the European Commission on February 2009.

Chapter 4 presents current data from VAN partnership and compares it with the information gathered last year, showing the related evolution. There's a special section at the end assessing the evolution of women participation along the whole duration of the project.

Finally, chapter 5 presents the main conclusions from the report.

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1 Introduction

Ten years ago, in 1999, an action plan on women and science was launched by the European Commission in order to start a strategy to promote research by, for and about women. This was done in co-operation with Member States and other key actors, and the approach was so successful that further steps have been taken till now.

To support this initiative, the Helsinki Group on Women and Science [HEL09] – which was also set up in 1999 – provided a framework for pooling national policy experiences and exchanging good practice. It has also set out a comprehensive strategy for longer-term co-operation.

Moreover, the Commission's 2001 Science and Society Action Plan [EC02] contains a series of actions – Actions 24 to 27 – targeted specifically at 'producing gender equality in science'.

As a result of the above set of actions, today we are commemorating the tenth anniversary of Europe's activities in the area of women and science. Along the last years research studies have been carried out to help us understand the situation; funding schemes have been put in place in many countries of Europe to help women progress up the academic ladder, to gain visibility or to attract them to areas of research where they are severely underrepresented. Shortly, a lot has been done at the European Union and member state level. However, we also need to acknowledge that a lot still has to be done.

Gender equality means putting men and women at the same level. Ideally, this would mean no specific positive measures towards women would need to be included in research agendas. However, given the substantial gender imbalance in the sciences – women make up half the student population, but hold only 15% of senior academic positions – it's clear that some measures need to be taken if we want to promote a gender equilibrium.

The current unbalance puts at risk Europe's target, as established in the context of Lisbon Treaty, to forge the world's leading knowledge-based economy. The EU is moving ahead to boost investment in R&D to 3% of its collective gross domestic product (GDP). This is likely to involve the creation of some 700 000 new research-related jobs by 2010 – which Europe will have trouble filling as long as half of its population remain sidelined in the S&T field.

Traditionally, research agendas have not taken the specific needs of women into account. However, if society is to develop a better understanding and acceptance of the developments in science and technology, specific measures must be taken to address both the under-representation of women in science, and the lack of attention paid to gender differences within research.

2 Main outcomes from the recent conference held in Prague (14th-15th May, 2009)

On the 14th and 15th of May 2009, a conference was held in Prague in cooperation with the Czech Presidency of the European Union (“Changing research landscapes to make the most of human potential”). This event offered an opportunity to highlight best practices adopted in EU and third country institutions, in attracting and keeping women and men in science and technology careers. During the conference such methods were discussed, and a number of gender awareness measures to modernize human resources management in research institutions were identified.

The modernization of universities and research institutions generally focuses on issues such as: autonomy, funding, accountability, partnership with businesses, quality of research, intellectual property rights, open access to research results, contribution to innovation, community engagement, etc. Among these, human resources management is often not included as one of the main topics - and gender issues are very rarely considered.

Gender bias is often the source of the most deeply set stereotypes, the majority of which are already acquired at school. This conference included discussions on possible measures at school level, taking into account the identification and elimination of old-fashioned regulations, teaching methods and teaching materials.

In the first-day's plenary session participants representing organizations from different countries showed their experiences and viewpoints. Janez Potočnik (European Commissioner for Research) gave a speech in which he introduced a description of the current situation, taking a look back along the latest 10 years.

It's clear things have changed in the sense that there has been a marked increase of women in paid work, together with an accompanying decrease in the proportion of men. The reason for this has been the shift in the type of jobs available – from manufacturing to service and knowledge based jobs – and the reduced demand for manual labour. Both facts have boosted female employment helping to improve the current unbalance between both sexes. Unfortunately this is not the general rule for all sectors of employment, and science and technology is not one of them. Despite the fact that 60% of all European university graduates are women, they just count for 19% of full professors in public research institutions. About 18% of the RTD workforce in the private sector is female, 29% in the public sector (Janez Potočnik's speech: http://ec.europa.eu/research/science-society/document_library/pdf_06/web2-potocnik_en.pdf).

We are in need of an integrated approach, which takes into consideration elements such as the promotion of equal pay, working conditions, career opportunities and vocational training for women and men, as well as facilities for childcare and for those in charge of looking after the elderly. This is tackled through the modernisation of human resource management and speakers from sessions taking place both days gave an overview on how their institutions are doing this, independently or following governmental input.

Pierre Bismuth, Schlumberger Ltd, presented the report [WIST09] from Women in Science and Technology (WiST). WIST is an international research project funded by the European Commission's 6th Framework Programme for Science and Society. The research covers an 18 months period and work began in September 2006.

For WIST project, the most serious concerns are, on the one hand, the so-called leaky pipeline, which describes the continuous exit of women from Science and Technology (S&T) (Figure 1) and on the other hand, the scissors (Figure 2). This one represents the different career tracks of men and women. A larger percentage of men than women reach the upper levels of academia and similarly for management. Unfortunately, they are accurate representations of gender diversity in S&T.

