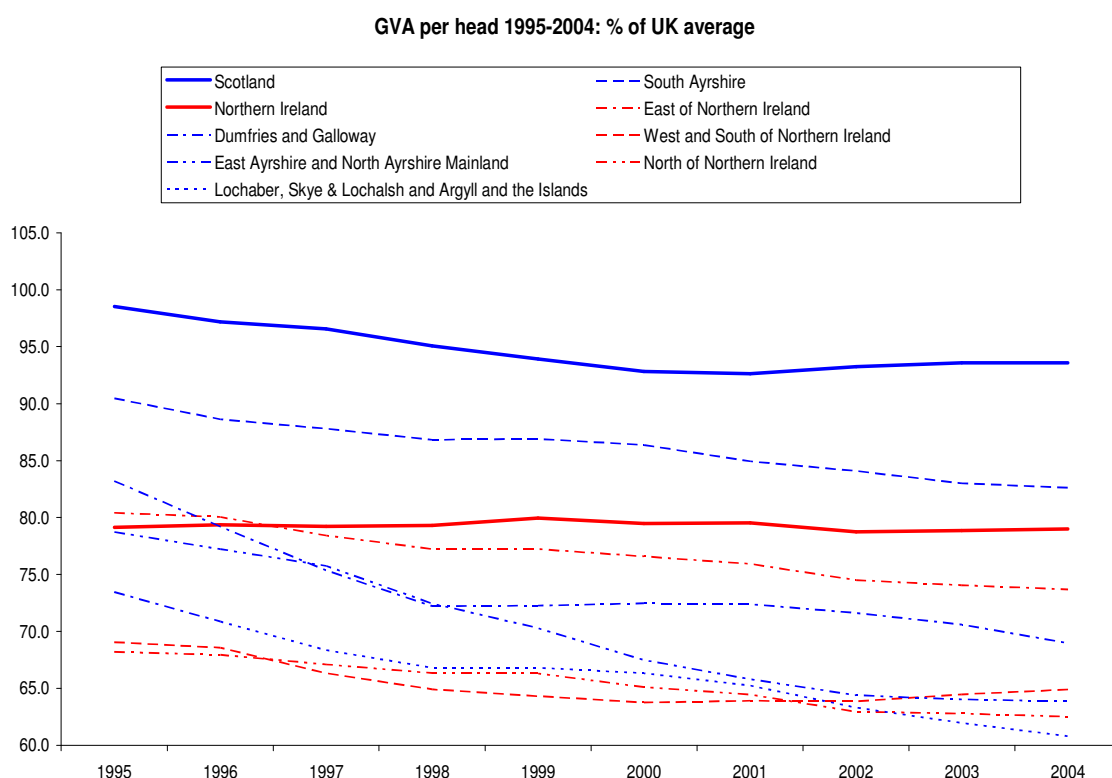


## PROFILE OF THE LEVEL OF INNOVATION IN THE REGION

In the UK as a whole 99.8% of businesses, 55% employment and 51% of turnover is in SMEs. Northern Ireland has the biggest SME base accounting for nearly 80% of employment and 75% of turnover while in Scotland the figures are nearly 58% and 56% respectively (Source: National Statistics).

The diagram below shows how relatively low the Gross-Value Added (GVA) is in the INTERREG sub-regions of Scotland and Northern Ireland compared to the %of the UK Average. Not only is GVA per capita around 30% lower in this region, but there is some evidence of the regions falling further behind (i.e. the gap with the UK average is growing).



In terms of innovation, using the 2005 Community Innovation Survey for the UK to look at single plant enterprises (these are most closely related to the target group for the project), in the South East of the UK (as the ‘best practice’ benchmark’) and the INTERREG sub-regions (postcode information in CIS4 allows such an identification of enterprises); the following table shows that enterprises in the market-based sector of the economy (i.e. excluding the public sector) located in INTERREG sub-regions had lower probabilities of undertaking R&D and/or innovating, and they had much lower levels of R&D spending per employee.

