Business Networks on the Island of Ireland

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Acknowledgements

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Contents

The project partners would like to thank all those who contributed to this report, particularly the networks and clusters who took the time to return questionnaires and all those in agencies, public and private, who helped with identifying networks and clusters.

Disclaimer
The data herein insofar as it relates to networks and clusters is as accurate and up-to-date as the project partners have been able to establish at July 2005. The partners regret any errors or omissions and, if notified of these, undertake to rectify them in future editions.

This report has been researched and prepared for Inter*Trade*Ireland by Skillnets Ltd, Momentum and Newry and Mourne Enterprise Agency.

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Foreword

The marketplace, particularly the global marketplace, is an incredibly competitive arena. Only those companies that have a winning formula of costs, quality, capability, innovativeness and price will be able to compete successfully.

Yet, the marketplace is not a winner takes all playing-field. Paradoxically, globalisation has meant that, for many companies collaboration has become a crucial driver of competitiveness. As knowledge becomes the primary economic resource and markets become more complex, companies increasingly find that they are unable to retain in-house all the skills and expertise required for competitive success. Collaboration is critical.

Economists and economic geographers have long highlighted the importance of dense collaborative networks of businesses to the economic success of regions such as Emilia Romanga in Italy and Baden Wurtemburg in Germany. In Ireland the report by the Economic Strategy Group, 'Ahead of the Curve' concluded that, 'in the future, business networks will increasingly facilitate knowledge transfer, disseminate market knowledge, foster innovation, inform the research agenda and identify infrastructure needs specific to sectoral development…playing a significant role in supporting the growth of internationally-traded activities and in enhancing the growth potential of the companies involved over the decade to come'.

However, little is known about the extent of business networks across the island. This report presents for the first time a snapshot of the business networks and clusters on the Island of Ireland. Perhaps somewhat surprisingly it concludes that the incidence of networks and clusters is widespread and that significant numbers of companies are involved. In fact, the report identifies a total of 110 networks and clusters across the island - with participation drawn from close to 10,000 firms, 93 per cent of which are small or medium-sized enterprises.

The report also identifies the key role that public sector agencies play in supporting the development of business networks and clusters, in both North and South. Invest NI, for example, has been involved in the funding of the Cluster Facilitators Forum (CFF), through the Centre for Competitiveness while Enterprise Ireland is launching a pilot initiative in response to the recommendations of the Enterprise Strategy Group.

The development of all-island business networks is central to the work of Inter*Trade*Ireland as it seeks to build the cross-border relationships that will optimise the island's economic resources, particularly its knowledge resources, in support of a globally-competitive island economy.

We are currently developing all-island networks in the biopharma and medical devices, software, polymers and plastics, crafts and food sectors. We will work closely with our sister-agencies in the North and the South to ensure that all-island opportunities in existing regional networks are exploited and we will act, where appropriate, to advance the recommendations in this report.

Inter*Trade*Ireland would like to thank the report's authors and the companies and networks that participated in this study, including all those who provided feedback on earlier versions of the report. We are particularly grateful to the Planning Managers of the island's industrial agencies for their support throughout this project.

Aidan Gough
DIRECTOR, STRATEGY AND POLICY

Why are Networks and Clusters Important?

Networks and clusters help firms to achieve critical mass and economies of scale and compete in larger, more diverse and more competitive markets than they could if they were to continue to act alone. By concentrating on core competencies and creating a network of specialised suppliers and partners, firms can develop their unique assets, stay flexible and adaptable and at the same time be able to respond to the demands of the global market. Networks allow firms to share costs and risks which have become too high for firms working in isolation.

On a less tangible level networks and clusters facilitate the transfer of tacit knowledge between firms. Contact between managers and staff enhances learning, increases knowledge and opens new channels for information and opportunities. This process of 'networked learning' is now seen as one of the most valuable outputs for firms that participate in networks, allowing them to develop or enhance a range of competencies in a flexible manner.

Networks and clusters are powerful motivators of innovation. Competitiveness is the overarching goal of public policy. Innovation is the critical element that drives competitiveness. Those businesses that can quickly adapt and incorporate new research and technologies into their operations are most likely to enjoy greater productivity and prosperity. Working in collaboration with others enables them to achieve competitive advantage faster, cheaper and with less risk and disruption to operations.

« Back to Contents Page

Executive Summary

PURPOSE OF THE STUDY

Inter*Trade*Ireland has identified the critical importance of Business Networks and Regional Business Clusters to sustaining investment and competitiveness in an increasingly global marketplace.

Inter*Trade*Ireland therefore, commissioned this study to establish the scope, range and extent of business networks and clusters on the island of Ireland and to identify the key factors associated with the establishment, development, and success of such networks and clusters. The project partners were also asked to make recommendations on how to effectively support the networking of networks across the island of Ireland.

WHAT IS A NETWORK?

It became apparent during the study that the term 'business network' is used in a number of different ways to describe both different forms, and variations in the extent, of inter-firm collaboration. Therefore, one of the initial challenges of this study was the necessity to clarify and categorise 'business networks' for the purpose of the mapping project. The following categorisation was agreed, and only those networks and clusters that fell within these three categories have been mapped in this study:

Category 1 – Business Networks

This involves firms collaborating for specific purposes where the results of the activity will have some identifiable and measureable impact on their business. Specifically a business network is (a) a group of firms, (b) with restricted membership, (c) who have agreed to co-operate in some way, (d) to achieve specific business objectives that are likely to result in enhanced competitive advantage and/or mutual financial gain.

Category 2 – Development Networks

This is the most basic form of network consisting simply of firms associating with other firms where the activity may often be confined to networking, the exchange of information, or shared services. These networks will usually be informal and unstructured and may meet the first three of the four key elements of a Category 1 business network but typically will not have a purpose linked directly to financial gain or competitive advantage for the members.

Category 3 – Regional Business Clusters

These are geographically concentrated groups of interconnected companies, educational institutions, local authorities, local economic development agencies, national government agencies and related institutions that arise out of linkages or externalities across sectors. Clusters share a common regional location, where 'region' is defined as a geographic area, labour market, or other functional economic unit. Though they often result in gain for companies, clusters are not always established solely with that end in mind and are often motivated by broader goals that have to do with regional and national economic development for the greater public good.

NETWORKS AND CLUSTERS MAPPED

A total of 110 networks and clusters were identified during the study, broken down as follows:

Category 1 – Business Networks - 74

Category 2 – Development Networks - 18

Category 3 – Regional Business Clusters - 18

The total number of participating firms in these networks and clusters is 9860 (according to figures submitted by the networks themselves).

Most of the firms involved are SMEs with 9132 employing less than 50 employees. Large Firms account for 7 per cent of the total or 728 firms. Most of these networks and clusters have been established in the past 5 years.

KEY SUCCESS FACTORS

The following were the key success factors as identified by the project partners:

1. Strong business leadership and involvement
2. Establishing and maintaining trust
3. Network facilitation
4. Supportive environment
5. Funding
6. Good communication and information flow
7. Common purpose and meeting business needs
8. Strong activity focus
9. Use of technology

CONCLUSIONS

The following are the general conclusions of the study:

1. **Incidence of Networks and Clusters is Widespread**

   Contrary to previous estimates there are a considerable number of networks and clusters on the island of Ireland – 110 currently identified.

2. **Significant Numbers of Companies are Involved in Networks and Clusters**

   Interest by firms in networks and clusters is significant with 9860 firms currently involved in networks and clusters across the island.

3. **Companies Appear Convinced of the Value of Networks and Clusters**

   The business sector seems wholly convinced of the value of networks and clusters with 74 per cent of these partnerships driven by the firms themselves. This also shows that, for the most part, this is a 'bottom-up' or business led phenomenon.

4. **Networks and Cluster Formation is a Current Phenomenon**

   The fact that most of the networks and clusters identified in the study have been established within the past five years indicates that this is a current phenomenon.

5. **Public Agencies Play an Important Role in Networks and Clusters**

   The study shows extensive and beneficial involvement by public agencies in networks and clusters at a range of different levels which is welcomed by the companies.

6. **Networks and Clusters Impacting MNCs and SMEs**

   With over 90 per cent of members employing less than 50 workers there is evidence that networks are helping SMEs to raise their competitiveness. The involvement of over 700 large companies is also significant - many larger companies take the lead in developing the network or cluster.

7. **Resources are Essential for Networks and Clusters to Grow**

   Networks require time and commitment to succeed and this needs to be supported both in cash and in-kind by the network participants and others.

8. **Intangible Factors are Important for Network and Cluster Success**

   Among the most important of the key success factors of networks and clusters identified by the respondents point to the importance of strong business leadership and commitment, establishing trust and effective communications and information flow.

9. **Independent Facilitation is Crucial for Sustainability**

   The role of the facilitator in network and cluster development emerges as a crucial element in the success of networks and clusters and in sustaining them over the long-term. Funding, and a supportive environment and facilitation for a number of years is necessary.

10. **Networks Require Critical Mass**

    Networks and clusters need a critical mass of companies as well as other actors to grow and prosper.

RECOMMENDATIONS

The following are the main recommendations of the study:

Recommendation No 1:

Implement an awareness raising campaign of the potential benefits from networks and clusters designed to increase their numbers on the island of Ireland.

Recommendation No 2:

Establish a programme for the training and professional development of network facilitators designed to improve the range and scope of network and cluster facilitation.

Recommendation No 3:

Establish a network information repository to improve the flow of information between networks and clusters.

Recommendation No 4:

Establish a standardised system for the evaluation of networks and clusters which will develop credible data on network and cluster performance.

Recommendation No 5:

Provide Funding for Networks and Clusters to enable them to -

a. engage the services of qualified facilitators for a 2 year period

b. provide funding to support the network management structure (companies will more easily contribute to financing activity rather than structure).

Recommendation No 6:

Establish an All Island Network/Cluster Linkage Programme to support collaboration between networks and clusters.

Recommendation No 7:

Establish a Network/Cluster Internationalisation Support Programme to support international collaboration for Irish networks and clusters.

SECTION ONE

1.1 Introduction
1.2 Terms of Reference
1.3 Definitions of Networks and Clusters

« Back to Contents Page

1.1 Introduction

Inter*Trade*Ireland has identified the critical importance of Business Networks and Regional Business Clusters in sustaining investment and competitiveness in an increasingly global marketplace. Networks have played, and continue to play, an important role in industrial development throughout the island of Ireland but this has often gone unrecorded, unrecognised and usually takes place on an ad hoc basis. Inter*Trade*Ireland decided to highlight business networks and clusters as critical vehicles of business development in future enterprise strategy across the island of Ireland and commissioned this study as a major contribution towards that end.

Following a public tendering procedure the partners to this proposal were appointed in April 2005 and tasked to undertake and complete this study by the end of June 2005. The partners, Skillnets Ltd., Momentum and Newry and Mourne Enterprise Agency, have significant experience and expertise in supporting and developing business networks and clusters and have demonstrated a sustained commitment over time to building the case for networks as a valuable means of fostering business development.

1.2 Terms of Reference

The project aims were to establish the scope, range and extent of business networks on the island of Ireland and identify the key factors associated with the establishment, development, and success of such networks. The partners were also asked to make recommendations on how to effectively support the networking of networks across the island of Ireland.

1.2.1 Scope of the Project

1 Identify and document all[1] business networks currently operating on the island of Ireland.

2 With respect to each of these networks further establish –

   a. the purpose and objects of these networks and why they were formed in the first place;

   b. the number and nature of participants in these networks by size of firm, sector, age, ownership, and the scope of other external partners in the network;

   c. network participants 'interactions' within the network including the level of trust between the participants and indicating the importance of 'social capital' and other aspects of a supportive business and social environment;

   d. the role of industry/trade associations and public agencies in facilitating such networks; and

   e. the key success factors involved in establishing and operating different types of business networks.

3 Prepare case studies which illustrate examples of best practice in the management, development and implementation of business networks in Ireland.

4 Make recommendations as to where and how the prospects for all-island networking activities can be enhanced, including how best to encourage further network development and growth.

5 Produce a comprehensive final report which will include all of the above for submission to Inter*Trade*Ireland.

1.2.2 Project Methodology

The Project entailed –

- Desk-based research to identify and document the maximum number of networks.
- A survey of the identified networks to assess a range of issues as stated in the project objectives above. Questionnaires were returned in hard copy format, via e-mail, through the project website and completed by a project team representative over the telephone.
- Visits to a selected sample of networks.
- Preparation of case studies of best practice networks identified.
- The project team held 4 project meetings and 7 conference call meetings.
- The team met with the Project Manager, Mr Dermot O'Doherty, Senior Networks Advisor, Inter*Trade*Ireland, on 4 separate occasions.
- Communication has been greatly enhanced by the use of a single information repository, internet based for knowledge transfer and sharing.
- An MBNIreland designated website has been set-up www.mbnireland.com.

1 Insofar as possible given the time frame allowed to complete the project.

1.2.3 Contacts Made

The following are an overall list of the categories and organisations contacted to date in an initial 'trawling' exercise. A total of 690 individual contacts have been made either by email, telephone, letter or personal contact:

- Area Development Management Ltd (ADM)
- Area-based Partnership Companies
- Bord Biá
- Bord Iascaigh Mhara
- Business Enterprise Centres
- Business Incubation Centres (BICs)
- Chambers of Commerce of Ireland (and all local chambers)
- City and County Enterprise Boards (CEBs)
- Community Enterprise Agencies/Centres/Groups
- Confederation of British Industry (CBI)
- Co-operation Ireland
- Enterprise Ireland (various levels)
- Enterprise Northern Ireland
- European Business Information (EBICs)
- FÁS
- Forfás
- Government Departments – NI
- Government Departments – Ireland (Enterprise, Trade and Employment; Agriculture and Food; Education, Environment)
- Institutes of Technology
- International Fund for Ireland
- Inter*Trade*Ireland (various levels)
- Invest Northern Ireland (various levels)
- Irish Business and Employers Confederation (IBEC)
- Irish Co-operative Society (ICOS)
- Local Development Organisations
- Local Enterprise Agencies
- National Business Organisations and Associations (78)
- Northern Ireland Chamber of Commerce (and all local chambers)
- Northern Ireland District Councils
- Rural Leader Organisations
- Science Foundation Ireland
- Shannon Development
- Údarás na Gaeltachta
- Universities
- Western Development Commission

1.2.4 Networking

A comprehensive questionnaire was developed, revised and agreed and is attached as Annex 2.

