eBusiness Strategy

Optimising usage of ICTs by irish SMEs and microenterprises

Department of Enterprise, Trade and Employment

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Executive Summary

This document is intended to form the basis of a new national eBusiness strategy. The aim of this strategy is to encourage and assist SMEs, and micro-enterprises, in the non-ICT producing sectors of the economy, to use Information and Communication Technologies (ICTs) in a way that will maximise their competitive advantage. The document represents the output of a Project Group established in December 2003 for this purpose. The Group was led by the Department of Enterprise, Trade & Employment and comprised representatives of Forfás, Enterprise Ireland, Shannon Development and the City and County Enterprise Boards.

Effective use of ICTs across all sectors of the economy can act as a driver to increase competitiveness. Relatively low levels of ICT usage by European companies, outside of the ICT sector, has been a contributing factor to the failure of Europe to catch up with productivity growth rates of the US. While Ireland has a very strong ICT sector and the potential to become a world leader in newly emerging ICT related industries, our performance is far less impressive when it comes to the use of ICTs by existing enterprises in the non-ICT sectors of the economy.

An analysis of the factual position as regards ICT usage by Irish enterprises shows that access to, and use of, computers and the Internet are now widespread, even amongst small and medium sized companies. The dynamic in relation to Internet access is now more about the speed and cost of that access.

The main purposes for which Irish businesses use the Internet are to search for information (75%), for online banking and financial services (65%), and for market monitoring (37%). Half of all enterprises have IT systems for managing orders and purchases. However, only a quarter of such companies have links between these systems and IT invoicing/ payment systems. Only 14% of companies have links between their IT systems for managing orders and their internal reordering systems. While, as might be expected, larger companies tend to make more sophisticated use of ICT than smaller companies, poor integration of IT systems also appears to be an issue for large companies. Overall there is quite a low level of sophistication in ICT usage among Irish enterprises.

A number of obstacles to greater and more effective usage of ICTs by enterprises outside of the ICT related sectors have been identified. These include a lack of appreciation on the part of owner/managers of the contribution that ICTs can make to their business, a lack of appropriate internal IT resources and skills or independent external advice, and the relatively high costs associated with investments in ICTs. The recent Economist Intelligence Unit report on ICT usage in Europe also cites lack of ICT knowledge in senior management as the biggest internal barrier to European companies maximising the benefits of ICTs

This strategy document contains recommendations to help overcome these obstacles and to stimulate optimum ICT usage by SMEs and micro-enterprises throughout the economy. The recommendations, which are detailed in Chapter 4, cover four broad areas:

- How to build ICT management and user skills
- Supports by the development agencies

- Provision of information
- Performance monitoring and research

A Working Group is being established to oversee implementation of the recommendations. This Group will be required to submit a report to the Minister for Enterprise, Trade and Employment before the end of 2005.

Chapter 1

INTRODUCTION

1.1. What is "eBusiness"

The term "eBusiness" has a very broad application. It can describe companies operating in the ICT producing sectors as well as new emerging sectors and industries such as in the area of digital content. However, at a more fundamental level, the term eBusiness also describes the application of information and communication technologies to business processes in all sectors of the economy to reduce costs, to improve customer value and to find new markets for products and services. It is this aspect of eBusiness that is addressed in this document. The document is intended to form the basis of a new national eBusiness strategy aimed at encouraging and assisting SMEs, including micro-enterprises, across all sectors of the economy, to use ICTs in a way that will maximise their competitive advantage. Effective use of ICTs by enterprises is a key element in building competitiveness.

1.2. The next ICT Challenge

The Lisbon Summit in March 2000 set the goal of making Europe the most dynamic knowledge based economy in the world by 2010. With European productivity growth rates fluctuating between 0.5% and 1%, the low uptake of ICTs by enterprises outside of the ICT sector in Europe is a contributing factor to the failure to catch up on the US. The relatively low levels of ICT usage (as distinct from ICT investments or ICT production) by European companies has also been identified by the Economist Intelligence Unit as the main differentiating factor in the US advantage over Europe in productivity growth.[1] It also notes Europe's weaknesses are most acute among SMEs and that success in encouraging innovation and effective ICT usage by SMEs across all sectors of the economy will have a large impact on the European economy's ability to reap greater economic growth and productivity gains.

The European Commission has identified 3 factors that make it difficult for SMEs, in particular, to engage more fully with ICTs;

1) the relatively high costs associated with investments in ICTs
2) the lack of technical and managerial skills and
3) reluctance on the part of SMEs to network with other enterprises.[2]

Action by policy makers to entrench ICT-related managerial skills in the workforce has also been identified by the EIU as one of the key imperatives for European policy makers and business leaders in creating a business environment where innovation can thrive and where the benefits of ICT are readily available at all levels of the economy.

Ireland has a very strong ICT producing sector and performs extremely well when compared to other leading economies, both in terms of enterprise creation and attraction of FDI in the ICT and related sectors. Ireland also has the potential and opportunity to become a world leader in the emerging digital content industry by focusing on a number of key sectors where existing strengths can be exploited such as eLearning, digital games, digital libraries, telematics/wireless services and non-media applications. Our performance is less impressive, however, when it comes to the adoption of ICTs by existing enterprises in the non - ICT related sectors of the economy[3].

[1]Economist Intelligence Unit report on "Reaping the benefits of ICT – Europe's productivity Challenge" http://graphics.eiu.com/files/ad_pdfs/MICROSOFT_FINAL.pdf
[2]European Commission Report "Adapting eBusiness policies in a changing environment – The lessons of the Go Digital initiative and the challenges ahead". March 2003 http://www.europa.eu.int/comm/enterprise/ict/policy/doc/com_2003_148_en.pdf
[3]Forfás eBusiness Monitor November 2003, http://www.Forfás.ie/publications/ecommerce.htm

eBusiness is also opening up many more sectors of the Irish economy to international competition as it makes it increasingly easy and cost effective for many types of work to be conducted at a distance. Administrative tasks such as handling small ads for a newspaper, architectural design and publishing are just a few examples of the types of sectors that are likely to face increasing international competition as large companies and public sector buyers take advantage of the cost savings offered by electronic procurement. This makes it increasingly important for Irish enterprises to engage with and make more effective use of ICTs. There is a twofold challenge for Irish enterprises in this regard:

- To use ICT as a generator of competitive advantage in the context of the environment they operate in, to facilitate new business models and new ways of working. Leading companies in their sectors such as Ryanair and Dell, have already shown how ICT can enable a differentiated business model.
- It is also vital that companies ensure that the ICT systems they have are robust and secure and that they obtain the maximum benefit from ICT investments already made. Research conducted by Enterprise Ireland indicates that the majority of Irish SMEs are weak in this regard[4].

1.3. Establishment of eBusiness Strategy Project Group

In November 2003 the Department of Enterprise Trade and Employment, in conjunction with Forfás, Enterprise Ireland, Shannon Development and the County Enterprise Boards established a Project Group. The aim of this Group was to examine the factual position as regards current levels of usage of ICTs by Irish enterprises, in particular SMEs and micro-enterprises, and to identify the obstacles to more effective usage and ways in which the Department and its agencies could assist in overcoming these obstacles. The objective was to present the results of this work in the form of a new strategy to encourage and assist SMEs, including micro-enterprises to use eBusiness in a way which will maximise their competitive advantage. The terms of reference and methodology of the Group are at Appendix 1.

