

# Digital Agenda Assembly

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*Brussels 16-17 June 2011*

**Report from the workshop**

***WOMEN for SMART GROWTH***

***(Action 60, and horizontal across all  
seven pillars)***





## Workshop headlines

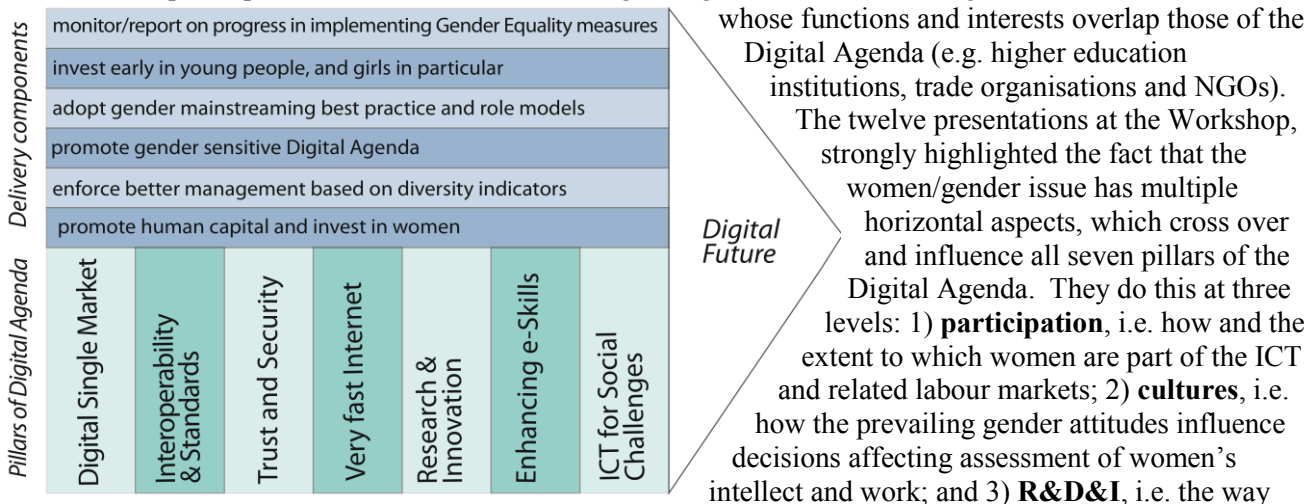
### EVERY WOMAN DIGITAL = SMART GROWTH!

#### Purpose and context of the workshop

The purpose of the Women for Smart Growth workshop was to define a new strategy for increased integration of women into the science and technology workforce and within the Digital Agenda.

DG INFSO has established a well-recognised leadership in promoting gender equality in the ICT domain through such initiatives as Code of Best Practices, ECWT, and the Budapest Declaration. The Workshop produced a Roadmap that builds on this experience, which is composed of six priority area: 1) invest in women’s human capital; 2) enforce better management based on diversity indicators; 3) promote a gender sensitive Digital Agenda; 4) adopt gender mainstreaming best practice and publicise women role models in the sector; 5) invest early in young people, and girls in particular; 6) monitor /report on progress in implementing Gender Equality measures.

The target actors in the implementation of the Roadmap are: policy makers at EU and at Member State level; participants and stakeholders in the Digital Agenda; and all other organisations and individuals,



whose functions and interests overlap those of the Digital Agenda (e.g. higher education institutions, trade organisations and NGOs). The twelve presentations at the Workshop, strongly highlighted the fact that the women/gender issue has multiple horizontal aspects, which cross over and influence all seven pillars of the Digital Agenda. They do this at three levels: 1) **participation**, i.e. how and the extent to which women are part of the ICT and related labour markets; 2) **cultures**, i.e. how the prevailing gender attitudes influence decisions affecting assessment of women’s intellect and work; and 3) **R&D&I**, i.e. the way

women and gender are recognised as a resource and a driver of innovative ideas, entrepreneurial growth, and new markets. The interdependence between these three areas of influence is well demonstrated through the example of voice recognition technology. When voice recognition products were introduced to the market they could not be used successfully by women because the voice recognition algorithm was based on male voices, primarily because labs had mainly men in them, however women’s voices are significantly different.

