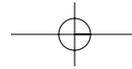


A REVIEW OF THE ALL-ISLAND CONSTRUCTION SECTOR

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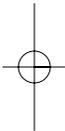
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ABSTRACT

The construction industry is an important contributor to the economies on the island and has performed strongly in recent years, due to increased business attractiveness and confidence in the private sector and an injection of government investment in infrastructure and public sector work. This study provides a status report on the construction sector in Ireland, North and South. It identifies the key strategic and operational strengths and weaknesses of the industry, and suggests developmental opportunities for the construction industry from an island-wide perspective.

The report aims to be a central point of reference for the sector, highlighting market trends, opportunities and barriers to development and cooperation in a cross-border context that exist or may potentially exist, for the benefit of both economies. A number of recommendations are proposed to help the industry realise its potential under the current economic conditions, aimed both at the private sector (for implementation at individual company level) and the public sector, to be executed by support organisations and other relevant government bodies.



Acknowledgements

InterTradeIreland would like to thank PricewaterhouseCoopers, Mr Mike Browne (University of Ulster), Mr Denis Rooney (Institute of Directors), Mr Paul McVeigh (Ballymun Regeneration Ltd), Mr John Armstrong (Construction Employers' Federation) and the consultees and companies who participated in the research, for their assistance with the report.

EXECUTIVE SUMMARY

The construction industry is an important contributor to the economies on the island; has performed strongly in recent years due to increased business attractiveness, confidence in the private sector, and an injection of government investment in infrastructure and public sector work.

In 2001, it generated over £14/ 20 billion in Ireland and almost £2.8/ 4 billion in Northern Ireland. Although growth was evident in both sectors over the last decade, the pace of expansion has been much greater in the South, where output grew at an average of 35 per cent per annum between 1996 and 2000, compared to 9 per cent in Northern Ireland over the same period. Construction accounts for 16 per cent of Gross Domestic Product (GDP) and for 14 per cent of total employment in the South of Ireland. The North lags some way behind, at 6 per cent and 5 per cent respectively - evidence of the scope for development.

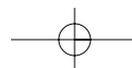
The pace of growth in the construction sector mirrors the strong performance of both economies. Between 1996 and 2000 GDP in the South grew by an average of 9.4 per cent per annum, while GDP in the North grew by 2.4 per cent per annum. In spite of a slowdown in the pace of GDP growth in the South, the economy remains one of the top performers in Europe. The economy in the North is set to continue to develop as well, with further investment expected in infrastructure and housing in particular.

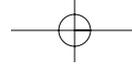
**TABLE 1:
GDP GROWTH BY REGION 2001-2003 (%)**

PERIOD	NORTHERN IRELAND	IRELAND	UNITED KINGDOM
2001	2.1	5.9	2.2
2002	2.0	3.8-4.3	1.6
2003	2.5	3.5-4.0	2.5-3.0

SOURCE: PricewaterhouseCoopers, Northern Ireland Economic Review & Prospects (2002)

Although this regional economic development has brought about significant opportunities and growth amongst the local companies involved in construction, they are at the same time challenged in meeting the operational and financial requirements that would enable them to capitalise fully and finance these market opportunities.



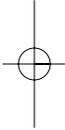


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**TABLE 2:
SUMMARY OF KEY CONSTRUCTION INFORMATION**

INDICATOR (2001)	NORTHERN IRELAND	IRELAND
Value of construction output:		
At current prices	£2.4 billion	20.1 billion
At 1995 prices	£1.9 billion	11.3 billion
Overall construction sector growth	+0.7%	+4.0%
Construction as % of GDP	6%	16%
Direct employment in construction	35,000	184,800
% of total employment	5.2%	10.5%
Direct & indirect employment	52,000	260,000
Forecast change in employment	+2.0%	-6.0%
Growth by market segment:		
General contracting	+3.1%	-8.3%
Housing	+0.4%	+4.8%
Civil engineering	+26.4%	+13.9%
Number of housing starts	13,000	52,600
Number of construction companies	4,000	6,000

SOURCE: PricewaterhouseCoopers



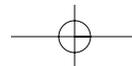
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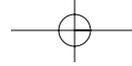
Despite sharing some common features and issues, the industry is operating on different platforms within the two jurisdictions and they cannot be treated as a homogeneous market due to legislative and cultural differences. The platform for cross-border trade in the short term is further affected by the downturn in economic prospects (and consequently the construction prospects), which means that companies are more competitive and protective of their own 'patch' and less open to collaboration.

The outlook in the medium to long term is more promising, as the local and international economies are expected to recover and business confidence to improve. This outlook, along with the similarities and common issues pertaining to the two construction sectors detailed below, could prepare the ground for potential joint cooperation and initiatives, which would aid development of cross-border trade and the performance of the sector in each jurisdiction:

- Similar building regulations, further enhanced by European Union (EU) standardisation;
- Same climate and language;
- Geographical proximity;
- Fragmented structure, with a limited number of large players and predominantly small- and medium-sized enterprises (SMEs);
- Relatively limited strategic approach to business development and management of customer relationships, as customers increasingly require improved reliability and more highly skilled staff;
- Need for better uptake of training and a long-term commitment to development;
- The need to adapt to new trends regarding the handling of Public Private Partnership (PPP) contracts, integrated project teams and information systems, adoption of best practice and off-site fabrication, etc.;
- Highly regulated and inflexible public procurement;
- Increasingly competitive environment, as Great Britain (GB) and other foreign companies become attracted to the island market; and
- Relatively low levels of innovation and research and development, which may affect competitive advantage.

It should not be ignored that PPPs have enjoyed a mixed reception in the North and South and have been subject to considerable criticism. Some early PPP projects on the island have experienced similar problems to those in other countries, these include protracted procurement timescales, difficulties in resourcing project teams, and relatively high transaction costs.





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The pool of bidders for PPP projects is affected by the reluctance amongst smaller companies to participate in tendering processes, as well as the relatively small number of companies that have the critical mass and expertise to act as prime or lead contractors. As larger companies become involved in one or two PPP projects, they are not able to respond to subsequent tenders. This may delay the implementation of high priority developments and/or open the door to direct competition from overseas contractors.

However, PPP projects, through their scale and expertise requirements, have the potential to bring about North/South cooperation (particularly given the current situation, as detailed in Chapter II) bridging possible gaps in capacity and, more importantly, sectoral expertise. In summary, despite sharing a number of similarities, the different market conditions in the Northern and Southern construction sectors have created an imbalance in the level of cross-border trade.

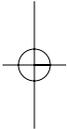
The sheer size of the market in the South, along with higher-margin work coupled with an under-capacity in supply, has encouraged Northern contractors to seek work there.

Industry support organisations tend to have an insular focus, with little support available to help develop external markets in either jurisdiction. This reflects the short-term needs of their clients. However, there has been some cross-border cooperation leading to the mutual recognition of health and safety training, under the 'Safe T Cert' scheme operated by the Construction Industry Federation (CIF) and Construction Employers' Federation (CEF). The availability of larger-scale projects would help drive increased cooperation across the sector.

The industry is going through a period of unprecedented change on the client and supply side, primarily through many types of government initiatives to boost the effectiveness and efficiency of the industry as a whole. Key issues for improving construction performance are:

- Partnering, integrated construction teams and supply chains;
- Procurement (non-traditional) and e-tendering;
- Project management and project information systems;
- Quality- and client-focus and management; and
- Training and people development, and the introduction of overall best practice.

Any cut in public sector investment will rebound on employment and will diminish the ability to deliver a modern infrastructure, so necessary to develop inward investment and indigenous growth in Ireland, North and South. Although there is a potential levelling-off of demand in the short term, this is against a much higher level of activity than historically has been the case.



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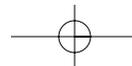
The report makes a number of recommendations which have been divided into two groups:

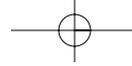
Recommendations for the private sector:

- Construction enterprises should be encouraged to adopt a proactive approach to business planning;
- The industry needs to improve its internal business efficiencies, particularly in the areas of project management, supply chain management, and management information systems;
- A mutual recognition of qualifications and training programmes would help organisations operate more fully on an all-island basis; and
- Expansion of the Northern Ireland Construction Best Practice Club to an all-island basis would enable a wider exchange of information and allow benchmarking against a larger pool of equivalent businesses.

Recommendations for the public sector:

- Better communication of government policy and committed spending plans for the medium term would allow businesses to commit to investment for the future and rationalise where necessary;
- The PPP process needs to be improved to reduce the cost and time involved at the bid preparation stage;
- Delivery of a 'masterclass' in the approach to, and preparation of, PPP submissions would help remove some of the current misunderstandings and misinformation surrounding the PPP process;
- Although Constructiononline is a relatively recent introduction to the North, the potential for extending the initiative exists and would help facilitate cross-border trade;
- In order to improve innovation on the island it has been proposed that a construction innovation centre is established. The scope of the proposal could be extended to establish a cross-border centre for innovation in construction;
- Improving quality standards (both in building techniques and construction materials) would enhance the local companies' competitive advantage in the face of increased presence of GB and foreign contractors in the market;
- Joint cooperation at industry level would mean that future efforts made towards the development of local and European Union (EU) standards are not duplicated but carried out in a strategic and coordinated manner; and
- A cross-border forum, bringing together representatives from key players in the industry (large and small), government and academic sectors would enable the establishment of relationships, facilitate the exchange of information and experience, and help further co-operation on joint industry training, skills and standards.





I INTRODUCTION

Objectives

This report aims to be a central point of reference for the construction sector in Ireland North and South highlighting market trends, opportunities and barriers to development, and potential prospects for cooperation in a cross-border context that exist or may potentially exist, for the benefit of both economies.

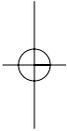
Methodology

The review involved three main phases of work:

- Market overview: analysis of up-to-date market intelligence regarding the economic and construction status in the two jurisdictions (see Appendix 1 for bibliography);
- Consultations with key industry and government bodies representing the sector both in the North and South, with a view to assess anticipated market dynamics, industry capability (in terms of capacity, skills, innovation, use of research and development (R&D), training, etc.); the current level of North/South trade and cooperation and associated constraints (e.g. in the areas of tax, legislation, and labour availability and skills); and potential opportunities and barriers to construction development in general, and on a cross-border basis in particular; and
- Case studies with ten companies (five in the North and five in the South) with experience of cross-border trade and/or contracting, to understand their experiences of, and attitudes to, cross-border work and partnering, positive outcomes and obstacles encountered on the ground, potential areas of mutual benefits, and views on possible joint initiatives.

Details of the discussion topics used in the consultations and case studies are included in Appendix 2 and 3. To protect the confidentiality of the respondents, information has been reported on an aggregate or anonymous basis.

Although the review focused primarily on the contracting component of the construction sector, the consultations and case studies included contributions from the building materials and tradeable services (i.e. architects, consulting engineers, etc.) sectors, and specific issues pertaining to these sectors are discussed where appropriate.



II THE CONSTRUCTION INDUSTRY

Economic context

The fortunes of the construction sector remain largely determined by the overall health of the wider economy, which started to slow both in the North and South in 2001.

Economic growth in the North has oscillated around the UK average for some time. Although there was a number of years during the 1990s when the average rate of growth exceeded that of the UK, the predominance of the public sector and the importance of public spending to the Northern economy have largely tended to insulate the region from both the downturns and upturns of the UK economy.

The price of avoiding sharp downturns in economic activity and output has been the lack of private service activity capable of stimulating high levels of growth, and consequently the North is trapped in a '2 per cent economy' cycle.

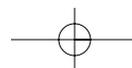
In 2001, the economy in the North experienced a pronounced slowdown, but not the recession that some expected. Despite the downturn, the economy performed well in a number of aspects; unemployment remained at or around a 25-year low, employment reached record levels and house prices continued to rise. However, manufacturing output retracted sharply and that sector was firmly in recession. The key trends in 2001 were:²

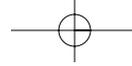
- **GDP growth** fell to 2.1 per cent, just below the UK growth of 2.2 per cent;
- **Manufacturing output** fell by 8.9 per cent (double the UK fall of 4.5 per cent);
- **Employee jobs** were at a record high in the fourth quarter (647,570);
- **Unemployment** on average for the year was 6.3 per cent;
- **Average earnings** rose by 4.1 per cent, well ahead of the GB rate of 2.9 per cent;
- **House prices** rose by 7.1 per cent, well below the UK average of 12 per cent.

The slowdown was reflected in the construction sector, where levels of new work, including housing, decreased. The level of infrastructure work increased however, a reflection of increased public spending in this area in recent years.

After a period of high economic growth between 1995 and 2000, the economy in the South also suffered a sharp downturn, as GDP growth fell from 11.5 per cent in 2000 to 5.9 per cent in 2001. Nevertheless, Ireland was the second-fastest growing economy in the world, creating an estimated 42,600 jobs during 2001.

² PricewaterhouseCoopers, *Northern Ireland Economic Review & Prospects (2002)*.





Growth rates of ten per cent are unsustainable in the medium term and the challenge is one of managing growth at a more modest, but consistent, level. Although the outlook is believed to be bright, there are a number of risks that should not be ignored, including:

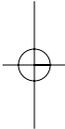
- **Inflation** - the highest in the EU and is expected to remain high;
- **Public finances** - government spending has outstripped tax revenue;
- **Regional disparity** - the Border, Midlands and Western (BMW) region has experienced much slower growth than the Eastern seaboard;
- **Congestion** - the focus of growth in the Dublin area has placed considerable strain on aging infrastructure, which EU funds have yet to completely address (with infrastructure problems also evident in other parts of the country); and
- **Exposure to US fortunes** - the experience of 2001 represents a warning, highlighting the extent to which the economy is exposed to the fortunes of the US economy and global demand factors.

The Public Services Spending Estimates for 2003 published by the Minister for Finance in mid-November 2002 were the first instalment of the budget for 2003 and set out the bulk of the government's spending plans. The Estimates provide for a 2 per cent increase in government spending in 2003. Gross current spending on current services is forecast to rise by three per cent, while Exchequer financed capital spending is projected to fall by 6 per cent.³

Few sectors have been spared in terms of cutbacks to capital spending. The large transport budget has been cut by 3 per cent, hospitals by 1 per cent, education by 17 per cent, and tourism by 11 per cent. Despite these cutbacks, expenditure under the Public Capital Programme (PCP) in 2003 will still be double the level of five years earlier in 1998, and public capital spending in Ireland will be almost twice the general rate in the EU.

Nevertheless, given the requirement to upgrade the existing public infrastructure in the South, it is the opinion of the industry authorities that these spending cutbacks are regrettable (particularly when the high rate of construction sector inflation is taken into consideration). It is perceived that these cutbacks will have a pronounced impact on construction activity in 2003 and will continue the strongly pro-cyclical stance of fiscal policy in recent years.

³ Department of Finance, *Public Services Spending Estimates (2002)*.



Construction overview

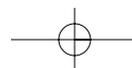
The construction industry is an important contributor to the economies North and South. In 2001, it generated over £14/ 20 billion in the South and almost £2.4/ 3.4 billion in the North. Although growth was evident in both sectors over the last decade, the pace of expansion has been much greater in the South, where output grew at 35 per cent per annum from 1996 to 2000, compared to 9 per cent in the North over the same period.

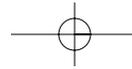
Construction accounts for 16 per cent of GDP and for 14 per cent of total employment in the South. The North lags some way behind, at 6 per cent and 5 per cent respectively, evidence of the scope for development of the sector there.

Despite sharing some common features and issues, the industry is operating on different platforms within the two regions and they cannot be treated as a homogeneous market due to legislative and cultural differences. The platform for cross-border trade in the short term is further affected by the downturn in economic prospects (and consequently the construction prospects), which means that companies are more competitive and protective of their own 'patch' and less open to collaboration. However, the downturn in economic prospects may be balanced by large public investments in infrastructural development.

The outlook in the medium to long term is more promising, as the local and international economies are expected to recover and business confidence to improve. This outlook, along with the similarities and common issues pertaining to the two construction sectors detailed below, could prepare the ground for potential joint cooperation and initiatives, which would aid development of cross-border trade and the performance of the sector in each of the regions:

- Similar building regulations, further enhanced by EU standardisation;
- Same climate and language;
- Geographical proximity;
- Fragmented structure, with a limited number of large players and predominantly SMEs;
- Relatively limited strategic approach to business development and management of customer relationships, as customers increasingly require improved reliability and more highly skilled staff;
- Need for better uptake of training and a long term commitment to development;
- The need to adapt to new trends regarding the handling of PPP contracts, integrated project teams and information systems, adoption of best practice and off-site fabrication, etc.;
- Highly regulated and inflexible public procurement;
- Increasingly competitive environment, as GB and other foreign companies become attracted to the all-island market; and
- Relatively low levels of innovation and R&D, which may affect competitive advantage.





• All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • North-South Trade: A Statistical Ground-Clearing Exercise • A Review of the All-Island Construction Sector • A Cross-Border Comparison and Manufacturing Growth and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • A Review of the All-Island Construction Sector • North-South Trade: A Statistical Ground-Clearing Exercise • A Cross-Border Comparison and Manufacturing Growth and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • North-South Trade: A Statistical Ground-Clearing Exercise • **A Review of the All-Island Construction Sector**

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Table 3 below highlights and compares a number of the key construction indicators for both Northern Ireland and Ireland:

INDICATOR (2001)	NORTHERN IRELAND	IRELAND
Value of construction output:		
At current prices	£2.4 billion	20.1 billion
At 1995 prices	£1.9 billion	11.3 billion
Overall construction sector growth	+0.7%	+4.0%
Construction as % of GDP	6%	16%
Direct employment in construction	35,000	184,800
% of total employment	5.2%	10.5%
Direct & indirect employment	52,000	260,000
Forecast change in employment	+2.0%	-6.0%
Growth by market segment:		
Other work	+3.1%	-8.3%
Housing	+0.4%	+4.8%
Infrastructure	+26.4%	+13.9%
Number of housing starts	13,000	52,600
Number of construction companies	4,000	6,000

SOURCE: PricewaterhouseCoopers

The following chapters of this report provide a comprehensive review of the construction sector in Ireland, North and South. Despite sharing a number of similarities, it is not advisable to treat the island as one homogeneous market. Indeed, during the course of our research, it became apparent that most contractors do not even consider the South, to be one uniform market, due to extensive regional variations.

