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© Partner organisations and committee of experts in the project Tackling Stereotypes

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To download further copies of this report please visit the tackling stereotypes website: www.tackling-stereotypes.org

Barcelona, January 2006

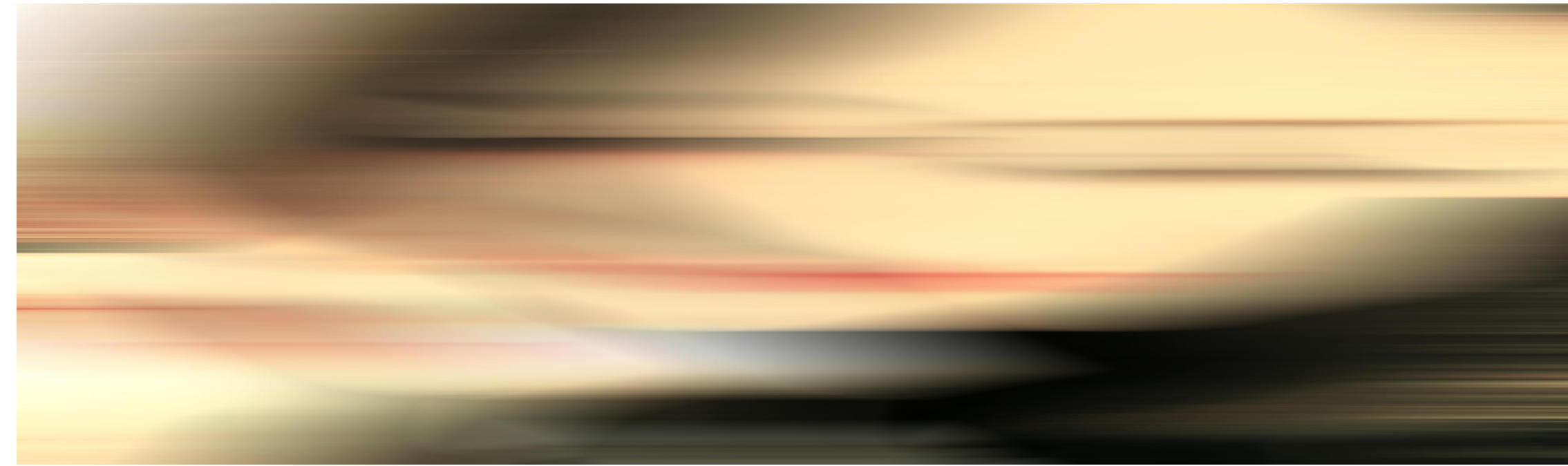


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Don't be afraid to show your true colours.
Your true colours are beautiful - like a rainbow.

cindi lauper - true colours



European **guide for change agents**
how to tackle gender and SET stereotypes



Tackling Stereotypes: Maximising the potential of women in SET project

FOREWARD

“Achieving equal and full participation of women in all scientific disciplines and at all levels will enhance diversity, and promote further progress and excellence in European science. Achieving such a real and lasting change will go beyond women currently working in science, or aspiring to work in science, to help create a more inclusive European scientific research area, for the benefit of the economy and society as a whole.”

European Commission. Women and Science. 2005

Promoting organisation:

WiTEC - European Association for Women in Science, Engineering and Technology e.V.

In partnership with:

Universitat Politècnica de Catalunya - **Spain**

Inova Consultancy - **UK**

Technikon - **Austria**

University of Tartu - **Estonia**

SPPI - Diputació de Barcelona - **Spain**

Gender-Institut Sachsen-Anhalt (G/I/S/A) - **Germany**

University of Halmstad - **Sweden**

EDEM - **Greece**

VHTO - **The Netherlands**

BME - **Hungary**

WHAT'S IN THIS GUIDE

1: Introduction

2: Main stereotypes regarding women and professions in SET

- some barriers for the recruitment, retention and promotion of women in SET as a result of stereotypes
- the impact of stereotypes on women's education and career

3: The impact of stereotypes

- career choice
- career perspective
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4: Tackling stereotypes: proposals for interventions

5: Synthesis of good practice

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1: INTRODUCTION

Tackling Stereotypes: maximising the potential of women in SET is a European project financed by the European Commission as part of the V Strategic Action Programme for Equal Opportunities among Men and Women 2001-2005. The project has been promoted by WiTEC - European Association for Women in Science, Engineering and Technology in partnership with organisations in nine European countries.

WiTEC is a non-profit European association with more than eighteen years experience in developing a variety of projects with European partners relating to women in SET (Science, Engineering and Technology).

WiTEC aims are:

- to increase the number of girls and women studying SET subjects and help them progress to related careers;
- to develop women's technical and entrepreneurial skills through training initiatives and projects;
- to create information exchanges and networking opportunities for women in SET;
- to promote and support research into areas relating to women in SET;
- to support initiatives promoting the Gender Mainstreaming Policy;
- to promote regional, national and international awareness and interest in this field.

In all European countries women are under-represented in technical studies and SET professions. In most European countries, the number of female graduates overall is proportionately higher than that of male graduates. However, the scientific labour market remains male-dominated and women are significantly under-represented in scientific and engineering disciplines.

Statistics show that women:

- have great difficulty finding employment in science and technology jobs;
- receive fewer promotions;
- receive lower salaries, and
- have less access to management positions and decision-making bodies.

Gender stereotypes act as barriers, through their negative impact on recruitment, retention and promotion of women in science and technology sectors and occupations.

The project Tackling Stereotypes will address two main areas with regard to women in SET:

