# Case Study 5: Belfast's Gasworks Employment Matching Service By Jörg Plöger



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#### 1. Context

### City facts and regional political context

- Belfast is the capital of the UK province of Northern Ireland.
- Its population in 2004 was 269,000 (Metropolitan area: 645,000) (see Fig. 1).
- Between 1968 and 1994, Northern Ireland experienced violent conflict between loyalist and republican forces (known as the 'Troubles'); in 1972, the UK government imposed direct rule on Northern Ireland and suspended the provincial parliament ('Stormont').
- In 1998, the Good Friday Agreement, signed in Belfast, formally restored the Northern Ireland Government and 'demilitarised' conditions in the province.
- In 2004, Direct Rule by Westminster was re-imposed due to the failure to form a government between more extreme parties now controlling many seats.

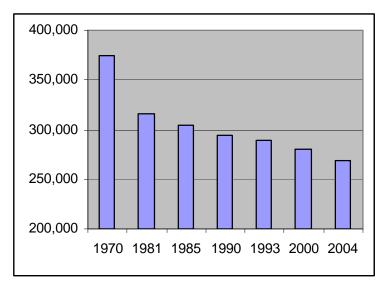


Fig. 1: Population changes in Belfast (1970-2004)

Source: NISRA (online)

## **Urban crisis**

Belfast went through significant urban decline hitting its lowest point in the mid 1980s. The urban crisis had the following three characteristics:

Deindustrialisation: Although Belfast's industrial base had experienced decline since the 1930s, the industrial crisis reached its peak in the late 1970s/early 1980s with all the traditional industrial sectors affected (e.g. shipbuilding, engineering, linen-production). Due to the accelerated process of deindustrialisation, manufacturing employment declined from 67,000 in 1973 to 18,000 in 1995. Although over 8,000 new jobs were created in services during the 1980s, about 15,000 jobs in manufacturing were lost over the same period (Gaffikin/Morrissey, 1999). As a consequence, only 8.7% of the workforce was employed in manufacturing in 2001, down from 23.4% in 1981 (NISRA, online; Gaffikin/Morrissey, 1999).

- Political crisis: Belfast's urban crisis was aggravated by the violent conflict, much of which was played out in the city's neighbourhoods. Due to the climate of insecurity, those who could afford to left the city and moved to suburban areas, making Belfast one of the most sprawling metropolitan areas in the UK. For the same reason, the divisions between the two major sectarian groups (Catholics and Protestants) caused extremely high levels of spatial segregation.
- Social problems: The result of this extreme situation was that most socio-economic indicators hit deeply
  problematic levels. Unemployment peaked by the mid 1980s (see Fig. 2). In the 1990s, 26 of the 51
  wards in Belfast were classified as deprived (Gaffikin/Morrissey, 1999).

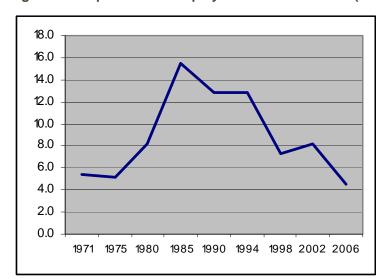


Fig. 2: Development of unemployment rates in Belfast (1971-2006)

Sources: NISRA (online); Gaffikin/Morrissey 1999; DRD 2001.

## 2. Towards recovery

The path towards urban recovery was initiated by several factors, most notably the **Peace process**. From its peak in the mid 1980s, violent conflict greatly reduced and the Peace process was formalised in the 1990s, with paramilitary ceasefires in 1994 and the Good Friday (peace) Agreement in 1998. The return to political 'normality' offered significant potential for a 'new start' in Belfast.

The first steps towards **urban renewal** began in the mid-1980s at the height of the 'Troubles'. Strategically, these were guided by the Belfast Urban Area Plan (1986). From 1988 the Westminster central government provided significant financial aid for a series of job-related projects through the Making Belfast Work programme. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The *Making Belfast Work* initiative was launched to address the economic, educational, social, health and environmental problems in the most disadvantaged areas of Belfast. Until 2006, £275m have been allocated to support over 350 projects (www.dsdni.gov.uk/making\_belfast\_work).

The peace process also offered local municipalities the opportunity to recover political status. Belfast City Council has extended its previously narrow remit and is now slowly gaining wider **local control** over service provision. Nevertheless, it must be noted that Belfast still does not share the equivalent devolved power of other British cities, even less than other European ones.