1.4. Context/Impetus for the development of a new strategy

Since 1999 a myriad of actions have been taken by the Department and the agencies to foster an environment conducive to eBusiness in the broadest sense, and to help enterprises benefit from the potential of the Information Society. A number of reports with recommendations for further actions in this regard have also been published.[5] Considerable emphasis has also been placed on the development of IT skills for the ICT producing sector. However, co-ordinated strategy specifically targeted at stimulating greater and more effective usage of ICTs by enterprises across all sectors of the economy has not been articulated to date.

Having regard to the foregoing it was felt that the time was opportune to examine the potential roles for the Department and the agencies going forward in this area. Also, the Forfás eBusiness Monitor 2003, found that while Ireland has performed very well in terms of the creation of indigenous eBusiness related enterprises and in attracting eBusiness related foreign direct investment, Ireland lags other key economies in terms of the adoption of eBusiness by existing enterprises. In May 2003, the European Council also

[4]http://www.enterprise-ireland.com/eBusiness/ebit_ictissues.htm

[5]Forfás: 'e-Commerce the Policy Requirements', 1999 . http://www.Forfás.ie/publications/ecommerce.htm
Forfás: 'Legislating for Competitive Advantage in eBusiness and ICTs', October 2002
Information Society Commission: 'Building the Knowledge Economy', December 2002
Forfás: 'eBusiness Monitor' November 2003, http://www.Forfás.ie/publications/ecommerce.htm
Information Society Commission: 'Building Trust Through the Legal Framework', December 2002
'New Connections: Second Information Society Action Plan', March 2002

endorsed a recommendation from the European Commission, that Member States should regularly review their support policies to help SMEs adapt to the changing environment for eBusiness[6].

The initiation of work on the strategy was substantially facilitated by the publication in November 2003 of the CSO Report, "Information Society Statistics-Ireland 2003:".[7] This is the first report to provide comprehensive statistical information on the ICT sector in Ireland and on the use of ICTs by households and enterprises. The first survey on the adoption of ICTs by Irish enterprises was undertaken by the CSO in October 2002 and was repeated in March 2003. The results of the 2004 survey were not available at the time of publication. Approx 10,000 enterprises were surveyed in 2003 and the response rate was 50%. A legal basis for the survey has now been adopted at EU level and it will be the source for most of the statistical indicators used to monitor the implementation of the eEurope Action Plan by Ireland and the other Member States.

[6]http://www.europa.eu.int/comm/enterprise/ict/policy/doc/com_2003_148_en.pdf
[7]http://www.cso.ie/publications/ict/ictirelandjune2003.pdf

Chapter 2

THE INFORMATION SOCIETY AND ROLE OF THE DEPARTMENT OF ENTERPRISE, TRADE & EMPLOYMENT

2.1 The Information Society

2.1.1. The Information Society Action Plan

Ireland was one of the first countries to recognise the potential and challenges of the Internet, with the establishment of an Information Society Commission in 1998, and publication of the Government's first Action Plan for the Information Society in 1999.

The First Information Society Action plan set out a range of actions to bring the benefits of the Information Society to citizens and business and to ensure that Ireland became a global player in the Information Society. These actions focussed on the development of the telecommunications infrastructure and regulatory environment, developing eBusiness opportunities, delivering public services electronically and generally stimulating widespread societal engagement with the Internet. The Government also established a special Information Society Fund to support specific actions intended to achieve the objectives of the Action Plan.

New Connections, the Government's second Information Society Action Plan was published in March 2002[8]. In Sustaining Progress[9], the Government reaffirmed its commitment to securing and maintaining a leading position for Ireland in the global information society through the implementation of the recommendations set out in New Connections. The second progress report on New Connections was published in April 2004[10]. The report outlines progress in the seven policy strands set out in the Action Plan - Telecommunication Infrastructure, Legal & Regulatory Environment, eGovernment, eBusiness; R&D, Lifelong Learning and eInclusion.

2.1.2. eEurope

Developing a successful European Information Society is at the heart of the EU's Lisbon Goal of becoming the world's most dynamic and competitive economy by 2010.[11] The eEurope Action Plans 2002 and 2005 set out the actions and targets agreed at EU level to stimulate greater usage of ICTs and exploit the opportunities offered by the Internet .

The Department of the Taoiseach has overall responsibility for coordinating Ireland's Information Society agenda and, since January 2003 for the eEurope agenda. That Department is also responsible for the Cabinet Sub Committee on the Information Society and for chairing the cross Departmental Information Society Implementation Groups at Secretary General and Assistant Secretary level. The Secretariat to the Information Society Commission is also provided by the Department of the Taoiseach.

2.2 Department of Enterprise Trade and Employment and agencies

2.2.1. Roles for Department and agencies

The Department of Enterprise, Trade and Employment and the enterprise development agencies are responsible for implementing the aspects of the national and EU Information Society Action Plans

[8]http://www.taoiseach.gov.ie/index.asp?docID=557
[9]http://www.taoiseach.gov.ie/index.asp?docID=1424
[10]http://www.taoiseach.gov.ie/index.asp?locID=181&docID=1773
[11]http://www.europa.eu.int/information_society/eeurope/2005/index_en.htm

concerned with enterprise creation and development, innovation, R&D and skills development. The Department and its individual agencies are also responsible for delivering their own aspects of the eGovernment agenda.

2.2.2. Legislative Framework

On the legislative front, the Department of Enterprise, Trade and Employment is responsible for the legislation giving effect to the Electronic Commerce Directive as well as for legislation in the consumer area and in relation to intellectual property rights that is relevant to online trading.

2.2.3. Targeted Support for Enterprises

Since 1999, the Department has administered the drawdown of funding totalling €16m from the Information Society fund. These funds have supported a number of initiatives undertaken by the Department, its agencies and private sector organisations, to encourage enterprises to exploit the opportunities afforded by ICTs. These included the initial business awareness campaign conducted by the Department in conjunction with IBEC, the Enterprise Ireland Acceleration Fund and eBIT programmes, the EMPOWER initiative undertaken by the County Enterprise Boards and the PRISM training and awareness programmes undertaken by the Chambers of Commerce of Ireland. The Department, through Forfás has also commissioned regular benchmarking studies of the environment for eBusiness in Ireland and of our performance vis-à-vis other leading economies. Details of ISF funded initiatives as well as initiatives funded through agency own resources to assist businesses engage with ICTs are at Appendix 2.

Chapter 3

USAGE OF ICTS BY IRISH ENTERPRISES

3.1 Usage of ICTs by Irish Enterprises

This Chapter presents the factual position as regards ICT usage by Irish enterprises, based on the analysis carried out by the Project Group of CSO and other data, and identifies the key challenges to be addressed in stimulating more optimum ICT usage.

3.2 Access to ICTs and the Internet

According to the 2003 CSO report on ICT usage by enterprises, of all enterprises reported on:

- 95% use computers,
- 85% use email and
- 86% use the Internet.

With the exception of the computer and related activities sector, where the results show close to 100% use, there is a similar level of uptake of these technologies across all sectors.

While the CSO surveyed enterprises in the manufacturing sector with 3 or more employees, published results for 2003 are only available for enterprises with 10 or more employees. CSO data for 2001 shows that 54% of manufacturing companies employing less than 10 used email and 24% had websites. In the services sector the corresponding figures were 37% and 13% respectively.

It has not been possible to access comparable 2003 figures from the Eurostat survey for other EU Member States. However, usage of the Internet by Irish enterprises in 2002 was in line with the OECD average. Japan, Finland, Sweden and Denmark recorded the highest rates of Internet usage by enterprises (+95%). Usage of the Internet by Irish enterprises (84%) was on a par with Germany, New Zealand, Spain, the Netherlands and Norway.