- women in academia** and
- women in business.**

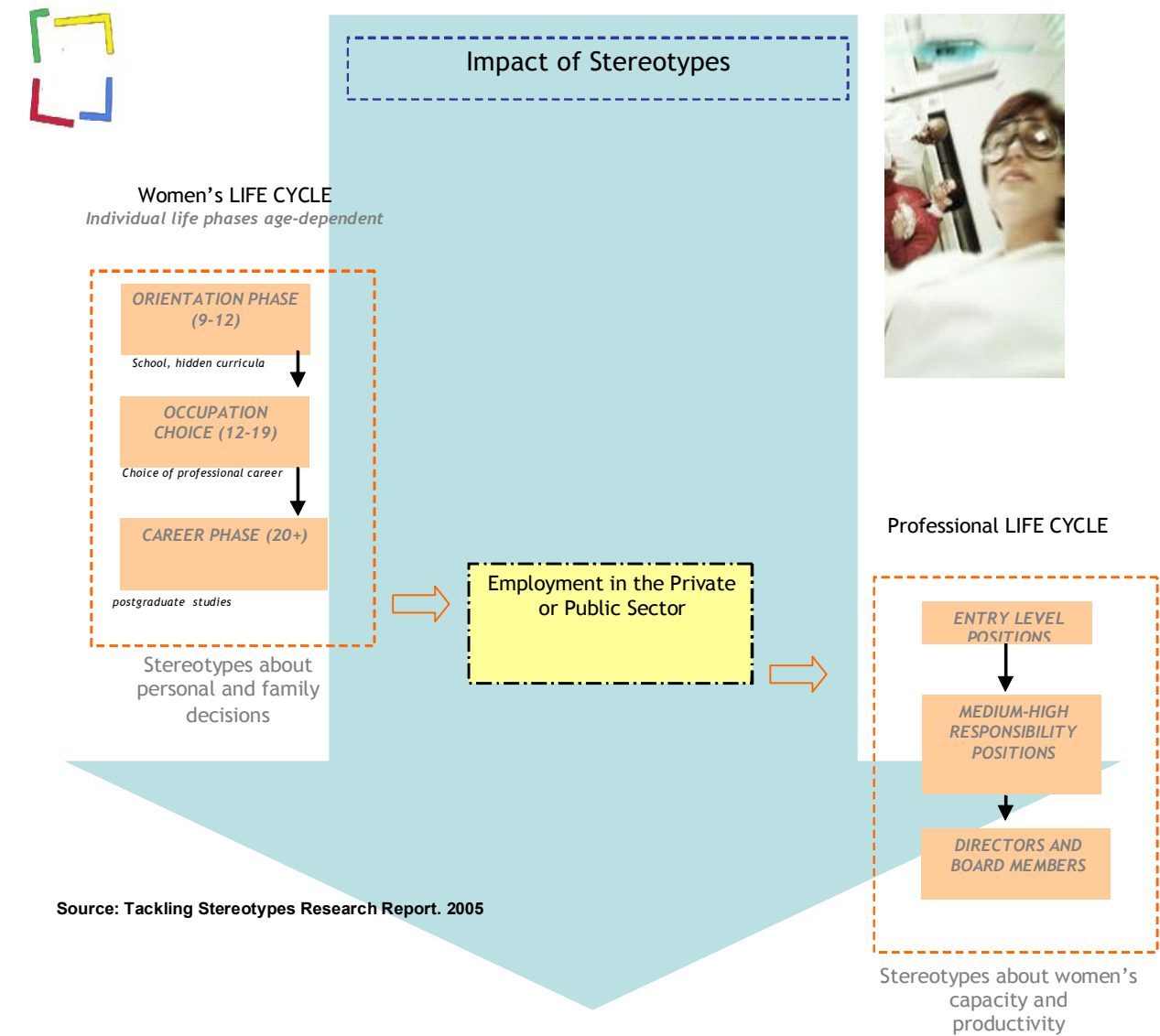
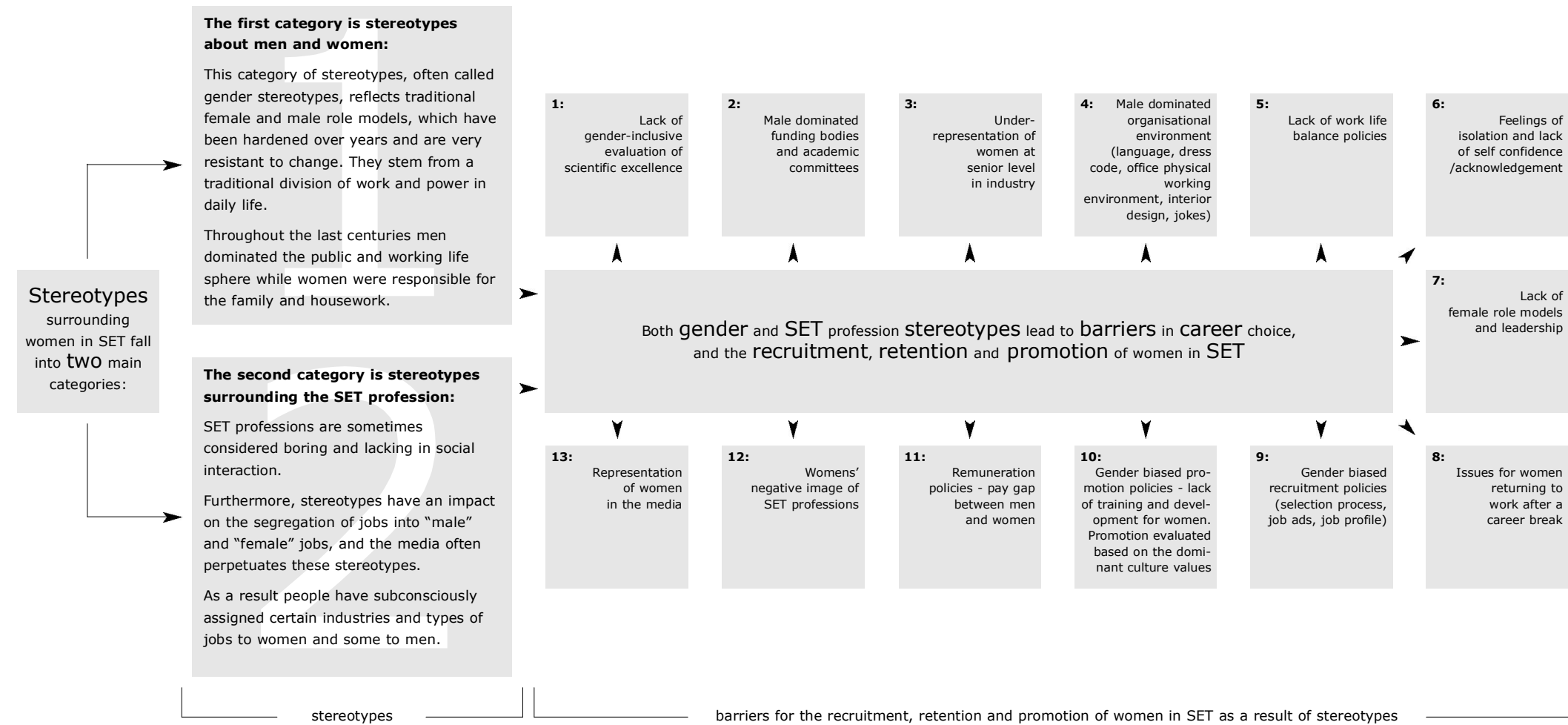
This guide is intended as a practical guide for change agents, presenting examples of good practice and positive interventions from across Europe with the aim of increasing the numbers of women in SET.