In order to create proactive debate about the potential for urban development in the future, Belfast City Council hosted an international conference ('State of the City') in 2004, bringing together renowned urban experts. During this event options for Belfast's future were presented and channelled into several key strategic documents (e.g. on urban competitiveness and the city-region concept).

## 3. Laganside – large-scale regeneration project

#### **General facts**

In line with earlier experiences elsewhere in the UK, Belfast planned a large-scale regeneration project along its riverfront. Under the Thatcher government, private-public partnerships such as Urban Development Corporations (UDC) had become an important instrument for urban renewal.

The areas alongside the river Lagan contained derelict former docks and declining industrial activity; the adjacent neighbourhoods displayed high levels of social deprivation with high unemployment, and the river itself was heavily polluted and had come to symbolise urban decline.

In 1989 the public-private Laganside Corporation was set up as a UDC with major government funding. Its objective was to bring social, physical and economic regeneration to an area of 140 hectares on both sides of the river. The corporation carried out the land assembly, river dredging and infrastructure works. Government and EU (structural fund) money was used, as a catalyst to lever in private-sector investment. By 2006, £939m had been invested (Laganside Corporation, 2006). Developments within the scheme include the Gasworks site, Lanyon Place with the Waterfront Hall (opened 1997) and the millennium Odyssey shopping and entertainment complex (opened 2000) (see front cover photo and Photo 1). The corporation itself boasts that some 14,000 jobs in Belfast have been secured (note not created) through the development (www.laganside.com).

#### Gasworks site

The Gasworks site is part of the Laganside regeneration. This formerly derelict 10ha area is now owned and managed by Belfast City Council. £150m has been invested and 2,000 jobs have been created (Belfast City Council 2005, *City Region* report). The majority of the jobs were created in the new call centre, established by Halifax, a large international bank and financial services provider. With 1,500 employees, this is the largest call centre in Belfast and an international service centre for the bank. Other large employers include the Department for Social Development (public administration) and the new SAS Radisson hotel.

Photo 1: Gasworks site, Laganside



# 4. Gasworks Employment Matching Service (GEMS)

#### Background

The main reason for the GEMS was that it became evident that the job creation in the Laganside regeneration site in general, and the Gasworks area in particular, did not seem to have significant impact on the surrounding neighbourhoods of South and East Belfast in terms of reducing persistent social problems such as long-term unemployment. In the analysis of Hemphill *et al* (2006): "When investigated at ward level, there continue to be pockets of deprivation in Belfast which have become more polarised and immune to the associated benefits of inward investment and indigenous business growth".

In 1998, the rising levels of social exclusion and detachment from the labour market in the neighbourhoods adjacent to the redevelopment area led Belfast City Council to commission a study into how existing mainstream employability initiatives could be supplemented by a partnership-led approach. Although the argument for en-

<sup>&</sup>lt;sup>2</sup> Belfast has recently become an important location for call centres. In 2003, 26 call centres operated with an estimated workforce of 6,300 (source: www.investni.com).

hancing social inclusion was very important, further important arguments derived from economic development policy which was both trying to attract inward investment, but on the other hand responding to the need to improve the local skills base (see *Leipzig case study*).

A steering group representing different levels of government and partnerships was established. In addition to Belfast City Council, it included many other bodies:

- the partnership boards of South and East Belfast<sup>3</sup>;
- the Laganside Corporation;
- the central government bodies Belfast Regeneration Office (under the Department for Social Development) and Department of Employment and Learning;
- the Belfast Local Strategy Partnership, a partnership established to implement projects funded through the EU PEACE-programme;
- representatives of the local communities; and
- 'Business in the Community', an employer's organisation supporting social welfare aims.

The group discussed different options for integrating the long-term unemployed into the labour market and as a result a local employability initiative was launched, based on a similar project in Dublin. The resulting Gasworks Employment Matching Service (GEMS) started operating as a pilot-project in 2002 with initial funding for two years.

#### Aims of GEMS

GEMS was not designed to duplicate existing public services but to compliment and add value to government interventions such as *New Deal* and *Pathways to Work*. It evolved in response to two needs:

- to provide a co-ordinated and effective network of employment support services which meets the needs
  of local unemployed people and improves their potential to gain employment; and to provide information,
  guidance, training and personal development support for those excluded from the labour market, especially the long-term unemployed; and
- to meet the needs of companies, such as Halifax in the Gasworks case, by nurturing a skills base in the local community, as GEMS was also established to promote economic development more generally.