Consequently, we have analysed the two markets separately, highlighting any relevant implications, areas of commonality and key differences between them. Also, primarily as a result of the differences in scale (a £2.4/ 3.4 billion Northern market against a £14/ 20 billion Southern market), the level and detail of information available on construction activity within each jurisdiction does vary considerably.

Our review of each market is considered under the following key headings:

- Construction industry overview;
- Public sector spending;
- Market segmentation; and
- Industry capability

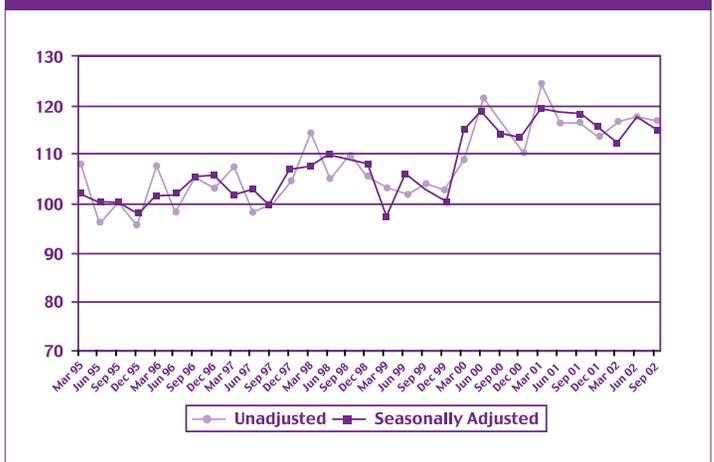
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III NORTHERN IRELAND

Construction industry overview

The construction market in the North has been relatively buoyant during the last seven years, with the Index of Construction showing overall growth of 18.3 per cent between 1995 and 2001, as shown in Figure 1. However, Northern Ireland is still far from mirroring the boom witnessed in Ireland.

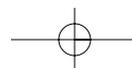
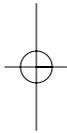
FIGURE 1: INDEX OF CONSTRUCTION, 1995-2002 (1995 = 100)



SOURCE: NISRA, Northern Ireland Construction Bulletin (Quarter 3 2002)

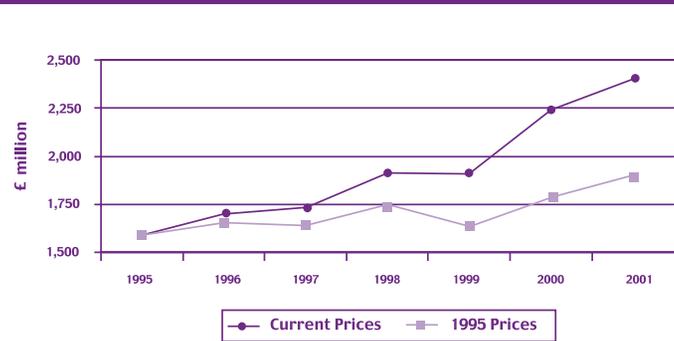
The Index of Construction is an estimate of the volume of construction output by firms from the North and GB operating in the North, produced by the Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA).

Construction is one of the North's largest industries, accounting for 6 per cent of GDP. The value of construction output grew from £1.6/ 2.3 billion in 1995 to £2.4/ 3.4 billion in 2001, equivalent to £1.89/ 2.7 billion at 1995 prices (see Figure 2). The sector is a major employer, with a 35,000-strong workforce representing 5.2 per cent of total employment. Overall employment, both direct and indirect, is estimated at 52,000.



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FIGURE 2: NORTHERN IRELAND VALUE OF CONSTRUCTION OUTPUT, 1995-2001



SOURCE: NISRA, Northern Ireland Construction Bulletin (Quarter 3 2002)

The strong performance of the construction sector since the mid-1990s was sustained by increased demand for new office and commercial property, along with increased demand for new housing. However, the rate of growth in the construction sector slowed in 2001 to a level of 0.7 per cent.

The public sector is a key source of work for the industry and this sector currently offers good prospects, as long-delayed investments are beginning to be implemented, particularly through the Roads Service Priority Capital Programme and Water Service Standard Improvements Plans.

The performance of the construction industry is heavily influenced by decisions and implementation timescales related to policies such as the Regional Development Strategy, Belfast Metropolitan Area Plan, and the Regional Transportation Strategy.⁴

Investment in the North's infrastructure has fallen far short of need over the past two decades, with public capital expenditure having declined in absolute and relative terms in the 1990s. The 10-year capital spending requirement is estimated at £13.8/ 19.7 billion, with baseline funding for the same period being marginally over £7/ 10 billion.

Consequently, the gross investment deficit amounts to £6.8/ 9.7 billion over the next decade, with investment need significantly outstripping capital baseline funding (see Table 4 for a breakdown of the 10-year capital baseline funding, capital need, and deficit). Three-quarters of this deficit is in the areas of responsibility of three departments: Department of Regional Development (DRD), Department of Health, Social Services and Public Safety (DHSSPS), and Department of Education (DE).

⁴ DRD, *Regional Development Strategy for Northern Ireland 2025 (2001)*; DRD, *Belfast Metropolitan Area Plan 2015 (2001)*; DoENI, *Regional Transportation Strategy 2002-2012 (2002)*.

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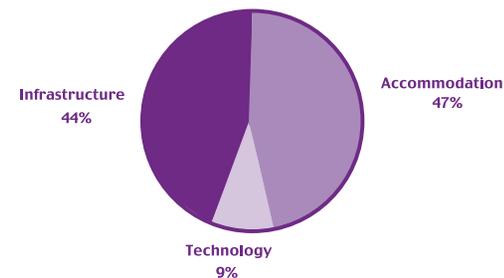
TABLE 4: GROSS CAPITAL INVESTMENT DEFICIT BY GOVERNMENT DEPARTMENT (£/ MILLION)

DEPARTMENT	BASELINE FUNDING	CAPITAL NEED	DEFICIT
Department of Agriculture & Rural Development	£285	£366	£81
Department of Culture, Arts & Leisure	£21	£432	£411
Department of Education	£1,011	£2,070	£1,059
Department of Enterprise, Trade & Investment	£1,448	£1,448	£0
Department of Employment & Learning	£292	£992	£700
Department of Finance & Personnel	£187	£351	£164
Department of Health, Social Services & Public Safety	£589	£1,990	£1,401
Department of the Environment	£42	£440	£398
Department of Regional Development	£1,834	£4,444	£2,610
Department of Social Development	£1,299	£1,299	£0
Office of the First Minister & Deputy First Minister	£3	£3	£0
TOTAL (£)	£7,011	£13,835	£6,824
TOTAL ()	10,016	19,764	9,749

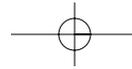
SOURCE: DFP, Northern Ireland Executive Budget 2002-2003 (2001)

Figure 3 shows, over 90 per cent of the 10-year deficit is in infrastructure and accommodation, with the period of greatest need being between now and 2005/06.

FIGURE 3: GROSS CAPITAL INVESTMENT DEFICIT BY GENERIC SECTOR



SOURCE: DFP, Review of Opportunities for PPP in Northern Ireland (2002)



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Accommodation: within the health and social services area, 73 per cent of investment need is for accommodation, due to present facilities being insufficient and out-of-date.

Infrastructure: major investment need exists in the area of responsibility of the DRD in terms of water and road infrastructure. Unless action is taken to improve local water and sewerage infrastructure, Northern Ireland will be in breach of EU Directives on water quality and could be subject to infraction proceedings and substantial daily fines. In transportation, the key areas of need are enhancement of the strategic roads network and addressing years of under-investment in public transport infrastructure.

Technology: while the scale of the deficit in this area is not as great, insufficient investment in technology has consequences for the quality and efficiency of public services.

This gross deficit does not take account of allocations of the Executive Programme Funds (EPFs), which have been made to departments for 2001/02 to 2003/04. If it is assumed that EPFs continue to be available at 2003/04 levels in subsequent years, this will total £956/ 1,366 million over the 10-year period and the net investment deficit falls to an estimated £5.9/ 8.4 billion for the period 2001 to 2010/11.

In a worst-case scenario, if capital costs overrun by 10 per cent and operating costs increase by 1 per cent, the net deficit could rise from £5.9/ 8.4 billion to £9.6/ 13.7 billion over the 10 years.

It is clear that the need for capital investment in the North's infrastructure is acute and cannot be deferred; in May 2002, the Reinvestment and Reform Initiative (RRI) was announced. As part of the initiative, HM Treasury agreed that the Northern Ireland Executive would be authorised to borrow £125/ 179 million in the two years to March 2004, as a loan repayable from existing regional rate income. This was to be matched with £75/ 107 million from the Executive's own resources. Further borrowing powers were predicted to come into effect in 2004/05.

However, any borrowing must be repaid. There has been considerable speculation as to the amount of money available under the RRI, but the available borrowings will be determined by the Executive's ability to repay. To fund the estimated deficit of £5.9/ 8.4 billion, the annual debt service charge could be £490-£590/ 700- 843million; in the absence of any other means of servicing the debt, this would have to be raised from the rates and/or new service charges (such as water charges).

Even a substantial rise in the North's rates and the abolition of industrial derating would only raise an additional £390-£400/ 557- 571 million annually. This leaves a substantial shortfall, which can only be addressed by:

- Reducing the cost and/or increasing the efficiency of government;
- Stimulating the private sector; and
- Increasing the use of PPPs.

A new boost has been received from the government's recent announcement of the largest-ever spend on infrastructure in the North, amounting to almost £2.15/ 3 billion over the next five years. As detailed in the following section, £785/ 1,121 million of this has already been allocated for potential procurement through PPP schemes; the best procurement options for a further £809/ 1,156 million are still to be decided, and the remaining £550/ 786 million has been assigned to conventional procurement.

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Strategic Investment Programme 2003-2008

These investment plans are part of the new Strategic Investment Programme under the RRI and they will make a significant contribution towards eroding the North's £6/ 8.6 billion infrastructure deficit. The recently established Strategic Investment Board (SIB) will play a central role in the development and delivery of the investment programme, including the provision of advice on priorities and value for money. Indicative allocations are shown in Table 5.⁵

The categories are defined as follows:

- Category 1** - The SIB will identify the best procurement options;
Category 2 - Projects identified for potential procurement through PPP; and
Category 3 - Projects proceeding by conventional procurement.

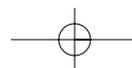
This injection of capital is over and above the normal capital budgets for departments and follows the first round of RRI allocations announced in July 2002, which provided for £270/ 386 million of investment between 2002 and 2004.

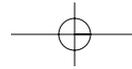
TABLE 5:
STRATEGIC INVESTMENT PROGRAMME (£ MILLION)

GOVERNMENT DEPARTMENT	SECTOR	CATEGORY 1	CATEGORY 2	CATEGORY 3	TOTAL
Department of Education	Schools		£74	£226	£300
Department of Employment & Learning	Further Education		£40	£39	£79
Department of Health, Social Services & Public Safety	Health & Social Services	£139	£174	£13	£326
Department of Health, Social Services & Public Safety	Fire Service	£25			£25
Department of Regional Development	Roads	£336	£73	£41	£450
Department of Regional Development	Public Transport	£38	£100	£13	£151
Department of Regional Development	Water and Sewerage	£231	£160	£155	£546
Department of Regional Development	Waste Management			£10	£10
Department of Regional Development	Housing Executive			£44	£44
Department of Culture, Arts & Leisure	Libraries		£20		£20
Department of Culture, Arts & Leisure	Arts			£9	£9
Department of Finance & Personnel	Office Accommodation		£144		£144
TOTAL (£ million)		£769	£785	£550	£2,104
TOTAL (£ million)		1,098	1,121	786	3,005

SOURCE: DFR Building On Progress Budget, 2003-2006 (2002)

⁵ Full details of the projects planned under each category can be obtained from the Office of the First Minister and Deputy First Minister (www.ofmdfmi.gov.uk).





In addition to helping expand the local construction industry, these projects are likely to attract interest from the South, GB and other contractors to the region. It is evident from Table 5 that PPPs will be required to play a major role in the delivery of public infrastructure projects, as indicative allocations in Category 2 account for almost 37 per cent of the total planned spend.

Clearly this is good news for the industry in general; the additional funding will provide a much-needed shot in the arm for the sector (split evenly over the five-year period, the additional £2.14/ 3.05 billion represents an 18 per cent increase on the current total market value of £2.4/ 3.4 billion).

However, it also represents a challenge in that PPPs will play a central role in the delivery of projects; in Chapter V we discuss the role of PPPs in funding construction activity in more detail and highlight that PPP projects have enjoyed a mixed reception in the North to date. Furthermore, the capability of indigenous contractors in the preparation and delivery of PPP bids is still developing; however, this does present an opportunity for collaboration on a cross-border basis with companies from the South that can provide the necessary skills and experience.

As stated above, the increased spend is likely to attract the interest of contractors outside of Northern Ireland. Any such increase in the level of competition will require contractors in the North to take a more strategic perspective on business development and develop the capabilities required to avail of new opportunities.

Market segmentation

Although the sector as a whole has experienced growth of 51 per cent in recent years (see Table 6), performance across the different components of construction activity has not been constant and it is therefore important to review each segment individually.

At a general level the market may be segmented according to the source of funding, between public and private sector expenditure. Reliance on the public sector has diminished somewhat in recent years and the CEF estimated that the private sector accounted for more than 60 per cent of total construction activity in 2000. However, as public expenditure increases in the medium term, the balance may shift once again, particularly in infrastructure work (i.e. civil engineering).

NISRA segment the Northern Ireland construction market in two ways; by the nature of work (**New work** and **Repair and maintenance**) and by the sector (**Housing, Infrastructure and Other work**). These are defined as follows:

- **New work** relates to new construction including factory and office extensions, major re-construction, major alterations, site preparation and demolition;
- **Repair and maintenance** includes all on-site work not defined as new construction, e.g. housing conversions, extensions and improvements;
- **Housing** relates to all housing construction activity, both private and public sector;
- **Infrastructure** includes work on roads and car parks, water and sewerage, electricity, gas, communications, air transport, railways, harbours and waterways;
- **Other work** includes factories, warehouses, oil, steel, gas and coal, schools and colleges, offices and banks, shops, universities, entertainment, agriculture, health and welfare, garages, and miscellaneous (essentially general contracting).

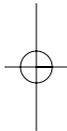
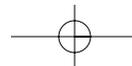
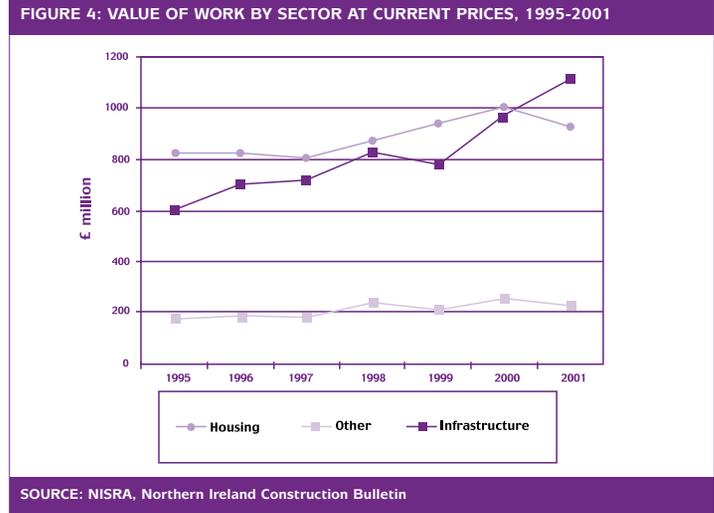


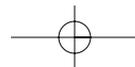
Table 6 and Figure 4 detail the value of work by sector at current prices from 1995 to 2001. Note that these figures include both new work and repair and maintenance.

**TABLE 6:
VALUE OF WORK BY SECTOR AT CURRENT PRICES, 1995 - 2001 (£/ MILLION)**

YEAR	HOUSING	INFRASTRUCTURE	OTHER WORK	TOTAL £	TOTAL
1995	£821.1	£173.8	£596.5	£1,591.4	2,273.5
1996	£817.1	£179.4	£696.0	£1,692.5	2,417.9
1997	£800.7	£178.3	£711.8	£1,690.8	2,415.4
1998	£867.3	£234.3	£814.3	£1,915.8	2,736.9
1999	£930.9	£204.0	£769.2	£1,904.1	2,720.1
2000	£992.4	£246.2	£953.6	£2,192.2	3,131.7
2001	£918.8	£220.9	£1,102.2	£2,406.4	3,437.7
% change 1995-2001	+12%	+27%	+85%	+51%	+51%

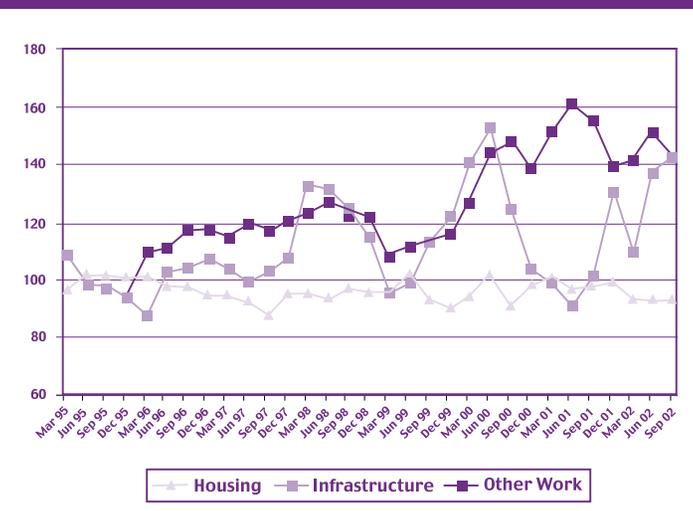
SOURCE: NISRA, Northern Ireland Construction Bulletin





The Index of Construction also includes indices for each of the sectors, showing variations in the volume of activity as detailed in Figure 5.