Access to ICTs and the Internet *per se* does not therefore appear to be a major problem for Irish enterprises. The survey also shows that Internet connectivity is relatively common, even among the smaller and mid sized companies. The dynamic in relation to Internet access would now appear to be more about the speed and cost of that access. In particular the widespread availability of broadband services at affordable prices has a critical role to play in the stimulation of greater usage of ICTs by small businesses.

Policies that promote infrastructure availability in isolation from the demand-driven applications that utilise this capacity can run the risk of encouraging inefficient investment decisions in telecommunications. Much of the focus to date has been on the supply of broadband given Ireland's current position in this context. Going forward, it will be necessary to ensure that support is also given to promoting awareness and demand for broadband content and applications. An increase in demand for broadband should consequently enhance the business case for telecommunications operators to invest in rolling out further infrastructure, particularly in more regional locations.

As access to broadband will enable more effective usage of the Internet by Irish enterprises, it is important to increase awareness among enterprises of the benefits that broadband can bring. The Department of Communications has developed a Broadband Information website to inform business and consumers of

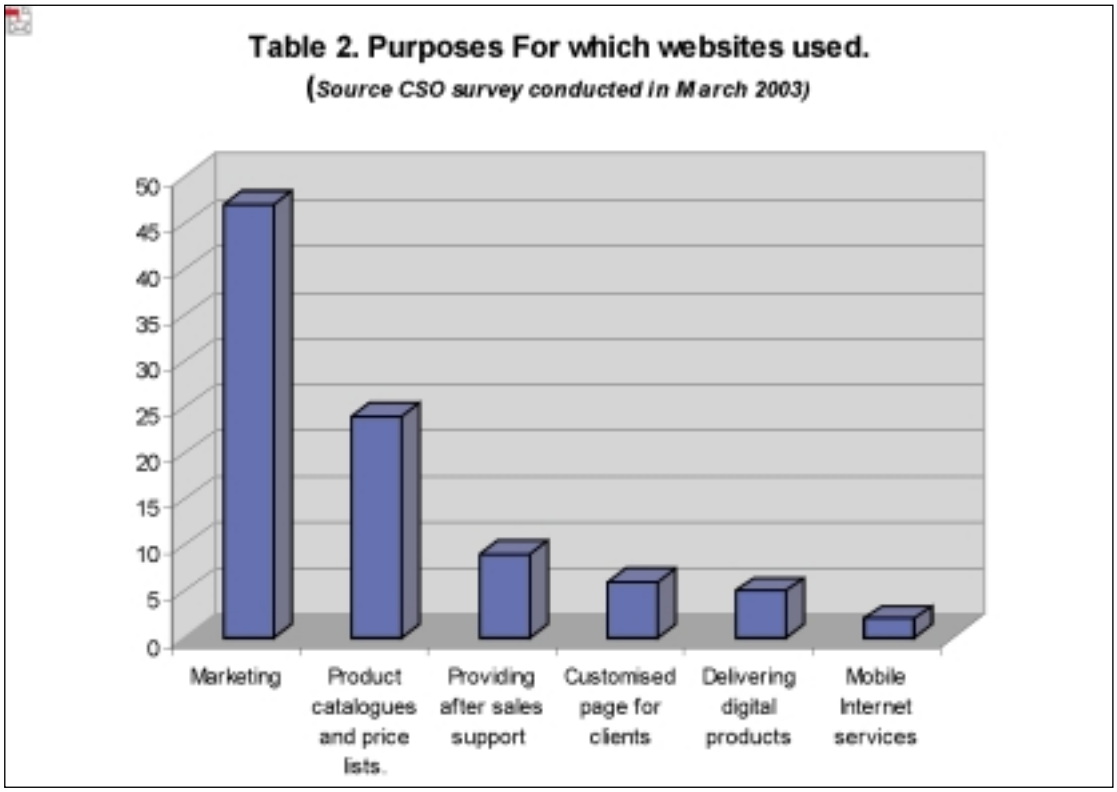
the availability of broadband and to assist them in making a comparison between the different broadband products available on the market (www.broadband.gov.ie).

3.3 What do Irish companies use ICTs for?

The main purposes for which Irish businesses use the Internet are to

1) to search for information (75% of enterprises)
2) to avail of banking and financial services (65%), and
3) to monitor markets (37%).

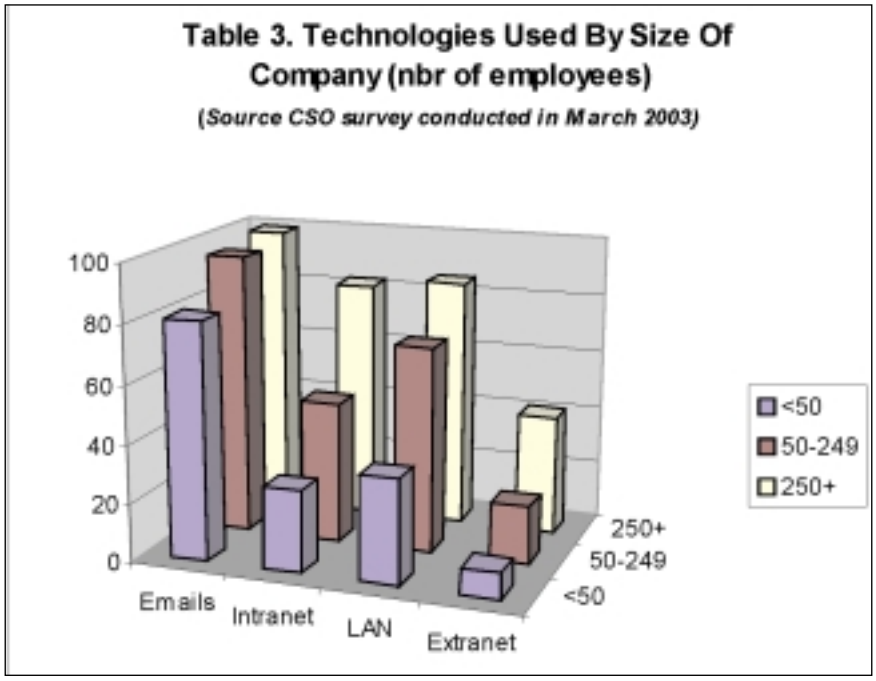
Just under two thirds of enterprises have a website. The exceptions are the computer and related services sector, (95% with websites) and the tourism sector where 81% of businesses have a website. Businesses with websites mainly use them to market their products and to make catalogues and price lists available. Only 9% of all enterprises use the Internet to provide after sales services to clients. The number of companies in the 250+employee bracket that do so is somewhat higher, but still low at 13%.



Half of all enterprises have IT systems for managing orders and purchases. However, only a quarter of such companies have links between these systems and IT invoicing/ payment systems. Only 14% of companies have links between their IT systems for managing orders and internal reordering systems.

While, as might be expected, bigger companies tend to make more sophisticated use of ICT than smaller companies, poor integration of IT systems also appears to be an issue for large companies. A significant minority of large companies also appear to be far less sophisticated in their use of ICTs than might have

been assumed to be. The data suggests that some of this minority might be less sophisticated than many companies in the under 50-employee range. For example 15% of companies with 250+ employees do not have a LAN while 36% of the small (under 50 employee) companies do.



It can therefore be concluded that while access to and use of the Internet is widespread, there is quite a low level of sophistication in the use of ICTs and the Internet by Irish enterprises-this is a problem for large companies also.

3.4 Reasons for lack of engagement with ICTs

While the enterprise development agencies have a very good insight into the issues for companies in relation to the usage of ICTs, it was important to discuss the conclusions drawn from the data with enterprises and to get direct input from them on what the obstacles are to greater and more effective deployment of ICTs and how these might be addressed. A focus group session was undertaken for this purpose, facilitated by the IMI. Participants in the Focus Group were asked for reasons why there appears to be such a low level of integration of ICT systems, internally, and with customers.