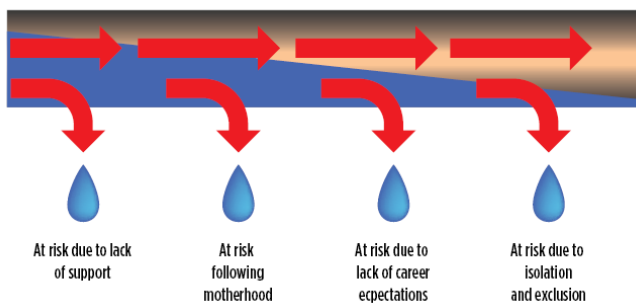


Figure 1. Leaky pipeline (source [WIST09])

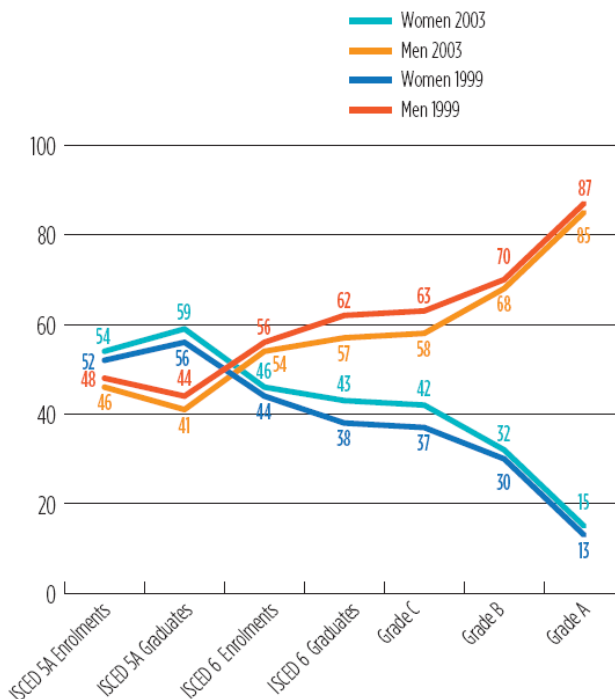


Figure 2. Scissors diagram (source: Eurostat Education data; DG Research, WiS database seniority grades)

Women represent a competitive reservoir of talents, and both men and women share the same ambition to succeed in their professional and personal life. CEOs understand this, and therefore know that the current situation does not make business sense – it is a waste of efforts and motivation for all. The obvious response to this problem is to improve the work life balance (WLB) for both men and women, in line with their needs and work requirements.

Flexible time is one of the classic examples of a WLB policy, but if S&T companies and universities do not manage the relationship between flexible time, workload and career, it is not going to work. If we don't manage it, flexible time will become a negative factor for the career of those who use it – so far, mostly women. If we do not control workload, flexible time will not contribute to work life balance.

The underlying culture in S&T companies and universities tends to marginalize those who use WLB policies. Ideally, these policies should address the needs of men and women at the time where personal life and work requirements conflict, typically when individuals start families. Too often it seems that the transition into career breaks is not adequately managed– or the transition back to work – with a sincere desire to protect the individual's career, or indeed the investment made by the company in that person's professional development. There is also a concern that WLB policies are not designed with the most promising, talented individuals in mind. Instead, the high performers are encouraged to avoid these tracks. Again, business-wise, it does not make sense. WLB policies should be at the forefront of every effort to retain the most talented employees.

Above all there's still the perception that S&T is a "man's world". The research on the images promoted by companies on men and women at work in S&T shows how much clichés and stereotypes are being fed. The tendency is to show men deciding and on top of operations and women part of the working environment.

3 Conclusions from recent report on equality between women and men (2009)

The European Commission reports to the European Council about the progress achieved in the field of gender equality in a yearly basis. It also proposes challenges and priorities for the future and this time we are facing an economic crisis with major consequences for households and the economy at large. In such circumstances we can't avoid overlooking certain policy areas that are adequately taken into account in normal times. However, we should invest in equality between women and men more than ever in order to get long-term benefits.

To achieve any further progress towards gender equality it is mandatory to profit from both women and men's skills and capabilities. Currently women still face more difficulties than men in balancing work and family life. Leave arrangements for both parents need to be improved and childcare services expanded, but men also need to take on a greater share of family responsibilities. In 2008 the Commission proposed to improve maternity leave and the situation of self-employed women, and the European social partners started negotiations on other family-related leave. However, such measures need to be accompanied by a change of mentality and the dismantling of outdated stereotypes about the roles and abilities of women and men.

3.1 Gender differences

Overall EU objectives of growth, employment and social cohesion will only be successfully fulfilled if differences between women and men are eliminated.

Women have more chances to be affected by the economic downturn on the labor market because they get most of the precarious jobs based on short-term contracts. Therefore, it is fundamental to pursue and reinforce gender mainstreaming in the area of employment and social policies, and to continue efforts to remove barriers to women's and men's full participation in the labor market.

The Lisbon objective, regarding female employment, was fixed in 60% by 2010. Now we are close to achieving it, as there has been an increase from 51.1% in 1997 to 58.3% in 2007. However, we must realize there are major differences between Member States, with figures varying from 36.9% to 73.2%. The average gap in employment rates between women and men is narrowing, and fell from 17.1 percentage points in 2000 to 14.2 points in 2007. But when analyzing the employment rate of women and men with children under 12 to care for, this gender gap is almost doubled. Also, the employment rate of women falls by 12.4 points when they have children, but it rises by 7.3 points for men with children reflecting the unequal sharing of care responsibilities and the lack of childcare facilities and work-life balance policies.