It is essentially a resource for changing organisational cultures in the area of SET, outlining positive initiatives and projects to develop and promote women in SET.

The full project report, with complete statistics, can be found on the website www.tackling-stereotypes.org



2: DOMINANT STEREOTYPES REGARDING WOMEN AND PROFESSIONS IN SET



Source: Tackling Stereotypes Research Report. 2005

Figure 1:
Impact of Stereotypes on Women's Education and Career

This illustration shows the impact of gender and profession oriented stereotypes on women at different stages of the personal and professional life cycle.

3: THE IMPACT OF STEREOTYPES

Stereotypes about gender and the SET professions have an impact on the number of women working in SET in the following areas:

Career choice

Stereotypes have a strong impact on the career choices of women. Women tend to choose subjects / jobs following the male / female segregation of jobs, which are more related to traditional interests and aspirations.

Career perspective

Female graduates who are able to enter into SET professions are already aware of some stereotypes.

For example, working life in ICT e.g. long working days, inflexible schedules, women unfriendly atmosphere, few possibilities to learn on the job.

(Van den Brekel, Van Klaveren & Tijdens, University of Amsterdam 1999)

Barriers in the workplace

Women often face the problem of not being fully accepted by their male colleagues and lacking the necessary access to networks to exchange ideas.

Women are often excluded on the basis that they lack competence.

It is therefore important to ensure that competence and merit are assessed in relation to norms.

Male-dominated assessment boards tend to under-value much of the research carried out by women.

Most SET professions and education programmes are still designed by and for men, demanding that women adapt to existing structures.

It can be argued that many women are not made to feel welcome in the workplace.

Also, women are likely to experience a lack of support in technology sectors and in other male-dominated areas.

(Neighbourship, I.O. Metal & Municipal Technology Centres, 2004).

4: TACKLING STEREOTYPES: PROPOSALS FOR INTERVENTIONS

The following proposals for interventions are addressed to change agents in organisations: Managers and Human Resources Managers, Research and Development (R+D) Managers, and people directly related to hiring, developing and promoting women in organisations.

Business focus groups were conducted with managers, project managers, engineers, consultants, business network representatives, public institution representatives and Associations, all of them related to SET and from different sectors including chemical, energy, consultancy, public institutions, IT and services and SMEs (Small and Medium Enterprises).

Both public and private organisations also participated in the Tackling Stereotypes Focus Group.

These proposals for interventions have been tested through **eighteen National Focus Groups** representing both the **business** and **academia** sectors, in each one of the countries involved in this research.

Academia focus groups were conducted with academic representatives from different levels, institutions and SET disciplines, members of research associations and representatives of professional organisations.

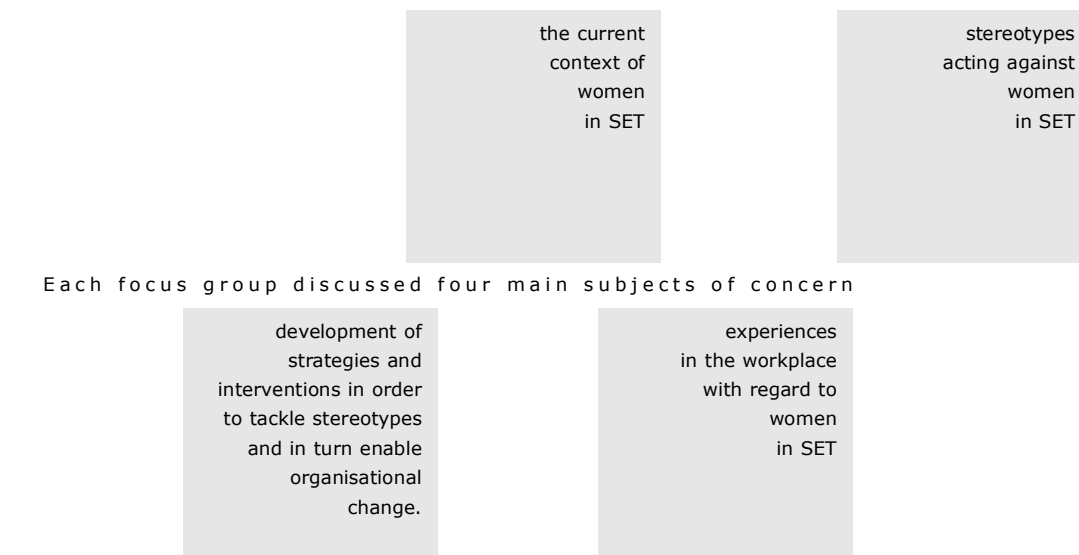
Men were also invited to participate in the national focus groups to discuss the project issues.

Groups were designed to obtain qualitative opinions on how businesses perceive women in SET, with a focus on stereotypes.

Groups also discussed proposals to tackle stereotypes.

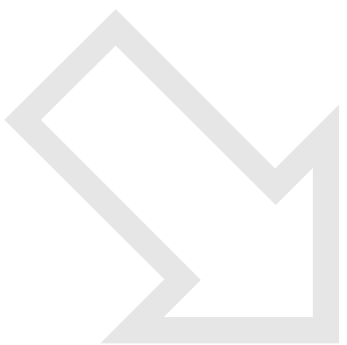
Participants discussed how stereotypes and gender affect their professional career and how certain factors are important to their businesses.

They also identified some factors that affect stereotypes and the role of women in SET.



The next section of this guide focuses on 12 barriers identified which have an **impact** on the recruitment, retention and promotion of women in SET.

The last section details specific projects and case studies related to tackling these barriers.



SECTOR: ACADEMIC**Barrier 1:**

Lack of a gender inclusive approach in the evaluation of scientific excellence.

Proposal:

Conduct evaluations on the experiences of all female academics in the organisation to develop a diagnosis and implement a gender sensitive evaluation system.