#### Tools

GEMS offers a number of direct support services:

- provision of advice and support in career planning;
- assistance with job applications (e.g. interview preparation, job search);
- linking candidates with appropriate training, education and employment opportunities;
- developing linkages between employers, local communities and support agencies;

<sup>&</sup>lt;sup>3</sup> These local partnerships complement Belfast City Council in the areas of urban renewal and economic development and try to involve the local population in decision-making processes through participative measures.

- enhancing the capacity of the local communities to participate fully in the economy and local development and to counter social exclusion; and
- promotion of corporate social responsibility among companies.

This last point is extremely important in the context of Northern Ireland where many companies see barriers to investment in the difficult social conditions.

#### **Target areas**

The original GEMS had a very defined area<sup>4</sup> of seven deprived wards in South and East Belfast, all adjacent to the Gasworks redevelopment site (Bridge-End, Donegall Pass, Lower Newtownards Road, Lower Ormeau, Markets, Ravenhill, Short Strand).

#### Who will benefit?

The main target group is long-term unemployed people.

## Governance structure and leadership

The partners forming GEMS are from local and central government, the private sector, as well as existing related partnerships. The South Belfast Partnership Board (supported by East Belfast Partnership Board) took on a leading role in the GEMS project and effectively became the governing body responsible to the funders. Progress is monitored by an advisory group.

#### Funding: First phase (2002-2005)

From the beginning, GEMS was funded through a 'funding cocktail'. The total amount of funds available for the first period of its operation was 1.16m Euro. Fig. 3 shows all identified sources and their proportion of the total budget. Significant amounts came from the Belfast Regeneration Office and from EU funds (both structural funds and PEACE funds).<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> This area focus was significantly widened with the second funding period since 2005 (see below).

<sup>&</sup>lt;sup>5</sup> The Programme for Peace and Reconciliation (PEACE) is a special EU programme for Northern Ireland with the objective of enhancing post-conflict social cohesion in the region. The second funding period (PEACE II) equipped with £18m ran from 2000 to 2006. It has had a spatial component, because area renewal and improving community relations were seen as two closely related processes. Funding has been secured for a third period (PEACE III) from 2007 to 2013.

Fig. 3: GEMS: Sources of funding during first phase (2002-2005)

Origin of funding	Funding provided by:	Amount (in €)	Share (in %)
Local government	Belfast City Council	188,000	16
Local partnership	Laganside Corporation	233,000	20
Central government	Northern Ireland Regeneration Office	391,000	34
	Dept. for Employment and Learning	15,000	1
EU	EFRE (EU)	188,000	16
	Belfast Local Strategy Partnership (EU funded)	119,000	10
private	Halifax (bank, financial services)	30,000	3
Total		1,164,000	100

Source: Interact (2004)

## Performance indicators (First phase)

The activities of Belfast GEMS had a real impact on the levels of unemployment in the target areas of South and East Belfast. Moreover, GEMS managed to outperform significantly the original targets set for its operation (see Fig. 4). In fact, it achieved more than three times what was expected.

Fig. 4: Belfast GEMS performance against targets (year 2)

Objective	Target	Achieved
Registered clients	200	776
Clients into employment	100	327
Clients into mainstream education/specialist training	100	343
Total	400	1446

Source: Hemphill et al, 2006.

## Funding: Second phase (since 2006)

Since 2006, GEMS has experienced significant changes:

The funding situation has become more heterogeneous and less secure. Funding from different funding
institutions is generally linked to a contract covering the delivery of specific programmes running for a
period of two years on average. Figures 6 and 7 give an overview of the complex structure of funding
and delivery. One key funder of the first phase of operation, the local authority, has withdrawn most of its

- financial involvement. The largest part of the funding now comes from the Department for Employment and Learning (DEL).<sup>6</sup>
- GEMS has widened its geographical range. This is mostly due to the fact that the original target areas around the Gasworks site have already received considerable assistance. GEMS is now offering similar services to neighbourhoods in the vicinity of other planned or current regeneration projects such as 'Titanic Quarter', 'North West Foreshore' or 'Victoria Square'. There are plans to widen its scope to the whole of Northern Ireland in the near future.
- GEMS now has its own strategic plan. It has registered as a charity, and operates as a non-profit business. In 2007, GEMS employed a total staff of 13 (of whom nine are client facing; one acts as employer interface; one focuses on social enterprises; two on administration; and a chief executive). Figures 5 and 6 show the extent of the programmes and funding sources.