1.3 Definitions of Networks and Clusters

It became apparent during the study that the term 'business network' is used in a number of different ways to describe both different forms, and variations in the extent, of inter-firm collaboration. Therefore, one of the initial challenges of this study was the necessity to clarify and categorise 'business networks' for the purpose of the mapping project.

Networks and Networking

As well as formal or structured business networks or alliances there are also personal and social networks which are often referred to as business networks. However, these may more accurately be described as 'networking.' In the context of the study 'business networks' were defined as groupings of companies directly concerned with the conduct of some form of business activity. This networking may be inter-organisational in that it includes other businesses, and may also include or be facilitated by trade associations, chambers of commerce, professional bodies and public sector agencies.

Network Support Organisations

Those organisations that actively facilitate networking usually do so within the context of a broader support service to companies (such as lobbying or representation) and are typically membership based organisations that are structured along local, regional, sectoral or professional occupation lines. Examples of these would include the chambers of commerce, business and trade associations, sector-based associations, professional bodies and trades unions.

Networks and Clusters

The term 'network' is often used interchangeably with the term 'cluster' though these are two distinct, if closely connected, forms of inter-organisational structure. Networks and clusters are elements of a common spectrum, 'with a blur between them rather than a sharp divide' (Ffowcs-Williams).

According to Michael Porter clusters are "geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions (for example universities, standards agencies, and trade associations) in particular fields that compete but also co-operate." Clusters share a common regional location, where region is defined as a metropolitan area, labour market, or other functional economic unit. However, Enright (1993) goes further and defines a regional cluster as an industrial cluster in which member firms are in close geographic proximity to each other. A more inclusive definition would be: regional clusters are geographic agglomerations of firms in the same or closely related industries.

Though they often result in gain for companies, clusters are not always established solely with that end in mind and are more often motivated by broader goals to do with regional and national economic development for the greater public good. Consequently they benefit and are aligned to the objectives and strategies of public and private stakeholders rather than being exclusively focused on the direct benefit of companies. Ties between firms in networks are typically more formal and intense than in clusters.

Formal and Informal Networks

Networks may be formal 'hard' networks involving firms joining together specifically to co-produce, co-market, co-purchase, or co-operate in product or market development. They may also be more informal 'soft' networks involving firms joining together to solve common problems, share information, acquire new skills or jointly provide training. 'Hard' networks involve companies entering formal contractual agreements with one another where each company shares the investment and commercial risks. 'Soft' networks do not usually assume shared commercial risk. However, enterprises may or may not currently trade with each other, although such trade could possibly occur in the future[2].

2 Industrial and Regional Clusters: Concepts and Comparative Applications Edward M. Bergman and Edward J. Feser (2003).

Value Chain Networks

A value chain network is an industry group identified as an extended input-output or buyer-supplier chain. It includes final market producers, and first, second and third tier suppliers that directly and indirectly engage in trade. It is comprised of multiple sectors or industries.

Towards a Network Definition

Many different definitions of the term 'business network' have been advanced, including the following:

- A group of firms with restricted membership and specific, and often contractual, business objectives likely to result in mutual financial gains. The members of a network choose each other, for a variety of reasons; they agree explicitly to cooperate in some way and to depend on each other to some extent. (Rosenfeld).

- A select, persistent and structured set of autonomous firms (as well as non-profit agencies) engaged in creating goods or services based on implicit and open-ended contracts. (Jones, Hesterly and Borgatti).

- A complex pattern of formal and informal linkages between individuals, businesses and other organisations such as government and voluntary agencies. (Blundel and Smith 2001).

- A network can be defined as a group of firms using their combined talents and resources to co-operate on joint development projects. Through complementing each other and specialising in order to overcome common problems, participants are able to achieve collective efficiency and conquer markets beyond their individual reach (Ffowcs-Williams, OECD, 2003).

Establishment of Categories of Business Networks and Clusters

For the purposes of this mapping project it was considered helpful to categorise the identified networks and clusters in the interests of effective analysis and to facilitate ease of dissemination. It was therefore, decided to adopt the following categorisation based on the definitions outlined:

NETWORK CATEGORIES

Category 1 - Business Networks

This involves firms collaborating for specific purposes where the results of the activity will have some identifiable and measureable impact on their business. Specifically a business network is a group of firms with restricted membership who have agreed to co-operate in some way to achieve specific business objectives that are likely to result in enhanced competitive advantage and/or mutual financial gain.

Four key elements of the definition are –

1. Group

   The network must contain 3 or more member companies.

2. Membership

   The membership must be restricted (e.g. formally recorded, subscription required, etc). The members must be business entities (private or public companies or sole traders) engaged in commercial activity for profit. Membership may include other non-business entities (e.g. educational institutions, state agencies) but these do not control or direct the network and the network's primary purpose was not to meet the needs of such non-business members.

3. Co-operation

   The members have agreed explicitly to cooperate in some way and to depend on each other to some extent.

4. Advantage/Gain

   The network objective is to achieve a specific business impact (not just for the purpose of associating or interacting i.e. networking). This impact can be either (or both) tangible in the sense that a specific and measurable business result or financial gain is obtained or intangible in the sense that competitive advantage of some nature is obtained as a result of the collaboration.

   Examples include:

   - co-marketing networks where firms jointly market their products;
   - research networks in which firms pool resources to develop a new product or process;
   - training or management development networks in which firms work jointly to identify and meet defined training and management development needs;
   - customer-supplier networks where firms co-operate with each other to meet the needs of a large customer, who can often set up and facilitate the collaboration; and
   - co-production networks where firms co-operate in manufacturing components, assemblies or finished goods.

...continued

- supply-chain networks - industry group identified as an extended input-output or buyer-supplier chain. They include final market producers, and first, second and third tier suppliers that directly and indirectly engage in trade;
- horticultural and fisheries cooperatives – where individual producers form networks to jointly market their produce or engage in joint purchasing, promotion or other business activity. [These entities are included in this definition only insofar as they remain business networks and are not 'cooperatives' (as defined below) even though they may be called 'cooperatives'.]

Category 2 - Development Networks

This is the most basic form of network consisting simply of firms associating with other firms where the activity may often be confined to networking, the exchange of information, or shared services. These networks will usually be informal and unstructured and may meet the first three of the four key elements of a Category 1 business network but typically will not have a purpose linked directly to financial gain or competitive advantage for the members. They may be significantly dependent on an external agency for support, though they exist independently of that agency. These networks can develop into 'full' business networks at a later stage of development.

Examples include:

- Networks of small firms supported under County Enterprise Board or Leader programmes;
- Networks of firms operating within Business Incubation Centres;
- Network of entrepreneurs meeting for mutual support such as the Women in Business Network.

Category 3 – Regional Business Clusters

These are geographically concentrated groups of interconnected companies, educational institutions, local authorities, local economic development agencies and national government agencies and related institutions that arise out of linkages or externalities across sectors. Clusters share a common regional location, where 'region' is defined as a geographic area, labour market, or other functional economic unit. Though they often result in gain for companies, clusters are not always established solely with that end in mind and are often motivated by broader goals to do with regional and national economic development for the greater public good.

Category 4 - Business Support Networks

This category refers to inter-organisational networks of business or trade associations with state agencies, universities or other institutions undertaking collaborative initiatives or inter-organisational responses for the ultimate, though not direct, benefit of businesses. They may also include some individual firms but their objectives are not directly related to the business results of those firms.

...continued

Category 5 – Business Organisations

This includes either recently or long-established industry associations, chambers of commerce, business associations, and professional bodies where members pay dues and commit themselves to a certain level of joint problem-solving, but where their business success does not depend significantly on the actions of other members. The primary aim of most of these bodies is to represent the business members to external parties.

Note re Agricultural Cooperatives

A cooperative is a business that operates for the benefit of its user members[3]. Though it is similar to a business network it has some important structural differences. While membership is voluntary it is also open, not restricted. There is a strong principle of democratic control - one member, one vote - while networks may have a range of formal and informal control mechanisms. Cooperatives members contribute equitably to and democratically control the capital of their co-operative. At least part of that capital is usually the common property of the co-operative. Financial arrangements in business networks and clusters are much less formalised and rarely if ever involve payment of limited interest on capital or the allocation of surpluses in proportion to members' purchases as in cooperatives. Cooperatives have evolved over a period of 150 years and some have grown into substantial public limited companies that are, in effect, multi-national corporations. The contribution of co-operatives to the Irish economy, North and South, in exports, employment, industrial activity and development of rural areas is very substantial.

In accordance with the objectives of the study Category 1, 2 and 3 networks and clusters were identified as the primary forms of business networks and clusters to be surveyed and analysed. Therefore, Sections 2 to 4 of this report relate solely to networks in these three categories.

3 Definition supplied by the Irish Cooperative Organisation Society.

SECTION TWO

2.1 Mapping the Networks

« Back to Contents Page

2.1 Mapping the Networks

This section contains a detailed analysis of the total number of networks and clusters identified and surveyed up to 15 June 2005. The analysis is based on the questionnaires (Annex 2) completed and returned by the networks and clusters in Categories 1-3.

2.1.1 Note on the Data

This is a 'snapshot in time' – networks and clusters are dynamic organisations, they can form and cease or go into 'suspension'. Consequently, in the period between data collection and publication of the report, some networks may have ceased operating and others will almost certainly have come into existence. The consultants can say with a 90 per cent degree of confidence that all networks and clusters operating on the island of Ireland have been mapped in this study. However, it should be noted that some additional groupings were still being followed-up at the time of finalising this report and these will be reported on in any follow-up activities.

It is important to remember that the data presented here has not been independently verified or validated. The consultants have taken at face value the information as presented by the networks and clusters that were surveyed. Even though the consultants contacted and spoke with many of the respondents it would be sensible to approach this data as indicative only.

The lack of a common language among those working with and inside networks and clusters also presents challenges for the effective analysis of the information gathered. It was clear to the consultants that different networks and clusters approached some of the questions from different angles. Since the intention was not to delve too deeply into the minutiae of how networks function, beyond identifying some general indicators, it was not always possible to resolve these 'language' or 'interpretation' difficulties to our satisfaction.

2.1.2. Total Number of Networks and Clusters

A total of 110 networks and clusters were identified and categorised in this study as set down in Table 1. All are listed in alphabetical order by category in Annex 1.

Table 1: Total Number of Networks

Category	Description	No
1	Business Network	74
2	Development Network	18
3	Regional Business Cluster	18
Totals		110

A further 17 Business Support Networks (Category 4 as defined above) were identified in the current study and are listed in Annex 1 but are not included in this analysis. 40 per cent of all networks and clusters (Category 1-3) identified are supported by Skillnets.

2.1.3 Geographic Location

The following is the distribution of networks and clusters by geographic area (as stated by the respondents in their questionnaire replies).

Chart 1: Geographical Distribution of All Networks and Clusters (Numbers in Table 2)
(The figures for all regions of Northern Ireland have been amalgamated in this chart.)

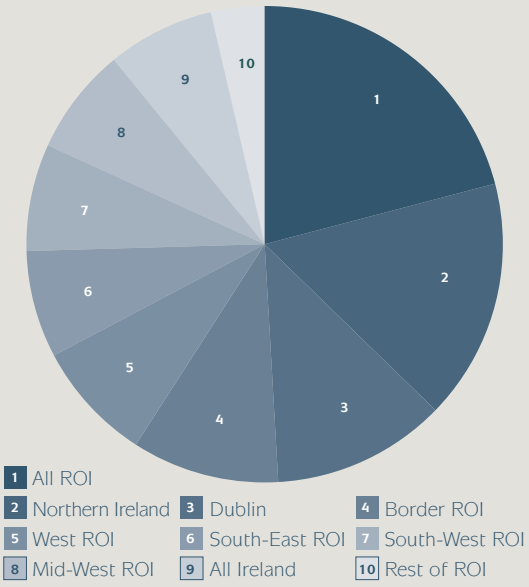


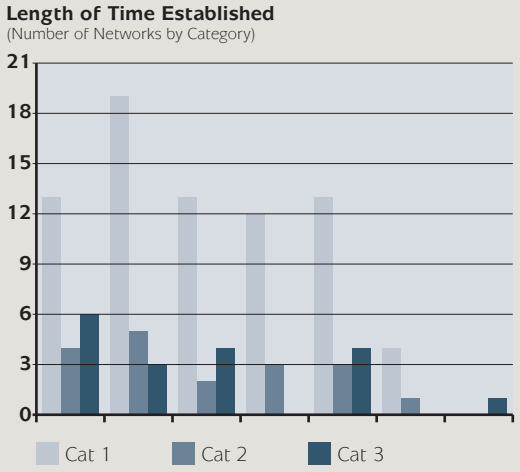
Table 2: Geographic Distribution of 110 Networks and Clusters in Order of Highest Number

Geographic Distribution	No
All ROI	23
Dublin	13
Border ROI	11
West ROI	9
All Island	8
Mid-West ROI	8
South-West ROI	8
South-East ROI	8
South-East NI	5
Mid-East ROI	4
Midlands ROI	4
North-East NI	4
All NI	3
North-West NI	2

2.1.4 Length of Time Established

Most networks and clusters on the island of Ireland are relatively young with the vast majority having been established in the last 5 years (81 per cent).

Chart 2: Length of Time Established



2.1.5 Number of Participating Member Firms

A total of 9859 firms[4] are participating in networks or clusters across the island of Ireland. The largest percentage of firms are found in Category 1 networks (92 per cent). Business Networks (Category 1) have seen the largest increase in membership of 5643 firms or 261 per cent.