The percentage of employed women working part-time was 31.2% in 2007, four times higher than for men. Although part-time and other flexible working arrangements may reflect personal preferences, the unequal share of domestic and family responsibilities leads more women than men to opt for such arrangements. In the EU more than 6 million women in the 25 to 49 age group say they have no choice but not to work or to work only part-time because of their family responsibilities [EUR06].

Women have also made progress in education: they accounted for 58.9% of university degrees in the EU in 2006 (56.7% in 2004). However, gender differences remain as regards the fields of study, especially in engineering (18% female graduates) and computing (20%), while women predominate in business, administration and law (60%). Women are still lagging behind men in the use of new technologies and have difficulties in accessing more specialist ICT-related jobs.

One of the consequences of gender segregation on the labor market is the persisting gender pay gap (17.4% on average in the EU¹), partly due to the fact that women are concentrated in less valued jobs and positions than men. Due to the fact that women are more likely to work part-time and interrupt their career for family reasons, they are likely to face negative consequences in terms of pay, career advancement and accumulated pension rights. This also has an impact on the risk of falling into poverty, especially for single parents, who in most cases are women (the at-risk-of-poverty rate is 32%), and for women over 65 (the at-risk-of-poverty rate is 21%, i.e. 5 points higher than for men). Women are also more at risk in times of rising unemployment since they are more often on fixed-term contracts than men (15% compared with 13.9%). Despite the fact that more and more women are highly qualified and the labor market participation of women is on the increase, they are still largely outnumbered by men in positions of responsibility in politics and business, particularly at the top level. The number of female managers in the EU has remained stable over the last few years, averaging 30%, and figures are even lower in a majority of Member States. The proportion of women directors of top quoted company boards is 3% across the EU, while one in ten company board members is a woman. There are no female governors of the national Central Banks in the EU, while they account for only 16% of the highest decision making bodies of these institutions. This is paradoxical when female students outnumber male in business, administration and law. In politics, there have been positive developments in most EU countries over the last decade, but progress is slow and overall figures remain low. The average share of women members of national parliaments increased from 16% to 24% between 1997 and 2008, but national figures range from 9% to 46%. Eleven Member States are above 30%, which is deemed to be the minimum level necessary for women to exert meaningful influence on politics. In national governments, one out of four senior ministers is a woman, but variations between Member States range from zero to 60% female ministers. There has been some progress within the European Institutions, but women are still underrepresented in top positions. Only three out of ten members of the European Parliament are women [EC09].

3.2 Related policies and legislations

Several measures have been put into practice in order to achieve gender equality. One of the main initiatives adopted by the EC in 2008 was the adoption of several measures aiming at supporting better work life Balance [COM08a]. One of the proposals comprising them was related to the amendment of Directive 92/85/EEC on maternity protection [COM08c]. The main changes proposed include increasing the minimum maternity leave from 14 to 18 weeks, in principle without loss of earnings. The Commission also proposed to strengthen the provisions of Directive 86/613/EEC [COM08b] for self-employed workers and 'assisting spouses' in family businesses. A Commission report [COM08d] has reviewed progress in developing childcare facilities in Member States, concluding that most Member States will not meet the Barcelona targets by 2010.

Following a two-stage consultation launched by the Commission, negotiations on family-related leave other than maternity leave have been started by the social partners.

Cooperation between Member States continued within the *European Alliance for Families*, which provides a platform at EU level for discussion between Member States on family policies and work-life reconciliation issues.

Most Member States have recognized the importance of reconciliation policies in terms of responding to economic and demographic challenges. Several measures have been introduced, including wider availability of childcare services (Germany, the United Kingdom and the Netherlands), better leave arrangements specially for fathers (Sweden, Germany, Greece, Lithuania and Spain) and awareness raising about the role of fathers (Slovenia).

¹ Eurostat, 2007 (figure based on a new harmonised EU-source) – see statistical annex (SEC(2009) 165)

The Commission continued to collect comparable data at EU level on women and men in decision-making, and a recent report confirmed that women remain strongly underrepresented despite positive developments. Several Member States have implemented measures to promote a better gender balance in leadership positions (e.g. Spain, Finland, France, Portugal, Austria, Denmark, Poland and Cyprus). An EU network to promote women in economic and political decision-making positions was launched in 2008 to provide a platform for exchange of good practices between existing networks at EU level.

The equal participation of women and men in political decision-making was a priority topic under the Slovenian Presidency, as part of the follow-up to the Beijing Platform for Action. In June 2008 the Council of Ministers adopted conclusions on women in political decision-making, and on eliminating gender stereotypes in society; this was a priority theme of the Trio Presidency programme (Germany, Portugal and Slovenia). At the end of 2007 the Commission launched a training and awareness-raising initiative aiming to inform companies, particularly small and medium-sized enterprises, of the benefits of tackling gender stereotypes. It also runs a campaign to attract young girls and retain women in ICT-related professions.

EU legislation on equal treatment between women and men is also contributing to progress in this field. In 2008 the Commission closely monitored the implementation of Directives 2002/73/EC² and 2004/113/EC³ and took the necessary steps to verify the timely and correct transposition of these directives in the Member States.