Actions:

- Carry out a survey based on the academic experience addressed to a representative sample of female teachers and researchers at university
- Organise discussion groups (with both male and female representatives) on gender based problems, specifically the present evaluation system
- Provide an online forum to allow discussions within the academic community
- Promote and value gender studies and research into gender issues
- Involve gender experts in or outside of your organisation
- Select neutral and objective criteria to evaluate the scientific excellence of a person. Universities and research centres must examine their policies and promote neutral evaluation criteria and processes, based on merit rather than stereotypical images
- Raise awareness and hence acceptance of alternative ways of working and making stereotypically "female" qualities as valuable as stereotypically "male" qualities in the working environment
- Work towards parental leave being accepted and not a barrier to the progression of women in SET. Women with caring responsibilities are often seen as not as being as committed as their male counterparts

SECTOR: ACADEMIC**Barrier 2:**

Male dominated funding bodies, academic committees, panels and other decision making bodies

Proposal:

Create mixed gender bodies, committees and panels. Women have to be represented in a proportion from 40% to 60% (the minimum percentage of women in the university / organisation)

Actions:

- Explore how committees, funding bodies and panels are formed
- Produce and collate statistics with gender-classified data
- Include indicators of equal opportunities (quotas)
- Produce non-discrimination policies for awarding projects, funding, grants and awards

SECTOR: BUSINESS / ACADEMIC**Barrier 3:**

Under-representation of women at Board / Senior Level

Proposal:

Promote women at Board level / Senior Level. Women have to be represented in a proportion from 40% to 60% (the minimum percentage of women in the university / organisation)

Actions:

- Implement systematic collection and dissemination of statistics with gender-classified data with regard to boards and high level management
- Encourage women to become top level management
- Develop training on gender sensitivity for managers
- Produce and collate statistics with gender-classified data for all staff levels

SECTOR: ACADEMIC / BUSINESS**Barrier 4:**

Male dominated organisational culture (language, dress code, office physical working environment, interior design, jokes)

Proposal:

Develop a neutral organisational culture

Actions:

- Encourage managers to be committed to equal opportunities and to combat stereotypes working against women in SET
- Examine the language in official documents, webpages, and in internal and external communications
- Develop awareness of gender issues within companies, research institutions and universities
- Develop training on gender sensitivity for personnel and encourage the use of neutral language
- Develop awareness of gender stereotypes
- Encourage a positive attitude in senior management towards women. A top-down approach is very important for cultural change in companies and research institutions
- Develop a neutral language guide
- Examine the physical working environment and adapt it to the needs and interests of women

SECTOR: ACADEMIC / BUSINESS**Barrier 5:**

Lack of work life balance policies

Proposal:

Promote work and life balance for men and women

Actions:

- Encourage men to take responsibility for private life
- Offer the possibility of part-time work to men
- Raise awareness about possibilities of childcare, maternity leave, other leaves (sabbatical) in your company / university (men and women)
- Diagnose/evaluate current organisational culture on working times, hours per day, planning meetings, flexibility of work
- Offer the possibility of teleworking and flexible working hours
- Do not promote meetings after 17:00
- Raise awareness that half of the users / customers are female
- Find out the percentages of women employed in different companies and the level of their employment and make this information available for female job seekers (how the company tries to balance work and life for their female employees)

SECTOR: ACADEMIC**Barrier 6:**

Feelings of isolation and lack of self confidence / acknowledgement in male dominated environments

Proposal:

Encourage successful women in SET to act as mentors to younger women in SET courses / industry and to assist women with contacts and networking.

Actions:

- Develop and implement mentoring programmes to ensure the retention and progression of women in SET
- Develop coaching structures
- Offer women career counselling or guidance
- Develop training packages for assertiveness and self-confidence for women in SET
- Develop networks for women in SET, to share experiences and to encourage each other
- Train unemployed women for technical professions and offer them employment at the end of training to increase female participation
- Raise awareness in managers that "female" qualities are as valuable as "male" qualities in a dynamic working environment
- Increase the value of women's business activities

SECTOR: BUSINESS / ACADEMIC**Barrier 7:**

Lack of female role models.

Proposal:

Improve the visibility and acceptance of competent women in research and technology. Ensure that women and their results are visible in the organisation

Actions:

- Increase the visibility of senior women through different media. Show women's success stories whenever possible
- Support women's participation in public life
- Work in partnership with the media in order to raise the visibility of women in SET
- Develop training packages to support women in becoming ambassadors in schools, universities, etc
- Use "female" language, when a counterpart of a word exists rather than accepting the "male" alternative as a self-evident norm
- Define women in the media through their individual achievements and qualities and not through those of their husband/father/family
- Create networks for female entrepreneurs, female employees and scientists in SET
- Develop awards for female engineers and scientists, to be presented in public.

SECTOR: ACADEMIC / BUSINESS**Barrier 8:**

Difficulties for women in returning to the workforce after a career break

Proposal:

Support women returning to the workplace through a placement/fellowship scheme

Actions:

- Raise awareness amongst employers of the difficulties women face when returning to the workplace
- Provide mentors to women returners
- Offer an interview with the employer before maternity leave to discuss job arrangements after the birth, and offering support after maternity leave
- Offer flexible working arrangements to women returners
- Offer professional development courses to women returners in order to update their skills and thus aid their re-integration.

SECTOR: ACADEMIC / BUSINESS**Barrier 9:**

Gender biased recruitment policies (selection process, job ads, job profile)

Proposal:

Provide a neutral and objective system for evaluating applicants

Actions:

- Develop training on gender sensitivity for recruiters and members of selection committees
- Ensure that vacancies are publicised throughout the organisation
- Use an objective set of criteria
- In a situation of candidates of equal merit, use positive discrimination in recruitment especially in fields and jobs with very few women

SECTOR: ACADEMIC / BUSINESS**Barrier 10:**

Glass ceiling: gender biased promotion policies

Proposal:

Provide a neutral and objective system for evaluating applicants

Actions:

- Develop training on gender sensitivity for recruiters, and members of selection committees
- Ensure that vacancies are publicised throughout the organisation
- Use an objective set of criteria
- In a situation of candidates of equal merit, use positive discrimination in recruitment especially in fields and jobs with very few women

SECTOR: BUSINESS / ACADEMIC**Barrier 11:**

Pay gap - remuneration policies

Proposal:

Put into practice the principle of equal pay for a job of equal value

Actions:

- Revise job titles in the organisation to ensure they appeal to both men and women
- Describe all the jobs completely and homogeneously
- Use a neutral job evaluation system (for example a points scale such as the ISOS procedure)
- Ensure transparency of salary information in the organisation
- Collect and disseminate gender-based statistics within the organisation

SECTOR: ACADEMIC**Barrier 12:**

Negative image of profession

Proposal:

Improve the image of the organisation or university to attract more women

Actions:

- Analyse curriculum, methodology and methods on gender inclusiveness
- Women's studies should be promoted and included in university curricula
- Strengthen the discipline of gender studies
- Integrate the needs and interests of women into research objectives to make technology more attractive to women
- Review publicity material (both hard copy and online) to ensure it is suitable for both a male and female audience
- Support role model campaigns, providing schools and universities with a series of posters illustrating trendy young women in interesting and dynamic SET careers

5: SYNTHESIS OF GOOD PRACTICE

The last section of this guide lists specific projects from the different partner countries involved in the Tackling Stereotypes project, linking them to the barriers to the recruitment, retention and promotion of women in SET listed earlier in the guide.