Table 3: Number of Participating Member Firms

Category	At Start of Network	At June 2005	Increase	Per cent Increase
1	2263	7921	5658	250%
2	869	1034[5]	165	156%
3	556	904	348	63%
Totals	**3688**	**9859**	**6171**	**167%**

2.1.6 Size of Firms in Networks and Clusters

As can be seen in Table 4 the vast majority of members of networks and clusters are small firms (less than 50 employees). There is a higher proportion of medium and large firms in Regional Business Clusters. The percentages in Table 4 relating to firms with more than 51 employees equate, in numerical terms, to 728 medium to large firms involved in networks and clusters in Ireland.

Table 4: Breakdown by Size of Firm

Category	>50	51-250	251>
1	93%	6%	1%
2	96%	3%	1%
3	83%	14%	3%

4 The term 'firm' includes sole traders and while it is not possible to state precisely how many are sole traders it is estimated that approximately 1,500 of the total may come under this category.

5 Two large data items have been excluded under this category, one because of suspected shared/duplicate membership with another network and the other because of the inclusion of all registered firms in the area as members of the network.

2.1.7 Distribution by Sector

In Table 5 the numbers listed after each sector are the total numbers of networks and clusters identified within that sector. Chart 3 gives a visual representation of this breakdown.

Chart 3: Sector Distribution of All Networks and Clusters

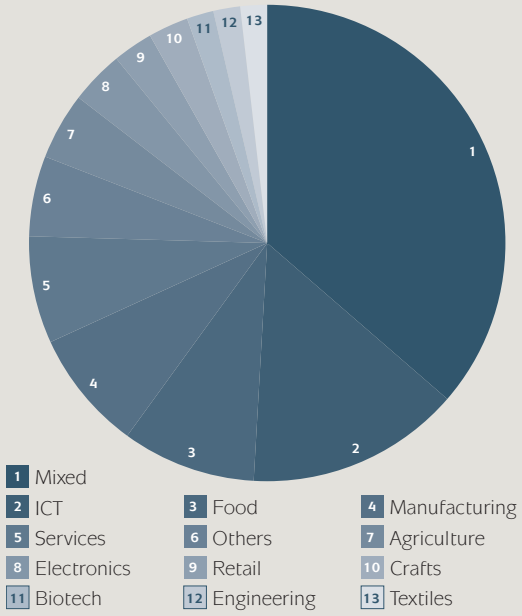


Table 5: Distribution by Sector in Order of Highest Number Networks and Clusters

Distribution by Sector	No
Multi Sectoral	40
ICT	16
Food	10
Misc. Manufacturing	9
General Services	8
Agriculture/Horticulture	5
Electronics	4
Retail	3
Crafts	3
Biotech	2
Engineering	2
Textiles	2
Other Sectors	
Transport	*1*
Environment	*1*
Leisure/Amenity	*1*
Construction	*1*
Plastics	*1*
Medical devices	*1*

2.1.8 Drivers of Establishment

The firms themselves are the main drivers in the establishment of Business Networks (Category 1) but State Agencies as well as Local Economic and Enterprise Development organisations and agencies are also playing an important role in the establishment of Development Networks (Category 2). Interestingly, the firms are also playing the lead role when it comes to establishing Regional Business Clusters.

Table 6: Drivers in the Establishment of Networks and Clusters

Category	Firms	State Agencies[6]	Educational Institutions
1	95%	14%	6%
2	39%	78%	6%
3	89%	39%	6%

NOTE: The percentages show the number of networks and clusters that indicated involvement by all or any of these partners in the establishment of the networks and clusters.

2.1.9 Financing Networks and Clusters

The survey attempted to find out, in broad terms, where the funding for networks and clusters is coming from. The results are inconclusive. They show that a large proportion of networks charge membership fees and also receive some form of grant-aid but it was not within the scope of the survey to quantify this. What the percentages in Table 7 show are merely the number of networks and clusters that indicated a funding source. A small number of the Category 1 respondent networks stated that they neither charge fees nor receive state funding but are self-financing from events and activities. The proportion of funding from events and activities is an area that deserves further study. 'State/EU Grants' mostly refers to occasional or once-off grants, many of which come from EU funded programmes or in the case of Ireland from Skillnets and County Enterprise Boards.

Table 7: Charging of Fees and State Funding of Networks and Clusters

Category	Charge Fees	State/EU Grants	No Fees or Funding
1	85%	78%	7%
2	50%	44%	33%
3	22%	72%	11%

2.1.10 Operating Structures

The majority of networks and clusters have a formal structure involving either the establishment of a legal entity to represent the network's interests or at least a formally constituted board/steering committee which takes decisions and may have subsidiary committees reporting to it. In Category 2 networks none have a formal structure since the main activity in these networks is networking and low-level collaborative activity.

Table 8: Network Structures

Category	Formal	Informal
1	68%	32%
2		100%
3	50%	50%

2.1.11 Facilitation

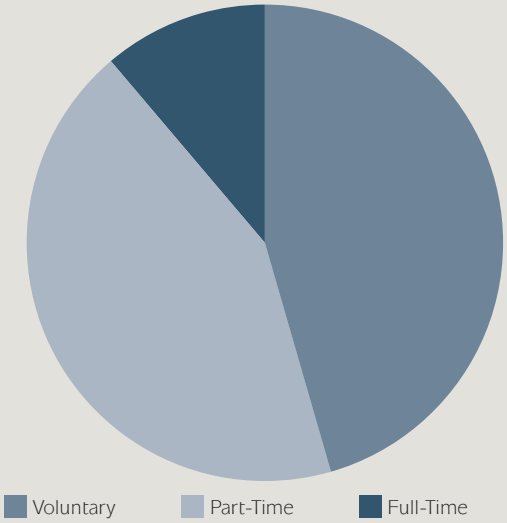
In Category 1 networks 80 per cent are either part-time or full-time facilitated. Part-time facilitation is mostly provided by the staff of state agencies, development organisations, educational institutions or business support organisations who have some responsibility for the network or are closely associated with it. Full-time facilitation is provided by staff that are specifically employed by the network to carry out that function as in the case of many of the Skillnets networks. Regional Business Clusters (Category 3) also have a relatively high level of full or part-time facilitation whereas the Development Networks (Category 2) are mostly facilitated on a voluntary basis by the members themselves.

Table 9: Facilitation of Networks and Clusters

Category	Voluntary	Part Time	Full-Time
1	20%	58%	22%
2	78%	22%	
3	39%	50%	11%

6 Includes Co-operation Ireland.

Chart 4: Average Overall Distribution of Facilitation of Networks and Clusters



2.1.12 Interaction with External Bodies/Other Networks and Clusters

In Regional Business Clusters (Category 3) there is a very high level of interaction with external bodies and other networks both cross-border and internationally. The main focus of external interaction in the other categories is focused on state agencies and local development agencies. The relatively high level of interaction with educational institutions in Category 1 (Business Networks) may be accounted for by the training links within the Skillnets Networks.

Table 10: Distribution of Interaction with External Bodies/Others

Category	Educational Institutions	State Agencies/ Local Development Agencies	International Links	Cross-Border Links
1	41%	81%	18%	8%
2	17%	89%	6%	6%
3	78%	94%	44%	28%

2.1.13 Business Needs and Focus of Activity

Access to business and sector information was the main objective and primary focus of activity across all three categories of networks and clusters closely followed by opportunities for networking and obtaining new business through leads and contacts. Training scored third highest overall and top of the list for Category 1 networks which may be accounted for to some extent by the high concentration of networks in Category 1 supported by Skillnets (39 per cent). Promotion of the region and marketing are of highest importance to Regional Business Clusters, while networking/new business and information score highest for Development Networks.

Table 11: Distribution of Business Need and Focus of Activity

Activity Focus	Category 1	Category 2	Category 3
Information	61%	78%	78%
Networking and New Business	35%	72%	50%
Training	70%	39%	33%
Promotion of Sector/Region	26%	89%	
Marketing	31%	6%	72%
Technical Support	32%	6%	50%
Joint Purchasing	15%	6%	17%
Lobbying	5%		33%
Knowledge Sharing	31%		
R & D	5%		
Access to Finance	4%		1%

SECTION THREE

3.1 Key Success Factors

« Back to Contents Page

3.1 Key Success Factors

An important objective of the study was to identify the key success factors of business networks. This section contains an analysis of these factors as seen by the study team based on (a) a review of the literature and sources from the international perspective, and (b) the key success factors which the respondents identified and which were explored and examined by the study team with networks and clusters and others during the research process. These have been analysed and synthesised by the study team to arrive at a comprehensive list of 9 key factors which influence the success of networks which are elaborated in section 3.1.3. In Section 3.1.4 we report on what the networks and clusters identified as the primary benefits to member companies

3.1.1 International Experience of Network and Cluster Development

While the characteristics of networks and clusters are different they are both driven by similar objectives and success factors. This is true in networks and clusters as far apart in geography, culture, competitiveness and market structure as Italy, Scotland, New Zealand, United States, Canada and Denmark, all of which have been examined in the context of this international review.

Clusters, as sectoral and geographical concentrations of enterprises, benefit primarily from external economies - the emergence of suppliers who provide raw materials and components, new or second-hand machinery and spare parts; the emergence of a labour pool with sector-specific skills. In clusters one sees the emergence of specialised services in technical, financial and accounting matters.

Developed clusters will have 'implicit and explicit forms of collaboration among local economic agents… and sometimes innovation capability' (Rabellotti).

Networks on the other hand are focused primarily on facilitating contact and co-operation between firms, achieving limited economies of scale, assisting mutual learning and encouraging individual business development as well as collective innovation.

Networking is of course crucial in networks and is not necessarily tied to firms being in the same locality. In networks the external economies tend to be small but the gains from joint action can be substantial.

Networks all over the world foster co-operation between enterprises irrespective of whether they belong to a specific sector or geographic location. In practice, however, participating enterprises (usually between 5 and 10) in networks tend to be from the same region or town and produce similar or complementary products or competing within the same industrial sector. The central idea is that together such enterprises can overcome obstacles and conquer markets beyond their individual reach and that external assistance plays an important role in facilitating co-operation.

The key feature of networks internationally is the network facilitator or broker who helps to identify opportunities, brings participants together and assists in implementing new ideas or projects. The broker concept was first developed in the Danish Network Programme (1993) which was designed by the Danish Technological Institute, funded by central government and carried out by the National Agency for Industry and Trade in conjunction with local institutions. This broker concept has been much refined since then and is now more commonly referred to as the animator, coordinator or 'facilitator'. Current best practice examples of the effective use of facilitators in network and cluster development programmes are to be found in Scotland and Upper Austria (see box on Page 19).

UPPER AUSTRIA CLUSTER DEVELOPMENT PROGRAMME[7]

In 2000 the Upper Austria Technology and Marketing Company (TMG), the regional technology and business development agency, began a programme to support cluster development in the region. Each identified cluster has a team of 5 staff (called cluster 'managers') who are responsible for:

- information and communication: company visits, database, journals, site visits;
- training: specialist events and workshops, training needs analysis;
- co-operation: initiation and support of co-operation projects between companies, R&D bodies and educational institutes, government funding for such project; and
- marketing and PR: strengthening the clusters image at national and international level, trade fair presentations, advertising, etc.

Joint projects are at the heart of these clusters and consist of technology projects, organisational projects (supply chain optimisation, joint marketing), and training projects.

The role of the cluster team is to initiate and support the preparation and implementation of these joint projects, organise and moderate meetings, prepare funding applications, etc.

The results have been impressive. By 2003 provincial government funding of €7.2m had generated €30.6m in joint project income.

Evaluations since the commencement of the programme have shown that:

- The clusters bring effective increases in economic and scientific integration of the members;
- Advisory bodies acting in supportive roles are critical to the success of these clusters;
- Cluster members have achieved 90 per cent of their goals; and
- Companies now contribute up to 50 per cent of the running costs of the clusters that continue to operate.

One of the most common findings of network evaluations internationally is that success depends to a significant degree upon the level of commitment from the individual firms. Outside sponsorship, such as funding for training or for the initial establishment of the network, was often helpful in getting networks off the ground, but public agencies cannot be the sole initiator, nor can they be the driving force behind the long-term functioning of the network.

Most firms, it was found, had a positive assessment of the benefits of network membership, though many still had concerns about other firms' commitment and the risks posed by cooperating with potential competitors. Studies have also found that where significant quantitative firm-level impacts were found, such as increases in revenues, they are likely to be concentrated among a few members firms rather than spread among all the members.

7 Lessons from European Experiences with Innovation Networks. Claire Nauwelars, MERIT-University of Maastricht, Netherlands, Oct 2003.

More commonly found were qualitative firm-level impacts such as increased market information, ability to access knowledge and the development of positive attitudes toward collaboration and policy awareness of networks. Macro-level economic impacts were difficult to measure.

Cluster development is attributable to several key factors, including technology transfer, knowledge transfer, development of a skilled labour force in related industries, the benefits of agglomeration economies, and social infrastructure. However, researchers differ on how these factors promote cluster growth. On the one hand, Michael Porter attributes cluster development and growth to competition, and focuses on how these key factors drive competition. Other authors say cluster development is promoted by collaboration among related firms that is encouraged by face to face contact. Through social interaction, technology and knowledge transfer occurs, therefore leading to the development and growth of clusters.

All clusters are different but a number of common features stand out as underpinning the development of successful clusters throughout the world[8]. Common factors range from 'softer' elements of cluster working such as networks and institutional development, through 'harder' aspects, such as physical infrastructure or the presence of large firms, to more intangible elements, such as the presence of leadership or an entrepreneurial culture. A number of other factors that have contributed to the development of successful clusters can also be identified, such as access to markets, to finance or to specialist services.