Figure 5 shows the wide range of activities and programmes run by GEMS.

Fig. 5: A selection of programmes run by GEMS

Employability Outreach Programme		Performance	
Funding	BLSP (PEACE II funds) (see fig. 7)		
Target areas	Communities in South and East Belfast (most of them highly deprived); including some interface neighbourhoods		
Approach	Person-centred to address identified needs in area		
Objectives	<ol> <li>to target 600 people from TSN areas of South and East Belfast who are furthest from the labour market</li> <li>to target 600 unemployed people</li> <li>employ 4 outreach employment consultants in 4 local organisations</li> <li>capacity building in participating organisations</li> <li>to ensure that 300-420 unemployed people from target communities progress to GEMS main employment training, work placements and job matching service</li> </ol>	<ul> <li>3. Outreach workers are generally perceived as a good addition to existing services</li> <li>5. 313 people referred to GEMS</li> </ul>	
Target beneficiaries	long-term unemployed, returners to labour market, early school leavers, young people at risk of becoming 'status zero' in the labour market, marginalised groups (e.g. offenders), minority ethnic unemployed people		

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<sup>&</sup>lt;sup>6</sup> The DEL is responsible for promoting learning and skills, preparing people for work and providing support to the economy. Due to their contacts with local communities, many DEL programmes are delivered with or through voluntary and community sector organisations (e.g. GEMS).

Labour Marke	t Mediation
Funding	Department of Employment and Learning (DEL) (see fig. 7)
Tasks	Pre-employment support to assist clients in preparing for a job (e.g. job applications, preparing a CV, interview preparation)  Job matching to link clients with actual available job vacancies  Job maintenance to provide support to client and employer during the initial employment period
Target groups	Job Seekers Allowance claimants, Income Support and Incapacity Benefit claimants, Ione parents, 'status zero' young people, partners of the unemployed, unemployed non-claimants
Target areas	Neighbourhoods in South Belfast
Language for	Work Programme
Funding	£73,600 from PEACE II programme (through BLSP) and Laganside Corporation (Community Grant Scheme); extended funding of £19,000 from BLSP until September 2006 (see Fig. 7)
Aim	Increase employability of clients with limited English by enabling them to promote themselves effectively on the labour market
Tool	Mainly: English-language course specifically designed for application process
Targets	Give training to 50 unemployed; support 20 into employment
Participation	Nationality profile of participants (total: 67): Polish (31, 46%); other Eastern European (13, 19%) Age profile (total: 67): 21-30 (35, 53%); 31-40 (19, 28%) Gender profile (total 67): Male (38, 57%)
Minority Ethn	ic Employability Support Project (MEESP)
Second funding period:	Commenced April 2006 (this project built on a similar programme called "Employability Support for Ethnic Minorities" funded by the Belfast Strategy Partnership) Funding: Part-financed by European Social Fund (ESF) under the Northern Ireland Programme for Building Sustainable Prosperity
Aim	Address the effects of the barriers to employment (specifically lack of English language proficiency) for unemployed minority ethnic people. Creating "pathways to sustainable employment" and "promoting a socially inclusive labour market"
Measures	One-to-one career guidance and support Language for work (see above) One-to-one English language support
Outcome	Supported over 200 participants
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Source: GEMS

Figure 6 sets out all the sources of funding for the GEMS project in its latest phase.

Fig. 6: GEMS: Sources of funding during second phase (since 2006) (estimates)

