

2009

# Innovation: Embracing the full diversity of Ireland's talent.

SUBMISSION by WOMEN IN TECHNOLOGY AND  
SCIENCE TO THE INNOVATION TASKFORCE



Women in Technology and Science  
September 2009



## Innovation: Embracing the full diversity of Ireland's talent.

The Innovation Taskforce will probably agree that our **Smart Economy** will be achieved through the efforts of our smartest people, with sufficient finance, who focus on our brightest ideas.

We propose that the key to harnessing innovation in Ireland, in economic terms, resides inside the heads of all our people and therefore the more diverse the thinkers, inventors and consumers of innovation- the better.

Diversity usually calls to mind differences in race, gender, ethnicity, physical capabilities, and sexual orientation—social or political differences that at first glance have little to do with innovation. We also call on the taskforce to look at innovation in the broader context of the success of Ireland- to be a **Smart Society**, using our resources, environment, technology and science for the benefit of all.

**Women in Technology and Science** (“WITS”) want **each and every one of you** to consider the **resources**, the talent bank, the inventive **potential** and the market opportunities of women in Ireland for our future.

We challenge you to include women, men, Irish, non-Irish, young and old people as your role models for inventors and entrepreneurs, as engineers and scientists and as teachers, carers and consumers.

We encourage you to ensure that you challenge narrow “stereotypes” of **who** will drive the smart economy and we have summarised some ideas which our members have collected as “food for thought” in your important deliberations for Ireland’s future prosperity.

WITS will be 20 years old in 2010. We are an independent, not for profit organisation with a clear mission.

To **RECRUIT** women into careers in science, technology, engineering and maths

To **RETAIN** women who choose these careers and increase the impact of women in decision making in the workplace, especially in non-traditional technical roles such as maths, physics, IT and engineering

To **RETURN** women who have taken career breaks to look after the young and the old in our society and to use the experiences of this group to help men and women who are currently unemployed to remain work-ready during these recessionary times

To **REVERE** the women who have achieved success in the past as pioneers in astronomy, botany, medicine and physics as roles models for our society.

We have published books, held policy forums, run training programmes, 4<sup>th</sup> level programmes, distance learning programmes and mentoring forums, developed a supportive pro-women SET network and encouraged women to take leadership roles on boards and taskforces through our Talent Bank to achieve the 40% target female participation rate.

We are do-ers! We know what we are talking about!

## Experience: Women as entrepreneurs and intrepeneurs –

Many current and past WITS members have started companies in high technology areas in food, marine technology, communications, biotechnology and venture capital. Many of the comments to the taskforce from this group will be common to companies run and managed by men and women, however specific reports<sup>1</sup> on the “barriers” to female entrepreneurship often fail to acknowledge that vast majority of the “barriers” are common to men and women.

1. **CLUSTER** SME’s who need similar technical supports- use virtual networking!
  - a. Encourage sharing of tech supports on an inter-company basis
  - b. Support cost-sharing and expertise-sharing schemes between companies to maximise cost-effective technology adoption.
  - c. Our IT-savvy entrepreneurs want you to specifically promote the use of “web-farms”

“Put in place a web-farm branded for each county/city as a portal for all businesses. Fill this portal with strong content management systems (CMS) and a number of well-designed templates. Ensure it has all the usual functionality to manage user, e-commerce options, order management etc. In order to prevent lock-in to any technology provider, a small number of CMS could be selected and made available for use. Invite local (perhaps each county or city) IT companies to TENDER for a concession to supply this common ICT infrastructure and make it their target to get local businesses online. This could be facilitated with HPSU clients from Enterprise-related agencies ..... with a little help at the start to get up and running the use of technology would grow and would encourage a win/win situation. Relevant community and voluntary groups should be encouraged to join the web-farm, perhaps as a free service, with the possibility of targets for unemployed participation”

2. **CHALLENGE** the restriction of Enterprise Ireland and County Enterprise Boards to assist companies with “manufacturing” and “export potential”.... think more radically about **what** activities you really want to include as innovative! Close the gap between EI and the CEBs into which many SMEs fall.
3. **CUT** the red-tape. The “ego” and image of many of the support agencies and their internal processes gives the impression to many entrepreneurs that they work for the agency! They do not put the entrepreneur first! This is particularly true at start-up businesses where technical people do not have the full spectrum of commercial, management and financial skills at the very beginning of a new enterprise-irrespective of the sector. Focus resources, space and funding on a really “**bottom-up**” approach to growing businesses.
4. **COMPETE** for international funds for Irish companies. Our members would also like to ensure that Irish government agencies support Irish business in seeking internationally competitive R&D co-funding from schemes such as the EU Framework, Marie Curie and Eureka funding projects.
5. **COUNT!** There is a well known expression in life. “**What gets measured gets done**”.

WITS requests that the taskforce ensure that gender and other diversity measurements are embedded in the ‘outputs’ for a smart economy. State agencies need to have targets for encouraging diversity, including female participation in entrepreneurship, enterprise finance, state- contracts and participation on state-boards.