While interlinked, responses on the lack of engagement with ICTs covered three broad areas:

i. lack of appreciation among owners/managers of the contribution that ICTs can make to their business,
ii. lack of appropriate internal IT skills, and
iii. the costs associated with IT.

These also reflect the difficulties for SMEs identified by the European Commission (see section 1.2 above).

It emerged that for many companies, not just the smaller ones, IT is regarded as a stand-alone function and deployment of ICTs is not regarded as part of the core business strategy. Lack of understanding or fear of

IT among older companies/managers can also be a contributing factor. It was suggested that for ICTs to become part of the core business agenda, owner/managers need to be able to see the benefits of greater ICT usage. Another significant issue is that investment in IT can be costly for small companies in particular, there is invariably competition for scarce resources, manpower as well as cash. The problem is that such investment is required on an ongoing basis and not just when new functionality is added. The fact of the matter is also that many IT investments do not prove to be successful. Companies who have had bad experiences with costly IT investments are very reluctant to put further resources into new systems. The cost for larger companies of integrating a number of different IT systems can also simply be prohibitive. Lack of in house technical IT skills also means that many companies do not fully realise the benefits of the IT investments that they have already made.

A significant majority of SMEs do not have a dedicated IT Department, or even a dedicated IT manager. Anecdotal evidence would also suggest that most do not have any form of written ICT strategy or IT action plan. A question was added to the 2004 CSO survey asking enterprises whether or not they do have a written ICT strategy/action plan.

An absence of in-house IT skills often means that the main source of IT advice for many companies is the sales person who is trying to sell them IT hardware or services. This can lead to inappropriate investments. Sourcing independent ICT advice can, however, be very expensive even if an appropriate source of advice can be identified. The quality of the advice from independent consultants can also vary considerably.

The unavailability of appropriate IT strategy training for owner/managers and key personnel in small companies has also been identified as a difficulty. While there is many publicly and privately funded IT courses available, most focus primarily on the technical, rather than the managerial aspects of IT. Some require attendance over weeks/months and are orientated to a qualification. It was noted that owner/managers find it difficult to spend the time doing lengthy courses in IT-they want shorter more focussed training relevant to the day to day running of their businesses.

The 2003 Benchmarking study for the UK Department of Trade and Industry (DTI)[12] found that smaller businesses in the UK are also lagging noticeably in more sophisticated usage of ICTs. This has led to an unmistakable trend over the past 3 years in the UK of smaller businesses "switching off" the Internet. The reasons for this were:

- it is more difficult for small businesses to access/afford broadband
- they don't have the scale to employ IT specialists so are unable to deploy ICTs as effectively as larger companies
- major IT vendors are focussing on larger businesses so those that employ less than 50 staff "fall through the cracks".

A quote from one senior executive interviewed for the DTI study might equally describe the situation facing many Irish SMEs *"smaller businesses, more than any, need someone to help them exploit technology, but no one's set up to do it"*.

[12] DTI Business in the Information Age, International Benchmarking Study 2003, Booz Allen Hamilton

Research conducted by EI[13] into the ICT status of SMEs (excluding micro-companies) indicates that most companies are failing to make optimum use of their existing IT facilities and about half face business risks due to IT weaknesses, especially the fact their IT systems are either not secure or not robust (see 3.7 below). A large majority of companies are weak or very weak on ICT strategy skills. However, significant extra investment in ICT was warranted in only a minority (38%) of cases. In other words, for many companies it would be inappropriate to make significant further investment in ICT, at least in the short to medium term. Instead, the key need is to make better decisions about IT investment, to better manage the IT facilities they already have and to make more use of these facilities. While these views are based on research that excluded micro-companies, anecdotal evidence from those working with such companies suggests that the above issues are also applicable to micro-companies.

Encouraging better use of ICT may also, in the longer term, increase the level of engagement. This is because the companies who make best use of IT are more likely to experience benefits from it and thus presumably to make more use of the IT facilities they already have. They will also be more likely to invest further in IT when their business environment warrants such investment.

The survey conducted for the recent EIU report also cites lack of ICT knowledge in senior management as the biggest internal barrier to European companies maximising the benefits of ICTs. The report suggests that the organisations that will be most successful in harnessing ICT will train their staff not only how to use new technology, but also in more challenging areas such as how to deploy technology for competitive advantage. In particular, managers will need to improve their understanding of the benefits, risks and commercial impact of new technology. The report recommends the entrenchment of ICT-related managerial skills in the workplace as one of the five imperatives for European policy makers and business leaders if they are to unleash the enablers of ICT-led productivity growth.

On the basis of the forgoing the following key challenge needs to be addressed:

KEY CHALLENGE 1
How to build ICT-management skills and ICT user skills in Irish SMEs

3.5 eCommerce

As is the case with all other OECD countries[14] Irish enterprises use the Internet more as a tool for ordering goods and services than for selling. Larger firms also use the Internet more frequently than smaller companies.

The CSO survey found that 30% of enterprises in industry sold goods using eCommerce, with such sales accounting for almost 25% of turnover. Electronic Data Interchange (EDI) accounted for about half of eCommerce sales. 25% of businesses in the services sector had sales via eCommerce, representing about 13% of turnover. Almost half of all businesses have purchased some goods or services using eCommerce, but the percentage of total purchases made in this way is still very small. The exception is the retail and wholesale sectors where 9% of purchases are made by EDI.

[13]http://www.enterprise-ireland.com/eBusiness/ebit_ictissues.htm
[14]http://www.oecd.org

The findings of the CSO survey that more Irish businesses are integrating systems with suppliers than with customers also mirrors those of the DTI International Benchmarking Study 2003[15] which identified "…*a clear theme of ICTs being used as a tool to drive supply chain efficiencies - and to unlock value for the buyer - at the expense of the seller*". The UK study also reported that in Sweden, where 66% of businesses engage in online procurement, concentration of buying power has allowed a few large manufacturing businesses to force numerous smaller suppliers to participate in online supply chain systems.

In this regard it should be noted that while 39% of all Irish companies placed orders over the Internet in 2003, the percentage is twice that, (79%) for companies in the 250+ employee bracket. The equivalent figure for 2002 was 64%. 18% of large companies purchased via B2B marketplaces in 2003 and 23% of them used EDI for purchasing, up 15% from the previous year.

From the foregoing it can be concluded that eCommerce still represents a very small percentage of buying and selling. However, almost twice as many Irish enterprises place orders over the Internet than receive orders via the Internet.

3.6 Barriers to eCommerce

The CSO survey asked enterprises what they perceived as the main barriers to eCommerce. While the emphasis was different depending on whether the companies were actually selling on line or not, security problems about payments and uncertainty concerning the legal framework for eCommerce were regarded as significant barriers to online trading by all enterprises. The other key barriers identified in the survey were; customers not ready for Internet commerce and products and services not suitable, although the latter might be more correctly characterised as a reason for not trading online rather than a barrier to online trading.

Participants in the Focus Group Session indicated that enterprise concerns about online trading included, insufficient awareness of "secure sites", insufficient knowledge of the laws applicable to online trading, concerns about the risks associated with online payments and the costs associated with managing such risks.