The benefits of increasing the integration of women in ICTs and in the Digital Agenda are well supported through economic arguments: 1) women’s increased participation in the labour markets has been one of the key sources of sustained economic growth (‘womenomics’); 2) women worldwide control more than 20 trillion dollars of consumer spending; 52% of university graduates are women, and among PhDs, 45%. However, the proportions in engineering and in computing are much lower and need correcting. It is worth considering this task through the example of Medicine, where women were totally absent once, now they are often in the majority. It was not women who changed but the institutions’ attitudes to them. This same change needs to happen in the ICT sector.

The core theme of the Digital Agenda Assembly, Every European Digital, enables a variety of interpretative perspectives. The core arguments in the new ‘women agenda’ proposed by the



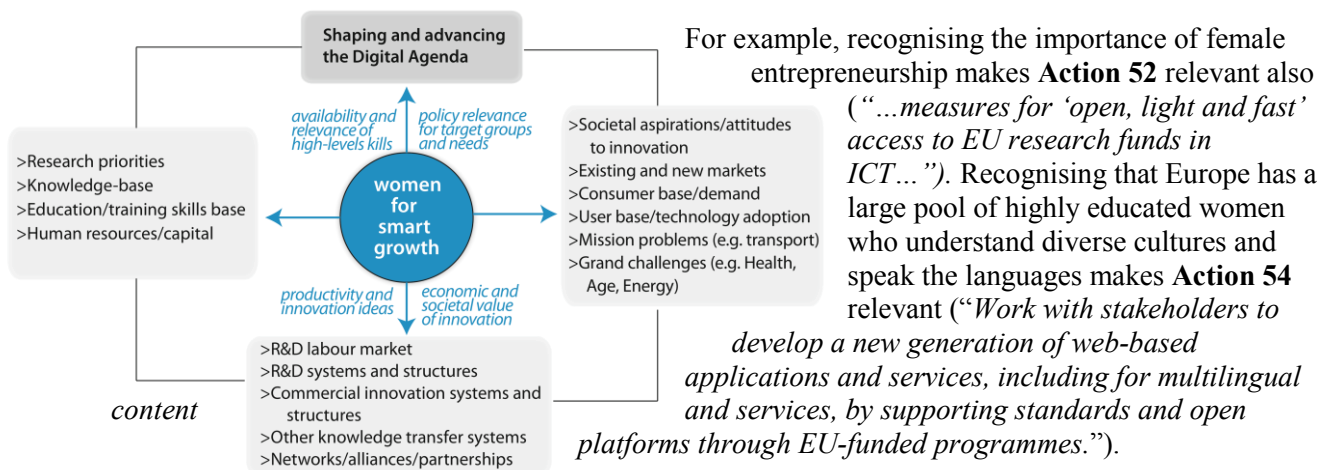
Workshop are that Europe’s women represent greatly underutilised human capital and competitive advantage and that they should be seen not as a ‘problem’ but as a source of innovative ideas, products and markets – i.e. a competitive advantage. With only 8% of patent applications coming from women, the EU’s patenting and research licensing trade is missing an important opportunity for growth. With its rich cultural diversity, Europe has considerable potential to use the investment in educating women to develop skilled technology entrepreneurs, who can use their experience and relationships to operate in cross-cultural, cross-border innovation environments – identifying new ideas and market opportunities, and creating new collaborative, international networks. Recent research has shown that the collective intelligence of teams where women are present not as a minority, is higher than the intelligence of each individual in the team. On this basis alone, the proposed ‘women agenda’, which calls for greater integration of women in ICTs and within the Digital Agenda, will naturally result in the greater effectiveness and efficiency of the 100 DA Actions.

## Related DAE action(s)

The main DAE action associated with the Workshop prior to the event was **Action 60: Increase participation of women in the ICT workforce**. The implementation of this action by the Commission includes the following EU-level actions:

- 1) **In 2011** - Encourage IT companies to organise internship programmes specifically tailored to young women and continue with the Shadowing Day exercise aimed at showing young people how an IT job looks like (<http://ec.europa.eu/itgirls>);
- 2) **In 2012** - Launch a Web 2.0 platform for girls containing teaching packages, specifically tailored and based on tools such as blogs, wikis, fora, social networks, tags, podcasts, videocasts etc.;
- 3) Launch a longitudinal study on the impact of the Shadowing exercise;
- 4) Collect relevant statistics on women in ICT;
- 5) Launch programmes for on-line retraining of women returners.