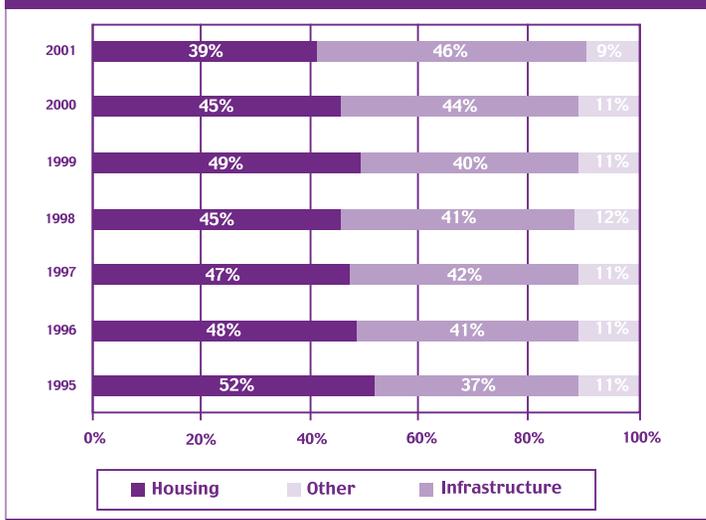
FIGURE 5: INDEX OF CONSTRUCTION BY SECTOR, 1995-2002, (1995 = 100)



SOURCE: NISRA, Northern Ireland Construction Bulletin

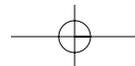
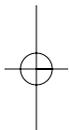
Figure 6 illustrates the contribution of each sector to the total value of construction output by value from 1995 to 2001.

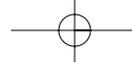
FIGURE 6: CONTRIBUTION BY SECTOR AT CURRENT PRICES, 1995 - 2001



SOURCE: NISRA, Northern Ireland Construction Bulletin

Until recently, housing represented the largest proportion of construction activity in the North. However, the strong growth experienced by the general contracting sector in recent years has resulted in other work now accounting for the bulk of the market. The increased spend on infrastructure expected over the next few years from the SIB, on top of the normal capital budgets, should mean that this sector increases substantially in terms of both value and share of overall activity, which in turn will present new opportunities for construction companies.





Housing

At the end of the third quarter of 2002, the Index of Housing was up slightly on the last quarter (92.5 against 91.6), but down 4.4 points on the corresponding period in 2001 (96.9). Residential construction has been relatively static over the last few years, with 10,000-12,000 housing starts registered annually.⁶ The housing stock comprised 649,000 dwellings at the end of 2001, an increase of 13,000 on the 2000 level.

The private sector continues to grow, accounting now for 80 per cent of total stock, while social housing is declining, with housing associations representing 3 per cent and Housing Executive dwellings around 17 per cent of housing stock. Demand will remain constant, as there is a need for around 10,000 new homes to be built in the North each year, with 1,500 of these needed in the social housing sector. Prospects for growth will continue to be driven by the private sector.

Future residential planning will need to reflect the changing demographic structure of the North. The average household size has fallen and now stands at 2.72 people. The proportion of single households has grown to 26 per cent and the elderly proportion of the population will continue to increase.

Although the residential sector has seen a slight slowdown since the last part of 2001, the Regional Development Strategy for Northern Ireland has confirmed an overall need for 160,000 new dwellings between 1998 and 2015. Almost 50 per cent of these are to be concentrated in the Belfast Metropolitan Area, maintaining it as the economic heart of the North, although some 70,000 rural dwellings will also be built up to 2015.

At the same time, the North faces enormous land pressures; issues around transport, density and design must be tackled if the 60 per cent target share of urban housing is to be provided within existing urban limits. The pace of growth in the residential sector may also be tempered by increasing costs associated with house building (e.g. compliance with the Quality Initiative scheme, soaring land prices and the aggregates tax), coupled with ongoing delays in the planning system.

Until recently, residential construction accounted for the largest portion of the market (by value). However, its share has been declining since 1995 and reached a low of 38 per cent in 2001, when it was overtaken by other work. Although the level of residential construction activity is expected to remain constant at around 10,000-12,000 starts per annum (equivalent to £800 - £1,000/ 1,143 - 1,429 million in value terms), the nature of housing is likely to continue to change with more demand for smaller dwellings such as starter homes and apartments. The role of public sector housing is expected to continue to diminish.

Infrastructure

The value of infrastructure work was relatively constant between 1995 and 2000 (representing 11 per cent of all work for each year during the period). Output peaked at £246/ 351 million in 2000; however, the Index of Infrastructure has shown substantial growth since the middle of 2001, with output up by 40.8 points between the third quarter of 2001 and 2002 (140.8 against 100.0).

⁶ DSD, *Northern Ireland Housing Bulletin, Quarter 2 2002 (2002)*.

There are good prospects for the sector in the medium term, as civil engineering work is likely to be stimulated in the coming years by further investment in roads, water and sewerage infrastructure. This is driven by the need to bring the North's antiquated infrastructure up to EU compliance standards and to avoid the application of significant fines by the EU.

Ongoing spend on the Roads Service Priority Capital Programme exceeds £150/ 214 million per annum, and the Water Service will continue to spend around £100/ 143 million per annum on capital works programmes, in addition to the recently announced SIB funding.

This promises well for contractors and other companies active in this sector of the construction market in the North, although as previously mentioned, it can be expected that competition will intensify as the greater scale of jobs attracts interest from external sources.

Other work

Since 1995, construction activity classed as 'other work' has almost doubled in value from £596/ 851 million to £1,102/ 1,574 million in 2001, representing an increase from 37 per cent to 46 per cent of all output. This has been driven by a number of factors, including the demand for:

- New office premises (particularly in urban areas);
- New large, purpose-built, call centre offices; and
- Continued development of regenerative industrial parks.

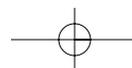
New developments planned in this sector include Victoria Square (£250/ 357 million), the Castle Court shopping-centre complex extension (£200/ 286 million) and the Donegal Quay commercial and residential development (£30/ 43 million) in Belfast, and a £9/ 13 million refurbishment programme for Omagh city centre. Additional prospects will emerge from the development of brown-field sites.

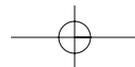
Other opportunities come from public investments planned in the health and education sectors, although a significant proportion of these projects are likely to be carried out as PPP programmes. Regularly updated details of PPP projects being tendered can be found on the government's dedicated website.⁷ There is a critical need for companies in the North to develop the capabilities or relationships required to effectively manage PPP projects, in order that they can successfully avail of these opportunities.

Repair and maintenance and new work

Since 1995, repair and maintenance has represented a decreasing proportion of overall construction activity, although the actual expenditure on this work in 2001 (£406/ 580 million) was the highest since 1995. Additionally, the Index of Repair and Maintenance has shown a distinct upturn since the beginning of 2002, perhaps indicating a reversal of the long-term decline exhibited by this sector. Table 7 and Figure 7 show the trends since 1995. This may be related to the increase in house prices, encouraging both homeowners and investors to release additional equity in their properties by undertaking repair and maintenance work.

⁷ www.pfi-ni.gov.uk



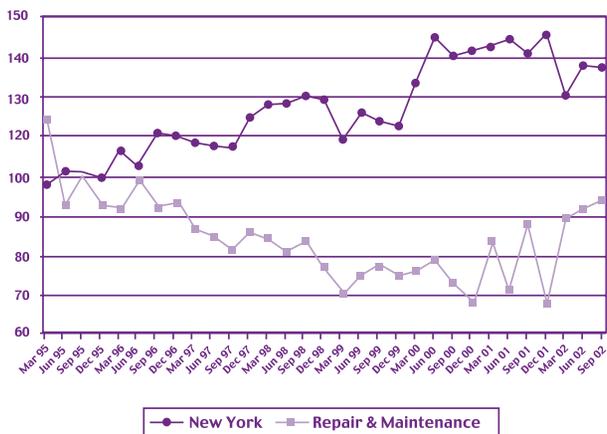


**TABLE 7:
VALUE AND SHARE BY NATURE OF WORK
AT CURRENT PRICES, 1995-2001 (£/ MILLION)**

YEAR	NEW WORK	REPAIR & MAINTENANCE	TOTAL £	TOTAL
1995	£1,171.9 74%	£419.4 26%	£1,591.4	2,273.4
1996	£1,289.4 76%	£403.1 24%	£1,692.5	2,417.8
1997	£1,332.1 79%	£358.6 21%	£1,690.8	2,415.4
1998	£1,541.3 80%	£374.5 20%	£1,915.8	2,736.9
1999	£1,548.9 81%	£355.2 19%	£1,904.1	2,720.1
2000	£1,828.1 83%	£364.1 17%	£2,192.2	3,131.7
2001	£2,000.2 83%	£406.2 17%	£2,406.4	3,437.7
% change 1995-2001	+71%	-3%	+51%	+51%

SOURCE: PricewaterhouseCoopers

FIGURE 7: INDEX OF CONSTRUCTION BY NATURE OF WORK, 1995-2001



SOURCE: NISRA

Outlook for the construction sector in Northern Ireland

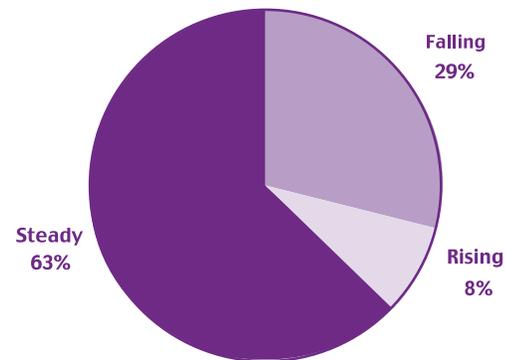
According to the State of Trade Survey for the fourth quarter of 2002, current workload had improved by seven per cent in the final quarter of 2002, after falling sharply earlier in the year.⁸ The survey also demonstrated increases in anticipated workload across most sectors (see Tables 8 and 9 and Figures 8 and 9).

**TABLE 8:
CURRENT WORKLOAD BY SECTOR, QUARTER 4 2002
(PREVIOUS QUARTER IN BRACKETS)**

SECTOR	RISING (%)	STEADY (%)	FALLING (%)
Civil Engineering	0 (5)	41 (52)	59 (43)
Private Housing	14 (10)	64 (57)	22 (34)
Public Housing	3 (7)	46 (24)	51 (69)
Private Industrial & Commercial	2 (0)	50 (53)	48 (47)
Public Non-Housing	6 (7)	53 (54)	41 (39)
Repair & Maintenance	4 (5)	63 (65)	33 (29)
Overall Workload	8 (6)	63 (61)	29 (34)

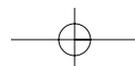
SOURCE: CEF, State of Trade Survey, Quarter 4 2002

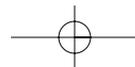
FIGURE 8: CURRENT OVERALL WORKLOAD, QUARTER 4 2002



SOURCE: CEF, State of Trade Survey Quarter 4, 2002

⁸ CEF, State of Trade Survey, Quarter 4 2002 (2002).



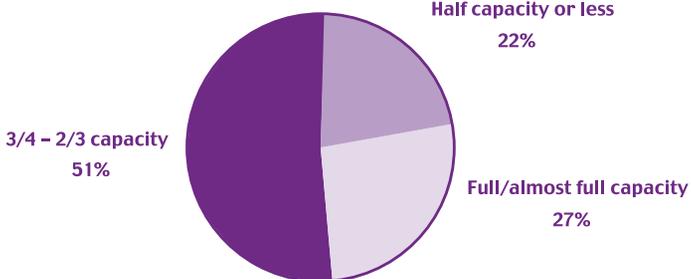


**TABLE 9:
FUTURE ANTICIPATED WORKLOAD IN 12 MONTHS
(PREVIOUS QUARTER IN BRACKETS)**

SECTOR	FULL/ALMOST FULL CAPACITY (%)	75% - 66% CAPACITY (%)	50% OR LESS CAPACITY (%)
Civil Engineering	12 (16)	38 (42)	50 (42)
Private Housing	32 (32)	49 (28)	18 (40)
Public Housing	8 (8)	37 (35)	55 (58)
Private Industrial & Commercial	19 (13)	56 (52)	25 (34)
Public Non-Housing	16 (24)	52 (35)	32 (41)
Repair & Maintenance	32 (29)	41 (32)	28 (39)
Overall Workload	27 (38)	52 (39)	22 (23)

SOURCE: CEF, State of Trade Survey Quarter 4, 2002

FIGURE 9: FUTURE OVERALL WORKLOAD



SOURCE: CEF, State of Trade Survey Quarter 4, 2002

Commenting on the results of the survey, Tony Doran, Managing Director of the CEF, stated:

While there was a modest improvement in current workload in the fourth quarter of 2002, it is notable that the civil engineering sector's current and anticipated workload is dropping. The announcement in December 2002 of significant future investment in infrastructure should improve output and employment. Clearly the proposed increases in infrastructure investment are not yet being translated into new orders given that workload in the civil engineering sector is falling. The Department of Regional Development must accelerate the flow of new orders to maintain employment and meet Northern Ireland's infrastructure and environmental needs.

The survey also found that an increasing proportion of firms were reporting a reduction in enquiries for new work, along with a decline in tender prices. There are no major problems with the availability of materials or plant; however there has been a slight increase in the proportion of firms expressing dissatisfaction with regard to the availability of labour (see Table 10).

**TABLE 10:
OTHER AREAS SURVEYED (PREVIOUS QUARTER IN BRACKETS)**

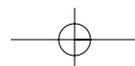
TOPIC	UP (%)	NO CHANGE (%)	DOWN (%)
Enquiries for New Work	9 (14)	46 (48)	45 (38)
Tender Prices	9 (10)	52 (54)	39 (36)

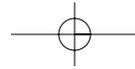
GENERAL SUPPLY			
SITUATION	LABOUR (%)	MATERIALS (%)	PLANT (%)
Satisfactory	81 (87)	97 (98)	99 (100)
Unsatisfactory	19 (13)	3 (2)	1 (0)

SOURCE: CEF, State of Trade Survey Quarter 4, 2002

Overall, the planned increases in infrastructure spend should compensate for any decline in activity in the short term; however, as the CEF have stated, it is important that this planned spend is translated into actual expenditure as soon as possible. Additionally, residential construction is expected to remain relatively buoyant, driven almost exclusively by activity in the private housing sector. The recent momentum demonstrated by the general contracting sector should be maintained by major projects expected to go live in the near future, such as the Victoria Square development, the extension to Castle Court and the redevelopment of the Titanic Quarter.

The availability of funding to finance recognised construction needs is obviously a vital aspect when looking at forecast or anticipated activity. However, the capability of the industry to actually deliver on this demand is also critical. In the next section, we look at the ability of the industry to exploit the opportunities that appear to be emerging, particularly in the medium term.





Industry capability

In this section we will examine the factors that, going forward, will largely determine the capability of the sector to make good on arising opportunities. These factors include:

- Structure of the industry (i.e. enterprise size);
- Labour availability;
- Skills and expertise; and
- Construction prices.

Construction labour market

Strategy 2010 identified around 4,000 organisations directly involved in the construction industry in the North. The majority of these are SMEs, with 65 per cent having fewer than five employees.

The CEF Employment Model estimates that direct and indirect employment in the construction sector in 2001 amounted to approximately 52,000 full time equivalent employees. Employment is expected to continue to grow, at around two per cent each year.

At present the industry finds itself faced with a range of labour-related difficulties that may affect its ability to increase capacity in the medium to long term. These problems include skill shortages at most levels, competition for labour from GB and Ireland, and the fact that a career in construction is not considered to be an attractive option to many young people.

Forecast skills needs

The occupational structure of the Northern Ireland construction industry is dominated by carpenters and joiners, managers, electricians, and clerical staff, who together account for over half of all jobs in the industry. The CEF Employment Model estimates that approximately 3,500 new recruits will be needed per year to satisfy demand over the next decade (see Figure 10).

This need will be largely for:

- Carpenters and joiners 540 new entrants required each year
- Managers 490 -
- Electricians 380 -
- Clerical staff 350 -
- General operatives 260 -
- Bricklayers 230 -

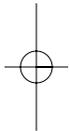
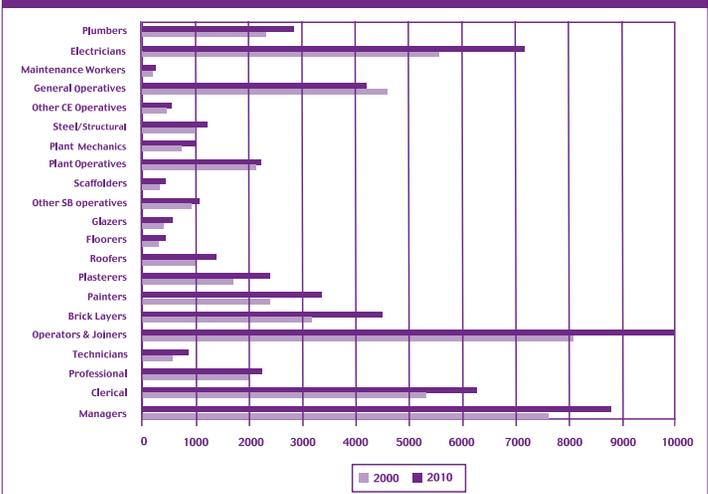


FIGURE 10: COMPOSITION BY OCCUPATION, (2000/2010)



SOURCE: CEF, Employment Model (2001)

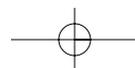
Planning for capacity

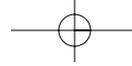
However, potential increases in investment to address the 10-year deficit of £5.9/ 8.4 billion could have a substantial impact on the construction sector in the North. Assuming an even spread of this amount over the 10-year period, the resulting average increase in workload would amount to £590/ 843 million per annum.

Some concerns have been expressed regarding the availability of necessary capacity within the local construction force (both in terms of number and skills of workers) to meet such a significant increase in demand levels. However, the CEF considers that training and efficiency gains could result in over half of the increased workload being met with the present labour force over a 10-year period.

On the basis of the same net investment deficit of £5.9/ 8.4 billion, with almost 50 per cent allocated to both accommodation and infrastructure, there is the potential for around 7,400 jobs to be sustained in the construction industry over the next decade.⁹

⁹ Department of Finance, *Review of Opportunities for Public Private Partnerships in Northern Ireland (2002)*.





The value of construction output in the North, as estimated by NISRA, is currently around £2.4/ 3.4 billion per annum; therefore, an average annual output increase of 19 per cent would be required to cope with the additional volume of work. The CEF considers that this could be accommodated, provided there is a planned programme, certainty and government commitment so that contractors can plan accordingly. The CEF assessment is that the construction industry has been working at below 75 per cent of its potential capacity in recent years.

Skills training - the need for coordination

The majority of the new entrants will require training, and organisations involved in training policy and provision such as the CEF, the Construction Industry Training Board (CITB) and the education institutions (i.e. universities and further education colleges) will need to design and implement their training policies accordingly. During the course of our research, it emerged that there is a mismatch between the training needs of SMEs and the providers' perceptions, due to a lack of communication. This has occasionally led to a duplication of courses, rather than specialisation.