The Commission engaged infringement proceedings against a certain number of Member States for incorrect transposition of Directive 2002/73/EC and 20 procedures remain open. For Directive 2004/113/EC, infringement proceedings for non-communication of national transposing measure were initiated against twelve Member States, seven of which are still open at the end of 2008.

The Commission is also in the process of reviewing the adequacy of EU current legislation on equal pay to tackle the gender pay gap, in line with the 2007 Communication [COM07], and it has launched a campaign to raise awareness on the gender pay gap. Several Member States have addressed the gender pay gap through specific initiatives, for instance in the UK (gender duty on public authorities and Women and Work Commission), France (inclusion in wage bargaining at social partners' level), Finland (national equal pay strategy), Sweden (compulsory annual plan of action for equal pay for all companies with at least ten employees) and Belgium (annual reporting and introduction of gender-friendly job evaluation systems).

The European Institute for Gender Equality is in the process of being set up. Once up and running, the Institute will provide new technical assistance to the Community institutions and the Member States.

² Directive 2002/73/EC amending Directive 76/207/EEC on the implementation of the principle of equal treatment for men and women as regards access to employment, vocational training and promotion, and working conditions.

³ Directive 2004/113/EC implementing the principle of equal treatment between men and women in the access to and supply of goods and services.

4 Analysis on data collected from VAN partners

The contents of this chapter comprise first an analysis on data collected along the latest year. This has been performed similarly to the way it was done for the previous reports, following the usual procedure (check annex from D10.3-2 V1 to see the related questionnaire). The Gender Action Plan structure is described in the Technical Annex of this project.

As this is the last report on gender issues delivered by VAN consortium, a special section at the end of this chapter will give an overview on the evolution of women participation all along the project.

4.1 Workforce statistics

Figures 3.1 and 3.2 show the display of women and men regarding their function inside VAN project.

The overall participation of women reaches 17% (one point higher than last year). Tables 3.1 and 3.2 show the same information considering the evolution from last year. Actual figures and percentages are shown too.

First of all, we can appreciate a decrease in the whole participation, mainly due to the fact that the project is going through its final year and some tasks have already finished. Therefore, fewer personnel are needed. Actually, there is a woman and ten men leaving the project.

Regarding women, this decrease affects the category “Others”; the rest keep the same.

With respect to men, the main changes takes place inside “Early researcher” and “Experienced researcher”, and just a few of them are getting promoted inside “Scientific team leader / work package manager”.

In general terms, we can conclude that top positions don’t suffer significant changes.

Display of women in the project according to the function

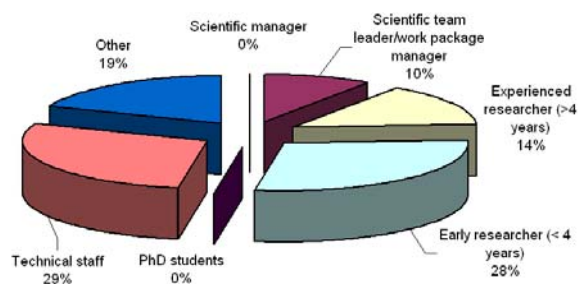


Figure 3.1 Display of women

Display of men in the project according to the function

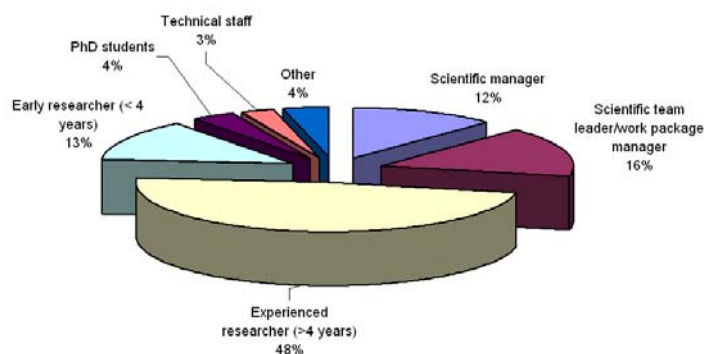


Figure 3.2 Display of men

	Women (Year 2008)	Women (Year 2009)	Men (Year 2008)	Men (Year 2009)
Scientific manager	0	0	13	13
Scientific team leader/work package manager	2	2	15	17
Experienced researcher (> 4 years)	3	3	54	51
Early researcher (< 4 years)	6	6	22	14
PhD students	0	0	3	4
Technical staff	6	6	3	3
Others	5	4	2	0
Total	22 (16,4%)	21 (17%)	112 (83,6%)	102 (82,9%)

Table 3.1 Evolution from last year in actual figures

	Women (Year 2008)	Women (Year 2009)	Men (Year 2008)	Men (Year 2009)
Scientific manager	0%	0%	12%	13%
Scientific team leader/work package manager	9%	10%	13%	17%
Experienced researcher (> 4 years)	14%	14%	47%	50%
Early researcher (< 4 years)	27%	29%	20%	14%
PhD students	0%	0%	3%	4%
Technical staff	27%	28%	3%	3%
Others	23%	19%	2%	0%

Table 3.2 Evolution from last year in percentage

When directly comparing the number of men and women within each category, we get the results shown in figure 3.3.