The findings of the survey in relation to uncertainty over the legal framework for eCommerce are also reflective of the conclusions of the Commission's first report on the application of the eCommerce directive,[16] the DG Enterprise online consultation on legal barriers to eBusiness[17] and the 2003 SME eBusiness survey conducted by the Chambers of Commerce[18]. This suggests that lack of awareness of the legal framework is the real issue that needs to be addressed, rather than the legal framework *per se*. From an initial review of key websites with eBusiness related information and advice it is clear that there are information gaps in this area.

The CSO survey also shows that very few of the Irish enterprises that trade online subscribe to confidence building measures such as customer complaints mechanisms (10% of enterprises), trust mark schemes

[15]DTI Business in the Information Age, International Benchmarking Study 2003, Booz Allen Hamilton
[16]http://www.europa.eu.int/eur-lex/pri/en/dpi/rpt/doc/2003/com2003_0702en01.doc
[17]http://www.europa.eu.int/comm/enterprise/ict/policy/doc/legal_barriers_sec_2004_498.pdf
[18]Chambers of Commerce of Ireland SME e-Business Survey 2003

(3%), codes of conduct (6%). This low uptake is at least partially accounted for by the fact that many Irish companies are using the Internet primarily to trade with long standing customers with whom they have built up trust via off-line contact and therefore do not see the need to subscribe to such schemes. Other companies have already gained the trust of consumers through well established brand names. However, it may also be the case that companies are not aware of the potential benefits of codes of conduct, trustmark schemes etc.

The first report by the Commission on the application of the eCommerce directive also noted that after an initial boom in the establishment of trustmarks and labels, immediately following the adoption of the directive, activity in this area has slowed down. This probably arises partially because the plethora of trust marks has reduced customer recognition of any individual trustmarks and thus reduced their effectiveness as a confidence building measure. However, even if companies selling online feel that trustmarks are not worthwhile, there is still a need to promote codes of conduct and other best practice methods of building trust.

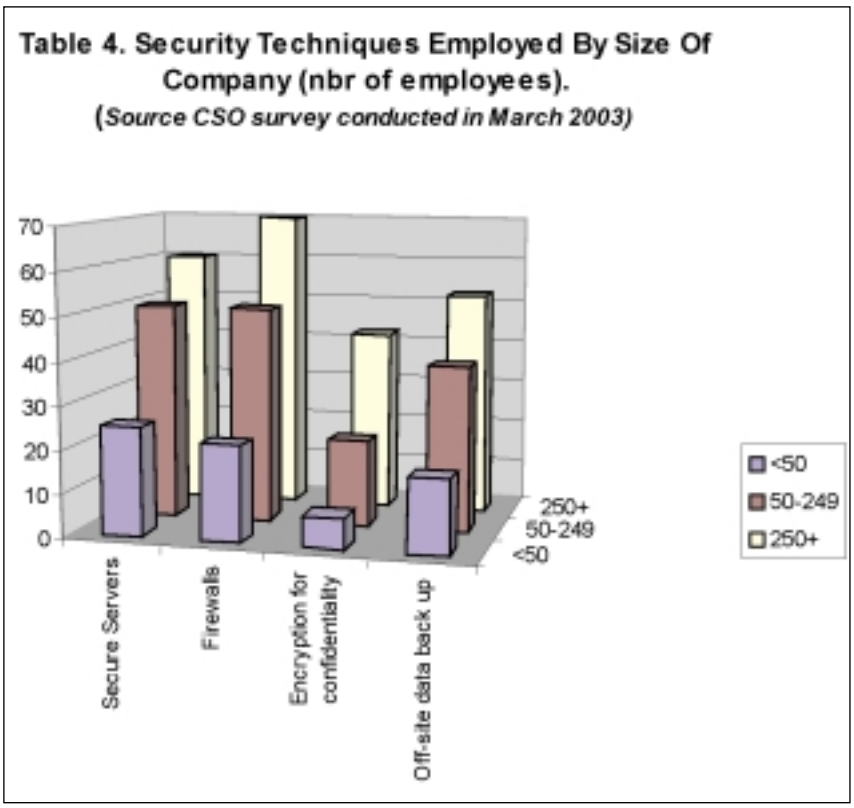
In relation to B2B eCommerce, the Commission has established an expert group to promote the elaboration of codes of conduct in B2B internet trading platforms. This group has already prepared a report with a checklist for the assessment of such codes. The Commission has also funded an initiative, eMarketservices.com which provides objective information to companies who are considering using online marketplaces. Enterprise Ireland is a participant in this initiative.

While the time/resources available for this project did not permit an in depth examination of each of the issues put forward as barriers to eCommerce, the available evidence/analysis suggests that for many companies a general lack of confidence is a barrier to trading online.

3.7 Security

The survey findings demonstrate an overall very low appreciation amongst Irish businesses of the importance of maintaining secure IT systems. Only 22% (small), 50% (medium) and 70%(large) companies use firewalls and only 17%, 38% and 52% respectively, use off-site data back up. When account is taken of the growing usage of ADSL, fixed high-speed connections and ISDN, the low level of firewall usage is particularly worrying.

[19]http://europa.eu.int/comm/enterprise/ict/policyb2b/wshop/fin-report.pdf



It has been suggested that the reason eSecurity is not treated as a priority could be attributed to lack of knowledge and poor perception the 'eVillain' is not visible, and enterprises assume that once they install virus software, they perceive themselves be safe from harm. An issue that clearly needs to be addressed is how to build appreciation among enterprises of the need to maintain secure IT systems.

The Department of Communications, Marine and Natural Resources has core responsibility in this area and has developed the netsecure website (www.netsecure.ie) to provide advice on IT security issues. That Department, in conjunction with industry and the Information Society Commission, launched a national Information Security Awareness Day in November (www.makeITsecure.ie). Enterprise Ireland also provides advice on network security through the Open Up website (www.openup.ie) and Information Society funding has also been made available to the Chambers of Commerce of Ireland to develop a guide for businesses on the importance of network security.

KEY CHALLENGE 2

What can be done to build confidence of enterprises in trading online

3.8 eProcurement

If significant Irish based private and public organisations are going to do more procurement electronically then their current SME supply base must be able to adapt to this way of doing business. eProcurement and related developments (e.g. aggregation of demand/requirement for supplier-managed inventories), will reduce "knowledge" barriers to entry thus promoting more intense international competition. Depending on the sector within which an SME operates, the implications may be significant. On the positive side there may also be more opportunities for suppliers who do adapt to develop new customers.

[20]http://www.netsecure.ie

The effects of eProcurement and the associated changes in purchasing practice on suppliers and potential suppliers whose customers are adopting eProcurement will vary. However, many SMEs are likely to experience one or more of the following: -

- Increasing demands on IT capability
- Increasing competition (pressure on prices and service levels).
- Inability to manage larger orders.
- New export opportunities.

As Irish enterprises will be affected both by eProcurement by private sector buyers and by public sector eProcurement an issue that needs to be addressed is:

KEY CHALLENGE 3
How to ensure SMEs are prepared for the challenges and opportunities of electronic procurement

Chapter 4

RECOMMENDATIONS

4.1. Introduction

The introduction to this paper points to how greater and more effective use of ICTs can act as a driver to increase competitiveness. While the scope of this project has by necessity been limited in many respects, evidence from other countries and international research supports the conclusions that have been arrived at in relation to the obstacles Irish SMEs face in engaging with ICTs and the types of issues to be addressed in overcoming these obstacles. This Chapter contains detailed recommendations for action to be taken and further work to be initiated by the Department and its agencies in this regard. The recommendations are categorised under four broad headings:

- Regulatory / Business Environment and workplace skills
- Supports to enterprises
- Provision of Information and Promotion of Good Practice
- Research / Monitoring

4.2 Scope of the Policy Challenge to be addressed

It needs to be acknowledged, that for many SMEs a relatively low level of engagement with ICTs is the appropriate level of engagement. For some enterprises, spreadsheets, word processing and use of the Internet to search for or use email to contact customers/suppliers may be all the ICT that is required. However, even in such cases, basic "ICT housekeeping" such as data back up and security are still important but often neglected and/or carried out inappropriately. For enterprises in this category the key policy objective should be to ensure that there is sufficient competition in the market to provide a choice when purchasing ICT systems and telecom services.