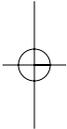
The University of Ulster at Jordanstown, through its Faculty of Engineering and Built Environment, offers a range of courses in construction-related subjects and project management. Between 500 and 550 construction and engineering professionals graduate from the university annually across areas including architecture, civil engineering, mechanical and electrical engineering, electronic systems, property development, and project management.

The vast majority of the 16 Institutes of Further and Higher Education (IFHEs) in the North also provide vocational qualifications in construction-related subjects. In December 2000, the Department of Employment and Learning (DEL) announced the outcome of the Strategic Investment Fund (SIF) Initiative, the objective of which was to sharpen the economic focus of the further education sector in line with *Strategy 2010*, and to drive up standards. Institutes were invited to bid under the SIF for recognition as Centres of Excellence in one or more of the following six key vocational areas which are significant to the regional economy: ICT and computing, electronics, software engineering, manufacturing engineering, tourism and hospitality, and construction.

Six Institutes submitted bids to achieve Centre of Excellence status in the area of 'Construction and Built Environment'. Success in obtaining this status requires high standards to be achieved regarding the facilities, expertise and resources allocated to the theme.

In March 2003, three IFHEs passed the stringent criteria for Centre of Excellence status. These are:

- North West IFHE: high standards in construction and engineering;
- North East IFHE: high standards in building engineering; and
- East Down IFHE: special recognition in wood machining.

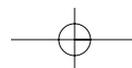


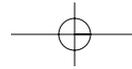
The CITB is the leading training policy-maker for the industry. Their *Training Strategy 2000-2005* has recently been updated with the *Strategic Plan 2002-2007*, which sets out the Board's target achievements and activities over this period, structured around five key themes:

- Improving the retention and progression of new entrants at all levels (e.g. greater cooperation with industry sectors and education to identify skill needs, promoting career progression through Construction Craft and Building Engineering Services (BES) sector apprenticeships);
- Encouraging industry competence and competitiveness (e.g. health and safety training advice, and participation in registration schemes and best practice initiatives);
- Increasing employer involvement in training (e.g. promote lifelong learning initiatives, and facilitation and evaluation of standard of training provision internally and externally);
- Supporting equality of opportunity and diversity (e.g. facilitate access to training province-wide, and encouragement of participation of more women in the industry); and
- Maximising income from the levy and additional resources (e.g. maintenance of effective systems to assess and collect levy from the industry, and provision of a value-for-money service efficiently and cost-effectively).

Future training initiatives should have a practical approach, and should respond to the changes currently taking place in the construction sector which place a higher emphasis on issues such as project management, integrated supply chain management and a higher-quality and client-focus.

The education, training and retention strategies developed by the industry authorities are therefore all the more important to ensure that appropriate levels of skilled labour are provided to meet anticipated industry demand.





Construction prices

In the short term, prices are expected to rise because of rising labour costs and the need for higher returns to allow for investment in the industry.

At the same time, local industry authorities are aware of the impact that sudden workload increases, particularly those generated by the public infrastructure sector, can have on construction costs, and will try to avoid the inflationary effects that have been experienced within major centres such as London and Dublin.

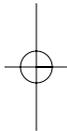
In the residential sector prices are likely to increase, as the industry claims that recent government policies of attributing capital costs of infrastructure, increased standards and provision of services to housing development, account for a large proportion of the rising house prices witnessed in Northern Ireland over the last few years.

A report from the CEF has identified additional development costs of some £14,000/ 20,000 directly quantifiable expenditure per house, including implications of the Quality Initiative, soaring land prices, planning delays, new disabled regulations, aggregates tax, street lighting, and CCTV sewer surveys.¹⁰

The slow planning regime in public works, both residential and civil engineering, adds to the cost of projects. Delays are usually attributed to a lack of resources and relatively low levels of efficiency, reducing the authorities' ability to deal with major planning applications quickly.

It is vital that these issues are addressed proactively, so that the industry is suitably prepared and positioned to benefit from opportunities as and when they arise, as opposed to having to address problems on a remedial basis. To date, issues such as the supply of labour and availability of skills have been considered separately within each jurisdiction; however, as the market conditions within Ireland, North and South, continue to change, consideration of resources on an all-island basis may go some way towards alleviating concerns of both under and over capacity in each region.

¹⁰ CEF, *New Housing - Increasing Costs (2002)*.



IV IRELAND

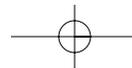
Construction industry overview

The construction industry in Ireland experienced phenomenal expansion between 1991 and 2002, with the value of output increasing from £3.1/ 4.4 billion to over £14/ 20 billion (equivalent to £7.7/ 11 billion at 1995 prices).¹¹ It accounts at present for around 16 per cent of GDP and employs some 260,000 people, both directly and indirectly.¹² At a European level, the contribution by the construction sector to overall GDP is, on average, 12 per cent.



Having recorded this major growth in both construction output and employment over the seven-year period to 2000, the industry is now going through a period of downward readjustment (see Figure 12).

¹¹ The value of construction output at 1995 prices for 1990-1996 is unavailable.
¹² Based on the Quarterly National Household Survey, direct employment in building and construction totalled 183,200 in the first quarter of 2002. This excludes employment in the manufacture and distribution of building materials, plant hire or construction-related employment in the professional services sector (e.g. architects, engineers, planners, and surveyors, etc.).



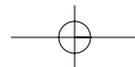


FIGURE 12: CHANGE IN CONSTRUCTION OUTPUT BY VALUE AND VOLUME IN IRELAND



SOURCE: DoELG, Construction Industry Review 2001, Outlook 2002-2004 and Euroconstruct

The volume of construction output expanded by a cumulative 144 per cent between 1994 and 1999 or by an average of 12 per cent per annum. Starting in 2000, the construction industry appeared to enter a new cycle, with the rate of growth slowing to 6 per cent in 2000 and 4 per cent in 2001. This was the result of a combination of national and international adverse developments and government initiatives in the private rental sector.

Work volumes are estimated to have fallen by 3.5 per cent during 2002, equivalent to a loss of some £560/ 800 million worth of work for the industry. This is the first decline in output since 1993.

The huge demand placed on the industry throughout the 1990s caused some fears that the resources available would not be able to deliver the required output of work, while the overstretching of the supply base led to price overheating and high inflation rates, threatening any ability to deliver the National Development Plan (NDP) programmes on budget. However, the current slowdown in demand means that concerns over the ability of the indigenous construction industry to deliver the NDP at competitive prices have been reduced, with spare capacity now available and more competitive pricing levels. A more detailed analysis of the industry's capacity and pricing trends is presented in the 'industry capability' section of this chapter.

Authorities advise that long-term plans to expand the capacity of the industry should continue to be implemented, in order to ensure that it is in a position to service future demand as the economy returns to improved rates of development.

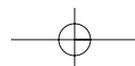
Reflecting the global and national economic slowdown, Euroconstruct predict that in the medium term the Irish construction sector will level off (in volume terms), remaining close to its performance in 2001. The industry overall is projected to decline by a modest 0.2 per cent over the period 2002-2004.

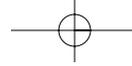
This moderation is occurring at an already high level of output (more than double that of 1994) and, therefore, the level of demand will still be reasonably strong, but with less risk of capacity constraints or overheating.

A number of factors are expected to influence the performance of the industry over the next few years, some of which will have a beneficial impact and some of which will pose a risk of constraint.

Potential benefits:

- The Agreed Programme for Government published in June 2002 is placing a renewed emphasis on addressing Ireland's infrastructure deficit and it has recommended the setting-up of the National Development Finance Agency (NDFA) to finance major public projects and to evaluate financing options for PPP projects.
- The PCP provided in 2002 an additional £385/ 550 million for capital investment, the total spend representing a 22 per cent increase on the 2001 level in value terms.
- More efficient and streamlined planning and development processes have been and continue to be implemented, as all recommendations within the Planning and Development Act 2000 were brought into force by March 2002.
- The National Spatial Strategy, published at the end of 2002, promotes a more regionally balanced economic and social development.
- *The Review and Progress Report on the Action Plan to Expand the Capacity of the Construction Industry (APECCI)* was prepared by the Forum for the Construction Industry (FCI) and published in July 2002. The report acknowledged that significant progress had been made in implementing the more than 50 measures contained in the Action Plan, with visible expansion in industry capacity. The review recognises the current economic and construction slowdown and a more balanced supply-demand ratio, but it concludes that it is important for the momentum of capacity increase to be maintained, so that future demands can be met.
- The role of PPPs continues to be actively promoted, along with the formation of consortia and partnerships between foreign and Irish contractors to deal with large and/or complex projects.
- Improved tax liability rates for building contractors/manufacturers as employers: employers' PRSI rate was reduced from 12 per cent to 10.75 per cent; the corporation profits tax rate was reduced from 20 per cent in 2001 to 16 per cent in 2002 and further reduced to 12.5 per cent from January 2003.
- The NDP offers continued opportunities, despite a number of factors limiting progress.





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Potential constraints:

- If continued, the worldwide decline in equity values could hamper the medium-term capability of private companies to fund planned capital investments.
- There has been a decline in the level of Foreign Direct Investment (FDI), which may continue even when the US economy resumes its growth.
- Public expenditure growth in 2002 was curtailed by the government in response to poor income tax receipts and this may limit the extent to which the PCP can offset any continuing decline in private investment. The medium-term provision for Exchequer Capital Expenditure shows a declining growth rate in PCP allocations from 24.6 per cent in 2001 and 14.7 per cent in 2002, to 7.1 per cent in 2003 and 8.4 per cent in 2004 when it will amount to £4.6/ 6.5 billion.
- Under the European Monetary Union (EMU) regime, budget deficit should not exceed three per cent of Gross National Product (GNP). Accordingly there may be continuing pressure on resources allocated to the PCP and hence on full implementation of the NDP by 2006.

National Development Plan

The NDP continues to be the driving force in the economy of Ireland and it particularly influences the evolution of the construction sector. It set out a public investment programme of some £36/ 52 billion (at 1999 prices) over the seven years 2000-2006.¹³

Spend in the Southern and Eastern (S&E) Region accounts for 66 per cent of the total, with the BMW Region representing the remaining 33 per cent.

The Economic and Social Infrastructure Programme (ESIP) on its own is worth 43 per cent of the total planned investment at £15.7/ 22.4 billion. A breakdown by sector shows the greatest investment need to be in the areas of housing and national roads (see Table 11).

**TABLE 11:
THE ECONOMIC AND SOCIAL INFRASTRUCTURE PROGRAMME STRUCTURE**

AREA OF EXPENDITURE	NATIONAL	BMW REGION	S&E REGION
National Roads	5,968	2,176	3,792
Public Transport	2,837	250	2,587
Environmental Protection	3,213	888	2,325
Energy	185	90	95
Housing	7,619	2,057	5,562
Health	2,539	800	1,739
Total (million)	22,361	6,261	16,100
Total (€ million)	€15,653	€4,383	€11,270
Total per capita ()	6,167	6,486	6,051
Total per capita (€)	€4,317	€4,540	€4,236

SOURCE: Department of Finance, National Development Plan 2000-2006 (2000)

¹³ www.ndp.ie

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A further £2,785/ 3,978 million is being provided for economic and social infrastructure as part of the regional programmes. An additional £1,451/ 2,073 million allocated for education and training capital under the employment and human resource priority takes the total provision for economic and social infrastructure across all programmes to in excess of £20/ 28.5 billion.

Under the Social Affordable Housing and Health Capital category, housing is shown to require an additional 35,500 local authority housing units (26,000 in S&E, 9,500 in BMW), which equates to an average of 5,000 new dwellings per annum. Health capital plans include facilities and modern accommodation for persons with intellectual disabilities, mental illness or physical disabilities and the provision of quality acute hospital infrastructure.

Within the £4,177/ 5,968 billion allocated to national roads, plans cover the whole network in the country, including both major and minor routes. Details of planned works are available on the National Roads Authority (NRA) website.¹⁴

Water and waste water investment entails the construction of all outstanding schemes required under the EU Urban Waste Water Treatment Directive, the primary centres being in Dublin, Cork, Waterford, Limerick, Sligo, Westport and Letterkenny. An additional investment of £373/ 533 million was allocated to Rural Water Services under the Regional Operational Programmes.

It is estimated that £7.14/ 10.2 billion was spent for NDP projects over the three-year period to the end of 2002. However, output has been adversely affected to some degree by the inflation rate, which became significantly higher than anticipated at the outset of the plan, and by additional re-specification costs incurred during projects as they moved from conception to planning, design and construction.

The NDP clearly represents a major spending commitment and will continue to provide significant opportunities for the construction industry. However, in a recent article, the CIF brought to attention the fact that a large funding gap may be looming over the NDP:

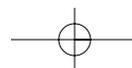
The physical delivery of projects to date is behind schedule in a number of priority areas and unless a new approach is taken, the targets of the plan will not be achieved during the timescales envisaged. The CIF believe that the operational programme for economic and social infrastructure is substantially under funded and that additional resources of the order of 9 billion at current prices will be necessary to ensure its completion.

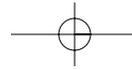
Any major strategic changes are unlikely to occur before the mid-term review of the NDP, which is due at the end of 2003.

External contractors

Overseas contractors are actively encouraged to participate in the delivery of NDP projects, either through joint ventures with Irish firms or by tendering on their own. Their contribution is sought when supplementary capacity is needed and particularly in cases where specific expertise is required (e.g. the Dublin tunnel forming project, carried out by the NMI consortium comprised of the Japanese Nishimatsu Construction Company, Mowlem & Company from the UK, and Irishenco Construction, an Irish civil engineering contractor, now part of the Mowlem group of companies).

¹⁴ www.nra.ie





The projects most frequently seeking overseas contractors' expertise are PPPs for the integrated design, building, operation and, in appropriate cases, financing of large and complex infrastructure projects. Actions proposed in the APECCI included:

- Inviting the CIF, as part of the NDP communications strategy, to cooperate in establishing a website register of Irish contractors who are interested in forming joint venture consortia with overseas contractors to undertake large and complex projects;
- Seminars on the NDP for overseas contractors, held in the UK, Germany and France;
- The development of a comprehensive information pack for overseas contractors; and
- A website established to track data on the progress of major NDP projects, with the NDP website to provide links to tender information services.

As discussed above, the considerable spending planned under the NDP has actively encouraged contractors from the North to enter the Southern market. As the overall market constricts and the current conditions of under-capacity begin to be reversed, the competitive environment is likely to become more aggressive as Southern contractors look to maintain their level of business.

Market segmentation

The Irish construction market can be broken down into three key sectors:

- **Housing** (including private and social developments) is the largest segment, accounting for over half of the total market in 2001;
- **Infrastructure**, representing civil engineering projects (for example roads and water), accounted for 27 per cent of the market; and
- **Other work** (or general contracting, comprised of work for factories, offices, health, education, retail, etc.) makes up the balance of 18 per cent.

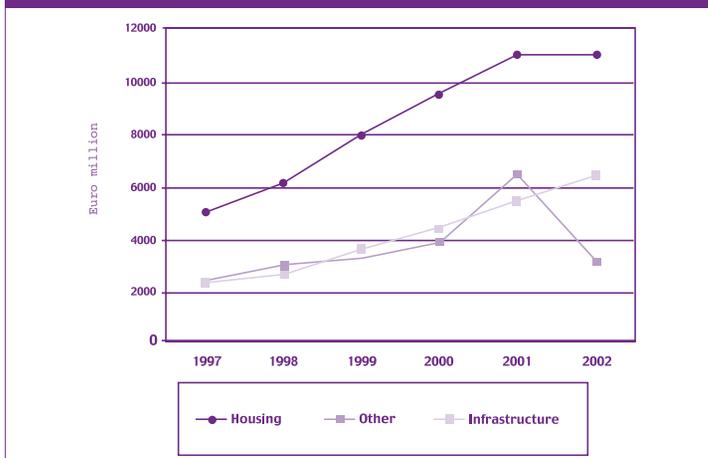
TABLE 12:
VALUE OF CONSTRUCTION OUTPUT IN CURRENT PRICES,
1997-2002 (ESTIMATE)(£/ MILLION)

YEAR	HOUSING	INFRASTRUCTURE	OTHER WORK	TOTAL	TOTAL £
1997	5,055.6	2,314.7	2,389.8	9,760.1	€6,832.1
1998	6,157.6	2,684.4	2,995.0	11,837.0	€8,285.9
1999	7,924.5	3,566.5	3,349.9	14,840.9	€10,388.6
2000	9,496.4	4,334.9	3,820.1	17,651.4	€12,356.0
2001	10,954.3	5,400.0	3,710.1	20,064.4	€14,045.1
2002 (estimate)	10,869.2	6,356.5	3,058.4	20,284.1	€14,198.9
% change	+115	+175	+28	+108	+108

SOURCE: Do ELG, Construction Industry Review 2001

¹⁵ Source: Do ELG, Construction Industry Review 2001

FIGURE 13: VALUE OF WORK BY SECTOR AT CURRENT PRICES, 1997-2002 (ESTIMATE)



SOURCE: DoELG, Construction Industry Review 2001

The breakdown of total construction output in 2002 was as follows:¹⁶

- Public sector new work - 31 per cent of work (up from 21 per cent in 1999);
- Private sector new work - 44 per cent of the total output; and
- Repair, maintenance and improvement - 25 per cent.

¹⁶ DoELG, Construction Industry Review 2001 Outlook 2002-04 (2002).

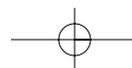
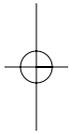


FIGURE 14: CONTRIBUTION BY SECTOR AT CURRENT PRICES, 1997-2002 (ESTIMATE)



SOURCE: DoELG, Construction Industry Review 2001

Housing

According to statistics from the DoELG, the residential sector witnessed sustained growth between 1993 and 2001 and now accounts for 54 per cent (see Figure 14) of total construction output, up from 42 per cent in 1994.

In 1999 it was estimated that some 500,000 new dwellings would be required over a 10-year period to meet housing demand, over 70 per cent of which would be needed in the S&E region. Meeting this target would require an annual average output of 50,000 units over a 10-year period.

The need for greater investment in housing was also highlighted in the Bacon report (June 2000). The report undertook an up-to-date assessment of short and medium-term projections on the demand and supply of housing, and made further recommendations for action required to bring supply more in line with demand and improve housing affordability, especially for first-time buyers. At the same time, the department also carried out a full review of social and affordable housing programmes to address increasing social housing needs and improve affordability for lower- and middle-income households. The findings suggested that:

- The supply-demand imbalance and expected increases in prices were fuelling demand and leading to housing market instability;
- There was evidence of a significant element of speculative demand (i.e. investors seeking to make short-term capital gains) and demand was being brought forward to avoid anticipated future price increases; and
- A significant increase in supply would be required to meet rising demand and gradually reduce the rate of price increases, e.g. around 55,000 private houses per annum in the six years to 2005, after taking account of measures to reduce speculative demand.