These projects present examples of positive interventions currently in progress around Europe.



5: SYNTHESIS OF GOOD PRACTICE

Country	Organisation	Best practice	Description	Target	Problem faced	Strategy	Barrier number
AUSTRIA	ICT&S (Centre for Advanced Studies and Research in ICT & Society at the University of Salzburg)	Ditact women's IT summer studies	Aims to increase the number of women studying or working in the fields of SET.	Female students, female schoolgirls, female scientists in the field of IT.	Under-representation of women studying or working in IT.	Offer training aligned to women's needs. (Provide IT qualification).	10, 12
	Solve Direct	SD 100 Solve Direct inclusive	Development of a structural framework to create opportunities for women to enter into SolveDirects Development Teams.	Female university students.	<ul style="list-style-type: none"> - Need to improve the efficiency of the Development Team - Need to create mixed teams. 	<ul style="list-style-type: none"> - Finding female employees within universities. - Training, career development, mentoring, flexible work time and teleworking for employees, particularly women. 	5, 9, 10
	Graz University of Technology	"FIT- Frauen in Technik" (Women for SET)	Initiative which supports women studying and working in Science, Engineering or Technology.	<ul style="list-style-type: none"> - Female pupils between ages 17-20. - Students, alumni and interested women who are in the phase of deciding whether to start technical studies. 	<ul style="list-style-type: none"> - Low number of female students in technical studies. - Need to overcome the obstacles and stereotypes that hinder women from being active in SET area (university and labour market area). 	<ul style="list-style-type: none"> - Activities dedicated to support young women in their study decisions. - "Schnuppertage": Giving a taster of studying in SET. - Mentoring Platform: IT platform to connect and support female students and women already working in SET. 	12, 7
	Infineon Technologies Austria AG	Personnel marketing for female employees in SET	Programme created by Infineon to support women, in particular female returners and their re-integration (e.g. after maternity leave).	<ul style="list-style-type: none"> - Female technical graduates at university level. - Infineon's women staff. - Girls starting education in SET. 	<ul style="list-style-type: none"> - Need to increase the number of female technicians. - The company had the problem of a lack of female employees in various departments. 	<ul style="list-style-type: none"> - Recruiting activities: "Girl's Day" (girls invited to visit the company) - Special training opportunities for girls who did not have technical studies. - Retention Activities: retention and development activities for the re-integration of women after maternity leave. 	8, 10, 5
	Wild Austria in co-operation with the Austrian Job Service	"Frauen in die Technik" (Women for Technical Jobs)	Basic training for women to become technicians in the fields of CNC (Computerised numerical control), assembly technology and electronics.	Women searching for jobs in Wild, without the education needed to fulfil the job requirements.	Need for skilled technical personnel for the technical production area.	<ul style="list-style-type: none"> - Recognised training in labour market for women in the fields of CNC (Computerised numerical control) and assembly technology. 	9, 10
ESTONIA	QUIN-Estonia	Network of Creative and Innovative Women	The network was created to enhance women's participation in innovation and develop initiative.	Women entrepreneurs and innovators.	<ul style="list-style-type: none"> - Associations of inventors do not attract women. - Many women do not consider themselves as inventors (even patent owners). - The role of an inventor is very untraditional for Estonian women. - Need to disseminate good practice of Scandinavian female inventors as innovators. 	<ul style="list-style-type: none"> - Researching "Women Entrepreneurs & Innovation": overview, mapping problems and possible solutions. - Women's view on themselves needs to be changed: bring more women into higher value markets, increasing value of women's activities and introducing good role models. - How to best mobilise and support women: local and regional support, promoting female entrepreneurship, disseminate information. 	7, 12, 6
	Tartu University - The Science Centre AHHA	Science Centre AHHA	The mission of AHHA is to introduce science to the general public using interactive and entertaining methods.	School students, public in general.	Fear and prejudice about studying science.	<ul style="list-style-type: none"> - Offer innovative demonstrations of scientific experiments. - Organise science events: exhibitions, lectures, demonstrations, science theatre shows, technology day, etc. - Support formal education curricula. 	12
	Estonian Physical Society	The Science Bus	Dedicated to the World Year of Physics, was organised as a travelling exhibition on physics.	Female students and researchers.	Need to create a positive image of physicists.	<ul style="list-style-type: none"> - Activities organised to advertise science: website, visits to schools and public events, interactive secondary school lectures, interviews in TV. - Female students and women as part of the team (role models). 	12
	University of Tartu - The Gifted and Talented Development Centre	TK	TK gives talented students in mathematics and science guidance in their pursuit for self-realisation and to organise additional schooling.	Students with an interest in mathematics, physics, and astronomy, chemistry or computer science.	Students in local schools don't receive sufficient opportunities for developing their interests in mathematics, physics, chemistry or computer science.	<ul style="list-style-type: none"> - Teleworking process with students. - Organise lecture days, study sessions and training camps. - Annual open contests. 	10, 12