Source of funding	Programme / Project	Funding period	Approximate funding
Belfast Local Strategy Partnership (BLSP) (PEACE II funding) via: ESF Building for Sustainability for Pros- perity (see below)	Employability Outreach Programme (see below) Employability Support for Ethnic Minorities (ESEM) (> Integration)	09/2004-09/2006	£237,000 (actual)
	Social Enterprise Programme	09/2006-08/2007	£28,000
	Employability Skills programme <sup>7</sup>	09/2003-03/2006	£109,000
	Language for Work programme (partly)	08/2004-09/2006	£56,000 (actual)
Source of funding	Programme / Project	Funding period	Approximate funding
Department of Employment and Learning (DEL)	Labour market intermediary services in South Belfast	03/2006-04/2007 (funded 2002-)	£250,000
	Local Employment Intermediary Service (LEMIS) in South Belfast	04/2007-03/2010	£135,000 But 60% has to be generated through output, only 40% is guaranteed (!)
Belfast Regeneration Office (BRO)	LINKS Employability Outreach Service: local information, knowledge and skills, neighbourhood renewal areas (South & East Belfast)	10/2006-08/2007	£120,000
Belfast City Council	Employer interface in South Belfast and city-wide (> economic development)	10/2006-03/2007	£20,000
Laganside Corporation	Language for work programme (partly)	08/2004-03/2006	£37,000
Building Sustainable Prosperity (ESF, NI Programme)	Minority Ethnic Employability Support Project (MEESP) (runner-up of ESEM, see above)	03/2006-03/2008	£40,000 (year)

Source: GEMS

# 5. Challenges and responses

GEMS has worked hard to find an adequate response to new challenges as they arise by designing appropriate instruments, shown in the figure below.

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<sup>&</sup>lt;sup>7</sup> This Programme, funded through PEACE funds, aims to enhance the employability skills of unemployed by providing them with the opportunity to experience what it is like to be in work.

Figure 7: Challenges and responses

Challenge	Response	
Immigrants: South Belfast is increasingly mixed with new European Union and Eastern Europe immigrants and asylum seekers; 11 out of every 100 people coming in to the centre do not have English as their first language, representing 'a huge change in the client profile'.	Special programmes are targeted at unemployed migrant ethnic populations, e.g.: - 'Language to Work' programme - Minority Ethnic Employability Support Project (MEESP)	
<b>Employers</b> : Raising employers' awareness of community needs and social problems. Providing employers with a 'value proposition' to encourage them to employ long-term unemployed/economically inactive people.	Employ an Employer Relationship Manager to offer city-wide Labour Market Mediation via partnerships with peer organisations, offering support to major, SMEs and micro businesses for maximum impact.	
Challenge (ctd.)	Response	
Inequalities: Significant social inequalities are hidden by the low official unemployment rate (approximately 4.2%); but long-term social exclusion is obvious in the high rate of economic inactivity (approximately 27%), this includes lone parents and those on incapacity benefits (two groups amounting to 10% of the working population)	the labour market and disconnected from regular employment long-term. Helping people to realise that there is no 'job for life' anymore, that in times of	

## 6. Overall lessons and results

Industrial decline and political violence have presented the City of Belfast with an enormous challenge in overcoming its urban crisis. On the physical side, huge regeneration efforts such as the Laganside regeneration were undertaken with the hope of attracting inward investment and new jobs. Two main factors led to special partnership approaches such as GEMS targeting specific areas of Belfast:

- the realisation that most inhabitants who were long-term unemployed or otherwise seriously excluded in the deprived neighbourhoods adjacent to redevelopment sites such as the Laganside / Gasworks did not benefit from the new jobs created there; and
- the recognition that the local skills base needed to be improved in order to attract inward investment by new companies who were looking for specific skills in their workforce.

With GEMS a unique organisation was founded with the objective of creating links to local communities and improving their access to the labour market. Due to its profound knowledge of the local communities it was working with, GEMS was able to reach many inhabitants of South and East Belfast that had been long excluded from the labour market. The in-depth knowledge of their clientele enabled them to design specific programmes directly tailored to the needs of local communities (e.g. the more recent focus on minority ethnic unemployed people). Measured in numbers, its activities have been successful so far. Figure 8 shows what has been achieved up until now.

## Figure 8: People assisted on different programmes<sup>8</sup>

- over 2,000 unemployed have been supported
- over 1,000 of those supported entered employment
- over 800 unemployed have completed training courses designed to enhance their employability
- over 200 people have been assisted so far through the 'Language for Work' programme
- GEMS maintains working relationships with over 400 employers

## 7. Concluding thoughts

The record of this social enterprise is deeply impressive in the context of Northern Ireland where such harsh social conditions work against this level of concrete achievement. However, there are difficulties facing the organisation. One of the biggest difficulties GEMS encounters derives from its changing and fragmented funding structure and its dependency on continually finding sufficient resources to fund their services. The cut of the Department for Employment and Learning's funding for the new funding period beginning April 2007 means a big challenge. The project-based funding from different sources and a shortage of personnel make it more complex and time consuming to demonstrate the effectiveness of their programmes to their funders.