Cooke and Morgan describe "the network paradigm" as an emergent set of developmental practices whose key elements are:

- **Reciprocity** - a willingness to exchange information, know-how, proprietary knowledge and goods (Powell);
- **Trust** - a willingness to risk placing faith in the reliability of others (Sabel);
- **Learning** - a recognition that knowledge develops and best-practice should be learnt (Lundvall);
- **Partnership** - a preparedness to solidify reciprocal relationships preferentially (Sako); and
- **Decentralism** - a realisation that centralised information and decision-processing is inefficient (Aoki).

As evidenced in the international experience cited above, there are several common themes in the success of networks and clusters[9]. First, it is generally agreed that they are a dynamic phenomenon. It is the interaction and functional relationships between firms and industries that characterise networks and clusters (Doeringer and Terkla). Secondly, most of the work on clusters reference the geographic scope of the cluster, and the importance of spatial proximity. However, while geographic scope is important in defining clusters, networks have different geographic requirements, so there is no uniform definition of the appropriate geographic scope of a cluster or a network (Rosenfeld 1996).

A third common theme is the importance of looking beyond individual industries and recognising that individual firms are part of a much larger industrial system which today, facilitated by the internet, is getting ever wider. Current international trends are towards a broader definition of business networks that are defined by both horizontal and vertical relationships, and include both direct and indirect linkages.

Finally, in addition to vertical and horizontal relationships, Dr Stuart Rosenfeld who was responsible for USNet, a major programme to support networks in the United States, has pointed to the role of 'social infrastructure'[10] in the success networks and clusters. Information flow is critical in an effective network, and, in order to facilitate information exchange, a social infrastructure is required. Effective networks and clusters must also include social interaction, trust, and a shared vision in order to create their unique dynamic nature.

A detailed elaboration on each of these key success factors along with appropriate case studies of networks and clusters follows below in Section 3.1.3.

8 Report 'A Practical Guide to Cluster Development' to the Department of Trade and Industry (UK) and the English RDAs by Ecotec Research & Consulting (2003).

9 Much of the material for this section is based on the work of Jessica LeVeen, Department of Regional Planning, University of North Carolina, Chapel Hill: Urban and Regional Development March 1998.

10 Rosenfeld defines social infrastructure as "the associations and organisations that bring business people together where they can get to know and trust each other".

3.1.2. Key Success Factors Identified by the Respondents

The following key success factors were noted by respondents (across all 3 categories) in their replies to the questionnaire and are listed in order of the number of times each issue was highlighted in the feedback:

Position	Topic	No of Times
1.	Commitment of members	9
2.	Access to funding for the network	7
3.	High level of trust and openness	7
4.	Full-time facilitation	6
5.	Good information flow/communication between members	5
6.	Support of state agency	5
7.	Strong leadership by members	4
8.	Listening to the needs of members/constant feedback	4
9.	Increase in membership base year on year	3
10.	Sharing of knowledge in the network	2

The following were also listed under each category as success factors:

Category 1 – Business Networks

- Ability to pass on information to members;
- Training;
- Impartiality;
- Recognise trusted brand;
- No connection with state organisation;
- No political agenda;
- Need to know network is valuable to business;
- Achieving targets;
- Industry support;
- Same project management team for 5 years;
- Structured agenda of the network;
- Frequency of meetings;
- Realistic expectations;
- Wide variation in membership from micro to MNC's;
- Real benefits to members;
- Staff have a strong involvement in the network;
- Activities & plans are flexible to allow for continuous change of needs and priorities in member businesses;
- Providing good quality and value for money service;
- Consistently delivering what the members want;
- Learning from each other in the network;
- Reviewing focus and activities on an annual basis;
- Networking works;
- Consistently beating targets;
- Perceived real need and clear outcome for the members;
- Involvement of key industry players; and
- Strong focus on commercial activity.

Category 2 – Development Networks

- Ongoing need to recruit new members;
- Development of trust among members; and
- Personal attention to the needs of the members.

Category 3 – Regional Business Clusters

- Appetite for learning and information;
- Fact that members are MDs of companies;
- Funding;
- Leadership;
- Commitment;
- Facilitation;
- Trust;
- Critical mass;
- Industry led;
- Agreed plan and goals;
- Willingness of members to communicate and share knowledge; and
- Affiliation with 3rd level college.

3.1.3 Comprehensive List of Key Success Factors

Based on the survey data, the international review and on further discussion with networks and clusters and others the study team have arrived at a combined list of 9 key success factors.

1. Strong Business Leadership and the Involvement/Commitment of the Network Partners

The existence of strong business leadership allied to the level of involvement and commitment of the network members was identified numerous times during the study. Some examples include:

- The Visual Design Arts and Crafts network (Lisburn/Leitrim) says that without the commitment from core participants the network would fail.
- The Westgate Craftworks Network in Wexford started with 10 members in 2002 and now has 60. It is self facilitating and self-financing and focuses on selling products as a group, with training and lobbying as ancillary activities. Knowledge sharing and learning from each other are added bonuses of participation. The network claims that the 'determination of the core people is what keeps it going' – strong leadership is the key to strong networks.
- The strongest differentiator of the Bizwest network from other business supports in the region is the fact that it 'is fully led by the members and all decisions are made wholly by the members and the steering committee.'
- The Shannon Regional Materials Forum is driven by industry and its success is primarily dependent on a 'good committed steering committee' and the 'commitment of upper management'.
- Strong leadership and championing of the network concept from the Wexford County Enterprise Board has been crucial to the success of the Wexford Owner-Managers Network which has 20 local small firms in membership.

The commitment of top management to the network concept is absolutely essential. Successful networks involve a high level of interaction between the member firms at all levels of the firm (not just the managerial level).

The importance of large companies in a leadership role in a network or cluster has also emerged in the study. The status and credibility which large companies can bring to a network and the importance of their presence from the point of view of small companies are important factors, as seen in the Plato experience. Large MNCs can foster more demanding standards by all firms within the network. The experience of US Net led the Programme facilitators to place greater emphasis on the role of large customer firms in encouraging networking behaviour among their smaller suppliers.

LEADERSHIP AND COMPETITIVE ELEMENTS IN NETWORKS

Cluster: it@cork

Over the past decade the Cork region has spawned a wide range of companies and professionals in the Information Technology sector, many of whom are small Irish-owned enterprises with enormous potential. These firms are highly innovative, entrepreneurial and must be capable of meeting the demands of a sector which is characterised by dynamism, diversity, uncertainty and rapid growth.

it@cork is a not-for-profit industry organisation that supports businesses that depend on Information Technology in the Cork region. It provides a forum for businesses that have a key dependency on IT, to share best practices and to network. It also supports the promotion of the region to external investors and works with other regional stakeholders to promote IT related opportunities.

The network organises monthly information and networking events for its members and annually hosts the biggest IT conference outside Dublin. Membership of it@cork provides the opportunity to make new business contacts, learn the latest in technology trends and heighten your company profile. The organisation provides IT professionals from all sectors with opportunities to meet and develop an appreciation of the resources and activities of the IT market in Cork.

Some valuable learning from the network to-date includes:

- The companies themselves have taken complete ownership of the process and are dictating the method and content of the programme based on company-specific needs.
- Overcoming concerns about sharing knowledge among competitor firms in a knowledge-based sector has been a notable achievement of the trust-building measures adopted by the network which have primarily involved getting participants to know each other and work together.
- The network is giving firms the opportunity to participate in a very focused, sector-specific programme which would have been denied to them in the past because of limited financial and people resources.
- The network initially operated on an informal action-oriented basis but is now moving to install more formal structures to drive the network forward.
- The network has extended its original focus to include local multinational companies so as to encourage knowledge transfer and cross-company mentoring and benchmarking, as well as the potential for joint ventures and linkage subcontracting.
- The network is also serving as a forum for IT professionals in the region and acting as a catalyst for change and facilitating a new dynamism within the sector in the Cork region, aiming at establishing Cork as a leading IT region.

2. Establishing and Maintaining Trust

The concept of trust as an important indicator of network success is well established. Networks that foster openness and trust gain the confidence and support of their members. Trust embodies the concept of reciprocity (also referred to as 'untraded dependencies' (Storpor) - flows of information and support between firms within the network - both a cause and a consequence of collaboration. Firms are willing to help each other without immediate prospect of gain. As ties become more complex, it is possible to obtain additional benefits, such as a reduction in transaction costs (i.e. due to 'trust'), and the exchange of tacit knowledge.

The all-island Ceramnet network has 15 firms in the ceramics industry and aims to stimulate discussion and interaction between companies and encourage collaboration in the fields of training, waste management and technology development.
The network allows senior managers from firms that are geographically widely dispersed the opportunity to meet and discuss topics of commercial interest. Building trust has been crucial in this process. Because of the non-competitive nature of the network, members have been facilitated to become open to discussing a broad range of topics and experiences.

The 'willingness of members to communicate and share knowledge' was identified by the Fermanagh Engineering cluster as vital to its success.

Many other networks and clusters have a similar experience, and this is reinforced by the literature which points to the importance of trust in building and sustaining effective networks. In an earlier Irish study Martin for example, states that where partners are suspicious of each other the level of trust needed to engage in cooperative activities takes longer to develop or, in some cases, may never be achieved. It is interesting, therefore, that little research appears to have been done on clarifying what is meant by trust and how it is achieved in a network context. This seems to result from the fact that the study of trust falls between economics and sociology. In standard economic theory there is no concept of trust as a component part of effective management. However, Lorenzen posits a definition of trust in a business network context as 'an expectation of a manager that his (potential) business partner will not act opportunistically - even if he holds no power over him to ensure that he behaves.'

The process of building and sustaining trust in networks can be seen to take place in a number of ways:

- The initial trust between participants to a network may result from their personal knowledge of each other, their common membership of a local association or even sports body, social or business references, or even credibility enhancement (reputation/profile).

- Trust may initially be embedded in formal agreements, contracts, rule of behaviour, or the mediating and facilitating role of a facilitator. The support or influence of a professional body, state agency, business association or large and well established company may also be important. All of these factors, for example, are evident in the Plato experience.

- Trust can be sustained by social interaction, the behaviour of the participants towards each other, the achievement of 'openness' in communications, the absence of undue conflict, and the achievement of the desired results.

- A carrot-stick approach also serves its purpose. For example, participants may be more inclined to trust and seek trust from their network partners when they consider the 'cost of leaving' and the loss of the 'sunk cost' investment in initiation and maintaining the network. Peer pressure also plays a role.

- Locality and the importance of geographic proximity is influential in retaining trust in a network. A number of the Northern Ireland clusters in this study identified trust as a significant element in their success.

In his analysis of seven industrial sectors in the Appalachian region of the Eastern United States, Rosenfeld concludes that "trust is a major factor in the strength of a cluster, increasing the opportunities for firms to take advantage of their collective capabilities and knowledge.. ' which is derived to a large extent on the availability of a region's social infrastructure ('the associations and organisations that bring business people together where they can get to know and trust each other'). He goes on to recommend a policy which encourages networking recognising that 'while many of these firms do compete with each other in regional markets to supply

rarer customers, a large number have differentiated themselves with their special capabilities over the past few years, thus increasing the likelihood of co-operating on mutually beneficial issues.

They may find there is far less direct competition and more opportunities for co-operation.'
Thus, trust becomes a critical intangible asset for competitiveness through innovation.

TIME NEEDED TO BUILD TRUST IN NETWORKS

Network: North Mayo Skillnet

In addition to the usual barriers to training which most SMEs experience those in North Mayo have a number of additional disadvantages. In particular their geographic isolation means that training providers are both far away and unwilling to bring training to what is perceived as a weak industrial area. Another problem created by geographic peripherality is the difficulty of recruiting and retaining qualified staff.

The North Mayo Skillnet was established to overcome these disadvantages and to deliver training focused on the real needs of the firms, sharing resources and expertise where possible, keeping the cost low, delivering training locally and allowing the firms to exercise real control.

The process of network-building has been slow and not without its problems. Building trust takes time and that's a commodity that firms don't seem to have in great abundance. But time was made as benefits became clear and now 4 years on the network is thriving.

Growth and learning areas experienced by the network include –

- Creating momentum at the beginning was a slow process in a brand new network which had no previous infrastructure or base to work from. As members came on board and structures and training started working the network began to take off.
- In the early days receiving feedback from members on their updated training requirements needed a lot of encouragement mostly due to members lack of time. However, as the network developed and they saw the impact of training on their employees and in their operations they committed increasing time to the process.
- It took some time also for the network to gain consensus on proper benchmarks for success but the network is now agreed that the following will represent success of the project for the individual companies: improved performance in the workplace, greater productivity, measurable efficiencies and improved staff retention rates.
- The network is providing more training than firms have ever been involved in before in what is a very peripheral region both geographically and in terns of available training resources.
- Being locally delivered and wholeheartedly supported at all levels in the members firms it has been possible to provide training outside normal hours in the evenings and at weekends.
- A significant outcome is the changed attitude to the region among training providers. With the existence of the network a single point of contact with a substantial combined workforce has attracted high quality trainers from far afield to bid for work which would never have happened in what had previously been perceived as a weak industrial region. It has also placed the network in a relative position of strength in terms of purchasing power.
- With a build-up of trust among members the barriers to sharing information and knowledge have been greatly reduced.

3. Network Facilitation

Research shows that the most effective strategy in developing networks and creating a 'hospitable' environment in which participant companies value networks sufficiently and can develop is to have the network facilitated professionally for at least the formative 3 year period. Strong networks are those with strong facilitation. Invariably this requires good facilitation skills, some of which are unique to network and cluster management. In most cases this requires skilled and experienced people, full or part-time, who are paid by the network or other organisations or who act in a voluntary capacity.

Networking is a vital mode of knowledge exchange - a powerful vehicle for productive engagement with the business community. A diverse range of approaches and structures are required to achieve real value from these connections. It is vital that through facilitation, models of networking are continually adopted and adapted that best suit the circumstances encountered.