5: SYNTHESIS OF GOOD PRACTICE

Country	Organisation	Best practice	Description	Target	Problem faced	Strategy	Barrier number
GERMANY	Metop GmbH	"Double step" (double step 2- technology and authority).	The project aims to extend the occupation choice spectrum and motivate girls to choose suitable courses.	Girls and young women.	Although the recent female generation is particularly well trained in Germany, girls and young women do limit themselves frequently due to a lack of role models in their profession.	Two Stage Mentoring project: - Allow girls to discover variety of vocational perspectives. - Diminish possibly existing reservations and pre-formed conceptions about occupations in SET.	7, 12, 6
	Siemens AG	YOLANTE (Young ladies' Network of Technology).	YOLANTE is a mentoring programme aimed at female students in SET.	Female students in engineering and scientific fields.	- Get a larger pool of female talent (young women in technology at an early stage). - Fewer female graduates in technological disciplines.	"All around Service" - Students receive guidance during their university studies and can learn more about the company through internships and thesis research.	
	Technische Universität Braunschweig Project supported by the Ministry of Science and Culture of Lower Saxony.	EMENTO (E-MENTORING)	EMENTO is an E-Mentoring programme aimed at pupils in the engineering and scientific fields. The goal is to motivate young women to enter scientific and technical courses and occupations and also to qualify them in these fields.	School pupils and female students in the engineering and scientific fields.	Increase the number of female technicians.	Offer school year pupils two thematically different modules.	12
GREECE	ATTIKO METRO S.A	Equal Opportunities Implementation	Equal opportunities plan and policies.	Women Attiko Metro employees.	Increase the number of women at all levels. (Implementation since 1991). Up to now they have achieved almost 50% women staff across all levels, most in middle positions and a good number in higher positions.	- Offer equal access to training. - Reconciliation of family and work. - Respect maternity leave. - Offers a specific amount of money all to employees, every time they become mothers or fathers.	3, 7, 8, 5
	Public Power Cooperation S.A	Equal Opportunities Implementation	Equal opportunities plan and policies.	Women Power Co-operation employees.	Small number of women reach director level.	- Promotion policies based on qualification criteria. - Longer parental leave than that set by the Public Sector. - Reduced working hour programme. - Equal access to personal training for women. (If women obtain the qualifications they are promoted).	10, 5, 8
HUNGARY	Hungarian Academy of Science, Chemical Research Centre	Increasing the awareness of careers for women researchers	The project (ongoing since 2005) explores the professional and private life-paths of female employees with an academic degree of the research centre. The purpose is to aid development of women's job possibilities, professional success and career chances.	Women researchers in chemistry.	The career possibilities of women mostly depend on the family background, on social political situation and on the inequalities of the society.	- Develop the possibilities for women researchers in career - building and publications. - Help younger women researchers to achieve a work-life balance. - Help senior women researchers to progress in their organisation.	1, 5, 3
	Budapest University of Technology and Economics (BME)	Preparation of a statistical measurement of the women teaching and researching at the university.	This project aims to weigh up the situation and proportion of women in the hierarchy of the university, among the conferees, the EU grant applicants and winners.	Women personnel.	To support female researchers in their academic improvement.	Results of measurement will set the base to prepare the University's Equal Opportunities Plan.	3
	Pásztor Tamás és Társa Ltd	Continuing education and flexible labour-time.	Training offered to women in order to occupy jobs in charge or care of customers.	Women employees of the company.	Low presence of women in the company.	Form a foreign-language speaking team with good technical skills.	3, 7
	L'oreal Hungary Kft.	L'ORÉAL -UNESCO HUNGARIAN FELLOWSHIP: For Women and for Science. Fellowship for female scholars.	The aim of the fellowship is to achieve prominent, practical and usable scientific developments by scholars. Another goal is to promote female possibilities in science, especially in research fields in Hungary.	Women with Hungarian citizenship, students and researchers in connection with some specific fields.	Promote the female possibilities of science and acknowledge women.	- Public recognition and acceptance of women - Career possibilities through scholarships given (prominent research outcomes on material and life sciences with a lifetime award).	1, 2
	Procter and Gamble Budapest	Plant and Regional Women's Network	2003 Plant Women's Network was established to enable a forum for discussion on how to retain and promote women to senior positions.	Local female workers of P&G.	Business needed to retain women in Product Supply (Manufacturing) and Engineering.	- Discussions about: work life balance, how to self promote, leading within our culture and mentoring. - Training Sessions: by senior P&G females from Headquarters in US. - Work and family leave policies developed.	5, 7, 6, 8

5: SYNTHESIS OF GOOD PRACTICE

Country	Organisation	Best practice	Description	Target	Problem faced	Strategy	Barrier number
NETHERLANDS	Nederlandse Organisatie voor Wetenschappelijk Onderzoek- The Netherlands Organisation for Scientific Research (=NWO)	Aspasia programme	The Aspasia programme was launched in 1999 as a temporary scheme to increase the number of female senior lecturers.	Female lecturers who are able to become senior lecturers.	Women are generally less represented in the upper academic echelons.	Female lecturers have the possibility of writing a research proposal for a four year promotion research or a two year post Masters project.	2
	Opportunity in Bedrijf (Opportunity in Business)	Ambassadors Network (Ambassadeursnetwerk)	Ambassadors Network is a group of prominent men and women in industry, trade, the government and the non profit sector. Initiated activities to make female managers visible and promote the career development of women towards top positions.	Girls and women.	There appear to be differences in the way in which opportunities are presented to men and women and/or in the way men and women make the most of given opportunities.	City Tour Women & Technology: present women engineers as role models to girls, women and their families and friends, to promote the choice of a career in technology.	3, 7, 9
	VHTO	'Spiegelbeeld' (mirror image)	To show that there are technical female professionals, female engineers, female beta/technical scientists, female managers and entrepreneurs, that they are successful and that they enjoy their job.	Girls in secondary education and their parents, teachers and careers counsellors.	To clarify ideas about professions and to reveal a broad range of possible job opportunities to girls in secondary education and their social environment.	The VHTO is developing an online database with women in natural/technical science or ICT related jobs, offering role models to girls. Role models can provide their experience, short movies, media presentations, online mentoring, speeches for parents, visiting lectureships and work shadowing.	11, 7
SPAIN	NESTLÉ SPAIN S.A.	Impulsion and Follow up Committee for the "Óptima Programme"	A Committee was created to meet bi-monthly, in order to analyse and implement several improvement proposals. The objective is to promote equal opportunities between men and women, framed within the recognition of Nestlé as an Optima company.	Women within the organisation.	Increase the percentage of female staff at all levels of the company.	<ul style="list-style-type: none"> - Encourage/favour the balance between private & professional life. - Women with children under 1 year old do not work at night. - Women who are developing a commercial career can undergo sales training close to their home. 	5
	University of Granada / Andalucian Womens Institute	Univertecna Project	The UNIVERTECNA Project offers career advice to female students in their final year in SET related careers, assisting them in finding employment.	Final year students or recent graduates.	Women in SET related careers encounter more difficulties than their male counterparts in securing employment.	<ul style="list-style-type: none"> - Career guidance. - Professional development. - Practical experience. 	9, 10
	DUPONT IBERICA S.L.	Diversity - DuPont Women's Network	Diversity is a voluntary work group composed by employees of different business groups and functions. They work for the integration and development of any group of people that, for any reason, could be discriminated against.	Women Employees.	Make retention and business growth possible, and improve the intellectual capital capacity at a corporate level.	<ul style="list-style-type: none"> - Work/life balance actions. - Equal opportunities in the progression and development of men and women. - Encourage good communication between employees and management. 	5, 10
	INDO Internacional S.A.	"NDO, An Ethical Vision"	The project is part of the Social Corporate Responsibility, which includes actions from a gender perspective. INDO is committed to offering all its employees equal opportunities in work and progression of their professional careers.	Employees.	Work towards maintaining equal opportunities between women and men.	Adhesion to the Programme "Equal Opportunity Plans in Companies in the City of Barcelona".	9, 10
	GIOPACT -UPC with the support of Catalan Institute of Women	Neutral Language Guide www.gencat.net/icdona	GIOPACT has developed a neutral language guide addressed to the entire university community.	Teachers, staff and students.	The language in technical universities usually has a masculine gender orientation.	Development of a guide and dissemination to the community.	
	Instituto de la Mujer del Ministerio de Trabajo y Asuntos Sociales	ISOS www.mtas.es/mujer/index.html	This project developed a neutral job evaluation system and an IT application to use in an organisation.	Companies and people in general.	Job evaluation usually has a masculine perspective and rules.	The Instituto de la Mujer distributes a free CD with the IT application.	9
	PROGRAMA DONA - UPC	The SUMMER of Programa Dona	The programme is concerned with the promotion of technical studies in order to encourage young female students to choose SET subjects.	Secondary school female students.	Low number of female students in technical and science careers.	<ul style="list-style-type: none"> - Change "masculinised" concept of technical and science studies (stereotypes) through role models and workshops in laboratories. 	12, 7