Social cohesion is the most pressing issue that has to be dealt with. Several project-based initiatives have sprung up since the peace process. The GEMS project has a neighbourhood focus and attempts to alleviate social problems including unemployment and therefore it contributes to efforts aimed at social integration. The development of new skills for a highly disadvantaged and separated part of the population is in this context a most significant achievement.

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<sup>&</sup>lt;sup>8</sup> Information provided by GEMS.

#### Annex

### **Bibliography**

GAFFIKIN, F./MORRISSEY, M. (1999): The Urban Economy and Social Exclusion: The Case of Belfast. In: GAFFIKIN, F./MORRISSEY, M. (Ed.): City visions – Imagining place, enfranchising people. London: pp. 34-57.

HANNA, B. (1999): Belfast: A partnership approach to local governance. In: GAFFIKIN, F./MORRISSEY, M. (Ed.): City visions – Imagining place, enfranchising people. London: pp. 194-206.

HEMPHILL, L. et al. (2006): Leadership, Power and Multisector Urban Regeneration Partnerships. In: Urban Studies, Vol. 43, No. 1 (January), pp. 59-80.

LAGAN CONSULTING (2004): Northern Ireland Yearbook 2005. Belfast.

LEONARD, M. (1998): The Long-term unemployed, informal economic activity and the "underclass" in Belfast: Rejecting or reinstating the work ethic. In: *International Journal of Urban and Regional Research*, Vol. 22(1), March, pp. 42-59.

NISRA (2005): Multiple Deprivation Measure 2005. May 2005.

REGIONAL FORECASTS LTD. (2006): Understanding Population Decline in Belfast – Demographic and socio-economic analysis of Belfast. *Draft report*.

## Material by the Belfast City Council or other public agencies

BELFAST CITY COUNCIL (2004): Belfast: State of the City. Conference Report.

BELFAST CITY COUNCIL (2004): Belfast: A Competitive City?

BELFAST CITY COUNCIL (2004): Belfast: The Masterplan 2004-2020 - Executive Summary.

BELFAST CITY COUNCIL (2005): Belfast: City-Region.

BELFAST CITY COUNCIL (2005): Annual Review 04-05 - Development Department.

BELFAST CITY COUNCIL (2006): Belfast: Capital City 2006-2010.

DEPARTMENT FOR REGIONAL DEVELOPMENT (DRD) (2001): Shaping our future. Regional Development Strategy for Northern Ireland 2025.

EU (2004): Belfast. In: Interact brochure, no. 10 (June 2004).

GEMS (2006): Evaluation of Employability Outreach Service. March 2006.

GEMS (2006): Evaluation of the Belfast GEMS "Language for work" programme. By Stratford & Associates. March 2006.

Laganside Corporation (2006): Laganside – Employers' Needs Analysis. June 2006.

## Webpages (accessed in 2007)

Belfast City Council http://www.belfastcity.gov.uk/

Belfast Interface Project (BIP) http://www.belfastinterfaceproject.org/

Belfast Local Strategy Partnership (BLSP) http://www.blsp.org/

Belfast Regeneration Office (BRO) http://www.dsdni.gov.uk/index/urcdg-

urban\_regeneration/belfast\_regen\_office.htm

Community Relations Council (CRC) http://www.community-relations.org.uk/

Department for Social Development (DSD) http://www.dsdni.gov.uk

Gasworks Employment Matching Service (GEMS) http://www.belfastgems.org/

Invest Northern Ireland http://www.investni.com/index.htm

Laganside Corporation http://www.laganside.com/

Northern Ireland Statistics & Research Agency (NISRA) http://www.nisra.gov.uk/

Census 2001: http://www.nicensus2001.gov.uk/nica/common/

home.jsp#

Review of Public Administration Northern Ireland (RPA) http://www.rpani.gov.uk/

Titanic Quarter http://www.titanicquarter.com/

#### Interviewees

Kyle Alexander Chief executive Laganside Corporation

Patricia Elliott Policy and Research Manager Development Dept. / Belfast City Council

Eddie Jackson Director Belfast Local Strategy Partnership

Linda Mac Hugh Director, Urban Regen. Strategy Dept. for Social Development (DSD)

Shirley McCay Head of economic initiatives Development Dept. / Belfast City Council

Susan Russam Managing director Gasworks Employment Matching Service (GEMS)