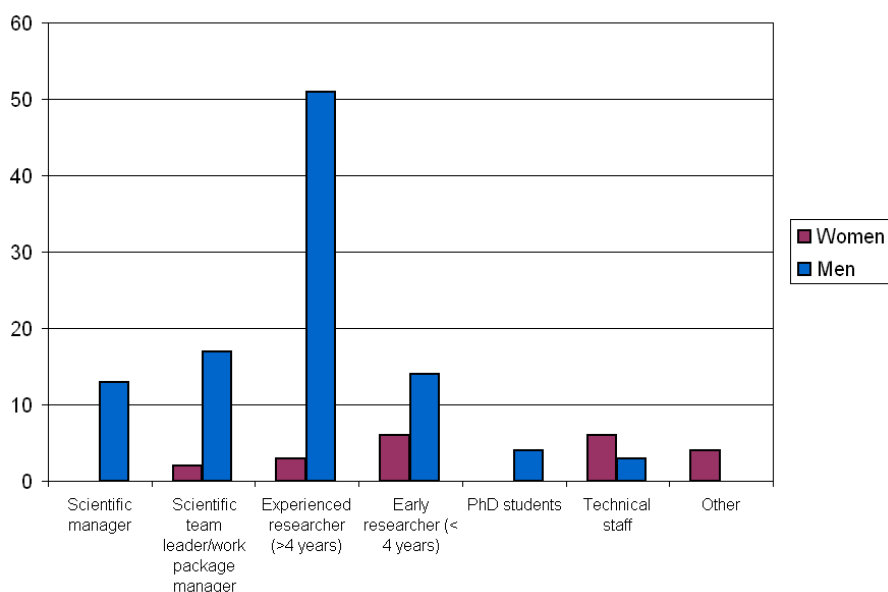


Figure 3.3 Comparison between women and men according to the different categories.

4.2 Taking special action to bring more women into the project

4.2.1 Recruitment

Merit-based open recruitments are commonly applied among VAN partners. Moreover, men and women usually have the same opportunities. That is, the recruitment process is carried out without any gender consideration. However, there are some special cases worth to be mentioned.

For **Siemens AG**, coordinator of the project, merits and skills are even the most important trigger for the recruitment of staff. In case of two people having the same merits and skills for a job, women and disabled people are preferred.

For **Otto von Guericke University of Magdeburg**, the application of merit-based open recruitment is the basis of employment. This is particularly accentuated through the woman promoting law in Saxony-Anhalt

Forschungszentrum Karlsruhe GmbH encourages women to apply in all job announcements and in case of same qualification, women are preferred.

Phoenix Contact Electronics GmbH is open to engage men as well as women in qualified positions. The company puts high emphasis on actions to keep men / women in business and 34% of the staff at the headquarters is female. Women are employed as engineers, product and sales managers, as well as other management functions. Further on, women are employed as skilled workers and office assistants.

37,7% of staff in **CARTIF** are women. Though no specific measures are taken to encourage women to apply for posts inside the organization, both women and men share the same opportunities and get equivalent posts.

Fidia S.p.A. applies procedures based on previous working experience or academic record (for people with no previous job experience) and, most important, the result of aptitude tests.

Politecnico di Milano applies public open contests.

Brno University of Technology, most often researchers grow from PhD students. PhD students are engaged based on detailed pre-knowledge of the PhD tutor regarding the student's scientific orientation. Therefore, those applicants for PhD studies are engaged who best fit a certain research group.

For **Institut fuer Automation und Kommunikation e.V. Magdeburg**, merits and skills are the trigger for the recruitment of staff, irrespective of gender.

4.2.2 Promotions

Promotions on both men and women are performed differently by VAN partners. Some of them carry out staff review systems, though this is not the general rule.

Siemens AG, once a year board and group managers of the unit SIMATIC NET meet with the personnel department to talk about salaries, promotions and special career advancements. There, women and men are dealt with simultaneously and equally.

Schneider Electric GmbH, carries out yearly staff review with decisions for promotions.

Fidia S.p.A and **CARTIF**, the team manager makes recommendations on promotions and then the company manager is the one to take the final decision.

Forschungszentrum Karlsruhe GmbH, The institutes of the FZK perform staff reviews in order to support the education from new personnel to leader positions in the organisation.

Italian partners (**Machining Centers Manufacturing S.P.A** and **Politecnico di Milano**) apply Italian law concerning promotions on staff.

Institut fuer Automation und Kommunikation e.V. Magdeburg applies yearly staff reviews with discussion on both sides establishing targets. Whenever considered relevant, there are promotion opportunities.

4.3 Promoting an attractive work environment

Most partners give maternity and paternity leaves, usually applying national law.

Maternity and paternity leaves related policies are integrated in the German law (Bundeserziehungsgeldgesetz (BerzG)). There's a law called "Bundeselterngeld- und Elternzeitgesetzes (BEEG)" according to which it is possible for both parents to take a paternity leave

for a maximum of three years. This can be divided among the parents individually. Until the 12th month this leave is paid. After that, it's unpaid, but with the right of reemployment. There exists also a special maternity leave from six weeks before to eight weeks after the birth, especially for the mother, according to the German "Mutterschutzgesetz" – MuSchG.