If this category of enterprises are also able to access, an appropriate level of ICT management and user skills training and independent IT advice this would help ensure that they get the maximum benefit from their ICT investments. It would also increase the likelihood that such enterprises would invest in more sophisticated IT capabilities if and when this became appropriate.

For an increasing number of enterprises, however, a failure to engage more effectively with ICTs will result in missed opportunities for growth. For many others the choice may be much starker - either they can adapt to new ways of doing business, increasingly based on efficient use of ICTs and the Internet, or they will lose business to competitors who can and do adapt. Other enterprises will put themselves at increasing risk by becoming more and more dependent on ICT for their day-to-day operations, without taking appropriate measure to ensure that the security and robustness of their systems is commensurate with their degree of dependence on these systems. More targeted intervention is warranted for these categories of enterprise.

4.3 Regulatory/Business Environment and Workplace skills

The Project Group identified the following factors as central to the creation of an environment that is favourable to ICT usage:

1. *An appropriate level of ICT management skills and ICT user skills in the workforce.*
2. *A good telecommunications infrastructure.*

3. *A good legal framework including effective enforcement of rules against fraudulent or malicious behaviour online.*
4. *Effective IT security policies at the level of the firm.*
5. *An effective and cost competitive support infrastructure.*
6. *Increased usage of the Internet by trading partners (national and international, including, where relevant, consumers).*
7. *Availability of skilled and accredited independent ICT consultants.*
8. *The possibility of easily interacting electronically with external bodies such as the government, financial institutions, utilities, major customers etc.*

This Department and its agencies have responsibilities in relation to the development of appropriate ICT skills within the workforce. It is also responsible for legislation that is directly relevant to online trading. In that context this Department has a role to play in ensuring that business and consumers are informed about this legislation and are consulted in relation to changes to it. As was noted in Chapter 3 uncertainty about the legal framework seems to be contributing to a lack of confidence on the part of enterprises in engaging in online trading. There are a number of sources of State and EU funded sources of information on the legal framework for online trading but enterprises may not be aware of this. Different sources present information in different ways and as was also noted, it is clear that information gaps exist.

Recommendation No 1

It is recommended that, as a priority, action should be taken to build awareness of the legal framework for online trading.
Any initiatives to be undertaken should have regard to the principles outlined in Recommendation No 10 below.

As regards the general regulatory environment, the Department of Enterprise, Trade and Employment has a role to play in ensuring that legislative proposals that fall within the remit of other Departments do not adversely affect the conditions in which business operates. A good telecommunications infrastructure and competitive market conditions are also essential to the creation of a supportive environment in which all business can flourish, not just eBusiness related activity.

In relation to factor number 8 above, each Government Department and State agency is responsible for rolling out the provision of its services electronically. As well as facilitating more efficient service delivery, experience of using online Government services can help build familiarity and confidence amongst businesses in using ICTs. A significant number of the services that this Department provides for businesses have now been e-enabled.

Chapter 3 also highlights the need to ensure that SMEs are prepared for the challenges and opportunities that will arise as significant public sector as well as private sector buyers move to electronic procurement. The Department of Finance is responsible for implementing the national eProcurement strategy. There is a role to be played in seeking to ensure that this is done in such a way that takes into account the implications for SMEs.

Recommendation No 2

It is recommended that dialogue be progressed with the Department of Finance and major public sector buyers to leverage the opportunities and mitigate the threats posed by public sector eProcurement for SMEs.

4.3.1. Building ICT management skills and ICT user Skills

There is a distinction between ICT management skills and ICT user skills. Both are necessary to develop and implement an ICT strategy but the priority should be to focus on developing ICT management skills. According to the Economist Intelligence Unit, the two crucial missing skills in European companies are the lack of ability of business mangers to deploy technology to business advantage and the inability of IT and business management to work together effectively.

While there are many other weaknesses (e.g. lack of user skills, shortage of technical skills) these are more likely to be resolved if managers: -

- acquire the skills needed to take ICT driven or accelerated changes into account when formulating business strategy,
- acquire the skills needed to focus ICT projects on areas that will give the most business benefits,
- apply conventional sound general management principles (e.g. cost benefit analysis, proper project management etc.) to the planning of IT investments and to the day-to-day management of IT operations.

Accessing Training already available

There are a number of potential actions the State might take to increase the level of ICT user and management skills in enterprises. The starting point should be to ensure that businesses know how to access the formal training courses that are already available in these areas.

By way of example, Scottish Enterprise, in association with DTI (UK), has identified a range of eBusiness seminars, workshops and training courses available in Scotland and provides a database of these events on their website (www.scottish-enterprise.com/eBusiness). From this site, companies can access information about each event and choose one most relevant to their companies needs. They can also book places at these events online and most of the workshops and seminars are free.

Recommendation No 3

It is recommended that a comprehensive database of all relevant ICT management skills training courses be established. This will require at the outset an inventory to be undertaken of what training is already available in this area. Both exercises should seek to build on existing sources of information.

Development of new courses on ICT management skills

It is understood that some third level institutions have already developed courses that combine IT and business skills. The feasibility of developing other new courses on ICT management skills should be

explored. For example, a course on managing IT for non-IT people, along the lines of the Certified Diploma in Accounting and Finance, or a course on using ICT to generate competitive advantage. The objective of such courses would be to equip companies to think in different ways to see how they could make innovative use of ICT, possibly including use of ICT to facilitate changes in business models.

Recommendation No 4
Following the completion of the inventory at Recommendation 3 above, the feasibility/desirability of developing further third level courses in the area of ICT management skills should be explored.

New approaches to building ICT management skills in existing companies

The European Commission has recommended using support networks for SMEs as an approach to developing eBusiness skills[21]. The Skillnets initiative funded under the National Training Fund through this Department is an enterprise-led network based model of training.

Building ICT management skills is an issue for all enterprises, not just the Enterprise Ireland/Shannon Development or CEB client base of enterprises. However, considerable experience has been built up within these agencies in recent years on how to encourage more effective engagement with ICTs by enterprises and some innovative training approaches, such as the Shannon Development eCluster programme and the Donegal CEB eBusiness programme have been developed. The feasibility of building on such approaches to develop a national training initiative on ICT management skills, having regard to the Skillnets model should be explored.

Recommendation No 5
It is recommended that the feasibility of developing a network based national training initiative on ICT management skills be explored

ICT consultant accreditation

Feedback obtained during the course of the project was that the quality of ICT consultants could vary considerably. Recent research by EI also indicates significant strategy weaknesses amongst consultants used by SMEs to advise them on IT. FÁS/EI operate a register of approved trainers/training organisations. FÁS also certifies trainers in aspects of construction skills. It may be possible to apply some features of these schemes to an ICT consultant accreditation scheme. The objective of developing such a scheme would be to seek to ensure a certain level of ICT strategy consulting skills for consultants and possibly, other professional advisers, who normally advise SMEs in relation to either IT issues or business issues.

Recommendation No 6
It is recommended that an ICT consultant accreditation scheme be established.

