Managing the Risks of ICT, the Global Profession.

The Case for Accreditation, Certification and Mutual Recognition

**WCC 2015**

Moira de Roche - IFIP IP3 Vice-Chair

*Replacing Brenda Aynsley IP3 Chair*
“To take a step back, there is a lack of clarity in the language around professionalism," she says. "This is not just semantics; professionalism is at the very centre of the disruption ICT will cause in the next couple of years as we transition increasingly from old ways of doing things to the information-driven economy. My mission is to get people understanding the same thing when we say ‘professionalism in ICT’.”

Brenda Aynsley, IP3 Chair, ACS President
Given the reach of ICT in our lives, it is important for an ICT professional to be **technically strong** (in order to use the right technology for the relevant problem) **ethically grounded** (to ensure that technology is put to the right use), **socially conscious** (so that the technical solution takes into consideration elements of sustainability) and **business savvy** (to ensure commercial viability which is required for social prosperity and funding of new developments)”

*Tan Moorthy, GIC Director*
## Skills Development Framework

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<th>Area</th>
<th>Skills</th>
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| Technically strong professional | • Emerging skills  
                          | • Legacy skills                                                      |
| Ethically grounded            | • Professional  
                          | • Code of Ethics                                                     |
| Socially conscious            | • Sustainable solutions  
                          | • Trustworthy                                                       |
To establish a global partnership that will strengthen the IT profession and contribute to the development of strong international economies

- **Providing**
  - encouragement and support to the development of both ICT practitioners and employer organisations
  - recognition of those who meet and maintain the required standards for knowledge, experience, competence and integrity (ethics)
  - the development of international standards of professionalism in ICT Capacity building and skills shortages
IFIP IP3 Vision

- A vigorous program to promote professionalism in IT, define international standards and create a global infrastructure that will encourage and support the development of both practitioners and employer organizations

- An international IT profession, equivalent in prestige and structure to other established professions such as law, accountancy and medicine

- The creation of a worldwide set of professional certification schemes recognized as the hallmark of true IT professionalism, delivered through independent national member societies and supported by development frameworks for both individuals and organizations

- A program which reaches beyond the developed world to encourage and facilitate the development of IT capability within emerging nations
Risks

- To the economy
  - Security in the age of the Internet of Things
  - Attacks by other parties
  - Technology used for evil & good
  - Weaknesses in critical underlying systems – catastrophe
  - Capacity building and skills shortages
  - Privacy invasive practices
“Critical software bug could
down Boeing 787s mid-flight

Article went on to say that until a proper fix could be developed and deployed airlines have been instructed to reboot their in flight computer controllers every 248 days to avoid the problem that will happen on the 249th day.

This is a staggering situation that puts at risk almost 1 billion passengers who take to the air every year (809,611,003). In an environment which is highly regulated, air safety, how does this happen?

It happens because business decisions are made every day that puts someone or something at risk. It happens because people are not skilled sufficiently to do the job asked of them. It happens because the environment they work in is not sufficiently rigorous to ensure it does not!
Failure inherent in ICT enabled projects

Reasons

- Leadership, accountability & governance
- Planning
- Funding
- Probity & procurement
- Project Management

Standards for providers of ICT goods and services
Mitigating the risks

- Insist on:
  - Professional ICT employees
  - Service Providers meet standards
  - Continuous Professional Development
- Trustworthy computing
  - Community must understand need
- Collaboration between government and relevant stakeholders