As regards childcare facilities, only **Politecnico di Milano** and **Forschungszentrum Karlsruhe GmbH** have them.

Concerning emergency leaves for caring for sick family members, about 50% of the partners apply this measure. National laws are also applied. In this sense, German law (5. Sozialgesetzbuch (SGB V) and BAT-O resp. MTArb-O) establishes 20 work days per year for each child. It is a specific labour agreement for public employees.

Otto von Guericke University of Magdeburg. Kindergartens are placed in the surroundings of the university. Additionally, a diaper-changing room has been opened at the medical faculty. Furthermore, the university cooperates with the local flat building cooperative "Otto-von-Guericke", in a way that studying parents can rent flats with a special discount. The working group for job and family currently leads a study about studying with a child and they discuss about the possibilities to open an own university-kindergarten. According to the law, to assist children (Kinderförderungsgesetz – KiFöG) of Saxony-Anhalt, every child up to its seventh year has the right for a full-time or part-time children attendance, according to the needs of the family.

Regarding emergency leaves for sick family members, German law is applied in the first place, but also an unpaid vacation is possible if needed.

The University of Magdeburg got a certificate of an audit for a family friendly college from the Hertie foundation. There are baby change rooms available with appropriate fitments.

CARTIF doesn't have child care facilities of its own, but there is a nursery in Boecillo Technology Park, where CARTIF is located. There are people from this organization currently taking advantage of this service. Current Spanish law allows fathers to enjoy a fifteen days paternity leave, as well as economic aids.

Phoenix Contact Electronics GmbH puts high emphasis on actions to keep men / women in business and to install measures to have a work-life- and business-family-balance.

Aucoteam, individual agreements can be reached for subsidised child-care costs and emergency leave for caring for sick family, if necessary. An alternative is the development of real good project team structures.

Institut fuer Automation und Kommunikation e.V. Magdeburg has no need of own child care facilities since the communities offer sufficient ones. Childcare costs are subsidised by the German state.

Forschungszentrum Karlsruhe GmbH, there are day care facilities for children from 2 months up to 6 years. There is a possibility of doing flexible work time or half time jobs.

4.4 Flexible work schedules

Concerning the possibility of applying tele-working, tele-conference or video-conference, most of the partners enjoy these possibilities and others, but for some of them it is only possible in special situations and not entire tele-working places.

Siemens AG gives their staff the possibility of using as well remote access via WLAN, UMTS, GPRS etc. to the company network.

Phoenix Contact Electronics GmbH has totally flexible work schedules installed since 2000. Tele-working and part-time-working have been in action for the last years.

AUCOTEAM GmbH and **Forschungszentrum Karlsruhe GmbH** apply flexible work time models.

For **Institut fuer Automation und Kommunikation e.V. Magdeburg**, teleworking is possible under special circumstances. Within the flexible work schedule it is strived to keep the daily core working

time from 9am to 3pm if possible. Teleconferences are possible and remote e-mail and network server access is applied for every employee.

4.5 Linking with networks of women scientists in the field of the project

This practice has not been usual among VAN partners along the latest years.

In **Otto von Guericke University of Magdeburg**, within the VAN project there are no special networks established for women, but within the faculty and university there are several programmes for the motivation of young women to take jobs in science. Furthermore, there are programmes funded by the local public service to support women achieving a PhD with a scholarship.

<http://www.sachsen-anhalt.de/LPSA/index.php?id=3623>

<http://www.double-step.de/>

AUCOTEAM GmbH takes part in the network of women scientists organized by the Senat of Berlin. The aim of this network is to guarantee the safety and security of computer based solutions in production and management systems using the VAN-components.

4.6 Linking with schools and universities to trigger the interest of women in the project

Siemens AG. There is a special person who is responsible for contacts with schools and universities, also taking care of this issue.

Together with the university of applied sciences in Berlin, **AUCOTEAM GmbH** will establish a new curriculum women students in the field of process control. The aim of this curriculum is to create a course of academic education with emphasis on:

- Central energy and operation management for essential industries
- Control and monitoring virtual power stations using virtual automation networks
- Mathematical modelling of technological systems
- Mobile components for control systems
- Safety, security and real time in public network based control systems
- Knowledge based components
- Teleworking and Telecontrol

Otto von Guericke University of Magdeburg. Each year there is a children lecturer day held for pre school children. There is a special open door day each year for pupils where women interests are considered. In lectures the interest of women are especially encouraged, especially to apply for diploma, praktica and student jobs which this organization offers.

CARTIF, as a research centre, has a strong relationship with Valladolid University, though there aren't special measures to specifically trigger the interest of women over men. Both are treated equally.

Forschungszentrum Karlsruhe GmbH has links with schools and universities already established, working towards triggering the interest of women.

Phoenix Contact Electronics GmbH. In order to get more female apprentices and female engineers, as well as to encourage young women to study engineering sciences, a special event organized by Phoenix Contact was installed in 2004 and takes place regularly every year: "Womenpower 2004/2005/2006". It is an information event open for pupils, students, young women, as well as parents and teachers to get a live impression how fascinating the world of electro technique and automation is.