4.4 Supports by the Development agencies

Enterprise Ireland and Shannon Development are responsible for assisting the development of indigenous

[21]European Commission Report "Adapting eBusiness policies in a changing environment – The lessons of the Go Digital initiative and the challenges ahead". March 2003 http://www.europa.eu.int/comm/enterprise/ict/policy/doc/com_2003_148_en.pdf

companies in the manufacturing and internationally traded services sectors. They provide a range of financial, advisory and other supports to client companies on an individual and group basis to foster innovation, business development and the development of overseas markets. The role of the 35 City and County Enterprise Boards (CEBs), is to develop indigenous enterprise potential, to stimulate economic activity at local level and to promote micro-enterprises (10 or fewer employees). This support includes business advice, financial assistance and management training. FÁS also runs specific programmes to assist businesses by improving the skills of employees and provides a training advisory service on a regional basis.

If effective use of ICTs is to become part of everyday business, then the activities directed at encouraging this must be mainstreamed. Research of the OECD and the Economist Intelligence Unit has found that many companies do not capture the full benefits of their investments in ICT, unless they restructure their organizational structure and processes to leverage that investment. This supports a conclusion that the development agencies will increasingly be required to promote ICT and eBusiness development supports as part of an overall package to promote enterprise development, rather than addressing eBusiness as a more remote and distinct activity.

Company specific supports

Experience would suggest that State sponsored one-on-one advice, along the lines of the Enterprise Ireland eBIT programme and the Shannon Development eCluster programme is probably the most effective way of building capacity in enterprises to manage ICTs, especially in the short to medium term. However, it is probably the most expensive way of doing so. It is estimated that a scheme designed to provide limited direct one-on-one advice on building more effective usage of ICTs for half of the SME population would cost roughly in the region of EUR15m to EUR120m depending on the level of advice and support offered. Other countries are making such investments. For example, Wales is in the process of spending an estimated Stg£37m over a six year period to target SMEs in certain designated disadvantaged areas.

Agencies' existing financial instruments can always be used on a per company basis but the effort is large and the coverage is small. At the same time continued Information Society funding for discrete projects like the eBIT programme is not guaranteed into the future. It is necessary therefore for the agencies to decide what is the most appropriate delivery mechanisms and funding levels required to deliver this type of support into the future.

Recommendation No 7

It is recommended that the development agencies should promote ICT and eBusiness development supports as part of an overall approach to enterprise development, rather than addressing eBusiness as a more remote and distinct activity.

Recommendation No 8

It is recommended that further research be carried out into the one-on-one advice programmes that are ongoing in Wales and in other Member States and seek to discover whether post/mid-project evaluations show that these programmes have produced benefits commensurate with the costs of operating them. The feasibility of developing such a programme in Ireland should then be examined.

Sectoral initiatives

Another factor to be taken into account when considering possible future supports is that a major influence on an SMEs level of electronic interaction with its trading partners and others, is the degree to which those organisations currently conduct their business electronically. For this reason, collaboration in relation to the adoption of electronic interaction, by companies within a sector or a particular supply chain, can be a very powerful tool for driving eBusiness adoption. Examples of such collaborative groupings exist both in Ireland and elsewhere. One Irish example is the Construction Information Technology Alliance, (www.cita.ie). Many, and possibly most, of the major Irish construction companies, architects/consulting engineering companies and suppliers to the construction industry are members of this alliance, as are a number of IT suppliers to such companies and some academics. Encouragement and support for groupings of this nature may well offer an effective and cost efficient method of advancing the eBusiness agenda. The eBusinessW@tch sectoral studies referred to at 4.2.2 and the experience of other Member States in this area could also help inform any initiatives to be developed in this area.

Recommendation No 9

It is recommended that industry led sectoral initiatives designed to facilitate eBusiness adoption be encouraged by the State agencies.

4.5. Provision of Information

There is a strong case to be made for better co-ordination both between and within Departments and agencies in the development and dissemination of information to enterprises on eBusiness related issues. Responsibility for providing information to enterprises in this area does not fall neatly within one development agency, a Division of this Department or indeed with any one Government Department. The often rigid delineation of responsibilities between individual State agencies and within and between Departments and agencies can militate against a cost effective and coherent approach to the provision of information to enterprises. The objectives should be to ensure that enterprises can readily access relevant information, and avoid duplication of costs and effort in the generation of appropriate content.

By way of an example, the techniques of using the Internet to search for business information is no different for a company employing 3 people than they are for one employing 200 people. Enterprise Ireland has already developed a detailed guide, "Using the Internet as a Business Intelligence Tool" which is available free of charge via the Open Up website. However, Enterprise Ireland is not an obvious point of contact for micro-enterprises.

A significant amount of material, including guides, case studies and training material on how to develop an ICT strategy has also been produced over the last 4 years; some through agency own resources and some

with support from the Information Society Action Fund. The Chambers of Commerce of Ireland has also received Information Society funds to develop a range of "How to…." guides and training material to more effective use of ICTs. Information also needs to be provided through recognised channels and the fact that it is available has to be advertised. Virtually all SME managers are extremely short of time. If they look for information and cannot quickly find it, they are likely to stop looking. The recent Enterprise Ireland Openup campaign and associated market research has shown that:

- SME managers who accessed published information generally found it useful.
- Awareness of the availability of published guidance for SMEs in relation to ICT is still relatively low.
- Advertising and active public relations measures can increase the level of usage of such educational material.

Recommendation No 10

It is recommended that there should be better co-ordination in the way in which State funded eBusiness related material is developed/disseminated, having regard to the following principles:

- the State should not pay for the same content more than once;
- content with broad applicability should be shared;
- proposals for new content should seek to build on what has already been developed;
- information should be channelled through recognised SME points of contact (e.g. SME EICs).

4.6. Monitoring Performance/Research

Statistical data

Access to reliable statistical information about the usage of ICTs by enterprises is essential to the formulation of appropriate policy responses in this area. It is also a prerequisite to the establishment and monitoring of targets and performance. It had been originally envisaged that the strategy document to be produced from this project would set targets for future levels of eBusiness adoption by SMEs and outline mechanisms for their measurement. However, it is now clear that more analysis and research is needed before this can be attempted.

The development of the CSO enterprise survey of ICT usage, henceforth to be conducted on an annual basis, will significantly enhance our capacity to monitor levels of ICT usage across all sectors of the economy. Because the same survey is replicated in each of the other EU Member States it will also provide a reliable basis for benchmarking Ireland's performance against that of the other Member States. The results of the 2004 CSO survey of ICTs will be available shortly and will provide a basis for assessing the rate of change in ICT adoption over the last 12 months. Additional questions were also included in this survey to try and get behind some of the headline findings of the 2003 survey.

Further research is being conducted at national level on the impact of ICTs on productivity. There is also scope for additional research to be supported on other aspects of ICT usage by enterprises in Ireland.

Very good progress has also been made at EU level in generating more comprehensive statistical information on ICT usage by enterprises. In addition to the national Eurostat surveys initiated in all Member States, the Commission funded eBusinessW@tch initiative has produced a series of in depth studies on the impact of ICTs on different sectors of European industry. Work is also progressing at EU level on the development of an "eBusiness Sophistication Index" with the objective of identifying those elements of eBusiness that have a measurable impact on productivity and growth.

Recommendation No 11

It is recommended that a Statistical Group be established to identify all sources of data relevant to ICT usage by SMEs; assess further data needs; monitor and provide input to national and EU developments in this area; and conduct further work with a view to establishing targets for ICT adoption by Irish enterprises and mechanisms for the monitoring of such targets.