Significantly, the Workshop identified other issues and opportunities, which make the ‘women agenda’ relevant to a variety of actions crossing all seven pillars of the Digital Agenda. As shown in the figure below, the horizontal aspects of the integration of women within ICTs and the Digital Agenda go beyond Action 60.



Recognising that assessment methods are frequently gender biased and disadvantage women more than men, makes **Action 58** relevant (“...develop tools to identify and recognise the competences of ICT practitioners and users”). Recognising gender bias in health research, which seriously disadvantages women makes **Action 77** relevant (“Foster EU-wide standards, interoperability testing and certification of eHealth systems...through stakeholder dialogue.”). Actions to promote Internet content and addressing issues of Trust and Security can also be shown to be sensitive to gender issues.



The limit imposed on the length of the report makes it impossible to quote all the relevant DAE actions here but persuasive arguments for increased integration of women and of gender issues in the Digital Agenda could be easily produced for example for **Actions 1, 2, 3, 4, 6, 23, 32, 36, 40, 43, 48, 50 & 53**.

### Results from previous online exchanges and activities

The starting point for defining the Roadmap were the eight priority areas comprising the Budapest Declaration. The leadership role of DG INFSO in creating innovative initiatives to promote gender equality in ICT was recognised and highlighted in a number of Workshop presentations. The conclusions of the Workshop match the issues and recommendations found in the written responses to the public consultation exercise on the DG Research and Innovation's Green Paper. Some examples are included here.

**Net!works. European Technology Platform:** "Women should be encouraged to be more interested to study scientific disciplines. Given that the ICT sector is facing a serious and increasing shortage of skilled staff and students in the areas of mathematics, information technology, the sciences and technologies, the ICT sector will increasingly need to entice women to study these topics and fill the open posts in the industry..."

**Federal Association for Information Technology, Telecommunications and New Media (BITKOM):** "...the ICT sector is facing a serious and increasing shortage of skilled staff and students in the areas of mathematics, information technology...the ICT sector will increasingly need to entice women to study these topics and fill the open posts in the industry. Activities should start...in the schools to change the perception of the ICT to that of an attractive sector for women to make careers in.

**"Digital Europe:** "...Career advisors in schools and universities also have some limited influence on the choice of careers girl students take. Both need to receive better information about STEM opportunities. A number of science fairs and lab open-days already exist across Europe, but the Commission could consider supporting such events targeted at women. The European Commission should continue raise awareness around the issue among ministries of education in the Member States. Female role models play an important part in raising the profile of STEM among women. Knowledge societies, such as the Association of Computing Machinery (ACM) or the Institute of Electrical and Electronics Engineers (IEEE), do have female members who could be supported to outreach to female at school and university ...increasing the participation and visibility of woman in the management of scientific and engineering management would demonstrate to girls that it is possible for women to achieve success through careers in science and engineering with the result that more girls would choose to study STEM subjects.

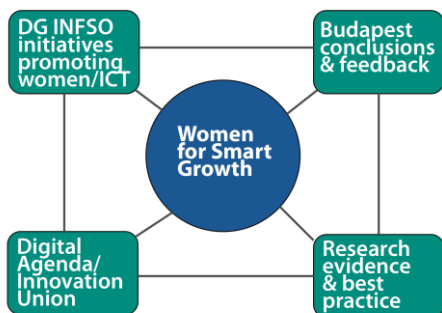
**Microsoft:** Programmes to raise awareness of career opportunities in science, technology, engineering and mathematics (STEM) are key to attract women into science. Such programmes should target children, students, career advisors, parents and policy makers ...Female role models play an important part in raising the profile of STEM among women. Knowledge societies, such as the Association of Computing Machinery (ACM) or the Institute of Electrical and Electronics Engineers (IEEE), do have female members who could be supported in reaching out to females within both schools and universities. Code of best practice for women in research – Together with Alcatel-Lucent, IMEC, Motorola and Orange, and the European Centre for Women and Technology (ECWT), **Microsoft signed a Code of Best Practices for women and ICT. Such a Code of Best Practice is only a beginning and the EU could consider doing a similar one for research.**



## Status of progress and challenges reported in the workshop

In proposing the new strategy for an increased and wide reaching integration of women into ICTs and the Digital Agenda, the Workshop built on the extensive experience of the participants in the area of women and gender issues in ICTs and STEM; past and current policy initiatives; and the substantial body of research evidence concerning gender mainstreaming in STEM.