The Irish experience of catalysing, facilitating and supporting networks and clusters shows that networks function at a number of levels. Therefore facilitation should be demand-led and activity varied to suit the goals of a particular network or cluster. The primary aim is to fully exploit the competency and knowledge base of all network participants as a means of adding value to the cluster.

It has to be recognised that networks and clusters, with great potential to boost competitiveness, often emerge out of synergies found within less structured groupings or networks. In facilitation activities a dynamic approach needs to be adapted that supports such development and progression.

There are international examples of cluster facilitation that should be closely examined as to their viability and if deemed suitable then applied to the Irish marketplace. One of these includes 'hot housing' the start-up phase of networks so as to provide the impetus at a critical stage of network growth.

While state agencies, development bodies and educational institutions have an important role to play as network supporters they may not be ideal candidates for the role of network facilitators. A facilitator should be neutral and dynamic with only the network's interests at heart. This position allows the facilitator to draw on any and all available support and participation without compromise and represents the broader focus of the network.

Even where Managers foresee a benefit in establishing a network relationship they may not have the skills or resources to facilitate or co-ordinate the actual implementation of the network. This has been referred to (Dixit and Nalebuff) as the 'collective action problem', where a group of individuals or firms may frequently fail to achieve co-operation, even where it would be beneficial to every individual in the group. It is therefore incorrect to assume that, even where co-operative behaviour would be beneficial, it will automatically emerge.

Firstly Biotech is an impartial privately funded all-island networking forum which has grown from 100 to 1500 members in the biotechnology sector. It is driven by industry needs and has evolved an educational and knowledge sharing role with help from facilitators, Investnet, a private company which specialises in the support of networks and clusters. The network believes that the range of activities and rapid growth in just over 3 years could not have been achieved without this full-time facilitation.

The Refrigeration Technology Skillnet identifies one of its key success factors as having had the same project management team and facilitator for over 5 years.

The network of food firms supported by the Clean Technology Centre (CTC) at University College Cork originated in informal contacts between the companies and the University; and, then evolved into continuous dialogue with a semi-formal structure that is now facilitated by the CTC.

NETWORK FACILITATION

Network: ITQuarter – Ireland North West

ITQuarter – Ireland North West was established in June 2000 (5 companies growing to 58 in June 2005) and came about as a result of the amalgamation of 2 research projects on the needs of the local ICT sector in Derry, Donegal, Coleraine, Limavady and Strabane. The findings of the studies indicated that a number of common issues faced the NW ICT (especially indigenous) sector, which were unique to the region. The North West ICT companies therefore wished to explore the possibility of addressing these concerns through a common platform or forum. From the outset and still so today, the network is employer driven.

A strategic framework for ITQuarter was developed in consultation with partners, local and regional during 2001. ITQuarter elected to focus its efforts on:

- Building a strong public image for the information technology industry in the North West;
- Assisting with the recruitment and development of needed information technology workers;
- Lobbying for and support the establishment of a telecommunications infrastructure capable of meeting the future information technology requirements of the North West;
- Expanding our member network of contacts and exchange of business, technical and other information; and
- Strengthening our strategic alliances and working relationships with local, regional, and global information technology and business development organisations.

The programme of work was demand led and facilitated by network practitioners (NORIBIC) working alongside a formal management committee elected by employers and underpinned with local authority and government agency representation. One of the fundamental measures of success to date, has been the dedication and persistence of key individuals.

In December 2003, ITQuarter working with Momentum, Invest Northern Ireland and Derry and Coleraine councils secured a regional development executive for the NW region; one of the aims being to support and facilitate the ICT NW network.

Some valuable learning from ITQuarter on facilitation includes;

1. Network facilitators are key agents. Holding the commitment and motivating these persons sometimes when financial rewards or funding are not forthcoming is crucial. If not in place the network will collapse.
2. Facilitator must be a relationship builder acting locally but thinking globally.
3. Facilitation is a “team sport”, establish focus teams and communicate. ITQuarter had broad campaigns to introduce concepts to business community.

...continued

4. Ensure there is a strategic focus and plan – review, measure and evaluate. To secure funding a "formal" structure must be in place – but there must be flexibility to evolve as the intensity of the co-operation increases.

5. Private sector provides the leadership group comprising :

   - Senior personnel
   - Mix of indigenous and FDI companies
   - Relationship builder
   - Chair and two co-chairs
   - Channel/Communication tool – ClusterNet (NORIBIC)

4. Supportive Environment

A supportive environment is crucial to the success of networks and clusters. This has been referred to as 'Institutional Thickness' (Amin and Thrift) or the quantity and quality of support organisations associated with a particular network. Networks function as cohesive units but external linkages bring additional resources, perspectives and connections which may be crucially important to the growth of the network.

As evidence by the responses to the questionnaires in this study, networks and clusters benefit greatly from links with external establishments such as universities, development agencies, trade associations, business angel groups, financiers etc. Such organisations are usually included as associates or, as in the case of R&D collaboration with third level educational institutions, may become cluster members.

Whilst a network works as a cohesive unit the addition of other external linkages brings additional resources to the table and can greatly benefit the network.

It is important that such organisations are included as associates or, for example with third-level educational institutions within an R&D support role, they may become cluster members.

The success of the Italian clusters is greatly assisted by the supportive economic, social and public policy framework in which they exist. Without such an all encompassing supportive framework the Danish experience substituted a high-profile awareness campaign and major public financing and support through full-time brokers to enable networks to flourish. Rosenfeld points out that the limited funding support offered in the United States to the US Net initiative hindered its effectiveness. He concludes that 'a decade of experience has been instructive in the importance of political support. Brokers can stimulate networks, but to achieve the scale that has an impact on a region's economy requires an economic context and a social infrastructure.'

IMPORTANCE OF INSTITUTIONAL SUPPORT

Network: IMDA

Irish Medical Devices Association (IMDA) Skillnet developed a competence-based system of employee development in conjunction with the Cork Institute of Technology which is now available through the FÁS Net College.

The main challenges facing this hi-tech sector are ever more stringent regulatory requirements, increased global competition, short product life-cycles and the need to retain qualified staff. Recognised standards and competency are essential to ensure quality (and safety) of the end product and to satisfy regulatory agencies. There is also a need to enrich and enlarge jobs to meet the needs of staff, to keep them motivated and also to encourage them to stay.

The network has developed a strategic approach to address these issues. This has required member firms to contribute large amounts of time and personnel and substantial sums of money to create a system which none could have attempted to achieve on their own. It has also involved major support from Skillnets and involvement by a number of other bodies, not least Cork IT and FÁS. The result is a certified system for the industry which has external validation from FÁS/FETAC and has been designed to fit on the ladder of educational qualifications. It is not easy for companies to contribute in this way and yet the ultimate outcomes are of long-lasting value to a wide range of companies.

The continuity of the management in the network was crucial to the success of the IMDA Skillnet but so also was the experience of the management and the support of the IMDA itself following previous work done in allied sectors.

5. Financing and Support for Networks and Clusters

External sources of funding support for networks come from a wide and varied range of Government, Local Authority, EU Programmes and Initiatives, County Enterprise Boards, Skillnets, North-South Programmes and Private Sector Trusts and Foundations.

It is clear from this study that further flexible mechanisms for providing State aid to networks should be developed to take account of the unique needs of companies working in networks and clusters. State agencies have traditionally related to companies individually and grant support has evolved on that basis. In some cases this has given rise to difficulties in providing funding to networks which are in the early stages of development or are loosely structured. The problem for the state agency is often being able to determine which company in the group it should provide the funding to, where the network is not established as a separate legal entity. Skillnets have introduced creative and effective mechanisms to overcome this problem which might be usefully considered by other agencies.

First Biotech and Wireless Wednesday are both self funding networks facilitated by the same private company, Investnet, and state that they do not receive State grant aid. Neither do they charge membership fees, as such, preferring to operate on a commercial basis by funding the facilitation expenses from charges for events and direct services to members.

First Biotech identifies its independence from the state sector as an important element in its success and is concerned to maintain its impartiality. It has also voiced concern at potential competition from state funded networks under proposed new funding mechanisms.

However, the necessity to rely exclusively on event-related income may have its drawbacks and the international experience shows that pump-prime funding is essential and in most cases funding for a number of years has been provided. For the vast majority of companies working in a network represents a considerable innovation and for many it takes time to be clear about the benefits or understand how these benefits arise. As outcomes become clear companies are quite prepared to invest the necessary resources to make the networks work.

The availability of seed funding, in the form of grants or funding for a facilitator, is also seen as important as a magnet for drawing groups of firms to work together (the Skillnets experience in Ireland and the New Zealand experience shows that the availability of external funds becomes much less of a driver as trust and enthusiasm develop).

FINANCING NETWORKS AND CLUSTERS

Network: Environmental Technologies Cluster (ETC)

Some networks and clusters have large budgets allowing them considerable freedom in prioritising their actions and strategies. Others run on meagre budgets requiring fund raising for even modest projects. Is a largish budget required?

Our survey indicators would seem to suggest that clusters and networks with strong budgets are better at achieving their goals and meeting their objectives. Part of the explanation is found in the fact that well funded networks are sometimes working in stronger cluster sectors – but one fact is notable; networking, lobbying and co-operation are not affected by budget constraints.

Those objectives which show some relationship with bigger budgets include: cluster expansion, cluster facilitation, programme delivery, training, cluster management tools and branding.

The financial interventions of government and other organisations can catalyse clusters. Their role in cluster development, both deliberate and unintentional has had a catalysing impact on cluster competitiveness and innovative capacity on the Island. Resources to support the development of clusters are being made available from a number of organisations, including economic development agencies, IDA, Inter*Trade*Ireland, Invest Northern Ireland, Enterprise Ireland and others. These resources include funding and time (particularly through the availability of local cluster facilitators).

The case study below is a current example illustrating government (North & South) support, private sector and local authority intervention and mobilisation.

The Environmental Technologies Cluster part of the Border Vision programme is a transnational clustering initiative founded in June 2005 and facilitated by the Newry & Mourne Enterprise Agency/Louth County Enterprise Board partnership. The programme is funded under the EU Programme for Peace & Reconciliation, which is administered by Co-operation Ireland. This core funding is used as 'prime funding' and as leverage in attracting additional support both financial and 'in kind' for specific initiatives from all of the other main support agencies on the island including Inter*Trade*Ireland, Enterprise Ireland and Invest NI.

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This financial support has allowed the ETC to initiate, develop and deliver several key initiatives including:

- Facilitation, workshops, technology visits, mentoring and support funded under the EU Programme for Peace & Reconciliation administered by Co-operation Ireland;
- The use of a Virtual Enterprise Network (VEN) funded by Invest NI for active facilitation, secure communications, file sharing and skills development;
- Technology research and all island market research funded by Inter*Trade*Ireland;
- Long term strategies of R&D and strategic alliances seeking new business and technologies.
- A comprehensive marketing plan; and
- National and international links with other clusters in the environmental and associated sectors.

6. Communication and Information Flow in Networks

The exchange of information and effective communications is seen by 61 per cent of Business Networks (Category 1) and 72 per cent of Clusters (Category 3 Table 11) as an essential element in their success and in building and maintaining the commitment and involvement of the network participants.

The network needs to agree a clear strategy for communicating externally the outcomes of its work, using the most appropriate media for the task. Internally, the partners need to agree a system of information flows, to ensure that everyone is kept up to date with meetings, minutes, decisions and work-plans. Individual partners should also take steps to ensure that the outcomes are disseminated internally within their own organisations.

Provan and Human have distinguished between centralised and decentralised information exchange processes within business networks. In the former the network facilitator acts as a form or 'clearinghouse' for information to and from, and between the members, while in the latter the facilitator enables the maximum exchange of information, formal and informal, between the members, through, for example, multi-firm exchanges and more frequent meetings.

The Fresh Produce Skillnet concluded that 'the formal and informal communication structures within the networks allow for constant feedback and revision.'

'Frequent communication and interaction with the associates within the cluster' are essential ingredients in the success of the VERA Cluster Initiative in the Craigavon-Newry corridor.

COMMUNICATION

Network: ITAG

In September 2000 ITAG was established by a group of forward looking IT professionals representing both multi national and indigenous IT companies. It was recognised by the founding members that a unique combination of economic factors and social conditions makes Galway an exciting place to do business, work and live.

It was equally recognised that this ideal combination does not prevail by accident but by design and is not guaranteed to flourish without creative, committed and continuous planning. In order to play its role in shaping the future development of Galway, both economically and socially, the IT sector, in association with other stakeholders, has been mobilised through ITAG. ITAG aims to ensure that the IT sector continues to thrive to the mutual benefit of those working in it and the wider community.

ITAG now has 58 member firms and operates a dynamic network through a number of specialist clusters to appeal to members from a wide-range of specialist backgrounds including, HR, Training, Finance, Business Development, Marketing and IT. It's motto is to connect, create and compete and it operates a highly professional business focused network with both online and offline communication and information tools that allow it to maintain close and meaningful contact with members as well as facilitating immediate and relevant feedback from members on key issues.

7. Common Purpose and Meeting Business Needs

Successful networks are focused networks - with goals that are understood, agreed and shared by all members (which may take time). For networks to be effective, participants must have a compelling need to achieve some business-related objective as a consequence of their participation in the network. Network support services, including training, that do not explicitly link themselves to compelling business needs are likely to fail (Williams).

Member firms need to understand (a) what the network is about, (b) what the benefits of the network are meant to be for their firm, and (c) have a clear way of knowing when those benefits have been achieved.

Plato, one of Ireland's largest business networks, links its success to paying personal attention to the needs of the members and developing the network with the needs of the members in mind. It is able to do this because of the proximity of its full-time facilitators to the members.

IMDA Skillnet identified its key success factor as a 'perceived real need, and a clear outcome for both members and the wider industry.'

A strong example of a needs based and strongly business led network is to be found in First Biotech which prides itself on both its independence from the state sector (even though its has strong operational links to that sector) and its impartiality.