Monitor best practices

Ireland is not the only Member State that is trying to grapple with the challenges of getting SMEs more engaged with eBusiness. Other Member States are also in the process of developing new national strategies in this area. The eBusiness Support Network is a DG Enterprise supported initiative that provides an opportunity for policymakers, business representative associations and academics across Europe to share information and experiences on programmes/initiatives to help SMEs engage more effectively with ICTs. (www.e-bsn.org) The Steering Group for the network also tracks the work at EU level on statistical information referred to earlier. Participation by the Department and the agencies in the network has proved invaluable and should be continued.

Recommendation No 12

It is recommended that policies in EU Member States and other leading economies in relation to ICT adoption by SMEs be monitored, including through participation in the European eBusiness Network, with a view to ensuring that support policies for Irish enterprises are in line with international best practice.

Building confidence in online trading

Recommendation No 1 proposes action to be taken to address the extent to which uncertainty about the legal framework contributes to a lack of confidence on the part of business in engaging in online trading. As noted in Chapter 3, the time/resources available for this project did not permit an in depth examination of other issues cited as potential barriers to eCommerce. Further work needs to be undertaken to identify the nature of these barriers.

Recommendation No 13

It is recommended that more research be conducted into the precise nature of the barriers to online trading experienced by enterprises.

4.7 Implementation

A Working Group, comprised of representatives from the Department and the agencies within whose remit the proposals for action fall, is being established to oversee implementation of this work programme. Separate project groups will be established for each of the recommendations. Participation in these groups will also be open to private sector representatives, academics and other interested stakeholders. The Working Group will be established for a period of one year initially and will be required to submit a report to the Minister for Enterprise, Trade and Employment before the end of 2005.

APPENDICES

Appendix 1

eBusiness Strategy Group – Terms of Reference

Membership

Department of Enterprise, Trade and Employment:	Kieran Grace, Anne Forde, Sinead Gilligan
Forfás:	Adrian Devitt, Shane Quinlavin
Enterprise Ireland:	Jim Cuddy, Lorcan O'Sullivan
Shannon Development:	Brendan McCormack
City and County Enterprise Boards:	Eamon Kelly

Methodology

The Group met on 10 occasions. An extranet was developed to facilitate the work of the Group. Representatives of SME and Local Enterprise Section of the Department attended some meetings of the project group and participated in the Focus Group Session. Labour Force Development Division and FAS participated in one meeting.

At the outset the Group met with the CSO for a detailed discussion on the findings of the ICT survey. The CSO made available detailed data in relation to the enterprise surveys conducted in 2002 and 2003. They also agreed to take on board a number of additional suggestions for questions to be included in the 2004 survey. Over the course of a number of meetings the Group analysed and discussed the findings and came to some broad conclusions in relation to the levels of ICT usage by Irish enterprise.

Representatives of all the major business organisations, agencies dealing with SMEs, ICT consultants, academics and other bodies, were invited to a Focus Group Discussion in April to discuss the conclusions drawn from the data by the Project Group, and to get direct input from them on what the obstacles are to greater and more effective deployment of ICTs and how these might be addressed. The session was facilitated by the IMI and provided a very good insight into some of the issues surrounding the deployment of ICTs by SMEs and micro-enterprise(s).

Terms of Reference

To develop a national strategy to encourage and assist SMEs including micro-enterprise(s) to use eBusiness in a way which will maximise their competitive advantage.

Definition of eBusiness:

"eBusiness is comprised of both eCommerce (buying and selling online) and the restructuring[22] of business processes to make best use of digital technologies".

eEurope 2005

[22]integration of IT with existing business process

Agreed Project Outcome:

A document that would:

- Set the context for the development of the Strategy.
- Set out the factual position as regards current levels of engagement by SMEs.
- Outline what policy approach has been taken to date and the supports currently available to encourage greater engagement with eBusiness.
- Identify the barriers to engagement by SMEs and to making appropriate use of eBusiness.
- Outline potential benefits and needs of engaging with eBusiness
- Identify actions/supports to be continued or developed to address these barriers.
- Set targets for future levels of adoption by SMEs and outline mechanism (to be developed) for their measurement.
- Explain who will be responsible for implementing the Strategy.
- Mechanisms for dissemination of information
- Describe the structures for coordinating/monitoring implementation of the Strategy.
- Outline how the impact of actions/supports to be provided [the Strategy] is to be measured.

Appendix 2

Details of Information Society Action Plan and Agency funded Initiatives

1) eBusiness support Projects funded from Information Society Action Plan Fund 2000-2003

YEAR	Project	Description	Funded
2000	EBusiness Unit: eCommerce Masterclass	Promotion of Ecommerce Awareness and Legislation in conjunction with IBEC	€0.3m
2000-2002	Enterprise Ireland Acceleration Fund	To fast track eBusiness cases to provide examples of best practice	€8.0m
2000	Empower Initiative - CEB	To fast track eBusiness projects for micro enterprises	€3.6m
2001-2002	Chambers of Commerce eBusiness Prog	To build eBusiness capactity within SMEs through training	€1.9m
2003	Enterprise Ireland eBIT Initiative	Provide consultancy advice to assist companies eBusiness Strategy and educational awareness campaign	€1.0m
2003	Chambers of Commerce Prism III	Raising awareness and providing training in eProcurement for SMEs	€0.5m
		Total	**€**15.4m

Appendix 3

List of reports referred to in strategy document

1. The Economist Intelligence Unit – Reaping the Benefits of ICT – Europe's Productivity Challenge

2. European Commission Report "Adapting eBusiness policies in a changing environment" The lessons of the Go Digital initiative and the challenges ahead.

3. eEurope Action Plan 2005: An Information Society for all.

4. Information Society Commission - Building the Knowledge Society

5. Information Society Commission – Building Trust through the Legal Framework

6. Forfás eBusiness monitor 2003

7. CSO report Information Society Statistics – Ireland 2003

8. Second Information Society Action Plan in Ireland – New Connections

9. Forfás eCommerce Report the Policy requirements

10. DTI Business in the Information Age, International Benchmarking Study 2003, Booz Allen Hamilton

11. The Electronic Commerce Directive 2000/31/EC, adopted by the European Parliament and Council in June 2000, which was transposed into national law on 24 February 2003

12. A Guide to the European Communities (Directive 2000/31/EC) Regulations, 2003 (S.I. No. 68 of 2003), which give effect in Ireland to certain provisions of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of Information Society services, in particular electronic commerce, in the Internal Market ("Directive on Electronic Commerce")

13. REGULATIONS entitled European Communities (Directive 2000/31/EC) Regulations 2003 (S.I. No. 68 of 2003)

14. Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee - First report on the application of Directive (2000/32/EC) of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ("Directive on Electronic Commerce")

Appendix 4

List of Web site links

Organisation	Weblink
Enterprise Ireland	www.enterprise-ireland.com
Open Up	www.openup.ie
Shannon Development	www.shannondev.ie
County Enterprise Boards	www.empower.ie
Forfás	www.Forfás.ie
Intertrade Ireland	www.iti.com
Department of An Taoiseach	www.taoiseach.gov.ie
Department of Communication, Marine and Natural Resources	www.dcmnr.ie www.netsecure.ie
Information Society Commission	www.isc.ie
Central Statistics Office	www.cso.ie
European Commission-DG Enterprise	www.europa.eu.int/com/enterprise/
EBSN Portal	www.e-bsn.org
EEurope 2005	www.europa.eu.int/information_society/eeurope/2005/index_en.htm
EBusiness Watch	www.eBusiness-watch.org
ELEAS portal	www.eBusinesslex.net
Organisation for Economic Co-operation and Development OECD	www.oecd.org
Economist Intelligence Unit	www.EIU.com
UK Department of Trade and Industry	www.dti.co.uk