Increasing housing supply is a key element of the government’s strategy to secure price stabilisation and balance in the housing market. The policy document, Action on Housing, set the following objectives:

- Maximise housing output to meet the continuing strong demand for housing;
- Curb short-term speculative demand;
- Strengthen the position of first-time purchasers in the market;
- Increase the supply of social and affordable housing to meet rising housing needs; and
- Improve the institutional arrangements to facilitate the delivery of housing related infrastructure and thereby increase overall housing supply.

The number of new house completions in 2001 reached 52,600, the highest level recorded in Ireland to date. This level is not expected to be matched again, and overall house-building activity was projected to decline by approximately 3 per cent in 2002 in volume terms. The 8 per cent decline in private sector completions (from 47,727 to 44,000 units) would be somewhat offset by a 40 per cent increase in public housing completions (from 4,875 to 6,800 units).

Statistics regarding home starts are based on HomeBond registrations and they are perceived by industry as misleading and unreliable. The DoELG accepts that they are no longer suitable to use as a proxy for tracking housing starts, as HomeBond no longer control 100 per cent of the market and do not generally cover one-off houses (which are estimated to account for up to 30 per cent of the market). A new system is being piloted, based on commencement notices under the Building Control Act.

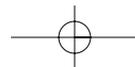
A number of positive measures introduced in the 2002 budget were welcomed by the industry and helped restore confidence in the housing market:

- The reduction in stamp duty rates for investors buying new and second-hand properties to levels applicable to non-first-time owner-occupiers who purchase second-hand property;
- The restoration of interest deductibility on residential investment for tax purposes; and
- The extension of deadlines for eligible projects under the Urban and Rural Renewal Schemes by two years.

Although it is recognised that there have been improvements in the planning process, the An Bord Pleanála system (and the conflicts it can create between inspectors and local authority planners) can still slow house-building through delays.

Private housing is also likely to be affected by the expiry of planning permissions for a total of 80,000 homes by the end of 2003, in a system that is already slow in dealing with development applications. The industry has been calling for the removal of Section 96 (15), Part V of the Planning and Development Act 2000, which introduced the two-year restriction on planning permissions.

In the medium term, the underlying demand for housing will remain strong at around 50,000 dwellings per year, given the demographic profile of the country (high proportion of young, single people without children).



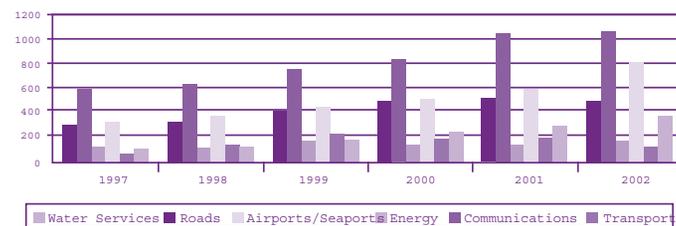
Infrastructure

Largely representing public sector civil engineering projects, this was the only sector to exhibit growth in 2002. Investment in new productive infrastructure is estimated to have increased by 16 per cent in 2001 and by a further 7 per cent last year, reflecting the impetus brought to this sector by the NDP.

Growth is led by energy (+36 per cent) and seaports (+28 per cent), with more modest rates of growth in transport (+8 per cent), airports (+6 per cent) and roads (+2.5 per cent). Output from new projects in the water services area is expected to decline by 7 per cent, after an all-time record investment level in 2001 (see Figure 15).

Roads and energy account for almost 70 per cent of total investment in productive infrastructure projects. The NRA spent £0.8/ 1.2 billion on roads in 2001 and £0.9/ 1.3 billion in 2002, 70 per cent of which was allocated for national road works. An additional £17.5/ 25 million was awarded through PPP schemes, which have received a positive response from Irish and foreign contractors. Four major projects are likely to be awarded early in 2003, as bidding is underway for the M1 Dundalk Western Bypass, N8 Fermoy Bypass, N25 Waterford Bypass and the N3 Clonee-Kells.

FIGURE 15: PRODUCTIVE INFRASTRUCTURE 1997 TO 2002E (M AT 1995 PRICES)



SOURCE: DoELG, Construction Industry Review 2001

Water, waste water and sewerage services benefited from investments worth £377/ 538 million in 2002, a decline of seven per cent on the peak level of 2001. The NDP allocates a total package worth £3.1/ 4.4 billion for schemes in this area to expand local infrastructure and bring it up to the level required by EU Directives. A significant proportion of the projects will be undertaken through PPP schemes. Currently, expressions of interest are sought for a waste-to-energy plant at Poolbeg, Dublin, which will be a PPP- Design, Build, Finance, Operate (DBFO) project. In the energy sector, the major investors are Electricity Supply Board (ESB), Bord Gáis Éireann (BGE)/Viridian and Airtricity.

Overall, prospects remain positive in this sector, as the remainder of the ambitious infrastructure investment programme coordinated through the NDP should be delivered throughout the period 2003-2006. Given the recent moderation in construction demand and price inflation, public authorities expect future projects to be delivered within required budgets and timescales.

Other Work

General contracting encompasses two distinct sectors: private non-residential construction (e.g. industrial, commercial, retail, and agriculture sectors) and social infrastructure (e.g. education, health and public buildings).

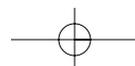
During the six-year period from 1994 to 2000, overall output of private non-residential construction increased by 156 per cent or by 17 per cent per annum, expanding by over four times in terms of value within the same period.

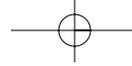
However, confidence in private sector general contracting has been the most adversely affected by the recent slowdown in economic activity and it is expected to have recorded an overall decline of 23 per cent in 2002 (on the back of an estimated decline of 10 per cent in 2001). Trends at sub-sector level include:

- The industrial and commercial sectors were hit hardest and, after a modest 4 per cent growth in 2001, last year they were expected to witness a sharp decline of 25 per cent and 27 per cent respectively; the downturn in demand has resulted in an increase in vacancy rates of between 8 per cent and 14 per cent.¹⁷
- Notable developments in the industrial sector are Intel's plans to press ahead with its \$2 billion Fab24 facility (which, when in full operation, will represent the largest single construction site in Ireland), the emergence of new industrial areas outside of Dublin in counties Kildare, Meath and beyond, and a two- to three-year excess of data-centre capacity available in Ireland.
- The best prospects in the commercial sector come from brown-site developments including the Grand Canal Harbour projects in Dublin and the Cork Docklands Development Strategy.
- Investments in the retail sector will also see a slowdown from a record £336/ 480 million in 2001. A number of projects are expected to come on stream over the next few years, such as the Dundrum Centre in South Dublin, the Fairgreen Shopping Centre in Carlow, Mahon Point in Cork and Tesco in North Dublin. Retail warehousing is one of the fastest growing segments of the retail market, particularly in the larger provincial towns such as Dundalk, Letterkenny, and Sligo, and in the Dublin suburbs.
- Tourism investment remained weak in 2002 (down by 22 per cent), partly due to the effects of the Foot and Mouth Disease (FMD) outbreak and the events of September 11 which affected global travel. The vigorous expansion of the hotel sector appears to have peaked in 1999 when 5,500 hotel rooms were added to existing stock, compared to a total of 4,000 rooms between 2000 and 2002.¹⁸
- Agricultural building investment hit an all-time low in 2001 at £109/ 156 million and only recovered by five per cent throughout 2002, a weaker performance than anticipated (although explained by factors such as the BSE and FMD crises, financial difficulties within the dairy sector in particular, and the bad weather in 2002).
- Urban and Village Renewal schemes also generate a continuous, albeit limited investment, with provisions made through the NDP, Town Renewal Scheme and Integrated Area Plans.

¹⁷ Lisney mid-year property update.

¹⁸ The Finance Act 1998 introduced restrictions on the spillover of excess capital allowances on expenditure in respect of hotels (which in the past had attracted a lot of interest), which may have curtailed this enthusiasm.





• All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • North-South Trade: A Statistical Ground-Clearing Exercise • A Review of the All-Island Construction Sector • A Cross-Border Comparison and Manufacturing Growth and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • A Review of the All-Island Construction Sector • North-South Trade: A Statistical Ground-Clearing Exercise • A Cross-Border Comparison and Manufacturing Growth and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • North-South Trade: A Statistical Ground-Clearing Exercise • **A Review of the All-Island Construction Sector**

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Prospects for further growth in the private non-residential sector are low, at least in the short term, given the uncertainty surrounding the pace of economic recovery.

Activity in the social infrastructure sector is predominantly determined by the PCP. The volume of output continued to grow and the 18 per cent increase in 2001 is expected to be followed by a further 27 per cent rise in 2002, reflecting strong performance in each of the key sub-sectors - local authority services (+88 per cent), education (+43 per cent) and health (+20 per cent) - while investment in public buildings was set to decline by 5 per cent from the peak level of £232/ 332 million experienced in 2001.

However, these improvements in social infrastructure cannot offset the weaker private investor market; as a consequence, the overall general contracting market was down by 1 per cent in 2001 and could be down by as much as 10 per cent in 2002.

Repair and maintenance and new work

Despite increasing in value by almost 75 per cent between 1997 and 2002, repair and maintenance work now accounts for just 25 per cent of total work, down from 30 per cent in 1997 (see Table 13).

TABLE 13:
VALUE AND SHARE BY NATURE OF WORK AT CURRENT PRICES,
1997-02 (ESTIMATE) (£/ MILLION)

YEAR	NEW WORK	REPAIR & MAINTENANCE	TOTAL	TOTAL £
1997	6,794.2 70%	2,965.8 30%	9,760.1	£6,832.1
1998	8,585.9 73%	3,251.1 27%	11,837.0	£8,285.9
1999	10,787.8 73%	4,053.2 27%	14,840.9	£10,388.6
2000	13,048.4 74%	4,603.2 26%	17,651.4	£12,356.0
2001	14,928.4 74%	5,136.1 26%	20,064.4	£14,045.1
2002 (estimate)	15,112.6 75%	5,171.4 25%	20,284.1	£14,198.9
% change 1997-2002	+122%	+74%	+108%	+108%

SOURCE: DoELG, Construction Industry Review 2001

Outlook for the construction sector in Ireland

Overall, the size of the construction industry in Ireland by 2004 is projected to be almost the same as it was at the end of 2001 (in volume terms), declining by a modest 0.2 per cent between 2002 and 2004.¹⁹

¹⁹ DNM Economic Consultants, *The Short Term Prospects for the Irish Construction Industry 2002-2004*, paper delivered at the Euroconstruct Conference in Dublin, June 2002 (2002).

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TABLE 14:
MEDIUM TERM PROSPECTS (% CHANGE IN VOLUME OF OUTPUT)

INDICATOR	2000	2001 (ESTIMATE)	2002 (FORECAST)	2003 (FORECAST)	2004 (FORECAST)
Total Construction Output	+6	+3	-1	0	+1
GNP	+10	+5	+1	+3	+4

SOURCE: Euroconstruct Conference 2002

This projection acknowledged that the construction sector will remain highly vulnerable to any further weaknesses in economic and construction indicators over the short term, and concluded that, as the public sector looks to be the only sector of the construction industry making any significant contribution to growth over the medium term, any reduction in the PCP would seriously jeopardise sentiment within (and the future performance of) the construction industry.

Demographics are such that it is very likely that the underlying demand for housing will remain strong. However, in the private non-residential sector, after several years of sustained growth in output, it is no surprise that further growth seems unlikely over the short term at least (particularly while there is uncertainty about the pace of economic recovery).²⁰

However, there remains an ambitious infrastructure investment programme to be delivered over the period 2003-2006. The recent moderation in construction price inflation should ensure that this programme is met within budget, while the emergence of spare capacity should ensure it is delivered within a reasonable time frame, subject to the necessary funding being made available.

Despite the current period of contraction in construction output, it is still a £14/ 20 billion industry, more than double its value in 1997. The challenge will be to maintain the real value of output around that level over the medium term.

Industry capability

Similar to our approach in examining the capability of the industry in the North, in this section we examine the factors that will influence the capability of the sector to respond to the changing market conditions in the South. As before, these issues are addressed in four main areas:

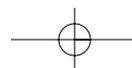
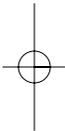
- Structure of the industry (i.e. enterprise size);
- Labour availability;
- Skills and expertise; and
- Construction prices.

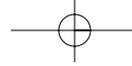
Action Plan to Expand the Capacity of the Construction Industry

The government and the industry advise that the APECCI from June 2001 should still be implemented without complacency to ensure that the NDP schedule is achieved.

The CIF warn that if construction investment is not sustained, the result will be a lower rate of fixed capital formation, resulting in an even greater infrastructure backlog, hindering further economic growth and leading to increased unemployment.

²⁰ DoELG Construction Industry Review 2001 and Outlook 2002-2004 (2002).





The action plan sets out more than 50 measures to expand the capacity of the construction sector. These are grouped around the key elements that contribute to overall construction capacity and performance:

- Availability of building materials, plant/equipment and zoned/serviced land;
- Labour and skills availability;
- Facilitating innovation;
- Planning and regulatory environment; and
- Expanding capacity with resources from abroad.

Another important factor influencing the performance of the sector relates to cost levels, which in turn impact on pricing and inflation rates.

It is not anticipated that any shortage of building materials, plant/equipment or zoned/serviced land would be likely to restrict building activity in the medium term.²¹

The planning environment

Actions proposed by the APECCI to address issues related to the planning and regulatory environment focus on the implementation of streamlined planning procedures under the Planning and Development Act 2000. All parts of the act were brought into force by March 2002 and key initiatives include:

- Planning regulations now exempt temporary accommodation for site construction workers from the requirement to obtain planning permission;
- Progress is being made on the development of a series of guidelines for planning authorities, particularly in relation to the NDP;
- Other actions are being considered including standardisation of planning applications, standards for smaller scale works (e.g. domestic extensions over 40m²), and planning applications for high-density housing;
- Regulations were introduced to increase the size of exempted developments from 23m² to 40m²; this is designed to reduce the number of planning applications by 30 per cent in major urban areas;
- The supply of Town Planners has improved, as a result of three key measures: expanded capacity within the education system (at Dublin Institute of Technology (DIT) and University College Dublin (UCD)); recruitment from overseas, particularly from the UK and South Africa; and An Bord Pleanála's employment of private consultants in certain cases, on a fee-per-case basis;
- Local authorities are required to prepare housing strategies and to allocate a proportion of up to a maximum of 20 per cent for the provision of social and affordable housing; and
- Proposals have been made for the establishment of Strategic Development Zones to facilitate the provision of housing and important new industries.²²

Public procurement is also undergoing a process of review and change, and a key outcome is the new website run by the Commercial Information Company, which pulls all public sector tenders together in the one location, to facilitate both suppliers looking for opportunities and public sector contracting authorities advertising and managing tender processes.²³

²¹ DoELG, *Action Plan to Expand the Capacity of the Construction Industry (2001)*.

²² Sites selected for development that is of strategic importance to the national economy.

²³ www.etenders.gov.ie

Construction labour market

Overall, the construction sector is estimated to have employed around 242,000 people, both directly and indirectly, at the end of 2002. This represents around 14 per cent of the national labour force estimate of 1.83 million.

Direct employment in the industry started to decrease slightly from the end of 2001. Based on the Quarterly National Household Survey, direct employment in building and construction totalled 183,000 in the first quarter of 2002, down from the peak level of 186,400 in the third quarter of 2001. The DoELG estimated that direct employment totalled 173,000 at the end of 2002 (a drop of 7.2 per cent from the peak in 2001).

This decline is expected to be overturned in coming years, reflecting projections for economic and construction output recovery.

The construction industry in Ireland remains very fragmented, with 60 per cent of the estimated 6,000 building firms employing fewer than 5 persons. The employment model has changed significantly in recent years, as the larger contractors now tend to employ specialist subcontractors rather than expanding their own labour base.

The DoELG estimate that approximately 35 per cent of total non-residential construction (civil engineering and general contracting) output is produced by the top 20 Irish contractors, and 65 per cent of total new civil engineering output is supplied by just the top 10 engineering companies in Ireland.

Forecast skills needs

The FÁS Manpower Forecasting Model suggests that there will be a 5.5 per cent decline of skilled construction craftspersons between 2002 and 2005, with carpenters experiencing the greatest decline over this period.²⁴ As construction output shrinks, it is anticipated that a significant number of the workers that had been attracted to Ireland during the boom years will leave the market, accounting for at least part of the employment decline seen so far.

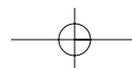
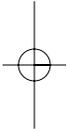
Overall direct employment in construction is anticipated to decline to 170,000 by the second quarter of 2005. However, the medium to long-term occupational forecast, produced jointly by FÁS and the Economic and Social Research Institute (ESRI), predicts that employment in the construction industry will increase by over 30,000 between 2005 and 2015.

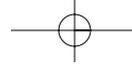
The planning of training and apprenticeship schemes should be based on the longer-term employment forecast, given that the industry is expected to enter a new cycle of expansion. Overall, the industry has improved vastly in terms of the number and different types of courses available; education institutions, the CIF, and FÁS now interact more regularly to review skill requirements in the industry.

A national survey in 2001/02 of non-agricultural vacancies in the private sector revealed that construction had the highest vacancy rate (6 per cent, against 2 per cent to 4 per cent for other sectors).²⁵ In particular, the vacancy rates for both sales workers and engineering technicians in the construction sector were substantially higher than average. A survey for the demand and supply of construction professionals (architects, quantity surveyors and civil engineers) has been commissioned by FÁS and the results should be available by the end of April 2003.

²⁴ Recognition as a craftsperson requires successful completion of a Standards Based Apprenticeship

²⁵ ESRI (for FÁS and Forfás), *National Survey of Vacancies in the Public Sector 2001/2002 (2002)*.





Recommended measures within the APECCI to address the issue of labour and skills availability include:

- Faster and extended locations for on- and off-site training and formal qualifications of craft apprentices;
- FÁS campaign 'Jobs Ireland' - an associated streamlined work-visa regime aimed at attracting building professionals (architects, engineers, surveyors) and town planners from abroad;
- Irish contractors encouraged to recruit craft and skilled building workers from abroad, particularly from the EU countries; and
- Foreign contractors being able to bring their own workers to undertake specific projects in Ireland without having to obtain work permits.