Institut fuer Automation und Kommunikation e.V. Magdeburg, there is a close link to the university of Magdeburg. Many male and female employees start as student apprentice or write their diploma thesis at the Institute. Also pupils use the opportunity to make a practical training. Furthermore, they have also done and fostered guided visits at their Institute of e.g. kindergarten groups (boys and girls) to wake up interest for automation related topics. Also, they are actively participating in public events as e.g. the scientific year or scientific night of Magdeburg.

4.7 Gender assessment along the whole project

The first report belonging to this series of updates on gender issues for VAN project presented the methodology proposed by the consortium in order to promote the participation of women inside all our organizations in general and in VAN project in particular.

All along the project we've been assessing women involvement and trying to enhance it through a set of measures generally encouraged by national laws. Now we are approaching the end of the project and are in a position to evaluate if we have improved our initial situation.

If we take a look at general participation percentages (total amount of men and women along the four years) we come to the conclusion that the proportion of women to that of men has always been extremely inferior, though some improvement has been reached from the initial 11.11% to the final 17.07% (see figure 4.1).

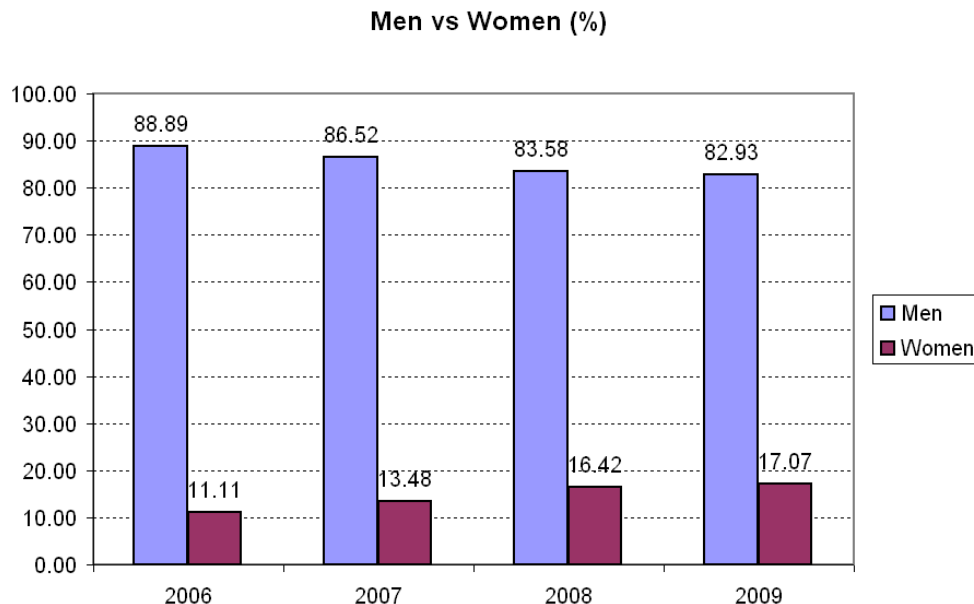


Figure 4.1 Participation of men and women in percentage along the four years of VAN project

If we go into detail analyzing the different functions, we realize that top positions (scientific manager, scientific team leader, experienced researcher), are held by men most of the times. In our project there has never been a female scientific manager, and very few have been scientific team leaders or experienced researchers (see figures 4.2 and 4.3).