<sup>1</sup> [http://www.gemconsortium.org/about.aspx?page=special\\_topic\\_women](http://www.gemconsortium.org/about.aspx?page=special_topic_women)

## Harnessing potential: What WITS has to offer –

Public policy has placed a heavy emphasis on encouraging secondary school students to take science studies for junior and leaving cert. Our college courses and PhD programmes can prepare students for work but not for a life-long career in Science, Technology, Engineering and Maths. WITS have members who survived the last recession, have seen companies come and go and have seen public funding for science wax and wane. Membership of organisations like WITS and other professional organisations should be encouraged at a campus level to allow our young students and young professionals access to **MENTORS** to help them on their journey.

Our 20 years of experience in promoting women in Science, Technology, Engineering and Maths means that we have specific experience about how to maintain the expertise in Ireland in people who are newly unemployed.

**WITS | Re-enter pilot programme was launched in February 2008 with funding from Inter Trade Ireland and WITS. Our research has shown that once people leave the workforce, they ignore their work and college networks and in many cases they lose their confidence- making it difficult to Re-enter the workforce.**

**To date 20 women have successfully completed the programme – completing an on-line Open University (“OU”) – Return to Science, Engineering and Technology Course (T161). These 20 women exited the OU course with an up to date CV and an Action Plan! They are implementing their Action Plan and WITS networked them with >20 voluntary mentors to support the women on this exciting journey.**

**Mentoring is a key element of the process to facilitate and support the women to return to a career in SET. Mentors provide guidance and support to the women, acting as a confidant and providing feedback to assist the women achieve their vision of returning to a career.**

- 1. THERE ARE VALUABLE LESSONS IN THIS PROJECT FOR MEN AND WOMEN WITH GREAT SKILLS WHO ARE NOW UNEMPLOYED AND wits WOULD BE INTERESTED IN PARTNERING WITH PROFESSIONAL ORGANISATIONS, COMPANIES AND COLLEGES TO CONTINUE THIS APPROACH TO MAKE US INNOVATION READY!**
- 2. WITS REQUEST THAT FUNDING FOR PARTICIPATION ON SKILLS AND NETWORK RETENTION FOR MEN AND WOMEN IN TECHNICAL AREAS IS FUNDED, WITHOUT IMPACTING ON THE JOB-SEEKERS ALLOWANCE.**

**We support the work of the Innovation Taskforce. We welcome the opportunity to participate and bring our female perspective to your work and we look forward to the publication of a clear and inclusive plan for innovation to emerge from your deliberations.**

## Appendix 1:

[http://www.cso.ie/newsevents/pr\\_womenandmen2008.htm](http://www.cso.ie/newsevents/pr_womenandmen2008.htm)

### Female employment rate exceeds EU 2010 target

The employment rate for women in Ireland was 60.5% in the second quarter of 2008 compared with 48.1% in 1998. This rapid increase means that Ireland already exceeds the EU 2010 target of 60%. The employment rate in 2008 for men was 75.6%, which was well above the average 2007 EU rate of 72.5%.

Women's income<sup>1</sup> in 2006 was around two-thirds of men's income. After adjusting for differences in hours worked, women's hourly earnings were around 86% of men's.

The report shows that women are under-represented in decision-making structures at both national and regional levels. In 2008 only 13% of TDs in Dáil Éireann were women, while they accounted for 34% of members of State Boards, 17% of members of local authorities and just 15% of members of regional authorities. The average representation in national parliaments for EU27 countries was nearly 24% in 2008.

The education and health sectors employed the highest proportion of women, with an 80% share of the total at work in health, 85% in primary education and nearly two-thirds in second level education (62%). However, women were not well represented at senior level positions. In the health service, women represented only 32% of medical and dental consultants. Similarly, women accounted for 51% of primary school managers, and in second level schools women accounted for only 38% of school managers.

The early school leavers rate among women aged 18-24 in 2007 was 8.7%, which was much lower than the male rate of 14.2%. There were higher proportions of girls taking English and European languages at Leaving Certificate higher level in 2008. However, boys had higher rates of participation in technical subjects. Over 90% of Leaving Certificate students taking higher level engineering, construction studies and technical drawing examinations were male. This pattern continued at third level with men accounting for around 86% of graduates in engineering, manufacturing and construction.

The proportion of men at risk of poverty in 2006, after pensions and social transfers, was 17% compared to 19% of women. At risk of poverty rates in 2007 were considerably lower for employed men and women at 6% for both.

Life expectancy for women at birth was 81.6 years in 2006, nearly 5 years more than the value for men of 76.8 years. Life expectancy for men at age less than 1 year in Ireland is over 2 years greater than the EU 27 average, while for women in Ireland life expectancy at age less than 1 year is just over half a year greater than the EU 27 average.

Men were generally more likely to die at a younger age than women, with the difference in risk particularly high in the 15-24 years age group. This reflects a greater tendency for young men to commit suicide and to be victims of motor vehicle accidents.

Ireland had the most gender balanced population in the EU in 2007, with 100 women per 100 men in the population. For older age groups the proportion of women in the population was higher with 80 men per 100 women in the 65 and over age group. At EU level there were 71 men per 100 women in the 65 and over age group.

<sup>1</sup> Refers to income liable for social insurance payments.



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Ms. Kitty Kelly**

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**Ordinary Members: Brid Carter, Margaret Finlay, Anne Hayden, Christian Field, Mianne McCarthy, Frances Buggy, Helen Barry, Katherine Dunne.**

- **Regional groups**

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**Midwest Branch:**

**Cork Branch:**

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**2009 Tax clearance certificate available on request.**