Construction prices²⁶

Rising insurance costs and wage costs have been the major factors in driving up construction inflation. A survey by Patterson, Kempster and Shortall (PKS) from late 2001 highlights that the cost of labour associated with the use of brick and block work has soared by 82 per cent since 1997.²⁷

These huge increases in labour costs were caused by overstretched resources, being in a position to command significant pay increases, and the social partners' Programme for Prosperity and Fairness (PPF), which implied that crafts such as bricklaying, for example, were entitled to a minimum pay of £380/ 543 per week. Most of the PPF effects have by now been assimilated by the industry and are not expected to exert significant pressures in the future.

The cost of building materials has not been one of the main contributors to overall construction inflation, with the average price increase of 4.15 per cent being broadly in line with the general rate of inflation in the economy. The highly competitive nature of the sector and relatively high level of import penetration helps keep prices under control, although it is more exposed to influences from external factors such as insurance premiums, transport costs and oil prices.

Reduced demand in parts of the commercial and residential sectors throughout the country, combined with a slowdown in some public sector projects, have also helped bring labour costs under control. This has led to a tightening of margins and a reduction in some tender pricing levels, as contractors and sub-contractors seek to utilise their increasing spare capacity.

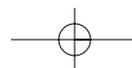
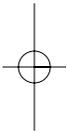
²⁶ Construction costs and tender indices are currently monitored through five indices prepared independently and concerning various aspects of construction activity (including the CSO General Wholesale Price Index, the Society of Chartered Surveyors' Building Costs/Tender Price Index, the Bruce Shaw Construction Cost/Tender Price Index and the PKS Tender Price Index). A new, half-yearly tendering monitoring system will be introduced from 2003, specifically to record movements within public sector tender prices.

²⁷Paterson, Kempster and Shortall, *Review of the Irish Construction Industry 2001 (2002)*.

As a result of these factors, the overall rate of construction price inflation has started to slow down, having decreased from 12 per cent between 1998-2000 to 9 per cent in 2001 and to almost 5 per cent in 2002. This moderation reflects a slowdown in the rate of increase in labour costs and in building materials prices, and also a more competitive tender market, particularly in the private non-residential sector (where tender price inflation is estimated at around 2 per cent).

In coming years, the cost of construction will be increasingly affected by legislation concerning new planning (particularly on the housing side), environmental policy changes, building regulations (for example ventilation and insulation), and health and safety legislation. During the course of our research, it was alleged that the complexity of the planning system (and particularly the appeals process) adds to the cost of projects. Additionally, it was believed that standards in the sector are getting higher. However, although this is adding to initial costs, most companies recognise that it is more beneficial to communities and the environment in the long run.

The challenge facing the industry now will be maintaining construction employment at current levels and ensuring that industry resources are fully utilised. It is envisaged that the industry can overcome this period of downward readjustment through effective management, realistic wage expectations and a clear government vision. Under these circumstances, public programmes are expected to be delivered on time and at competitive prices.



V ALL-ISLAND ISSUES

Although the construction industry on the island is currently split into two very distinct markets, there are a number of issues that, going forward, have a commonality on an all-island basis. In this chapter we examine these issues under the broad banners of innovation, funding construction activity, and cross-border trade, which set the context for aspects such as partnering or collaboration and project management transfers.

Innovation

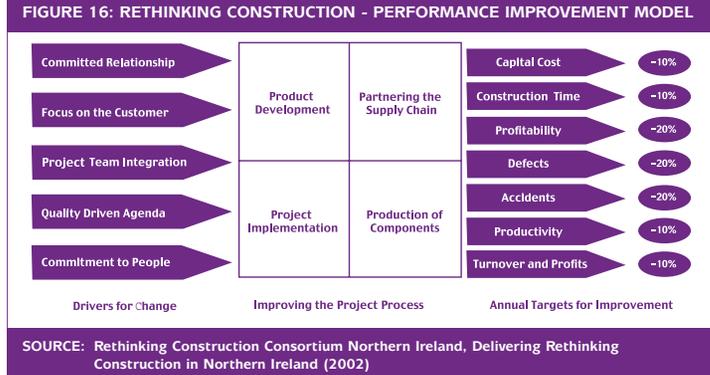
In recent years the industry has placed a greater emphasis on innovation, both in construction techniques and in the management of contracts. The development of highly trained and motivated staff (for example, through the Investor In People scheme) is also evolving rapidly. The uptake of Information Technology is on the increase, and e-commerce enables better collaboration between clients and contractors. For example, the CEF assists developments in this area through its dedicated units the Electronic Tendering Development Group and the Electronic Trading Development Group.

The emphasis is now on bringing innovation to the construction materials and processes employed. It is widely recognised that, to date, companies have been successful in adopting new materials and building techniques from the UK and other markets, but significantly slower in creating their own. The industry authorities confirm that innovation very much consists of trying to adapt things that have worked elsewhere; the industry does not invest heavily in research and development and it tends not to participate in EU funded programmes, mainly because the predominantly low-margin business does not lend itself to having the resources to invest in any long-term issues.

Innovation in Northern Ireland

Innovation and best practice in Northern Ireland have received a new impetus following the publication of the Egan report, which identifies five key drivers of change and proposes a new model of performance improvement, as shown in Figure 16.²⁸

²⁸ DTI, *The Construction Task Force - Rethinking Construction* (1998).



The report's recommendations also led to the setting-up of the Rethinking Construction movement, the banner under which the construction industry, its clients and the government are working together to improve UK construction performance.²⁹ Its activities and partners aim to showcase innovations in both products and performance through Demonstration Projects, and highlight best practice available within the industry. Its activities are delivered through a number of groups and partners:

- The Movement for Innovation;³⁰
- The Housing Forum;
- The Local Government Task Force;
- The Respect for People Steering Group; and
- The Construction Best Practice Programme.

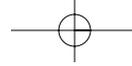
The organisation has a network of branches, and locally it is represented by the Rethinking Construction Centre Northern Ireland, located within the University of Ulster at Jordanstown.³¹ A number of demonstration projects have been initiated in the North under the Rethinking Construction principles, and examples include:

- Drumglass High School - roles were reversed in a successful Private Finance Initiative (PFI) school, where designers took the lead in the supply chain;
- Aquarius Mourne Water project - showcases the Water Service's adoption of integrated team working for the North's infrastructure;
- Royal Victoria Hospital development - reflects the procurement methodology adopted by the Northern Ireland NHS Estates, centred on performance related partnering. This project involved a fundamental restructuring of how major capital works are procured, designed constructed and maintained; and
- A7 Crossgar improvement - in this partnering study the Roads Service tested and validated partnering processes and procedures, through development of a cooperative team culture and team integration, to deliver a major road scheme.

²⁹ www.rethinkingconstruction.org

³⁰ www.m4i.org.uk

³¹ www.eng.ulster.ac.uk/rccni



In an attempt to reinforce and refresh the principles initiated by the Rethinking Construction movement, the Strategic Forum for Construction chaired by Sir John Egan published a new report in September 2002 - *Accelerating Change*. It sets new, ambitious targets for the UK construction sector, which are intended to produce a more dynamic, sustainable and customer-focused industry (as detailed in Figure 16).

Construction companies are also encouraged to benchmark their performance against industry standards and to exchange best practice information through a network of Construction Best Practice Clubs, the club in the North being run by the local branch of the Chartered Institute of Building.

Particular changes are emerging in the public procurement process and construction companies need to adapt and respond to these. Various suppliers to the sector have advocated that the rigidity of open tender processes and price-centred evaluations are time-consuming and expensive and restrict the potential for smaller companies to access this sector. There are now initiatives to address this issue, as public sector bodies attempt to promote a partnership-based approach to contracts within the limits permitted by EU fair competition legislation. In return, they expect a greater commitment to quality and service from contractors. Constructionline, the new single public sector pre-qualification database, represents such an example.³²

Constructionline is owned by the Department of Trade and Industry (DTI) and is a contributor to the Rethinking Construction initiative. It is the UK's largest register of pre-qualified construction contractors and consultants, with over 11,500 firms covering the full spectrum of activities from architecture to demolition and ranging in size from small specialists to the largest main contractors.

Constructionline's 1,500-plus clients range from large central government departments to local authorities, universities, further education colleges and NHS Trusts. They have direct access to the database and Constructionline helps them to achieve best value objectives. The aim is to raise standards within the industry, as strict pre-qualification criteria agreed with DTI must be met.

Innovation in Ireland

As a consequence of some of the problems experienced by the construction industry in the South (such as overstretched resources, inflationary pressures and inconsistent labour supply), architects are increasingly considering alternative building methods so that construction programmes can be completed in time and within budget. Examples of product development include:

- Off-site prefabrication, e.g. the Gresham Hotel (which added prefabricated bedroom modules) and the Midlands Prison;
- Rainscreen-type glazed partitions;
- Pre-cast concrete panels;
- High quality architectural cladding; and
- Acrylic mortar that is placed over a lightweight timber outer sheet (a relatively new product originating in Germany).

³² www.constructionline.co.uk

The concrete sector in particular has been hit as building contractors have been affected by a shortage of good brick and block layers (and the consequent rise in costs), coupled with an increase in the number of wet days during winter months. This has led to a gradual reduction in the amount of brick and block-work in major commercial projects and a move towards prefabrication off-site. Industry sources estimate that the brick and block-work element in commercial buildings fell by a massive 43 per cent during 2000.

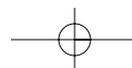
The National Standards Authority of Ireland (NSAI)/Irish Agreement Board (IAB) is the national body responsible for assessing new products/systems by way of Agreement Certificates. While its introduction has stimulated and coordinated certification in Ireland, processing delays still need to be addressed. There has been a huge increase in the number of applications to the NSAI over the past four years.

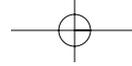
To promote best practice, the FCI and the DoELG sponsor the Construction Information Technology Alliance website launched in May 2002.³³ This contains links to relevant domestic websites and innovation-related international websites in the UK, USA, Canada and Australia. Traditionally the housing sector has been slower in adopting innovation, and a particular emphasis has been placed here, with the FCI setting a target to increase efficiency by 15 per cent. A study of innovation in house-building in the Netherlands and UK has been carried out, and pilot demonstration housing projects promote the use of proven building innovations certified by the IAB as suitable for use in Irish building and climatic conditions.

Timber-framed structures are becoming more popular, presenting some advantages over concrete. The usage of timber-frame housing is likely to increase due to faster completions, heat savings, fewer mistakes, reduced wastage and less labour; however, a programme to educate architects and estate agents to their benefits is needed. There may also be potential to expand timber-frame construction into the healthcare and education sectors.

Research on alternatives to brick and block was undertaken in the main contracting sector, with spin-offs in the house-building sector. However, most construction companies operate on very tight margins which do not allow for investment in research and development, and that is why trade bodies advocate the need for a government-funded innovation centre which would stimulate innovation and enable research and testing of new products and concepts.

³³ www.cita.ie





All-island perspective on innovation

At present, innovation in the island is based on what is working in other countries where research and development has been carried out, learning from that experience and applying the techniques and products locally.

In order to improve innovation on the island it is proposed that a **construction innovation centre is established**. The industry is a highly competitive, high-volume/low-margin business, which does not have excess resources to invest in long-term strategic issues. The current lack of facilities for research and testing have inhibited the development of innovation.

The centre would be driven by a combination of clients, the professions, and industry; academic centres of excellence should also be partners. This will enable a range of stakeholders to learn through the experiences of the centre.

Such a centre would carry out research and development of both construction materials and design technology, complementing work carried out by other bodies (for example, the FCI study of innovation in housebuilding). However, it is important that this is **applied** research and development, covering a range of factors:

- Establishing the sector's needs, requirements and problems;
- Investigating how other countries have resolved similar situations;
- Adapting the findings to the local situation and implementing the solutions; and
- Monitoring the systems and processes to bring about continuous improvement.

Although Constructionline is a relatively recent introduction to the North, the potential for extending the initiative to an all-island basis exists. This would help facilitate cross-border trade by providing clients with a wider range of contractors and other firms and present registered firms, with additional market opportunities in the public sector.

Funding construction activity

The importance of PPPs in the delivery of public projects has been recognised in both the North and the South, and such arrangements have already been deployed in a significant number of projects. Their role as sources of finance and expertise to public sector programmes is expected to increase in future, particularly as the contribution of EU grants towards the NDP in the South is decreasing, and significant investment is required in upgrading the North's infrastructure.

PPP investments are vital to the North's economy, given the current context of weakness in economic and social conditions. In spite of some signs of improvement in employment levels and manufacturing output, unemployment in the North remains higher than the UK average, a large proportion of the population is dependent on benefits, and the area has a poor health record. The provision of an effective and efficient level of public services is therefore essential. At present, not only does the North have a general investment deficit, but also the shortfall is concentrated in areas that are key to economic growth and prosperity - infrastructure, health and social services, and education. The net domestic investment deficit is estimated to amount to £5.9/ 8.4 billion over this decade, with investment need significantly outstripping capital baseline funding. PPPs are regarded as a key means in addressing this investment need.

In the South, the NDP entails the delivery of construction projects worth more than £36/ 52 billion (1999 prices) between 2000 and 2006. The delivery of the NDP is vital to the elimination of the country's infrastructure deficit and hence PPPs are perceived as an innovative way of procuring the construction of public projects. A minimum target of £1.65/ 2.35 billion (1999 prices) has been set for PPP projects throughout the seven-year period. PPPs, which are also aimed to encourage participation of overseas firms in the Irish market, provide increased capacity, enhance competition, promote innovation and upgrade capabilities in the Irish construction market.

The National Development Funding Agency (NDFA) was set up in November 2002 to help maximise value for money for the Exchequer in a number of ways, including the identification of the best financing packages and the application of commercial standards in terms of evaluating financial risks and costs for each project. In addition to maximising value for money for the Exchequer, the functions of the NDFA will include:

- Providing advice to state authorities, including government departments, to assist them in evaluating financial risks and costs of infrastructure projects and of the best financing package for each project;
- Assessing optimal financing for major infrastructure projects set out in the NDP and other infrastructure priorities; and
- In some circumstances, raising finance for projects, including certain design, build, finance and operate (DBFO) PPPs, where this would be more cost-effective than private funding and, in respect of conventionally procured capital projects, where there are clear benefits offsetting any increased cost of NDFA funding over Exchequer funding.

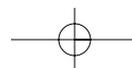
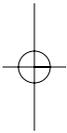
In the North and the South, PPPs represent a radical innovation in public procurement and they will be employed as a key method of delivering public investment in the next decade and beyond. The construction industries in the North and the South need to ensure that their capability is built to appropriate levels in order that they are well-positioned to meet the challenge and take advantage of the opportunities that such a system will bring.

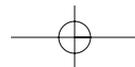
Implications for the construction sector

A typical contractual framework for a PPP project usually involves a private consortium setting up a Special Purpose Vehicle (SPV), which becomes the key contractual party for the project.³⁴ Financing is almost always on a limited-recourse basis and the sponsors or shareholders of the SPV are typically the construction and service companies that are going to build and operate the project. Thus, in addition to their contractual commitments to the project, these companies are also required to make equity commitments.

Typically the lead contractor assumes the responsibility and the cost of drafting the tender. The secondary and tertiary subcontracting companies can come from a range of service sectors, including general or specialist building contracting, design and architectural consultancies, and facility management companies.

³⁴ www.ppp.ie/ppp/brief/brief.htm



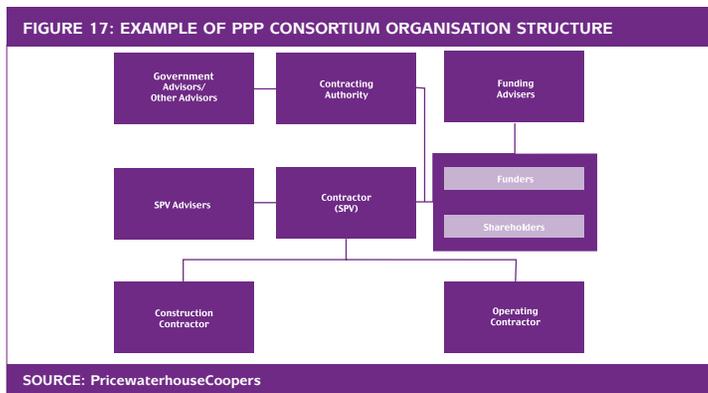


The contract which underpins a PPP project is the concession between the government and the SPV. It is the terms of this agreement which primarily determine the type of financial structure that the project can support. In particular, this agreement sets out the allocation of risk between the government and the SPV, performance requirements of the SPV and the payment mechanism.

The key to structuring a PPP project is efficient risk allocation. The public sector will try to pass on as much risk as possible while still achieving value for money. The key objective from the private consortium's perspective should be for it to assume only those risks that it can efficiently manage, price, and, most importantly, secure debt. The capital structure of the SPV is then a function of the level of market risk that the project is exposed to and the construction and operating risk of the project.

Financing sources include bank borrowings, low-cost funding from the European Investment Bank, bond finance, and institutional equity.

Figure 17 exemplifies a typical organisational structure for a private sector consortium:



In the North, experience of PPPs is developing gradually. To date the predominant form of PPP employed has been PFI (i.e. DBFO), and it has featured primarily in the health, education and ICT sectors. PPPs in other countries, including GB, have a different profile, where infrastructure projects tend to dominate, at least in initial programmes.

As of March 2002 a total of 24 projects had been procured under PPPs in the North, with a total capital value of almost £167/ 239 million. This equates to an average capital value of approximately £7/ 10 million per project.

At the end of 2002 there were a number of PPP projects in the process of procurement, again predominantly DBFO in nature, with a total capital value of some £200/ 286 million and an average capital size of £22/ 31 million. More projects are at various stages of planning and may begin procurement in the near future. They account for an additional £384/ 549 million and the average size is about £24/ 34 million.

The government has recently announced a £2.15/ 3.07 billion spend on infrastructure in the North over the next five years. £785/ 1,121 million of this has already been allocated for potential procurement through PPP schemes, with a further £809/ 1,156 million still awaiting decisions on the best procurement options.