5: SYNTHESIS OF GOOD PRACTICE

Country	Organisation	Best practice	Description	Target	Problem faced	Strategy	Barrier number
SWEDEN	The Association of Swedish Higher Education SUHF	IDAS (Identification, Development, Advancement, Support)	IDAS is a three year national leadership project aimed at getting more women into higher positions in the academic sector.	Female teachers, women working in universities.	Need for qualified staff in different leading positions (currently few women in leading positions). Need to fulfill the goal set by the Swedish Government: to have a much higher percentage of female professors and women in leading positions in universities.	<ul style="list-style-type: none"> - Identify promising women. - Develop local and national activities, training, seminars, etc. - Focus on recruitment, nomination process, etc. - Support women to take leading positions through mentors, coaches and experienced seniors. 	3, 7
	Halmstad University Dept. of Working Life and Gender	The GIT project (Gender, Integration and Technology)	Pilot training programme (72 weeks) for 22 unemployed women where half of the group were from Sweden and the other half were immigrants.	Unemployed women (especially women immigrants).	Few women in technical fields and high unemployment in women immigrants. Need to adapt international certificate training courses (of CISCO Systems) to be more women friendly.	New way of recruiting and pedagogical models tested. Students accepted on the courses based on their genuine interest, rather than formal qualifications.	10, 9
	NUTEK the Swedish Business Development Agency	KomTek (community entrepreneurship and technology schools)	Komtek is a place where school classes and teachers can come to investigate and test technology. Komtek is based on a problem based learning idea.	Women students of elementary and secondary school, teachers and unemployed women.	Need to make a base for recruiting technicians and engineers from both sexes.	<ul style="list-style-type: none"> - Give an all around knowledge of technology through courses. - Give an opportunity to test and discover different scientific and technological problems and try to find creative solutions. 	12
	With the support of Framework Strategy on Gender Equality (2001-2005)	Women2top www.women2top.net/se	(W2T) was a project involving Estonia, Denmark, Greece and Sweden set up to create a platform for the long-term, sustainable task of bringing more women into top management, and to expedite progress in this area.	The project targeted potential top managers and employers in the public and private sectors, as well as recruitment consultants.	Imbalance between women and men in managerial posts in Europe. Top-level management (Directors and Chief Executives) is the most male-dominated category in the European workforce.	W2T used a number of strategies based on new research findings and good HR practices.	3
	Studieförbundet Näringsliv Samhälle	SNS projekt för fler kvinnor på ledande poster i näringslivet www.sns.se/zino.aspx?articleID=367	The aim of this project was to work towards higher numbers of women in leading positions in trade and industry.	Women leaders.	Very few women are leaders in industry.	Activities in the project were to promote women into top positions and increase women's percentage share at the top.	3
	Swedish Government (2002 project)	Jämmt på toppen www.regeringen.se/content/1/c6/01/91/94/1412574a.doc,www.ab.lst.se/templates/InformationPage_21_1.asp	The aim of this project was to speed up the process for more equal opportunities for women to reach top positions in the business world.	Women in business.	To increase the number of women in top positions.	Activities in this project include seminars, knowledge exchange and collaboration with different companies.	3
	PTS - Post- och telestyrelsen (The Swedish National Post and Telecom Agency) (2006 project)	Mentorskap (Mentorship) www.regeringen.se/sb/d/6114/a/54757	New project for increased equality within the IT and Telecom sector.	The project targets potential top managers and employers in the public and private sectors, as well as recruitment consultants.	The aim is to increase the number of female directors and heads in the IT and telecom sector.	This project shall take advantage of experience from another project; "Women to Top".	3
	Harnosand Kommun (Municipality)	Forum for jämställdhet www.harnosand.se/ffj	The goal is to take advantage of women's competence and experience, and that these are seen as equivalent to men's.	Women, in general.	Its aim is that women and men should have the same opportunities and rights in all areas.	To achieve this aim there are lectures, seminars and education. Activities highlight the existing power of gender and other equal opportunities questions.	3, 9, 10
	Equal Opportunities Ombudsman	JämO and Project "Glashuset" has introduced a the term "glass ceiling" and "walls of glass". info@jamombud.se www.jamombud.se	JämO continuously reviews progress in equal opportunities in the workplace and universities. The aim of Glashuset is to make employers aware of the concrete problems for women.	People, especially women.	Its aim is that women and men should have the same opportunities and rights in all areas. The glass ceiling represents an invisible but real barrier for women.	Promotion of equal opportunities through access to positive experiences in breaking down the sex barriers, will encourage employers to increase their efforts to entice more women to the work place.	
	Q-Leader (financed by funds from the members, NUTEK and Länsstyrelsen.)	På toppen www.qleader.nu	The aim is that women can change their experience and have opportunities to network in all working areas.	Women in leading positions.	The goal is to increase co-operation and to encourage women to compete with men for top positions.	There are 90 members in this project today. Three networks were established during the spring 2003 and two more in 2004.	3, 7
	Independent Foundation	KvinnorKan (Women Can) www.kvinnorkan.se	Promote women's cause generally and enhance women's status in society in general, and in working life more specifically.	Women in general.	Enhance women's status in society in general, and in working life more specifically.	Increase, explore and display women's knowledge and skills in different areas, depict women as role models - both the well-known and new faces, organise meetings, debates and fairs and create opportunities for women to debate, grow, develop, be inspired - and have fun.	3, 7
	Topp Namn	toppnamn.nu (web site) www.toppnamn.nu	Database filled with fully qualified women to make it easy for different companies and organisations to find an appropriate person for a specific purpose.	Women and companies.	The long term goal is to create a society with equal opportunities. The short term goal is to provide the opportunity to show women's competence.	Database where an employer can find a smart woman!	9
	Högskolan Dalarna	Aiming to increase the number of girls entering technical professions www2.du.se/projekt/default.asp?iProjektid=145	A project as a preparation year to university studies. During that year the women had the opportunity to try out studies with technological focus.	Unemployed women with an average age of 36.	To give information about technological studies.	Women given a preparation year before starting university studies.	12