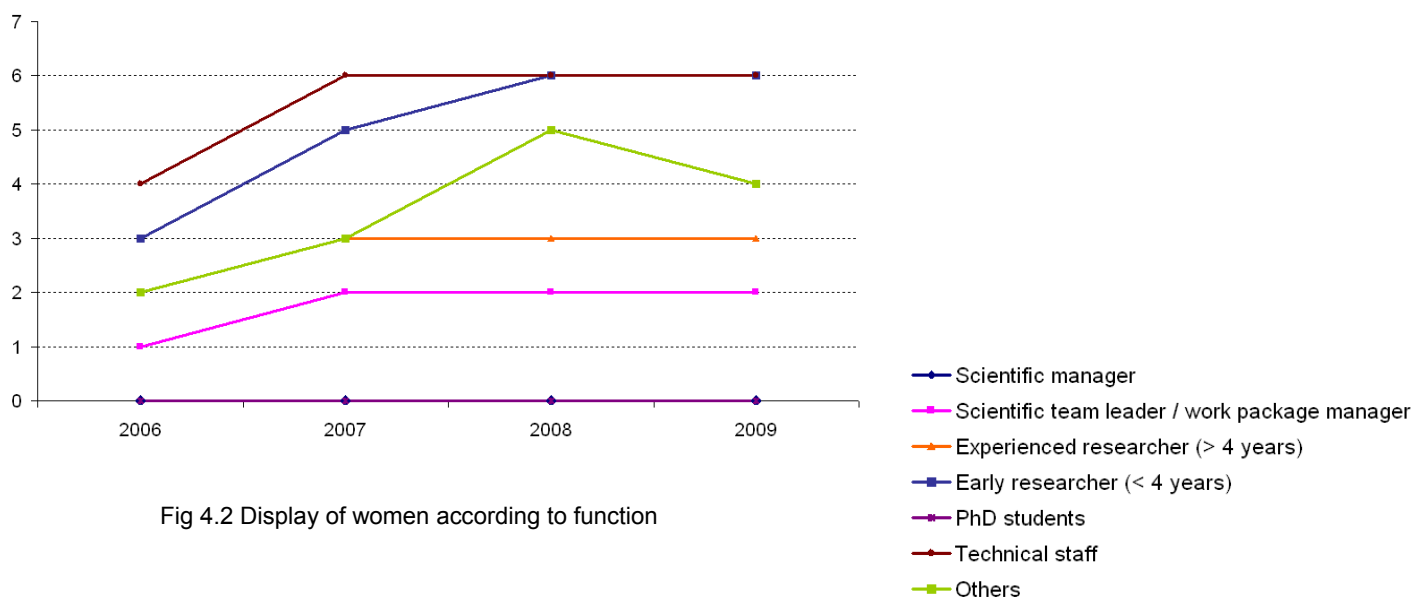


Fig 4.2 Display of women according to function

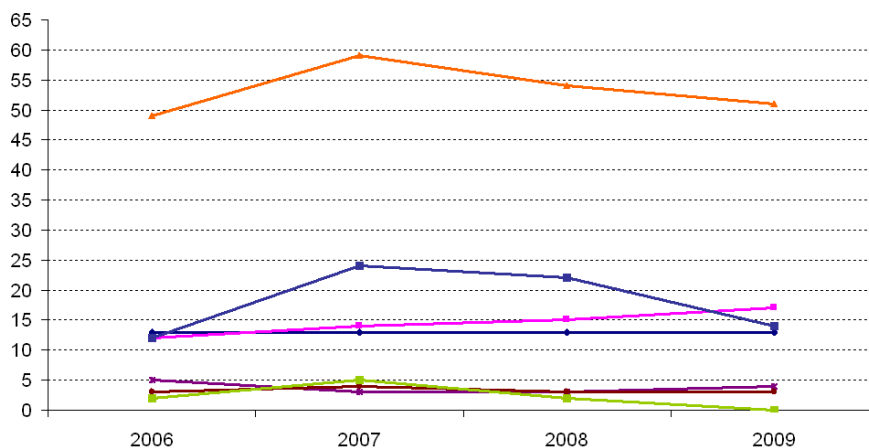


Fig 4.3 Display of men according to function

Regarding the actions taken in order to promote the participation of women, we have considered recruitments and promotions, and inside VAN both are applied quite equally to men and women. This means no special differences are made, but for their qualifications and previous experience.

More proactive are the actions taken towards facilitating an attractive work environment or giving flexible work schedules. Nowadays it's really difficult for most parents to reconcile professional and familiar duties. That's the reason why measures like maternity / paternity leaves, childcare facilities or special leaves for caring for sick relatives are really helping to overcome such difficulty. The same applies to flexibility in terms of work schedules. VAN partnership provides their employees with the possibility of tele-working, tele-conference or video-conference.

Last but not least, we must mention the efforts made towards linking with networks of women scientists, schools and universities in order to call the attention of women towards VAN project. Special actions like programmes, scholarships, lectures, etc, aiming at encouraging the presence of women in science, are being run by VAN partners.

5 Conclusions

- Along the whole project several actions have been put in practice by VAN partners in order to promote the participation of women in science in general and in VAN project in particular. Among them there are programmes for the motivation of young women to take jobs in science, the participation in networks of women scientists, or the organization of special events aiming to promote the interest of women in science. These actions have been growing all along the project and constitute a proactive measure to ease the rapprochement of women to science.
- The proportion of women has increased from the beginning, starting with an 11.1 % and ending with a 17.1%.
- Merit-based open recruitments are widely used through the consortium. This means that men and women generally are given the same opportunities when applying for a post. Though this is a fair practice, women are not preferred over men.
- Promotions on both men and women are performed differently by VAN partners, sometimes by means of staff review systems. Women are not treated differently in this sense.
- Maternity / paternity leaves are given by most partners, usually applying national law. Emergency leaves for caring for sick family members are given to their staff by around 50% of the partners.
- Flexible work schedules are commonly used among VAN partners. Tele-working, tele-conferences or video-conferences are available for most of them, though only for specific situations in general, and not entire tele-working places.
- Better reconciliation of work and private life for both women and men is essential not only to achieve gender equality, but also to reach the Lisbon objectives. The development of affordable and quality childcare facilities is vital for enabling both parents to combine work and family life. To meet the targets set by Member States for the development of childcare facilities, the so-called Barcelona objectives, a lot remains to be done to achieve satisfactory levels of childcare provision, particularly for children under 3 years of age. Reconciliation policies are also important in terms of responding to the demographic challenges. The Member States with the highest birth rates are currently those which have also done the most to improve work-life balance for parents, and which have a high rate of female employment.
- Women's high level of education is not directly reflected in the positions they hold in the labor market. Women are mainly working in 'feminised' sectors and professions and remain in lower job categories with less access to senior positions. Occupational and sectoral segregation has remained almost unchanged in most Member States over the last few years, indicating that the increase in female employment has taken place in sectors already dominated by women. A better gender balance across studies and occupations could contribute to meeting future skills and labor market needs.

Glossary

CEO	Chief Executive Officer
EU	European Union
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
PhD	Doctor of Philosophy
R&D	Research and Development
RTD	Research and Technological Development
S&T	Science and Technology
UK	United Kingdom
VAN	Virtual Automation Networks
WLB	Work Life Balance

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