### **OECD Review of Higher Education in Ireland**

**Submission by:** 

Forfás

Date: 4<sup>th</sup> February 2004

### OECD REVIEW OF HIGHER EDUCATION IN IRELAND: Higher Education System and the Needs of the Enterprise Sector

### Introduction

Forfás is responsible for policy research and advice in the fields of enterprise, trade, science, technology and innovation. We consider Higher Education to be crucial to Ireland's economic wellbeing and it is in this context that we wish to make a submission to this important review.

Much economic progress has been achieved in Ireland over recent decades. Incomes and living standards have improved; unemployment has been drastically reduced and the higher education system played a vital role by rapidly increasing the output of well qualified people with relevant skills.

### **Economic Context**

Globalisation of the world economy has accelerated in recent years, spurred on by the emergence of new competitors for international trade and investment such as China, India and Central Europe, and enabled by advances in communications. We are moving towards a world in which "world class" performance is necessary to trade internationally.

Irelands economic growth in recent years has led to higher costs and a rapid transition from a moderate cost to a high cost environment. Our economy displays many of the characteristics of a small, open, regional economy – in particular a high dependence on international trade. According to statistics published in the IMD World Competitiveness Yearbook 2003, Ireland is ranked 6<sup>th</sup> out of 59 countries surveyed in terms of *Trade to GDP Ratio*. We also depend heavily on a small number of sectors, particularly ICT, Life Sciences, Food and Financial Services. For example, according to PwC, Ireland retained its leading position for technology investment in 2002 with 86% of all investment being directed into 'high technology sectors'. This compares with just 60% for Denmark, the second ranked country. Much of our future growth will be in these sectors or in newly evolving areas of internationally traded services.

We therefore believe that future economic progress requires

- development of world class competencies in the spheres of business on which we will depend
- rapid evolution from an investment driven to an innovation driven economy

and that the higher education system should evolve in ways which enable and support this transition.

### Recommendation

Forfás proposes that the following objectives be adopted:

1. To ensure the delivery of world class competencies:

Each university (or alliance of universities) to achieve a world class standard of research in its principal areas of specialisation, and at least 3 of our universities to be recognised as world class research universities

Relevant avenues towards this objective may include:

- Greater cross department interaction and cooperation may be necessary to achieve a high standard of research and to ensure that graduates are themselves equipped with the necessary multidisciplinary skills (ability to work in teams, knowledge of business environment, high quality technical skills)
- Greater flexibility in course choice (e.g. combining science, engineering courses with courses in business, languages, etc.)
- Long term sustained commitment of public funding for R&D to support excellent research in strategically important areas
- Uncertainty regarding funding to the sector (both capital and non-capital) needs to be addressed and the recent trend of lower real funding needs to be reversed to signal national recognition of the role of the sector in meeting societal and economic goals
- Need to ensure that undertaking PhD level research is a viable option for those who wish to do so
- Mechanisms to reward institutions and individuals for research excellence.
- 2. To optimise the application of these competencies in Ireland:

Alignment of research fields, particularly, though not exclusively, of applied research, to areas of economic activity in which Ireland can compete internationally

Relevant avenues towards this objective may include:

- Research themes in different institutes should be consistent with Ireland's move towards an innovation driven economy and with current or anticipated areas of economic strength.
- Public investment in basic research has been increased: it needs to be matched by appropriate levels of funding for relevant applied research.
- 3. To underpin our high dependence on science and technology intensive sectors:

Maintain the relatively high proportion of science, engineering and technology graduates achieved over recent years to reflect our high reliance on technology intensive businesses

Relevant avenues towards this objective may include:

- Ireland to be in the top decile of OECD countries for participation in higher education
- Maximise completion rates and improve gender balance, particularly in engineering
- Third level institutes interacting more proactively with the NCCA to review course material, examine teaching methods, etc., geared towards making SET courses more exciting and interesting, thereby stimulating greater take-up of SET programmes
- Performance management systems in the higher education sector promoting and recognising those who make continuous improvements in the delivery of SET courses.
- 4. In recognition of the fact that 80 per cent of our 2015 workforce is already in the labour force today:

### Systems that Support a High Participation in Life Long Learning

Relevant avenues towards this objective may include:

- Funding anomaly between full-time and part-time education needs to be addressed
- More extensive use of modularisation and other user-friendly models of delivery to accommodate in-work learners
- Examine ways of accommodating study/exam leave requirements of in-work learners
- Increase proportion of students that enter the higher education system through alternative routes to the CAO process.
- 5. To facilitate achievement of the critical mass required for world class performance:

## Higher education needs to operate as a system where institutes work collaboratively in networks, both nationally and internationally

Relevant avenues towards this objective may include:

- Higher education institutes should network more with each other, and cluster their expertise in appropriate contexts (e.g. 4 Dublin-based universities and DIT: National Science Park)
- Higher education institutes should network more with business and industry, including the investment sector to maximise opportunities for innovation
- 6. To maximise the returns on public investment in higher education:

### Optimum technology transfer from the higher education system

Relevant avenues towards this objective may include:

- Develop mechanisms to stimulate and recognise mobility of staff in both directions between academia and industry
- Ensure mechanisms of technology transfer are effective:
  - > Entrepreneurial environment, infrastructure and expertise
  - > Pro-innovation culture of IP regulation and campus company start-ups
  - > Technology transfer expertise/infrastructure
- 7. To ensure that skills needs are met\_at all levels:

# Maintain a balance of skills appropriate to the needs of the economy and the enterprise sector between the vocational/technical training system and higher education system

Relevant avenues towards this objective may include:

- The importance of focusing on the higher end of the skills spectrum is now well recognised. However, equal recognition must be given to the importance of addressing the changing skills needs at the lower end of the labour market.
- There is a need to broaden the range of vocational training to ensure businesses can respond quickly to an ever-changing global economic environment.
- 8. In the interest of national competitiveness:

### No unnecessary barriers to entry to professional education

Relevant avenues towards this objective may include:

- Ensure higher education system supports the drive for greater access to, and more competition in, the professional services industries
- Address the misallocation of talent resulting from the attractiveness of high earnings in protected sectors.
- 9. In order to promote higher standards in international linkages:

### Promote education as an internationally traded service

Relevant avenues towards this objective may include:

- Higher education system should aim to attract greater numbers of undergraduate and postgraduate foreign students. In the longer term, foreign students will foster international links when they return home, strengthening relationships in future collaborations with Irish businesses
- Identify ways to maximise the international competitiveness of the Irish higher education system and benchmark its progress in this regard
- Identify ways to maximise the contribution of foreign students to Irish enterprise development.

- 10. A number of aspects of the operation of the higher education system should be reviewed and, if necessary, adjusted to facilitate attainment of the above objectives:
  - Funding mechanisms
  - Governance structures
  - Organisation + structure
  - Quality control
  - Admissions procedures.

Forfás believes that a guiding principle should be the setting of clear strategic goals by the State, and the establishment of both greater autonomy and clearer accountability for the higher education institutions.