5: SYNTHESIS OF GOOD PRACTICE

Country	Organisation	Best practice	Description	Target	Problem faced	Strategy	Barrier number
UK	University of Luton	Inclusive Committees	Project created to explore what equal opportunities good practice existed in committee structures, membership and procedures, elsewhere in HE/ other public sector organisations. The objective was to establish factors that inhibit the effective contribution of women to committees.	Women academics.	Womens' voices are not heard as often as they should be when committees are making important decisions. This is due to the fact that male academics in SET, as with other fields, make up a greater percentage of the committees.	Research done by primary sources: questionnaire sent to women academics. It covered issues of promotion, progression, committee participation and explored women's experiences and perspectives on working in the university.	2
	University of Surrey	Moving up	"Moving Up" is a university project, which aims to improve the recruitment, retention and career progression of women in science, engineering and technology (SET) and to support women in playing a more significant role in shaping the direction and culture of the university.	Women in SET working in the university.	Women are under-represented on most university committees and the university had found it difficult to retain the women it attracted.	Investigate the reasons why women were not being retained by the university and look for possible solutions. - Collect, analyse and investigate information on career progression and possible indirect causes of discrimination. - Develop management training. - Develop a network of friendly women in SET.	2, 10, 7
	Newell and Budge	Retaining Women Working in IT	Newell & Budge seems to attract women due to its reputation for having no glass ceiling and its flexibility.	Women.	Women are put off entering IT at an early stage and actually "self select" out of the industry because of their misconceived notions of what the industry is like.	Policy of flexible working: part time and home working. Parental and maternity leave policy. Equal opportunities policies.	5, 8
	University of Bolton	Mentoring: a regional scheme for women academics in SET	Aims to provide women with the confidence to take on more prominent/influential roles within their HEI's management structure, where they can have an impact on policies and procedures.	Women academics in SET.	Bolton had few senior women SET academics.	Mentoring programme: - Training. - Workshop to enable participants to develop awareness, establish effective mentor mentee relationships.	7, 6
	The Royal Society with UK Higher Education and Universities, Funding Councils, Office of Science and Technology, Department of Trade and Industry and SET professional and learned societies	Athena (1999)	Athena's aims are the advancement and promotion of the careers of women in science, engineering and technology (SET) in higher education and research.	Women in SET	To achieve a significant increase in the number of women recruited to top posts.	Involving other supporters including BP, Equality Challenge Unit, European Social Fund- Equal, Institute of Physics, Pfizer, Royal Academy of Engineering, Royal Society of Chemistry, UK Research Centre for Women in SET, and The Wellcome Trust.	3
	Witec	Database of Women Experts in SET www.setwomenexpertsuk.org.uk	The Experts Database of Women Experts in SET is a unique resource which supports the visibility of women experts in SET.	Women in SET.	To diffuse information about senior women in SET.	Used by the media, public appointments and industry to find women at a senior level.	3
	Portia	Equalitec: Advancing Women in ITEC www.equalitec.org.uk	Equalitec supports women returners.	Women returners.	To help women returners.	Using placement schemes, mentoring programmes and diversity forums.	7

6: CONCLUSIONS

The various interventions and case studies presented in this European Guide are compiled from the following:

- 1: WITEC's 18 years of experience of working on projects addressing the imbalance of women in SET professions
- 2: Specific research and focus groups carried out in the 9 European countries taking part in the Tackling Stereotypes project.

The interventions and case studies included in this guide have proved to be successful and effective in working towards combatting stereotypes of women in SET.

A wide range of valuable strategies (both practical and theoretical) across Europe are documented including:

- supporting women returning and re-integrating to the labour market
- encouraging girls to take on SET related courses
- increasing access to role models and mentors by women of all ages
- addressing cultural change in both the private and public sector via the representation of women on committees and accessibility to progression routes
- implementing support programmes to develop women's entrepreneurial skills
- addressing the negative image portrayed by the media of women and SET professions

It is hoped that a wide range of organisations can benefit from the transfer of European best practice included in this booklet and can work towards implementing similar initiatives across organisations to assist in the recruitment, retention and progression of women in SET education and careers.

However, all organisations involved in the Tackling Stereotypes project acknowledge that it is a long journey to fully redress the imbalance between men and women in SET.

Although some significant cultural changes have been made in some of the European countries involved in this project, there is still a long way to go.

All major stakeholders need to be involved in this process of change, as the European Community and the European SET sectors cannot afford to use only half of the population's available creativity, talent and innovation.

7: RESOURCES

For a full list of references, please visit www.tackling-stereotypes.org

AMIT - Association of Women in Research and Technology
<http://www.amit-es.org/>

Athens Chamber Commerce and Industry
<http://www.ebea.gr>

Scientific Research Council
<http://www.csic.es/wi/mujerciencia.jsp>

Women and Teleworking
<http://www.sbh.ac.at/ges/people/wagnleithner/sa/pph/frauen.htm>

Hellenic Management Association
<http://www.eede.gr>

Work Chamber - Vienna
<http://wien.arbeiterkammer.at>

Royal Institute of Technology - Stockholm
<http://kth.se/om/siffror.html>

Women on the Job Market
http://www.arbeit-wirtschaft.at/aw_09_01/art4.htm

Empowering Women in SET
<http://www.awise.org>

Women in Research and Technology
<http://www.femtech.at>

Women and IT: Discussion
<http://www.internet-relations.at/consulting/Frauen%20und%20IT.doc>

Johannes Kepler University - Linz
<http://www.jku.at>

The Womens Institute - Spain
<http://www.mtas.es/mujer>

Swedish Agency for Economic and Regional Growth
<http://www.nutek.se>

Mentoring for Women in Austria
<http://www.regionalesmentoring.at>

ISOTITA
<http://www.wto.gr>

National Statistics Institute - Spain
<http://www.ine.es>

National Technical University of Athens
<http://www.ntua.gr>

Research Centre for Gender Equality - Greece
<http://www.kethi.gr>

Women and Business
http://www.tecnociencia.es/especiales/mujer_empresa/introduccion.htm

Spanish National Research Council
<http://www.csic.es>

Statistics Sweden
<http://www.scb.se>

Equal Opportunities Commission
www.eoc.org.uk

Joint Interventions Partners
www.jivepartners.org.uk

Portia - Gateway into SET for Women
www.portiaweb.org

UK Resource Centre for Women in SET
www.setwomensresource.org.uk