The skills base in the Northern Ireland public sector in respect of PPP project development and procurement remains relatively low. The recently published Framework Policy for Public Private Partnerships in Northern Ireland sets the guidelines in respect of PPP projects management and implementation, but more needs to be done to raise awareness and expertise among key stakeholders, such as various government departments, local authorities, financiers, potential prime contractors, and subcontractors.³⁵

In the South, PPPs are also expected to play a major role in delivering some of the NDP's programmes, particularly in roads and other productive infrastructure. An indicative allocation of PPP funding across the main sectors is shown in Table 15:

TABLE 15: PPP FUNDING BY AREA OF EXPENDITURE IN IRELAND

AREA OF EXPENDITURE)	PPP FUNDING (M)	PPP FUNDING (€M)
Roads	1,271	€890
Public Transport	381	€267
Waste Management	571	€400
Water Services	127	€89
Total	2,350	€1,645

SOURCE: Department of Finance 2002

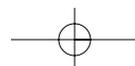
PPP is actively promoted in all the main infrastructure sectors. During 2000 the number of major approved core PPP projects in the water services, solid waste and roads sectors increased from 11 to 30, with the capital value doubling from about £666/ 952 million to £1.3/ 1.9 billion. The National Water Services Investment Programme identified upwards of 100 projects as having the potential to be advanced as PPPs.

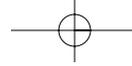
The number of approved PPP projects in the roads, water and waste infrastructure now totals 45, excluding Design and Build projects with capital costs of less than £4.2/ 6 million and short-term operational contracts. Additionally, a number of PPP projects are being advanced by local authorities.

Private finance is expected to contribute £560/ 800 million to the funding of the PCP over the period 2002-2004. A project tracker providing information on all PPP projects is available on the national PPP website.³⁶

PPP's are expected to be subject to more review by the NDFA, as the system is being refined and adjusted to the national context.

³⁵ Available to download from www.ofmdfmi.gov.uk
³⁶ www.ppp.gov.ie





In preparation for the proliferation of PPP projects, private sector companies were invited to submit proposals for training courses on the delivery of PPPs, and the DoELG has appointed specialist consultants to advise local authorities on financial and legal matters related to the management of PPP projects.

The DoELG also encourages the formation of joint ventures between Irish firms and overseas firms, as well as other Irish firms, whether in the context of PPP projects or otherwise, to ensure that suitably scaled teams are available to undertake large projects.

All-island perspective on funding construction activity

Although the importance of the PPP concept in the delivery of public sector programmes in both economies has been established, it is essential that the capability and readiness of local companies to sign up to and manage such projects is secured.

It should not be ignored that PPPs have enjoyed a mixed reception in the North and South and have been subject to considerable criticism. Some early PPP projects on the island have experienced similar problems to those in other countries, with protracted procurement timescales, difficulties in resourcing project teams, and relatively high transaction costs.

There is also a belief in the market that some PPP projects have failed because the partnership between the companies involved did not function properly.

Interest in PPP schemes (particularly among SMEs) is adversely affected by a number of factors including:

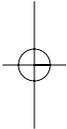
- Widely circulated examples of some unsuccessful projects;
- Perception of the price competitiveness and rigidity involved; and
- Time-consuming and costly bidding process.

During the course of our research, it became evident that contractors in the North believed that submissions towards PPP tenders were time consuming with only a 20 per cent chance of success, and considered that PFI projects were risky. A significant number of companies in the North and South who have repeatedly submitted bids for PPP projects without any success are now reluctant to participate in the tendering process, focusing on other business opportunities or only taking part as a subcontractor and leaving the bidding process entirely to a prime contractor.

The industry bodies have acknowledged that it is difficult for SMEs to tender for PPP projects and recognise that there is scope for matching large and small companies which can work in partnership on a project basis. They also believe that the government needs to regulate this area.

However, as well as delivering value-for-money outcomes, there has been evidence of valuable benefits arising from completed PPP projects in both the North and the South. These include faster construction (and thus early delivery of new public service infrastructure) and incentives for innovation in service delivery.

The industry calls for in-depth consultations between regulatory bodies, public sector customers and construction companies, so that the requirements and capabilities of all parties are considered at the outset of formulating tender documents. Further studies will be required to thoroughly assess the needs of local construction companies (and the changes that they must undergo) in order to fully capitalise on the opportunities offered by PPP projects.



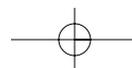
A common belief that emerged during our research was that PPPs seemed to be beneficial for the clients, financiers and consultants, but that the UK experience on the contractors' side was posing a question as to what value PPPs will bring to contractors here. There was also a general perception that the British government was having to look at how they could stop the slide in contractors walking away from PPP markets, and that although PPPs were recognised as a useful mechanism for bringing private sector expertise and finance into delivering public projects, the way they had been implemented so far seemed to have been driven more by the needs of the client than the needs of the construction industry.

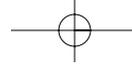
Consequently, the pool of bidders for PPP projects is affected by the reluctance amongst smaller companies to participate in tendering processes, as well as the relatively small number of companies that have the critical mass and expertise to act as prime or lead contractors. Once these larger companies become involved in one or two projects, they are not able to respond to subsequent tenders. This may delay the implementation of high priority developments and/or open the door to direct competition from overseas contractors.

However, PPP projects, through their scale and expertise requirements, have the potential to bring about North/South cooperation (particularly given the current situation, as detailed in the following section), bridging possible gaps in capacity and, more importantly, sectoral expertise. Bidding in certain sectors requires specialised expertise, and the small size of the market in the North does not allow opportunities to specialise; therefore, suitable partners are sought from GB and Ireland on a project-by-project basis.

A number of initiatives could be undertaken on a cross-border basis, to assist the local construction companies in developing a more proactive approach to PPP:

- There is a need to change the mindset of most local construction companies with regards to PPP. Seminars, roadshows and other similar programmes could be undertaken at industry level to raise awareness and understanding of the PPP process among local companies, across the sectors and company sizes, so that they become more familiar and comfortable with the activities, benefits and risk profile associated with PPP projects.
- There should be cooperation between trade bodies (e.g. CIF and CEF) and government departments to promote the take-up of PPP both to local companies (many of whom would act in a subcontractor role) and also internationally, to increase the number of consortia bidding for PPP projects. Attracting international players would have the dual advantage of increasing the number of bidding consortia (and therefore the number of sub-contractor roles available) and enabling the transfer of expertise to the local companies.
- Larger companies could aim to take the lead in terms of developing consortia to bid for PPP projects. However, only a very limited proportion of companies, possibly more from the South, may currently be in a position to manage such a role. In the interim they should be encouraged to forge links with complementary partners possessing a track record of PPP on a regional, island-wide and international basis, in order to gain experience and pass the pre-qualification stage.
- Since smaller companies are more likely to take on the role of sub-contractors, they would therefore benefit from assistance to develop links with local or international companies that are likely to bid for PPP projects.





Cross-border trade

The North and South share a similar construction environment, with a similar climate, similar regulations, similar work practices and similar building styles. Both the structure and content of the national building regulations in Ireland, Northern Ireland and GB are broadly comparable. This facilitates cross-border cooperation and trade between these regions both in terms of construction materials and contracting opportunities.

Under the umbrella of the North/South Ministerial Council (NSMC), some cooperation between the UK and Irish construction industries has been initiated, albeit on an informal basis, primarily concerning the area of building standards and controls.

National Building Regulators and representatives of local Building Control Officers from the UK and Ireland have been meeting informally once a year. The aim of these meetings is to informally exchange information and views on developments affecting building standards and enforcement at local, national and EU level.

There is also close and ongoing liaison between the Ireland and UK Delegations to the EU Standing Committee on Construction, which advises the EU Commission on the harmonisation of construction product standards under the Construction Product Directive.

It is hoped that any such harmonisation will aid trade growth in construction products in the North and South. This is also one area where cross-border trade is flourishing, whether on a pure selling basis, in-market presence or through company acquisitions. Statistics are not currently maintained; however, in 1996 the level of cross-border trade in construction materials was estimated as:³⁷

- North to South: £71/ 102 million (9 per cent of all construction product imports); and
- South to North: £89/ 127 million (14 per cent of all construction product exports).

In the South, locally manufactured materials continue to be supplemented with a significant amount of imports (estimated to be valued at over £1.4/ 2.5 billion in 2000), as Irish suppliers successfully manage their supply chain to meet the needs of their clients. A recent survey commissioned by the Belfast office of Enterprise Ireland revealed that cross-border trade in building materials has been growing steadily over the past decade (rising by almost 10 per cent per annum from 1993 to 2000); the survey also indicated that the figure is expected to rise significantly over the next five years.

PricewaterhouseCoopers has a significant number of audit clients operating in the construction sector. While working with these firms, they reported that financial and administrative differences, such as tax regimes and currency, can act as barriers to cross-border activity, particularly for the more unsophisticated SMEs. These companies will frequently be wary of tax and other potential pitfalls when working in another jurisdiction, but will frequently adopt a position based more on their 'gut feeling' as opposed to sound advice.

Smaller businesses also tend to have a limited office resource available. Different currencies, tax, VAT, pay and filing requirements all are inhibiting factors for organisations with limited resources. Exchange rate management is another dimension of risk when contracting in a different territory, a particular barrier for small companies.

³⁷DoELG and Statistics Ireland, *International Trade in Construction Related Materials 1993-1996 (2000)*.

Constraints exist on the cross-border mobility of labour, some because of legislative differences and some due to incorrect perceptions among companies. For example, only a resident business of a contracting state can obtain a work permit to use non-EU labour in that state; movement of that labour across a border is not allowed.

Perceived constraints are generally a result of confusion over the tax rules applicable for cross-border workers, with mobility frustrated by different tax compliance rules for the UK and Ireland. These differences create additional administrative burdens on contractors and subcontractors alike. Although these issues are not unique to companies in the construction industry, they are frequently cited by our clients as impediments to working on a cross-border basis.

The Ireland market

The market in Ireland is attractive to Northern Ireland contractors for a number of reasons, particularly scale (26 counties as opposed to 6 in the home market), together with its proximity to the S&E Region (such that Belfast to Dublin is a shorter journey than Dublin to Limerick, Galway or Cork). Additionally, planned public expenditure is much higher in the South, particularly against the backdrop of the NDP.

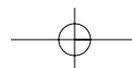
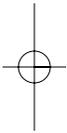
In the past there would have been little North/South activity, but the demand for building in and around Dublin has opened trade between the two jurisdictions.

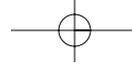
Now that the construction market in the South has started to cool and the level of work available has noticeably reduced, the success of contractors from the North in winning work at the expense of local contractors is starting to be felt more sharply. This is especially true in the BMW Region, where small- to medium-sized contractors in particular are encouraging their local CIF representatives to raise their situation at a ministerial level.

There has, until recently, been a recognised shortfall in capacity on the supply side in the South. It has been relatively simple for contractors from the North to partially meet this need, utilising their own employees and subcontractors with which they have an existing relationship.

This imbalance between supply and demand has created opportunities for higher-margin work in the South. As contractors from the North have found it increasingly difficult to source profitable work in their home market, they have been forced to look at additional markets such as GB and Ireland to maintain an element of growth.

On a more tactical level, many contractors report that the South is a challenging market to operate in. Despite the similarities in areas such as language and environment, there are distinct differences in culture and business practice. Difficulties in on-time payments remain (although this is not as severe as it once was), relationships with clients and designers tend to be much more adversarial, and the industry is considerably more unionised than in the North. Although the work tends to be of higher margin, our consultations with Northern contractors who have worked in the South have revealed that the additional costs incurred do mean that it is 'hard to make money'.





There are a number of issues that Northern Ireland contractors should be aware of prior to commencing work in Ireland. In the absence of appropriate documentation, payments to subcontractors working in Ireland must be subject to a 35 per cent deduction on materials, labour, and VAT elements of the payment, as opposed to a maximum of 18 per cent on the labour element only, had the work been done in the North.

Many subcontractors refuse to obtain the necessary exemption certificates, but still demand the same net take-home earnings. This represents a significant rise in rates, even before additional compensation is provided, for example for working away from home. In addition to transport and accommodation costs, this substantially increases the cost base of the Northern Ireland contractor and may make them less competitive.

Recent conditions of under-capacity in Ireland may have made it possible for the Northern Ireland contractor to absorb these higher subcontractor costs. In the medium to long term, as indigenous capacity becomes more available, margins will become tighter and this tax differential may prevent Northern Ireland businesses from competing.

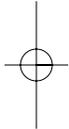
This situation is frequently misunderstood, particularly by contractors in Ireland who incorrectly assume that the differences in tax for unregistered subcontractors provide Northern Ireland contractors with a competitive advantage. Irrespective of who engages the labour for work on sites in the South, the 35 per cent must apply, not the 18 per cent. Northern Ireland labour working in Ireland cannot receive their payments under UK subcontractor tax deductions and rates.

However, in practice, many Northern Ireland principal contractors do not comply and continue to either ignore the deduction scheme completely, or pay their UK subcontractors as if the work was carried out in the UK and continue to operate the UK subcontractor scheme for such payments. Reasons put forward for non-compliance include shortage of construction labour and the need to have an adequate source of labour.

Many small subcontractors do not desire the burden of having to understand another set of rules imposed on them and will refuse to carry on work in Ireland if they have to abide by such rules; consequently, many main contractors have had to increase their rates in order to counteract the additional deduction at source.

Although Northern Ireland contractors have secured a considerable amount of work in Ireland in recent years, the approach has tended to be on a project-specific, ad-hoc basis. The most common basis for establishing a foothold in the market has been to initially undertake relatively small jobs, and deliver high quality work on time. This has allowed the company to establish a good reputation and build relationships, frequently generating further business with many clients through direct requests, without the need to participate in tender processes. Suppliers of building materials interviewed during this research advised that the approach to selling into Ireland is no different to that of selling into GB; the key is to get to know people, build relationships, and keep in contact.

A number of companies have successfully penetrated the market by focusing on specialist or niche areas, where local capability may not be so well developed. Their approach to market entry has been to establish direct contact and initial business with customers in Ireland, again starting with a number of smaller contracts and then expanding the customer base as their reputation and knowledge of the market increases, or by working in partnership with (or through the acquisition of) similar companies to gain access to an established client base.



The Northern Ireland market

The reasons that make the Southern market attractive to Northern contractors also act to discourage interest in the opposite direction. The small size of the market (both in terms of the total value of work and the scale of individual jobs) and the lower levels of public expenditure have led larger Southern based contractors to ignore the North as an export market, in favour of GB or beyond.

During the 1970s a number of contractors from the South operated in the Northern market, but this activity ceased with the sudden increase in construction in their domestic market. Currently there is not enough lucrative work available in the Northern market to encourage Southern contractors to enter it. The research indicates that the scale of most jobs in the North discourages interest from Southern contractors who would prefer £20-30/ 29-43 million rather than the £4-5/ 5.7-7.0 million contracts that tend to be the 'bread-and-butter' work in the North.

Some of the largest Southern contractors have stated that, to be interested in sourcing work in the Northern market, jobs with a value in the region of £140/ 200 million would be required. Such companies would have the management expertise to bring to a project of such magnitude, which may not otherwise exist in the indigenous Northern Ireland industry, thus creating opportunities for partnering.

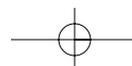
Over-capacity in the Northern Ireland market has meant that indigenous SMEs are very competitive and this has made it very difficult for Southern businesses to compete. Wages are higher in Ireland, driven upwards by the construction boom, and additionally the CIF has had to agree increases for craft workers to encourage working to deadlines.

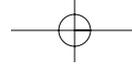
This combination of competitive local contractors with sufficient capacity to absorb new work has meant that work in the North tends to be of lower margin. The massive investment of the NDP, together with under-capacity, has led Southern contractors to focus on the higher-margin work available in their domestic market. Tax rate differentials for companies are increasing, eroding contract profitability further; profits from UK contracts may be taxed at 30 per cent (standard), as opposed to 12.5 per cent (from January 2003) for profits arising on contracts in Ireland.

In addition to these market forces, the 'chill factor' still exists and Southern contractors (and their labour forces) continue to be reluctant to come North. The success of the peace process will largely determine if the working environment becomes more favourable for Southern companies. Southern businesses still perceive that they would experience more risk and encounter more difficulties operating in the Northern Ireland market as opposed to the GB market.

The cost of Public and Employer Liability Insurance in Ireland has soared over the last two years, further eroding the ability of contractors to compete. Ireland has a weak track record for construction site accidents, with a fatality rate about twice that of the UK. A recent survey by the CIF among its members indicated that liability insurance has risen by over 100 per cent, compared with an estimated equivalent rise in the North of approximately 50 per cent.

Rather than tendering for work directly in the North, the more common approach for Southern companies interested in penetrating the Northern Ireland construction sector has been through acquisition; for example, Farrans, ReadyUse Concrete, Breton Precast, Scott Roof Tiles, Ballymena Construction and RJ Maxwells are now all owned by CRH (Ireland) plc.





Despite the current conditions deterring interest in the Northern market, many Southern contractors have stated that they remain open to working in the market should the situation change. This includes partnering with Northern companies to exploit business opportunities, a reflection of the positive experiences they have had in working with European firms.

All-island perspective on cross-border trade

In the current Northern Ireland market, few opportunities for cross-border cooperation have arisen. However, future developments, such as Victoria Square (£250/ 357 million) and the extension to Castle Court (£200/ 286 million), along with potential large infrastructure projects through the SIB, would be of a sufficient scale to facilitate a partnership approach. Opportunities for trade and cooperation will remain in the Southern market, where companies can bring specific expertise or skills in a certain area to meet the full requirements of a particular project. Partnering has become commonplace in the Southern market for a significant proportion of the larger jobs; the scale of certain infrastructure projects in particular has been such that the use of external contractors and their skills has become a prerequisite in successful tendering. This approach is less common in the Northern Ireland market, where the competitive environment has encouraged a 'go it alone' attitude in the sector. Contractors will only adopt partnering where the scale of a project is too large for them to take on by themselves.

The most conspicuous example of successful partnering in the Northern Ireland market is the construction of the £95/ 136 million Odyssey Arena by a consortium of two Northern contractors - Farrans (Construction) Ltd and Gilbert-Ash Ltd - under the partnership FGA (Farrans Gilbert-Ash) which was formed to compete with external companies.

The pooling of resources between both companies provided a much wider base of resources and experience; the scale of the Odyssey project dictated that no single contractor in the North could have realistically placed a successful bid (at the time of construction, the Odyssey Arena was the third-largest construction project underway in Europe).