MEETING BUSINESS NEEDS

Network: Supply Network Shannon

Supply Network Shannon (SNS) is a sectoral network of engineering and electronics sub supply companies located in the Shannon region.

The impetus for the formation of SNS was a combination of top-down and bottom-up. In the 1990s Shannon Development was becoming increasingly concerned about the low level of technical capability of the sub-supply base in the Shannon region which was contributing to over-reliance on low labour costs for competitive advantage in supplying multinational companies (MNCs). The sub-supply companies themselves were anxious to move up the value chain to circumvent the increased competition from low cost countries. Prompted by the occasion of an international subsupply fair in Limerick in 1997 Shannon Development published a Sub-Supply Directory for the region in 1998. This publication galvanised the listed companies into looking at themselves as a group and seeking opportunities to network together, particularly for the provision of integrated supply solutions to MNC customers.

SNS was incorporated as a limited liability company in 1999 and it currently has a membership of some 25 companies. It is driven by an independent Steering Committee whose officers are drawn from 9 member companies and 2 development agencies, Shannon Development and Enterprise Ireland. Shannon Development has provided financial resources and other supports to assist the development of SNS. Limerick University also supports the network through its Small Business Research Unit and Technology Transfer Unit.

The objective of SNS is clearly stated in its original charter: SNS is an industry-led initiative aimed at representing, promoting, developing and connecting together sub-supply companies in the Shannon Region of Ireland. Supply Network Shannon benefits all engineering and electronics sub-supply companies in the region, regardless of size or activity and will help to reinforce the regions position as a world class source of sub-supply products and services.

The network currently focuses on 3 main areas of activities: business issues such as supply chain management (SCM), technical issues relevant to engineering and electrical manufacturers and ICT usage. In its initial phase, SNS concentrated on 2 core activities, training and promotion.

Encouraging Collaboration for Collective Success

Over the Period 1998 through 2004 Supply Network Shannon (SNS) has been instrumental in developing and reengineering the sub-supply base in the Shannon Region, during a time of tremendous growth followed rapidly by a period of consolidation amongst the OEMs. SNS has developed a framework for indigenous companies to collaborate in joint marketing, training development and quotation activities. The SNS brand has been successfully developed, with recognition within the region.

The Irish manufacturing landscape is rapidly transforming from assembly and logistics to a knowledge based enterprise culture. A key competitive enabler for Irish Enterprise is the development of collaborative networks - none of us is as good as all of us. Through pooling existing competencies and developing new ones, collaborating networks of companies will succeed in the global competitive and rapidly changing environment.

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The SNS Business Network

The challenge for SNS today is to leverage its experiences and evolve into a national reference model for Business Networks. Business Networks are the way forward for enterprise development within Ireland, with the 'Eye on the Prize' being the use of business networks to increasingly deliver support for enterprise development for the state, thereby facilitating:

Shared Costs and Risks between State and Enterprises;

Enhanced Cooperative Learning;

Development of Market Focus; and

Platforms for Industry, Academic and Public Sector Co-operation.

Business Networks will gather and disseminate information on:

Market Developments;

International Projects; and

Technology Roadmaps & Development of Industry Standards.

Active SNS Programmes

SNSs pioneering approach to cluster development is reflected in the following active programmes:

- Tsunami Network - A cluster of manufacturing companies in the Shannon Region, pioneering the development of a Joint Quotation Model;
- TsunaMat Skillnet providing innovative staff development and deployment of tailored training in the region;
- Leonardo daVinci Project 'SME-Excel' - European sponsored initiative to develop a complete training tool-kit focussed on improving the competencies of owners and managers of SMEs;
- Marketing Group - Collaborative Marketing for SNS Members including Seminars and Exhibitions;
- Environmental Group - Collaborative development and deployment of Environmental Processes in member Companies in conjunction with the University of Limerick and the Regional Waste Authority; and
- All-Island Co-operation - Discussions with Northern Ireland Suppliers including joint presentations hosted by Bombardier, Belfast and facilitated by Inter*Trade*Ireland.

8. Activity Focus/Growth of Membership

The range, scope, frequency and extent of network activity especially during the early stages are key indicators of the success of the network.

A network, like any other organisation, is created through its interactions – they are its 'elixir of life'. Through them various opportunities become reality.

There is strong evidence that the good feeling generated in a network from early success is a major contributor to the long-term success of the network. The logical implication then is to set achievable goals and targets at the beginning and to monitor, record and inform as success is achieved. Regular interaction between network members is seen as crucial to network success, especially in the early stages of the life of the network.

The Digital Media Forum Skillnet has identified the success of the training they have delivered with support from Skillnets as a key factor in their membership growth.

A key element in the success of IASC (Irish Association of Seafood Companies) has been the year-on-year growth in membership from 25 to 80 members or and increase of 45 per cent in 3 years.

The high number of services provided for a relatively low membership fee is seen as the main attraction of the Women on the Move network which is based in the North West of Northern Ireland. The continuous contact with members to keep them up to date with all relevant information is also seen as crucial to the success of this network.

The Plato programme is heavily activity centred. These activities however, have a clear focus on facilitating networking. These range from one to one visits, the normal monthly meetings, joint group meetings and regional seminars. These can all be viewed as examples of networking within the Plato Network.

Evidence suggests that activities which work particularly well appear to be events that combine work with pleasure. Golf Outings appear to be particularly popular and successful. 'Golf is a terrific way to ascertain the character of a potential partner.' The facilitation of both formal and, mainly informal, contacts between network members are made possible through casual or planned meetings, information exchanges and customer-supplier relationships.

Regular interaction between network members is seen as crucial to network success, especially in the early stages of the life of the network. The higher intensity of network activity (especially involving more intense co-operation) created a higher positive rating for the impact of the network on the firms surveyed by Welch in 13 US networks.

Lee and Oakes found that in the networks they examined the primary activity of the largest network was the organisation of a rather formal series of visits to large companies to view aspects of 'best practice' in operation. In this instance, information exchange was the prime objective of the network organisers rather than the development of working relationships between a small group of companies. Conversely, the smallest network which had a maximum membership of 15 to 20 companies, emphasised interaction between the members and the social relationships which develop as a key part of the network operations. In this case, the network size was deliberately restricted to a relatively small number of companies who could develop together and were not in direct competition with one another. Unless new members could complement the mix of companies in the network, they were not invited to join.

STRONG ACTIVITY FOCUS

Network: First Polymer Training Skillnet

First Polymer Training Skillnet (FPTS) is an industry-led initiative designed specifically to fill the skills gap in the plastics industry. Before FPTS there was no dedicated Irish based training resource for this industry. Companies had to send employees to the UK or organise costly in-house training.

First Polymer Training Skillnet attributes the continued support of members for the network to its high activity rate – this includes 28 training courses provided 50 times per year – and consistently exceeding targets for numbers trained, range of courses and number of companies involved.

Its achievements include:

- A range of industry wide consultative meetings which have led to a new impetus for training among companies and facilitated an enterprise led approach;
- Additional investment from the plastics industry for training - 2 firms have donated large and expensive machinery to be used in the training;
- Reduced cost of training for companies by providing courses in Ireland which were previously only available in the UK;
- Alliances with a British University and 2 Irish Institutes of Technology to bring additional academic resources to the training offered; and
- Successful experimentation with a mixture of practical demonstration and instruction backed up by classroom theory directly relevant to developing participant skills. This has been facilitated by holding workshops of industry players to look at the type and format of training, such as the Innovation in Design Process workshop.

FPTS is based in the Polymer Development Centre in Athlone, and led by the Plastics Industry Federation which is a sectoral association attached to IBEC. The managing board of the project includes a number of network members.

The FPTS is a good example of an enterprise led approach to the development of systematic industry-specific and industry-wide training which is providing measurable benefits for companies and developing workforce skill standards and certification. The long term aim is to build a sustainable specialist training organisation for the plastics industry which will play a key role in its strategic growth and competitiveness.

9. Use of Technology in Networks and Clusters

Collaborative networks provide a basis for global competitiveness, innovation, and agility in a dynamic knowledge-based economy. Ranging from informal alliances of business partners to well-structured collaboration networks, there is a major trend of which integrated supply chains, virtual enterprises, virtual organisations, professional virtual communities, and collaborative virtual laboratories are first exemplary manifestations.

The use of advanced ICT infrastructures and support services, including mobility and ubiquitous computing, represents an enabling factor for experimenting and exploiting synergies from collaboration. Among the potential benefits are: increased access to market opportunities, sharing risks, reducing costs, boosting innovation, achieving business goals not achievable by a single organisation, and increasing knowledge.

The rapid formation of a collaborative business network, triggered by a business opportunity or regional need and specifically tailored to the requirements of that opportunity or need, is an expression of agility and a survival element in turbulent market scenarios. However, the formation of any coalition depends on some base commonality among its members. These include: shared goals, possessing some level of mutual trust, having established some common or interoperable infrastructures, and agreed policies, codes of practice and value systems. Achieving these challenging base conditions requires proper breeding environments, adequate reference models, and supporting technologies.

USE OF TECHNOLOGY IN SUPPORTING AND DEVELOPING THE NETWORK AND ENHANCING INTERNAL COMMUNICATION

Networks:
eClusterNet (NORIBIC);
ITQuarter – Ireland North West;
Virtual Enterprise Network (VEN);
Environmental Technologies Cluster (ETC);
Smart Communities New & Emerging Technologies Cluster (NETC); and
Border Vision - Newry & Mourne Enterprise Agency/Louth County Enterprise Board.

Web-based cluster management tools as used by the networks mentioned above have been created as exemplars in cluster communication and knowledge sharing management over a wide geographical area. The respective tools are utilised by participant companies for virtual meetings, online information exchange, collaboration and event management. The creation of these tools, as a platform for further cluster support development, assists in the establishment of wider regional clusters on an all-island basis through 'clustering of clusters'.

Says Tim Kelly, Director of Collaboration Services at NORIBIC; 'virtual collaboration tools stem from the requirement to service the needs of the increased speed and globalisation of business. For example, businesses that have the challenge of accelerated product cycles have the requirement to win and source new business quickly as well as impart more information to their marketing, sales, services and support organisations.'

Through a web interface, virtual collaboration tools enable individuals to communicate in real-time wherever they are in the region or world. Data in the form of voice and video helps to retain the 'personal' component of communication. Once inside a virtual meeting room, participants can talk to each other, see one another and call up relevant applications that they can collectively and simultaneously work on. Sessions are recorded so there is no need to document what is discussed.

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'This approach has obvious benefits for most business functions,' says Paul McCormack Border Vision Manager, 'Virtual collaboration can be used by CEOs, managers, network facilitators, sales people and practitioners to consult with a remote subject matter expert who, in turn, can access existing information to help impart knowledge. Participants can then immediately go out and apply what they have learned.'

The key business benefits of deploying virtual collaboration to the cluster companies include streamlining operations, information sharing, cost reductions (travel and other traditional forms of communication), real time working, empowering individuals through information, and enabling the new economy trend of working from home, which has its own cost saving and productivity benefits.

3.1.4 Benefits to Member Companies

Within networks overnight successes do not happen. Whilst many of the networks in Ireland are in their infancy there are several that have developed into maturity. These networks and many of the international examples that are cited repeatedly as best practice have matured into semi-permanent entities. The networks survived not because of financial support but more importantly because they produced value to their members. That value was most often not a joint product or new market - which occurred from time to time - but a combination of reduced costs, access to information and ideas, and solutions to common problems.

Many clusters are discovering that their success is less dependent on the flow of goods and services among members (traded interdependencies such as local supply chains) than it is on the flow of information and innovations (untraded interdependencies such as technological spillover).

Here are some examples of the value which participation in networks and clusters have added to firms that participated in this study (by category of network and respondent):

1. A number of successful collaborative projects have emerged from the Dublin based Digital Media Forum – from production to successful consortia for government tenders. C1.37.

2. The IMDA Skillnet developed a competency-based system for the medical devices sector that has been validated by FETAC and is now available to all companies in the sector through the FÁS Net College. It is estimated that these standards now cover 80 per cent of operator jobs in the sector in Ireland – 13,000 operators can now work towards certification under this scheme. C1.45.

3. 'From an engineering strategic perspective for Ireland the existence and activities of the associations (3 FÁS Clusters in the North West) make good sense. They have clearly anticipated likely trends…and have laid the foundations for a sound learning culture.' C1.60.

4. Members have collaborated together to tender for projects. C2.3.

5. Create economies of scale through the network resulting in a more effective bargaining position. C1.20.

6. Over 30,000 euros worth of business developed in the network in one year and 30 new jobs created. C1.51.

7. Feedback suggests significant business benefits for network members leading to changes in training and development investment patterns. C1.58.

8. Intellectual Property Guide for SMEs – valuable tool for member companies.

9. The enterprises in the Digital Media Forum 'are growing at a tremendous rate due to collaboration and training within the networks.' C1.37.

10. Channel to obtain finance C1.3.

11. Opportunity to meet contacts in the industry.

12. Platform to raise the profile of the industry.

13. Reducing the average training cost per day to €119. C1.50.

14. Groupings have been formed to pursue joint ventures. C2.7.

15. Opportunity to showcase early stage companies in the biotech sector C1.3.

16. Stronger buying power through linking members up with waste recyclers who get paid for collecting waste and bringing it to the depot. C1.4.

17. Reduced transport costs C1.4.

18. Enabled competitor companies to see what they have in common C1.5.

19. Training tailored to member needs.

20. Vertical focus enabling members in the ICT sector to do business together C1.10.

21. Enable companies to trade in international markets through collaborating together.

22. Benefit of access to shared expertise.

23. Securing £33m of work for local companies. C3.15.

Spin-off benefits and other outputs

1. A new national Institute of Refrigeration Ireland spun off as a separate entity from the Refrigeration Technology Skillnet C1.6.

2. The South East Lean Forum (SELF) was a spin-off of the Waterford Chamber Skillnet to share experience regarding the implementation of lean production principles in local manufacturing firms. C1.50.