In addition to identifying the six priority areas, speakers have proposed a range of possible actions to implement change.



Among the key action areas discussed were:

1. Effective communication of the Digital Agenda goals to the young - **Iris de Groot** how an innovative project at her University, helped her and her colleague to 'discover' the Digital Agenda. They were surprised why there was so little information available to them.
2. More effective engagement of schools and teachers – **Agueda Gras-Velazquez** described how working with teachers could help influence attitudes of girls to technology careers.
3. Flexible academic structures and pathways for new gender relations and scientific careers - **Miriam Diocaretz** described the prevailing issues and proposed a '*Multidisciplinary Digital Agenda Programme for Top Students in Higher Education*'
4. How can we move from gender devaluation and gender fatigue to gender energy and get more women to ride up the glass escalator - **Irene Kamperidou** reflected on the inflexible career structures in universities and proposed that "getting gender back on the agenda" requires an *Alternative Model* - redefining professional success and concepts of *excellence*, finding alternative paths to advancement or tenure, establishing measures and best practices at many levels;
5. Promoting female entrepreneurship in universities - **Tracy French** called for early support measures to excite women in universities to create such career routes;
6. Overcoming barriers to careers in industry - **Elizabeth Pollitzer** highlighted five problems facing the sector (female gender stereotypes, gender bias in recruitment, balancing work and life, underutilisation of female talent) and the risk that S&T jobs will move out of Europe and how overcoming these problems will benefit Europe and the Digital Agenda;
7. Using media wisely to promote role models for girls - **Cheryl Miller** highlighted the persistent gender bias in the media and how it impact on girls' career decisions and proposed three specific actions on how to remove these bias: a) Create a pan-European initiative (center/taskforce/working group) to address issues related to Women in (Digital) Media; b) Exploit existing platforms that actively promote women role models in STEM directly to girls; c). Support projects promoting positive women role models in STEM across all media: games, TV, films, books, comics, events -- e.g. the World Expo in Milan 2015
8. Integrating gender into R&D&I - **Martina Schraudner** gave a number of cases demonstrating benefits of gender sensitive innovation;
9. Using ICTs as opportunities for new collaboration - **Kirsti Kieruf** gave example of how sharing knowledge can produce important societal benefits. She proposed three specific measures: a collaboration platform, creating drivers to move women into technology fields, sharing knowledge with women globally, for example to open new business models and explain career paths;
10. Utilising networks to build leadership capacity of women – **Elena Bonfiglioli** reported on Women in Leadership initiative as an example of best practice in ensuring that women join ICT leaders in much greater numbers;
11. Sustainable partnership for European level benchmarking, monitoring progress and impact metrics - and commitment to monitoring progress and impact on gender issues - **Eva Fabry** highlighted the need for partnership and commitment to monitoring progress on gender issues.



The proposed Roadmap has the deadline of 2012 and invites the following actors to promote its implementation: policy makers at EU and member State level; participants and stakeholders in the Digital Agenda, and all other organisations whose functions impact on or can benefit from gender mainstreaming actions including: UN and UN Associates (UNESCO, ITU, UN Women); OECD, ILO.

## **Profile of speakers and audience: constituencies present/ missing, geographical balance, any other relevant aspect**

The Workshop attracted 45 registrations on the DAA website. Participants came from across Europe, but also from the USA and Australia. Many more individuals have acted as ‘observers’ and provided feedback prior to the event helping to shape the discussion and the proposed Roadmap. Only one man attended the Workshop and declared himself as flabbergasted that - given how much the ICT sector struggles with issues of access to high level skills – there were not more men attending the session. Those present came from a diversity of backgrounds: academic, industry, business, NGO’s, policy, media.