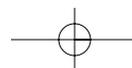
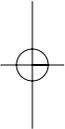
To date, there has been limited evidence of partnering or joint ventures on a cross-border basis; the most high-profile example of cooperation has been the joint venture partnership Graham Uniform, between John Graham (Dromore) Ltd and Uniform Construction (Lucan) Ltd, on the Dundalk-Dunleer motorway, at a total cost of £89/ 127 million.

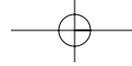
At industry level, the majority of the support organisations have an insular focus, with little evidence of a cross-border interest. In the North, the CEF did previously operate an Export Club for members interested in developing business in the South; funding for this operation ceased, however, and was not renewed. No similar service has been provided by the CIF, due mainly to the lack of interest demonstrated by Southern contractors in sourcing work in the North.

Cooperation between the CEF and CIF which has led to the mutual recognition of health and safety training has been more successful, with the joint launch of the 'Safe T Cert' scheme in October 2000. There is potential to develop this mutual recognition further into the area of construction qualifications, although this may have wider implications for the training and education sector.

In summary, despite sharing a number of similarities, the different market conditions in the North and South have created an imbalance in the level of cross-border trade in the construction sector:

- The sheer size of the market in the South, along with higher-margin work coupled with an under-capacity in supply, has encouraged Northern contractors to seek work over the border.
- Conversely, the smaller and more competitive Northern market has not attracted Southern contractors. The negative perception of "the Troubles" persists and further discourages Southern contractors from bringing labour North. Until construction projects of a certain magnitude arise in the Northern Ireland market, or the sector in Ireland experiences further unexpected decline, this situation is likely to persist.
- Differences in tax, VAT and other legislation act as inhibitors to cross-border trade, particularly for smaller organisations.
- Successful tactics for establishing business in another market have been either to start small and develop a reputation, or to acquire an existing operation;
- The concept of partnering has become an accepted approach in the South but is still relatively under-utilised in the North. Partnering is only a realistic solution when the participants are offering additional capability, skills or experience, rather than simply additional capacity.
- Industry support organisations tend to have an insular focus, with little support available to help develop external markets. This reflects the short-term needs of their clients. However, there has been some cross-border cooperation leading to the mutual recognition of health and safety training, under the 'Safe T Cert' scheme operated by the CIF and CEF. The availability of larger-scale projects would help drive increased cooperation across the sector.





VI CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The fundamental problems in the two economies of underdeveloped infrastructure and underdeveloped services for a growing population still remain.

Should the level of required infrastructure development take place in the North, this would in turn provide export opportunities for Southern firms, particularly where they have gained PPP project experience in their home markets.

In Ireland alone the industry is now worth £14/ 20 billion, more than double its corresponding value as recently as 1997. The challenge is to at least maintain the real value of output around this level to 2004, and to ensure that the industry is well placed to benefit from future economic recovery and any acceleration in private sector investment. Effective management will be required to ensure that the sector stays on track and emerges successfully from this period of uncertainty and readjustment.

With a number of major construction sectors such as commercial and industrial development already cooling off, industry representatives warn that it is vital that public sector development and infrastructure investment is sustained to maintain the momentum of the industry, which in turn will generate economic growth.

The industry in both the North and the South is highly fragmented, divided into three distinct tiers; this has implications on the strategic approach to business adopted by companies and also on the support mechanisms that could be put in place by relevant industry bodies:

- Small, family owned and managed businesses - typically will operate on a "work to live" basis, acting only as a subcontractor to a main contractor and reliant on these large businesses for sources of work;
- Medium-sized businesses - tend to work on projects with a value in the region of £10/ 14 million; and
- Large businesses - a relatively small number of companies capable of undertaking projects with a value in excess of £25/ 36 million.

The industry is going through a period of unprecedented change on the client and supply side, primarily through many types of government initiatives to boost the effectiveness and efficiency of the industry as a whole. Key issues for improving construction performance are:

- Partnering, integrated construction teams and supply chains;
- Procurement (non-traditional) and e-tendering;
- Project management and project information systems;
- Quality- and client-focus and management; and
- Training and people development and the introduction of overall best practice.

Traditionally construction companies have financed their operations through typical business means - mainly shareholders funds and bank loans (again symptomatic of the 'go it alone' approach). The sector has generally been unattractive to Venture Capital (VC), increasing the dependency on banks for raising finance, and rendering large construction projects out of reach for many SMEs in their current form.

A recent survey by PricewaterhouseCoopers of almost 300 companies in the North (of which approximately 10 per cent were in the construction sector) showed that over 60 per cent of companies used overdrafts and leasing/hire purchase as means of financing. Other frequently employed means included term loans, government grants and family equity. VC was the least widely-used option, with only 3 per cent of companies currently employing this option.

In recent years, banks have recognised the gains to be made by financing construction activity and have been keen to invest. However, with the slowdown in activity and weakened economic outlook, banks have become significantly more strict and now require that contractors have an end customer for the project before they will finance the construction.

The importance of the PPP concept in the delivery of public sector programmes in both economies has been established and it is essential that the capability and readiness of local companies to sign up to and manage such projects is secured. However, a number of factors, including the upfront costs involved and some negative misconceptions, continue to deter contractors from tendering.

With construction now accounting for some 16 per cent of GDP in Ireland and 6 per cent in the North, and responsible for the livelihoods of almost 300,000 people on the island, any cut in investment will diminish the ability to deliver the modern infrastructure, so necessary to develop inward investment and indigenous growth in Ireland, North and South.

Although there is a potential levelling-off of demand in the short term, this is against a much higher level of activity than historically has been the case; overall, prospects in the medium to long term are more positive and there are significant opportunities for the construction sector in Ireland, North and South.

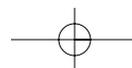
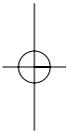
Recommendations

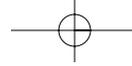
Based on the findings of this review, we propose a number of recommendations to help the industry realise its potential under the current uncertain economic conditions.

Preparation of the review revealed that virtually no statistics are maintained on a cross-border basis in the construction sector. Furthermore, the statistics that are maintained in the North and the South of the island tend not to be coherent either in their definition or period covered. We recommend that systems are aligned to enable the provision of cross-border information and that statistics are harmonised to allow for meaningful comparisons to be made.

Promoting cross-border trade against the current adverse economic backdrop is a significant challenge. We have divided our recommendations into two groups:

- Private sector - most relevant for implementation at individual company level, although certain initiatives may need to be led by industry bodies; and
- Public sector - to be executed by organisations such as the relevant government departments and agencies (such as InterTradeIreland, Invest Northern Ireland and Enterprise Ireland); and the trade bodies, Construction Industry Federation and Construction Employers Federation.





Recommendations for the private sector

At all levels the industry is characterised by little long-term strategic thinking. Dealing with operational matters on ongoing projects has a higher priority than preparation for long-term changes in the market. Construction enterprises should be encouraged to adopt a **proactive approach to business planning**, taking into account aspects such as improving customer satisfaction and retention, identifying and targeting emerging market opportunities, and differentiating their product or service offering through innovation or strategic partnerships.

The industry also needs to **improve its internal business efficiencies**, particularly in the areas of project management, supply chain management and management information systems.

These measures need also to be underpinned by improved training programmes and a commitment to long-term development. **Mutual recognition** of qualifications and training programmes would help organisations operate more fully on an all-island basis.

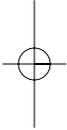
Currently the Northern Ireland Construction Best Practice Club (operated by the local branch of the Chartered Institute of Building) encourages local construction companies to benchmark their performance against industry standards and to exchange best practice information. Expansion of this to an all-island basis would enable a wider exchange of information and allow benchmarking against a larger pool of equivalent businesses.

Simpler site executions are perceived to have a positive impact on cost, safety record and quality assessment. However, approval and acceptance of these methods are still needed. They are employed on a small scale at present and investment in the research and development of a new knowledge base is required, to ensure that only successful products and systems are retained and promoted in the industry.

With the sector as a whole contracting in size in the short term, there may be a **need for rationalisation**. However, benefits do not tend to be realised just by company takeovers. For the medium- and large-sized businesses there is scope for increased partnering and joint venture activity. As the sector continues to cool, the point at which the capacity of the industry as a whole exceeds the demand for work will rapidly approach.

The prevailing tendency of the sector is to 'go it alone', with a reluctance towards partnering; this is likely to be exacerbated as the competitive environment becomes even more aggressive. Education will be required, both on the benefits of change and the possible cost of failing to do so. An increasing emphasis on supply chain management and clustering is necessary.

Increased partnering will enable indigenous contractors to pool resources, skill and knowledge to be better positioned to compete with external companies operating in the market. However, it must be realised that this is only a realistic option where the partners bring added value to the proposition, rather than simply extra capacity. For example, some of the larger contractors in Ireland have experience of projects with values in the region of £125/ 179 million and would have the management expertise to bring to a job of such magnitude in the North; this expertise may not otherwise exist in the indigenous Northern industry, creating opportunities for partnering.



Recommendations for the public sector

Government expenditure plans in both the North and the South remain relatively uncertain. This uncertainty leads to a lack of confidence in investment; better **communication of government policy and committed spending plans** for the medium term would allow businesses to commit to investment for the future and rationalise where necessary.

PPP is unquestionably a valuable mechanism for bringing private sector expertise and finance into the delivery of public sector projects; however, the implementation to date has been driven more by the needs of the client rather than respecting the needs of the industry. **The PPP process needs to be improved to reduce the cost and time involved** at the bid preparation stage; during the course of our interviews, contractors at the top end of the market have reported that some bids may cost £1.4/ 2 million just to put together. This obviously restricts all but a handful of indigenous companies from preparing and submitting a bid.

Delivery of a 'masterclass' in the approach to, and preparation of, PPP submissions would help remove some of the current misunderstandings and misinformation surrounding the PPP process. This masterclass, developed and delivered by the public sector to private sector contractors and other stakeholders, would help reduce the negative experiences encountered to date. Successful PPP bids could be used as best practice case studies.

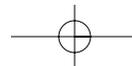
Although Constructionline is a relatively recent introduction to the North, the potential for extending the initiative to an all-island basis exists. This would help facilitate cross-border trade by providing clients with a wider range of contractors and other firms and present registered firms, with additional market opportunities in the public sector.

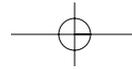
The industry does not invest heavily in research and development, primarily because contractors have focused on delivering buildings that have been designed by others. To increase the opportunities for contractors to demonstrate innovation, it will be necessary to **integrate planning into the construction proposition**.

At present, innovation on the island is based on what is working in other countries where research and development have been carried out, learning from that experience and applying the techniques and products locally.

In order to improve innovation on the island it has been proposed that a **construction innovation centre** is established. The industry in both jurisdictions is a highly competitive, high-volume/low-margin one, which does not have excess resources to invest in long-term, strategic issues. The current lack of facilities for research and testing has inhibited the development of innovation.

The scope of this proposal could be extended to establish a **cross-border centre for innovation in construction**. Such a facility would be driven by a combination of clients, the professions, and industry; academic centres of excellence should also be partners. This will enable a range of stakeholders to learn through the experiences of the centre.





Such a centre would carry out research and development of both construction materials and design technology, complementing work carried out by other bodies (for example the FCI study of innovation in house-building). However, it is important that this is applied research and development, covering a range of factors:

- Establishing the sector's needs, requirements and problems;
- Investigating how other countries have resolved similar situations;
- Adapting the findings to the local situation and implementing the solutions; and
- Monitoring the systems and processes to bring about continuous improvement.

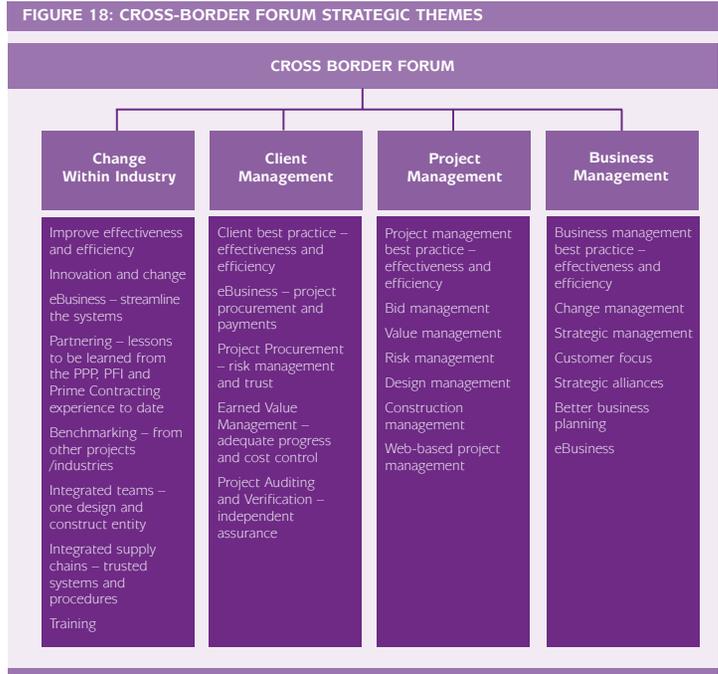
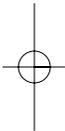
Improving quality standards (both in building techniques and construction materials) would enhance the local companies' competitive advantage in the face of increased presence of GB and foreign contractors in the market.

Joint cooperation at industry level in this area would mean that future efforts made towards the development of local quality standards and the adoption of EU standards are not duplicated and are instead carried out in a strategic and coordinated manner.

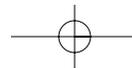
A cross-border forum, bringing together representatives from key players in the industry (large and small), government, and academic sectors would enable the establishment of relationships; facilitate the exchange of information and experience; and help further co-operation on joint industry training, skills and standards. This role is not filled by any existing industry organisation, which tend to have an insular focus. For maximum impact, the forum should have ministerial involvement, North and South.

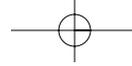
The forum would focus on a range of contemporary issues under four key strategic themes, as detailed in Figure 18. Additionally, the forum would enable networking between the various representatives through regular events (e.g. seminars, conferences, and showcase projects), and complement the work already carried out by InterTradeIreland in assisting education and removing misunderstandings in areas such as legislation and fiscal requirements (North and South), and alternatives for financing.

This forum would also help alleviate some of the concerns of Southern contractors regarding working in the North. For some SMEs in the South, experience of the Northern Ireland market and its conditions can be promoted as a 'stepping stone' into the GB market.



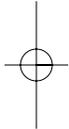
In our view, the implementation of these recommendations will help ensure that this industry maximises its potential over the next few years.





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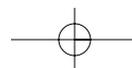
WEBSITE ADDRESSES

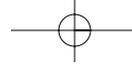
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APPENDIX 2: DISCUSSION TOPICS

Consultations with key industry and government bodies

1. GENERAL MARKET ISSUES

- Construction industry - recent, current and forecast performance by sector:
 - Building materials
 - Contracting
 - Architects
 - Civil engineering
 - Housing
 - Commercial
 - Industrial
- Key influences/factors (e.g. NDP, Regional Development Strategy)
- Policies and legislation driving the sector
- Anticipated volume of work and trends, by sector:
 - Areas that offer best development prospects
 - Areas that have the greatest exposure to threats in the medium/long term
- Key players and the competitive environment
- Requirement and availability of business skills (to meet increased challenges as volume of work decreases and competition increases)
- The supply chain and supply chain management (particularly from a cross-border perspective)
- Levels of innovation
- Current and future employment levels (including cross-border availability and movement of labour)
- Skill gaps - existing and predicted:
 - How to address this
 - Requirements for closing the gaps

2. CROSS-BORDER ISSUES

- Existing initiatives at government and industry level on cross-border trade
 - Positive outcomes
 - Best practice
 - Difficulties and barriers encountered
- Knowledge of private companies' experience in cross-border trade and/or working in partnership:
 - Positive and negative outcomes
 - Best practice
- Critical/key success factors in cross-border trade
- Opportunities for cross-border trade in short, medium and long term.
 - Mutual benefits
- Threats and barriers to cross-border trade in short, medium and long term
- Areas for improvement

3. IMPORTANCE OF PPP/PFI

- Details of existing initiatives (local, regional or cross-border)
- Future prospects for funding on this basis

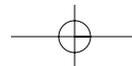
APPENDIX 3: CASE STUDIES

1. THE MARKET

- Trends by sector:
 - Sectors demonstrating growth potential
 - Sectors in decline
- Policies impacting on the market:
 - Northern Ireland, Ireland and cross-border (e.g. tax, health and safety, environmental, waste, other legislation); changes in legislation covering building specifications
 - Impact of Constructionline
- Industry capability and capacity:
 - Supply of materials, availability of skills, levels of innovation and best practice
 - Particular strengths and weaknesses
- Competitive environment:
 - Pricing
 - Insurance - cost and availability

2. CROSS-BORDER WORK

- Experience of cross-border work:
 - How did you become involved (proactive/reactive, tender, industry level initiative, etc.)?
 - Sources of information used in preparation
 - Do you have a permanent presence in other regions?
 - Experience of partnering, joint ventures, strategic alliances, etc.
 - Details of positive and negative outcomes, obstacles encountered
 - Areas for improvement in the facilitation of cross-border trade (i.e. industry or government initiatives)
 - Relationships with 'foreign' firms
 - Supply chain management (sources of labour, materials)
- Opportunities for cross-border work (new or additional) and barriers to development/penetration:
 - Type of work available
 - Tax
 - Skills
 - Legislation
 - Training
 - Finance and insurance
 - Willingness to undertake cross-border work
 - Partnering
 - Joint initiatives (training, health and safety)
 - Labour (supply/mobility)
 - Best practice and benchmarking
 - Ability to undertake cross-border work
- How does cross-border work compare with other export work (i.e. GB, EU, etc.)?
 - Differences in the competitiveness of Northern and Southern firms



• All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • North-South Trade: A Statistical Grid and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland • A Review of the Manufacturing Growth and Productivity • All-Island Mapping Study Private Sector • Developing Air Services on the Island of Ireland

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3. PPP/PFI

- Knowledge/awareness and involvement/participation in PPP/PFI projects to date:
 - o Experience of the process and initial results
 - o Advantages and disadvantages to private funding
 - o How could the process be improved?

4. COMPANY PROFILE (DETAILS TO REMAIN CONFIDENTIAL)

- **Business description:**
 - o Sectors in which the organisation is active
 - o Position in the supply chain (contractor, subcontractor, manufacturer, distributor, etc.)
 - o Type and scale of projects
 - o Primary customers (public/private)
 - o Structure/ownership
- **Commercial performance (current, historic, forecast):**
 - o Turnover (with breakdown by geographical markets)
 - o Number of employees