SECTION FOUR

4.1 Feedback from Networks
4.2 Conclusions of the Study
4.3 Recommendations

‹‹ Back to Contents Page

4.1 Feedback from Networks

This section records the feedback from the respondents on what is now needed to advance the role of networks (by category of network and respondent), outlines the main conclusions from the study and offers a series of recommendations.

In the questionnaire respondents were asked to state what, in their view, needed to be done now to advance the role of networks on the island of Ireland. These are the responses summarised under a number of headings:

Provision of Funding

- Continued state support and funding for networks is vital. C1.6.
- Resources are vital as networks do not have enough resources to support themselves C1.10.
- Essential that R&D networks are funded properly in terms of both scale and duration C1.12.
- Concerned at the proposal to allocate €50million over 5 years to develop networks in the Republic. This is a privately funded, successful and commercially driven network responding directly to industry needs and funded by its members and doesn't want 'subsidised competition'. C1.3.
- Financial support for networks and to sustain linkage activities between companies (especially relevant to cross-border).
- More funding to be allocated towards similar projects.
- Provision of funding to allow more full-time, paid facilitator type networks to be established.

Provision of Support Services

- External support is necessary C3.6.
- Provide mainstream funding to support facilitators. C3.12.
- Directory of supports available to networks.
- Listing of network mentors and consultants.

Networking the Networks on an All-Ireland Basis

- All Ireland network website C3.7.
- Develop links between groups/integration of effort across the island. C3.12/13.
- If networks identified and results published possibility of metanetworks. C1.4.
- Network the networks C3.13/16.
- Integration of effort across the Island - inclusion, experience, commitment.

- Central event, annually, where all networks/ clusters can congregate and exchange ideas, concepts etc in a central forum. A very good event on which this could be based is the MicroTrade MAIN (MicroTrade All-Island Networking) event held in Dublin.

Development of National Network-Cluster Strategy

- Develop a coordinated/agreed policy for cluster development in Ireland. Policy should be supported by appropriate resources and should involve the existing facilitators and networks. C3.12/13.
- Strategic action by Government – NI and Ireland C3.16/17.
- Development of an agreed policy on cluster development with committed resources.
- Some form of quality control; there are many 'not so good' networks offering 'not so good events' which tarnishes companies experience of networking.
- Central procurement.
- Strategic action by government both Northern Ireland and Ireland.
- Emergence of a central body to assist with issues and questions surrounding the creation and growth of cluster networks eg legal, contractual, functional, etc. Sort of LEA of clusters.

Develop Awareness of Networks and Clusters

- Develop public awareness of networks and clusters C3.16/17.
- Ensure networks are accessible and offer something to small companies not familiar or at ease with the concept.
- Information on what networks operate and for what sectors.

Internationalise Networks

- Internationalise C3.13.
- Building on existing strengths to take advantage of international market development opportunities.

Caution About What Networks and Clusters Can Achieve

- The simple idea that networking will provide an answer to the future problems / opportunities is an over simplification of what is happening now and in the future for industry in our region. Our ability to highlight change and provide a method to compete and survive will be our strength.

Maintain Independence of Action

- It is important that networks are run by the networks themselves and not the agencies C3.3.

4.2 Conclusions of the Study

Why Are Networks and Clusters Important?

The role of networks and clusters in the modern business landscape may appear self-evident to many, which view is clearly supported by this study, but not to all observers. It may be helpful therefore, to recap briefly on the reasons why networks and clusters are considered an important feature of the business development landscape.

Networks and clusters help firms to achieve critical mass and economies of scale and compete in larger, more diverse and more competitive markets than they could if they were to continue to act alone. By concentrating on core competencies and creating a network of specialised suppliers and partners, firms can develop their unique assets, stay flexible and adaptable and at the same time be able to respond to the demands of the global market. Networks allow firms to share costs and risks which have become too high for firms working in isolation.

On a less tangible level networks and clusters facilitate the transfer of tacit knowledge between firms. Contact between managers and staff enhances learning, increases knowledge and opens new channels for information and opportunities. This process of 'networked learning' is now seen as one of the most valuable outputs for firms that participate in networks, allowing them to develop or enhance a range of competencies in a flexible manner.

Networks and clusters are powerful motivators of innovation. Competitiveness is the overarching goal of public policy. Innovation is the critical element that drives competitiveness (World Economic Forum 2004). Those businesses that can quickly adapt and incorporate new research and technologies into their operations are most likely to enjoy greater productivity and prosperity. Working in collaboration with others enables them to achieve competitive advantage faster, cheaper and with less risk and disruption to operations.

The following are the general conclusions which the study team have reached based on the results of the mapping exercise and associated research:

1. Incidence of Networks and Clusters is Widespread
   Contrary to previous estimates there are a considerable number of networks and clusters on the island of Ireland – 110 currently identified.

2. Significant Numbers of Companies are Involved in Networks and Clusters
   Interest by firms in networks and clusters is significant with 9860 firms currently involved in networks and clusters across the island.

3. Companies Appear Convinced of the Value of Networks and Clusters
   The business sector seems wholly convinced of the value of networks and clusters with 74 per cent of these partnerships driven by the firms themselves. This also shows that, for the most part, this is a 'bottom-up' or business led phenomenon. The respondents to the study offered 30 examples of benefits that member firms have obtained as a result of participation in the networks and clusters. This is a critical matter. networks and clusters are only relevant, and worthy of support, if they create new, innovative and profitable activities beyond what the participating companies can generate within their own traditional activities.

4. Networks and Cluster Formation is a Current Phenomenon
   The fact that most of the networks and clusters identified in the study have been established within the past 5 years indicates that this is a current phenomenon.

5. Public Agencies Play an Important Role in Networks and Clusters
   The study shows extensive and beneficial involvement by public agencies in networks and clusters at a range of different levels which is welcomed by the companies. Almost a quarter of the networks and clusters surveyed were initiated by public agencies. The Irish experience also suggests that government agencies can and do (65 per cent of networks and clusters on average are part-funded by agencies) play an important role in funding the development of networks and clusters, particularly where they cooperate with private sector organisations.

The experience also suggests that the leverage of public resources can be increased by working with groups of enterprises. The collective approach has lower transaction costs and facilitates mutual learning; and it can be used for both forming new networks and for upgrading existing clusters.

6. **Networks and Clusters Impacting MNCs and SMEs**
   With over 90 per cent of members employing less than 50 workers there is evidence that clustering and networking help small and medium-sized enterprises (SMEs) to raise their competitiveness. The involvement of over 700 large companies in the networks and clusters mapped by this study is significant and in many cases these larger companies have taken the lead in developing the network or cluster.

7. **Resources are Essential for Networks and Clusters to Grow**
   Networks require time and commitment to succeed and this needs to be supported both in cash and in-kind by the network participants and others. There are a lot of sunk costs involved in the development of a network as well as major challenges for most business people in network participation; so companies are more likely to stay the course when they see solid and steady backing for their efforts.

8. **Intangible Factors are Important for Network and Cluster Success**
   Among the most important of the key success factors of networks and clusters identified by the respondents point to the importance of strong business leadership and commitment, establishing trust and effective communications and information flow.

9. **Independent Facilitation is Crucial for Sustainability**
   The role of the facilitator in network and cluster development emerges as a crucial element in the success of networks and clusters and in sustaining them over the long-term. Funding, and a supportive environment and facilitation for a number of years is necessary in most cases for a network to reach maturity and produce tangible benefits for members (and funders).

10. **Networks Require Critical Mass**
    Networks and clusters need a critical mass of companies as well as other actors to grow and prosper. There is significant interaction at all stages of network and cluster development between national, regional and local government bodies and the networks themselves and a growing trend toward creating linkages between networks across the island.

4.3 Recommendations

1. **Increase the Number of Networks and Clusters on the Island of Ireland**
   The recognition of the value of networks and clusters by all parties is clear from this study. Therefore, both government agencies and private sector bodies need to play an active role in supporting and sustaining existing networks and preparing the ground for more networks and clusters across the island. Since firms may not always be well placed to identify the opportunities for network relationships with other companies, as their knowledge and information base may be limited to their own contacts, a central database of firms interested in inter-firm collaboration should be developed. We propose that:

   Recommendation No 1:
   An Awareness Raising Campaign of the Potential Benefits from Networks and Clusters

   a. across the island;

   b. providing local firms with access to information about how and why to form networks and clusters;

   c. provide a central resource to facilitate companies to connect with other companies or networks (see Recommendation 3 below); and

   d. provide access to a mix of financial and technical support to existing networks or to develop new networks or clusters where needed and appropriate as recommended in 1 above.

2. **Improve the Range and Scope of Network and Cluster Facilitation**
   The role of facilitators clearly emerges from this study as crucial to the effective operation of any network or cluster. This role needs to be supported by a professional development process for facilitators, a sharing of experience between facilitators and the development of measureable quality standards by which effective network and cluster facilitation may be judged.

   Recommendation No 2:
   Establish a Programme for the Training and Professional Development of Network Facilitators

   a. leading to a standard qualification in business network facilitation;

   b. based on an accredited course of training and practice;

   c. linked to continued professional development; and

   d. independently monitored and assessed.

3. Improve the Flow of Information Between Networks and Clusters

There needs to be an ongoing and systematic process for collecting information on the progress being made in developing networks and clusters in Ireland. This repository of information could become a resource for locating partners for network and cluster involvement and in identifying the different types of arrangements being entered into by networks and clusters with a view to disseminating best practices.

Recommendation No 3:
Establish a Network Information Repository

To include:

a. a current directory of all networks and clusters on the island;

b. a partner-contact resource for networks and companies interested in joining or developing networks; and

c. a best-practice resource highlighting and disseminating important achievements and developments in networks and clusters in Ireland.

4. Develop Credible Data on Network and Cluster Performance

Network initiatives have not been exhaustively evaluated in the past, at least not so much in terms of their outputs and impact. Evaluators continue to debate appropriate methodologies, metrics, and performance indicators for networks. Whilst measurements of networks and cluster success should primarily be based upon the 'hard' measurable outputs it has to be recognised that there are many intangible benefits.

Recommendation No 4:
Establish a Standardised System for the Evaluation of Networks and Clusters

Which should focus on:

a. the effectiveness of network activities and services;

b. the impact of the network on the economy of the region or sector; and

c. the impact of the network on the competitiveness and economic performance of the participants.

5. Increase the Role of Public Agencies in Supporting Networks and Clusters

This study demonstrates the value of public intervention in networks and clusters (for both the state and the companies) provided that it remains balanced and focused on areas of greatest impact. Entirely top-down or solely bottom-up initiatives have less chance of success than those with a balance between the two. Public agencies can play a very useful role in building awareness, facilitating and supporting network formation, acting as a catalyst and providing seed funding and ongoing support for cluster development. Generally speaking public intervention should be strong in the early stages of network development and less active later on. It is also important to define an exit strategy for public intervention when either networks are no longer performing or have become self-sustaining. In this connection we make the following specific proposals for public intervention:

Recommendation No 5:
Funding for Networks and Clusters should be provided by public agencies to:

a. engage the services of qualified facilitators for a 2 year period; and

b. provide funding to support the network management structure (companies will more easily contribute to financing activity rather than structure)

6. Support Collaboration between Networks and Clusters

The significant number and diversity of networks and clusters on the island of Ireland offers an opportunity to add value to their work and provide extra benefits for participating companies through facilitating inter-networking or 'networking the networks' across the island. This was a clear demand from the networks and clusters themselves in their feedback to the study team.

Through the networking process a portfolio of clusters can be developed either on a sectoral or geographical basis or both! This allows for ease of information exchange, action awareness, greater collective strength, internationalisation and cross cluster best practice. The greater the linkages developed will result in greater potential success for each cluster. It has been proven that clusters operate with limited success within their own 'orbit' but when linked with other clusters and brought onto a higher plane the potential for success is greatly enhanced. Through these networking links the companies are exposed to enhanced commercial opportunities, strategic awareness and qualitative gains.

Recommendation No 6:
Establish an All Island Network/Cluster Linkage Programme

Which should focus on:

a. creating active and meaningful linkages between networks and clusters across Ireland both informally and formally within new cross-network structures built around regional or sectoral compatibility.

b. initiate an annual all-island Network Conference (with international links) to provide a shop window to the public and other business sectors for networks and clusters.

7. Improve International Collaboration for Irish Networks and Clusters

Networking the networks provides the knowledge, strength, links and acumen necessary to assist the networks in reaching global markets. To capitalise on this we need network multipliers i.e. network associates who are people intimately familiar with the companies and able to detect and assess opportunities for collaboration that can be passed through the network hub to the benefit of other networks. Sometimes referred to as 'scouts,' they include staff of chambers of commerce, trade associations, banks, accounting firms, law offices, trade centers, technical colleges, and technology extension services that serve SMEs. There is considerable scope to support greater use of international linkages by networks and clusters. At present only 18 per cent of networks and 44 per cent of clusters have any such links.

Recommendation No 7:
Establish a Network/Cluster Internationalisation Support Programme

Which should act as a mechanism for

a. identifying, training and supporting 'network multipliers' across the island;

b. create appropriate international contacts and links; and

c. operate an international network 'matching' resource.

Bibliography

« Back to Contents Page

Bibliography

Blundel, R. and Smith D (2001) Business Networks: SMEs and inter-firm collaboration: a review of the research literature with implications for policy, Small Business Services, DTI (UK) RR003/01

Report: 'A Practical Guide to Cluster Development' to the Department of Trade and Industry (UK) and the English RDAs by Ecotec Research & Consulting (2003).

Bridlecombe, Gray and Harvey. Report on cluster classification for New Zealand Trade and Enterprise (2003). NZ Enterprise.

FFowcs-Williams, I. Policy for Inter-firm Clustering, A Practitioners Guide. OECD. 2003.

Enterprise Strategy Group (ESG) Report 'Ahead of the Curve, Ireland's Place in the Global Economy' Forfas, Dublin 2004.