## **Key points from the discussion**

The theme of the DAA was Every European Digital. Among the 1400 attendees there were many more men than women. The key question for the DAA should be **"How can we include more women for the DAA in the future?"**

The key point from the discussion was ‘Every Woman Digital = Smart Growth’. The theme of the Workshop was Women for Smart Growth. The mind-set of policy makers and industry needs to be re-focused on thinking about women as a resources and a competitive advantage, focusing on creating a new culture where in Europe both men and women can succeed and create an economic growth for Europe, enabling Europe compete internationally. There is no need for industry to seek highly skilled workers outside Europe. With women making up 52% of graduates, there is sufficient pool of highly educated women within Europe to act as a talent pool for ICT industry. The sector must invest in girls and women so that more can find their way into R&D labs rather than being placed in supporting roles.

## **Actions and commitments mentioned in the workshop; future steps**

The new strategy is called **Every Woman Digital = Smart Growth**

**What it demands:** Participants of the workshop clearly underlined the need for a Gender Action Plan for the Digital Agenda with the key priorities: 1) invest in human capital and include women’s human capital as a driver of innovation; 2) enforce better management based on clear gender equality indicators; 3) promote gender sensitive Digital Agenda; 4) adopt gender mainstreaming best practice and promote female role models; 5) invest early in young people, and girls in particular; 6) monitor /report on progress in implementing gender equality measures.

**Future steps – Who are the actors:** Action is needed at three levels: EU (to link to the EU2020 goals and the restructuring of R&D infrastructure), DA (to engage all relevant participant organisations); wider Stakeholders (industry, universities, schools, HR and R&D organisations; innovation leaders), and including also global key actors (UN and UN Associates (UNESCO, ITU, UN Women); OECD, ILO) – **When this should be implemented:** Target date is 2012

## **Other relevant feedback from participants**

Important feedback was offered during the final Panel Discussion on Social Impact of ICT, where such high level leaders as Staffan Nilsson (SEC), William Kennard (US Ambassador), Diogo Vasconcelos (Cisco) have confirmed that **women have an essential role to play in the way ICT sectors is shaped and shapes society.**

*Patrice BRAUN (University of Ballarat, Australia), 06/06/2011 16:59*



*ICT-enabled women networks and network-to-network (N2N) development/ interaction are integral to knowledge, innovation, trade, community resilience & the socio-economic empowerment agenda in both developed and developing economies. I look forward to contributing to the evidence base that informs both policy and investment in female capital and the feminisation of markets.*



*Annex*

**Workshop programme**

**Workshop 22 – Women for Smart Growth**

**17 June 2011 – 9:30 - 13:00**

9:30 – 9:45	Introduction and purpose of the workshop	Dr E Pollitzer <b>Portia</b>
10: 00– 10:15	Early and sustainable encouraging and backing of scientific and technical talent and skills	Ms A Gras <b>European Schoolnet</b>
10:15 – 10:30	Flexible academic structures and pathways for new gender relations and scientific careers	Dr M Diocaretz <b>Socrates Chair Tilburg University</b> Dr I Kamperidou – <b>Capodistrian University of Athens</b>
10:30 – 10:45	Integration of gender in research and innovation	Dr M Schraudner <b>Fraunhofer Institute of Technology</b>
10:45 – 11:00	Targets for Member States for female entrepreneurship	Ms T French <b>Steinbeis Europa</b>
11:00 – 11:15	Careers in industry: mentorship, internship, recruitment, transparency	Dr E Pollitzer <b>Portia</b>
11:15 – 11:30	Creative positive images through role models,	Ms C Miller <b>Zen Digital</b>
11:30 – 11:45	Global collaboration project(s)	Ms K Kieruf <b>Accentua</b>
11:45 – 12:00	European multi-stakeholder based GAP partnership and platform & European level benchmarking and monitoring	Dr E Fabry <b>European Centre of Women in Technology</b>
12:00 – 12:15	Presentation of Best Practices	Iris de Groot <b>Tilburg University</b> Elena Bonfiglioli <b>Women in Leadership</b>
12:15 – 12:50	Discussion	Dr E Pollitzer <b>Portia</b>
12:50 – 13:00	Finalisation of Roadmap	Dr E Pollitzer <b>Portia</b>