Table: Comparisons of innovation activity in Scotland and Northern Ireland, 2002-2004 (market-based sector)

Percentage of enterprises:	of SE of England	Scotland	Northern Ireland

		Non-INTEREG	INTERREG	Non-INTEREG	INTERREG
<b>Undertaking any R&amp;D (1)</b>	26.4	22.5	14.2	19.4	18.1
<b>Introducing product/process innovation (2)</b>	29.3	25.2	18.0	26.5	28.2
<b>Doing either (1) or (2)</b>	41.7	37.5	29.5	37.4	38.7
<b>R&amp;D per employee (£) for those with R&amp;D&gt;0</b>	646.9	643.9	230.8	261.6	266.2

*Source: weighted CIS4 data (only single-plant enterprises included in calculations)*

Ireland lags behind other European countries in terms of overall business innovation. In 2003, Irish companies only reported 19.1% of sales coming from new or renewed products/services in the previous two years compared to the EU average of 22%. (Source: Innobarometer 2002 EU)

Ireland is also well below the EU average for business expenditure on R&D as a proportion of GDP 0.87% versus 1.3%, and as a percentage of sales 3.3% versus 3.7%. (Source: European Innovation Scoreboard, 2003, CIS European Commission)

With respect to the southern border counties, information is sourced from the BMW region analysis. According to a national study undertaken by National Institute of Transport and Logistics, supply chain management capability of companies in the BMW region is significantly lower than it south and east of Ireland counterparts.

Enterprise Ireland's assessment of productivity between companies in the BMW region and the S&E region companies shows that output per head is 30% lower in the BMW region. In addition, the majority of engineering sub-supply firms are experiencing major price competition from Central Europe. Unless they can innovate and move up the value chain they will not survive.

According to Forfas the BMW region in Ireland comprises:

- 30.7% share of national enterprises
- With respect to ownership of high-tech manufacturing and internationally traded services, the BMW region share of the national sector is low to extremely low (<20%)
- Wages and disposal income are lower in BMW region
- BMW region is more dependent on traditional industry and has difficulties in attracting international direct financial investment.
- S&E Region grew twice the rate of BMW region in the high-tech and services sectors between 1992-2002 with the S&E region's rate of change from traditional sectors to knowledge based sectors more rapid and it is better positioned to face future competition.

- BMW region has 23% of R&D companies but in all cases total turnover is very low compared to S&E region

Overall, gross expenditure on R&D in all three regions (Ireland, Scotland and Northern Ireland) remains low compared to the UK, EU and OECD levels. (Source: A Socio-Economic Profile of Border Region, Northern Ireland and Western Scotland)

The recently published Forfas Report Innovate Market Sell, which looked at the marketing, sales and innovation capabilities of exporting Irish SMEs, highlighted that:

*“Less than half of the SMEs surveyed were satisfied with idea generating and idea screening processes – indicating a lack of understanding of such processes and a lack of tools to structure this early phase of innovation”.*

The report further stated that this:

*“highlighted a need for upskilling which, if not addressed, will remain a significant barrier to SMEs becoming more innovative and competitive”.*

The report made a number of recommendations, which this proposal directly addressed:

Promote Innovation Among SMEs: highlighting that SMES need to be learn that: “successful innovation requires a company-wide innovation culture which they must lead, and may involve working with external parties such as third level institutions and suppliers to access skills and other resources not available in-house” The report highlighted the importance of “on-site support to transfer learning into action”

Cultivate Expertise in Innovation: highlighting the need to provide “skills training in innovation process management” and “developing a portal to facilitate sharing of best practice linking marketing an innovation. This would allow firms to network and learn from each other and to learn through case studies”

Most of the knowledge that firms use in innovation comes from outside, so absorptive capacity, which is the ability to recognise the value of new external information, assimilate it and apply it to commercial ends is key to performance. From literature, five elements are seen as central to this:

- Human capital, especially in form of graduates, scientists etc
- Ability to network with external sources of knowledge and other resources
- Organisation, routines and organisational processes
- Learning processes (cognition)
- Codification

Forfas Making Technological Knowledge Work – A study of Absorptive capacity of Irish SMEs February 2005 highlighted that

*“improving the capabilities of smaller firms with low technological capability cannot be achieved simply by hanging up a sign advertising support, and waiting for companies to apply. A proactive approach is needed to:*

*Broaden awareness of innovation and recognising the value of external knowledge*  
*Develop human resources*  
*Increase networking*  
*Improve management organisation and routines*  
*Develop learning processes within companies”*