Forfas (2000). *Enterprise 2010- New Strategy for the Promotion of Enterprise in Ireland in the 21st Century*, Dublin: Forfas.

Clancy, P, E. O'Malley, L. O'Connell, and C. van Egeraat, *Culliton's Clusters: Still the way to go?* Report prepared for the NESC Seminar: *Sustaining Competitive Advantage*. 1998. Dublin:NESC

Cooke, P. *Comparative Performance of SMEs in European and Domestic Network Programmes*, Centre for Advanced Studies, Cardiff University. 1998.

Culliton, J. (1992), *A Time for Change: Industrial Policy for the 1990's*. Dublin: Stationery Office.

Doeringer, P.B., and D.G. Terkla. 1995. "Business strategy and cross-industry clusters." Economic Development Quarterly 9: 225-37.

Porter, Michael. "New Strategies for Inner-City Economic Development." Economic Development Quarterly 11(1): 11-27.

Porter, Michael. The Competitive Advantage of Nations. New York: Basic Books. 1990.

Rosenfeld, Stuart A. "Bringing Business Clusters into the Mainstream of Economic Development. European Planning Studies 5(1): 3-23. 1997.

John Humphrey & Hubert Schmitz . Principles for promoting clusters & networks of SMEs. Number 1

Paper commissioned by the Small and Medium Enterprises Branch October 1995

Institute of Development Studies, University of Sussex, U. K.

Department of Trade and Industry (1998). *White Paper on Competitiveness*, London: Stationery Office

Department of Trade and Industry. (1999). *Learning through business networks - case studies*, London: Stationery Office.

Enright, M.J. (1992), *'Why Local Clusters are the Way to Win the Game'*. In Clancy *et al. Ibid.*.

Harrison, B (1997). *Lean and Mean*, The Guildford Press, Boston.

Humphrey, J. and Schmitz, H (1998) *Trust and Inter-firm Relations in Developing and Transition Economies*. Journal of Development Studies, Vol. 34, No. 4, pp. 32-61.

Joyce, P and Woods, *A Business Networks and Co-operative Strategies*, Brunel University, Department of Management Studies, Paper 24, London.

Lee, G and Oakes, I *Networking for Best Practice - Ideal and reality*, Paper presented at the 26th European Small Business Seminar, Vaasa, Finland. 1998

Lorenzen, M. *Information cost, learning, and trust: Lessons from co-operation and higher-order capabilities amongst geographically proximate firms*, Danish Research Unit for Industrial Dynamics1998

Martin, T. and Associates with Science Policy Research Centre, UCD (1997) *Survey of SME Networks in Ireland*. Final Report Submitted to the Pilot Networking Programme Steering Group, Dept of Enterprise, Trade and Employment (unpublished).

National Economic and Social Council (1998) *Networking for Competitive Advantage*, Dublin: NESC 100.

National Economic and Social Council (1998) *Sustaining Competitive Advantage*, Proceedings of NESC Seminar, Research Series, March. Dublin: NESC.

National Economic and Social Council (1999), *Opportunities, Challenges and capacities for Choice*, NESC, No 104, Dublin.

O'Connell, L., C.van Egeraat and P. Enright (1997), *Clusters in Ireland: The Irish Dairy Processing Industry: An Application of Porter's Cluster Analaysis*, Research Series, Paper No.1. Dublin: NESC.

O'Doherty, D, ed. (1990) *The Co-operation Phenomenon*, Graham and Trotman, London.

O'Doherty, D, ed (1995) *Globalisation, Networking and Small Firm Innovation*, Graham and Trotman, London.

O'Doherty, D with McDevitt, J. (1995) *Globalisation, SMEs and Innovation Policy Responses: the Irish Case*, in O'Doherty, D, ed (1995) *Globalisation, Networking and Small Firm Innovation*, Graham and Trotman, London, p 309.

O'Doherty, D. (1998) *Networking in Ireland - Policy Responses*, in Sustaining Competitive Advantage - Proceedings of NESC Seminar, Research Series, March. Dublin: NESC

O'Gorman, C. E. O'Malley, and J. Mooney (1997), Clusters in Ireland: *The Irish Indigenous Software Industry: An Application of Porter's Cluster Analysis*, Research Series, Paper No.3. Dublin: NESC.

Provan, K.J. and S.E. Human (2000) *'Organisational learning and the role of the network broker in small-firm manufacturing networks'*, in Grandori, A (ed) *Interfirm Networks: Organisation and Industrial Competitiveness*. London: Routledge.

Rabellotti, R., and H. Schmitz (1997) *The Internal Heterogeneity of Industrial Districts in Italy, Brazil and Mexico*. IDS Working Paper, No. 59, Institute of Development Studies, University of Sussex, Brighton, UK. Revised in *Regional Studies*, Vol.33, No.2, 1999.

Skillnets Training Networks Programme (2000). *Guidelines for Promoters*, February. Dublin: Skillnets.

ANNEX 1

List of Networks and Clusters by Category

« Back to Contents Page

ANNEX 1

List of Networks and Clusters by Category

	Category 1	Location
--	AMNet	West
	Architectural Crafts Expertise	Border
	Bizwest Skillnets Ltd	West
	BME Training Skillnet	Cavan, Monaghan, Longford, Meath and Westmeath
	BNI	Dublin
	Brewing Skillnet	All ROI
	Bullet	Kerry
	CAIS (Irish Farmhouse Cheese Association)	All ROI
	Carlow Kilkenny Training Skillnet	Carlow and Kilkenny
	Carlow Owner Managers Network	Carlow
	CAT NET Skillnet	Dublin (Eastern) and Cork (Southern)
	Ceramnet Skillnet	All ROI
	Clean Technology Centre	All ROI
	Consumer Food SME Skillnet	Dublin & North West of Ireland
	Craft Butchers (ACBI) Skillnet	All ROI
	CREST	All ROI
	Designers Training Skillnet	Dublin/Galway
	Digital Media Forum Skillnets	Dublin
	Donegal Engineering Cluster (FÁS)	Donegal
	Eco-Industrial Network	Limerick Shannon
	European Digital Media Network	Regions of Shannon Development and Gaeltacht Areas
	FCBA (Irish Bakers Skillnet)	All ROI
	First Biotech Network	All Island
	First Polymer Training Skillnet	All Ireland
	Fresh Produce Skillnet	East Coast

Category 1 (continued)	Location
Furniture Innovation Network	N. I. / Border Counties
Galway Executive Skillnet	Galway
Greasan na Meain Skillnet	West of Ireland - Galway and Connemara
Hospitality Management	All ROI
Hotbed Skillnet	All ROI
IASC (Irish Association of Seafood Companies) Skillnet	All ROI
IBEC Retail Skillnet	Donegal Administration Centre, National Project
IFA Training Skillnet	All ROI
IIFAnet Skillnet	Dublin
Inventors Club	Dublin based
Irish Centre for Business Excellence (ICBE)	Ireland
Irish Fashion Industry Federation Skillnet	All Ireland
Irish Furniture Designers Network	All ROI
Irish Medical Devices Association	All ROI
ISME Owner Manager Skillnet	All ROI
ITAG Skillnet	Galway
Learning Waves	All ROI
Leisure & Amenity Skillnet	All ROI Based
Lionra	All Island
Mayo Engineering Cluster (FÁS)	Mayo
MEDISA	West
MIDAS	All ROI
National Engineering Technical Skillnet	All ROI
National Partnership Training Skillnet	All ROI
NEST	Dublin

Category 1 (continued)	Location
North Mayo Skillnet	North Mayo/South Sligo
North West Regional Food Skillnet	North West - Donegal, Sligo, Leitrim, Cavan
Northside Business Skillnet Ltd	Dublin Northside
Northwest Organic Producers and Growers Association	North West
Plato Ireland	All Island
Refrigeration Technology Skillnet	
Renewable Energy Skillnet	West & South
Sligo Leitrim Engineering Cluster (FÁS)	Sligo/Leitrim
South East Micro Skillnet	South East (Tipperary, Waterford, Kilkenny, East Cork)
South Leinster & Munster Food & Beverage Skillnet	SLM Region
Southern Corridor Skillnet	Based in Limerick, covering Limerick, Tipperary & South East
Southern Regional Management Development Network	Cork
Southside Business to Business Network	Dublin
Taste Council of Ireland	All ROI
Technology West Network	West
Thimble	Belfast
Visual Design - Arts & Crafts Cluster	Lisburn / Leitrim
VERA Cluster Initiative	Armagh
Waterford Chamber Skillnets	Waterford City, South East Ireland
Western Organic Skillnet	North West
Westgate Craftworkers Network	Wexford
Westmeath Manufacturing Network	Westmeath
Wireless Wednesday	All island and clustered in the principally in the Dublin and Belfast Regions
Women on the Move Ltd	North East Area

Category 2	Location
Ballymoney Business Club	Ballymoney
Bioconnect Ireland	All Island
Business for Business (B4B)	NI Wide
Enterprising Women Net Dunlaoghaire	Dublin
Entrepreneurial Women Wicklow	Wicklow
Export Network Club	Newry
Fingal Reapers Network	Fingal North Dublin
Fingal Women in Business Net	Dublin
First Tuesday Network	Dublin
Genesis Enterprise Programme	Cork & Kerry
Independent Consultants Group	Dublin
Northern Ireland Electronics Forum (NIEF)	Northern Ireland
Offaly New Entrepreneurs Network O.N.E	Offaly
SIGNAL Network	Down
Sligo Women in Business	Sligo
South Dublin Women in Business	Dublin
South East Enterprise Platform Programme (SEEPP)	South East of Ireland (encompassing Carlow, Kilkenny, Sth Tipperary, Waterford, Wexford)
Wexford Owner Manager Network	Wexford

Category 3	Location
Atlantic Technology Corridor	Galway, Limerick
Cork Electronics Industry Association	Cork
Cross Border Construction Industry Cluster	Donegal, Derry, Tyrone
Design Shannon	Shannon region and adjacent regions
Digital Media Works	NW Border Region
Dublin Wireless Cluster	Dublin
Environmental Technologies Cluster	Newry & Mourne / Louth
Fermanagh Engineering Association	Co. Fermanagh
Fuchsia Branding Initiative	West Cork
KerrySoft	Kerry
IT Quarter (Ireland North West) formerly N West ICT Forum	N West Ireland (Derry, Tyrone, Donegal)
it@cork	Cork
New & Emerging Technologies Cluster	Newry & Mourne, Louth
North West Regional Environmental Forum	Sligo, Donegal, Leitrim
Shannon Regional Materials Forum (SRMF)	Limerick, Shannon & the Mid West
Supplier Model	North West
Supply Network Shannon Limited	Mid West
Terryglass Kilbarron Enterprises Group	Tipperary

Category 4	Location
Biomaterials and Bioengineering Network	All island with office in Limerick
BioMed Ireland	Island of Ireland
Consumer and Electronics Distributors Association	All ROI
Enterprising West	Tyrone & Fermanagh
Food and Drink Industry Ireland	All ROI
IFA Aquaculture Associations (incorporating Irish Shellfish & Salmon Growers Associations)	All ROI
Institute of Business Analysis and Consulting	All ROI
Irish Forestry Contractors' Association (IFCA)	Republic of Ireland
Irish Organic Farmers and Growers Association (IOFGA)	All Island
Irish Software Association	All ROI
Microtrade	All Island
Manufacturing Technology Partnership	All NI
National Network of Incubation Managers	All ROI
Northern Ireland Music Industry Commission (NIMIC)	Northern Ireland
Tecnet	All ROI
White Goods Association	All ROI

ANNEX 2

Questionnaire

« Back to Contents Page

ANNEX 2

Questionnaire

Thank you for completing this survey. Please return the form by email or fax.
If you need a PDF version of this document you may download it at www.mbnireland.com

If you would rather have us call you to complete the questionnaire by phone please tick here ☐

If you would like your network considered for inclusion as a case study please tick here ☐

1. Network Details

A. Network Name: _____

B. Location/Region: _____

C. Year Established: _____

D. Number of Member Firms at Establishment: _____

E. Number of Member Firms Today: _____

F. Number of Member Firms with

under 50 employees: _____ 51 – 250 employees: _____ Over 250 employees: _____

G. Business Sector(s) of Member Firms: _____

H. Please enter contact details of key network personnel.

_____

_____

_____

I. What are network business objectives over the next one/ two years?

_____

_____

J. What compelled you to start this business network?

_____

_____

K. Who are the key partners (member firms) in this network?

_____

_____

_____

2. Network Structure and Facilitation

A. Do members pay member fees or does the network receive funding or any other kinds of support? Please identify.

B. Please describe the structure of the network?
Formal or informal? Self evaluating? How has this developed over time?

C. How is the network facilitated? Who are the facilitators? What do they do?

3. Key Activities

A. Within the network.

B. Outside of the network.

C. What is/are the network's key differentiator(s) from other forms of business support/development methodologies or services?

4. Interaction with universities and other 3rd level educational institutions on the island of Ireland or internationally.

A. Who are the institutions and what is the nature of this interaction?

5. Interaction with specialist facilities and support infrastructure e.g. science parks, incubators, business support agencies & intermediaries on the island of Ireland or internationally.

A. Who are the other partners and what is the nature of this interaction?

6. Interaction with other networks, agencies or other bodies on the island of Ireland or internationally.

A. Who are the partners and what is the nature of this interaction?

7. Network Offering

A. What market or other business need is your offering designed to fill?

B. What features and associated benefits does your offering provide either internally or externally?

C. How does the network deliver the features identified in item B?
Be specific—this is the proof that you can do what you say.

D. Of these features, which ones differentiate you either in the marketplace or internally from other support/development services available to member firms?

8. Key Success Factors

A. What do you consider to be the key factors in the success of your network?

9. Final Word (optional)

A. What in your view are the 1, 2 or 3 things that need to be done now to advance the role of networks on the island of Ireland?

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Survey: 2005, Publication: February 2006