The Communications Market 2007

2 Communications in Northern Ireland

2.1 Setting the scene

2.1.1 Introduction

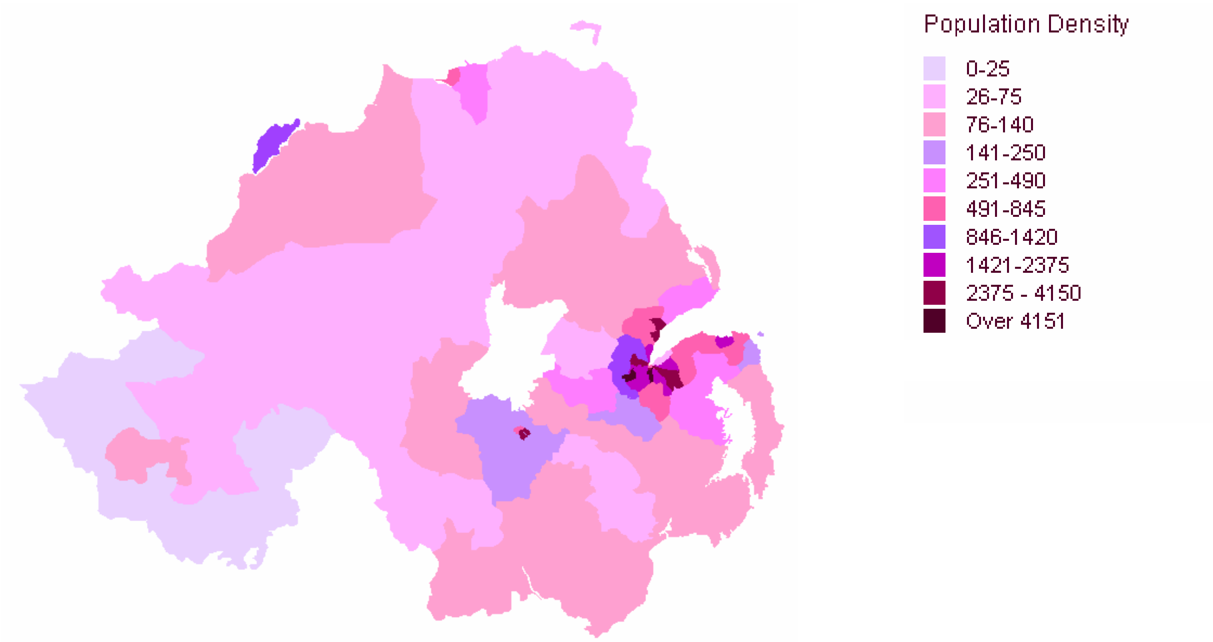
Northern Ireland is a distinct part of the United Kingdom with a set of specific geographic, cultural and socio-demographic characteristics which have affected, and continue to affect, the development of its communications services. The following figures analyse some of the socio-demographic features which influence communications services in Northern Ireland including population, rural/urban split, socio-economic groups and age.

2.1.2 Socio-demographic features

Northern Ireland has 630,000 households and a population of roughly 1.7 million inhabitants, accounting for 3% of the UK population (59.2 million). The Northern Ireland population is growing rapidly, increasing by 11% between 1981 and 2004; the equivalent increase across the UK was just 6% over the same period.

Figure 2.1 outlines Northern Ireland's population density, which grew from an average of 119 people per square kilometre in 2001 to 126 in 2004. The map indicates that the largest concentration of people is in the Greater Belfast area, which contains almost one-third of Northern Ireland's total population. (Figure 2.1)

Figure 2.1 Population density map



Source: Ofcom, based on Office of National Statistics 2001 Census (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

In terms of population characteristics, the 2001 Census reported that 40.3% of Northern Ireland's population were Roman Catholic, 45.6% was Protestant or other Christian religions, 0.3% were of other religions and 13.9% claimed no religious affiliation, or did not state their religion.

In terms of racial composition, Northern Ireland has the highest percentage of white residents (99%) in the UK (UK average: 92%) and the youngest median age, apart from London. Its median age is 35, while London's is 34 and the UK average is 38. Fifty-five per cent of its population are aged 15-44 years and 45% are aged 45 or older. (Figure 2.2)

Figure 2.2 Age profiles across the UK's nations

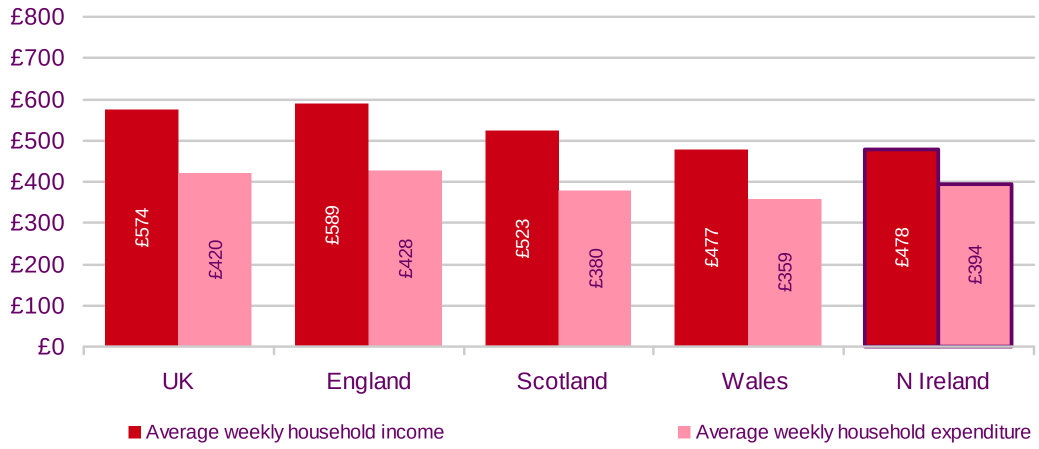
Source: Office of National Statistics, Census 2001 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

Northern Ireland has demographic characteristics which are linked to higher levels of deprivation and financial exclusion. The employment rate of 68% was the lowest in the UK in spring 2005 (UK average: 74.4%). The unemployment rate was, however, equivalent to the UK average, at 4.7%. Gross weekly earnings for full-time employees averaged £410 for men and £356 for women; this was 13% and 4% per cent below UK averages (April 2005). Similarly, the average weekly household expenditure of £394 is below the UK average of £420.

An aid package of €1.6 billion was granted to Northern Ireland by the European Union for the 2000-2006 period, to help minimize differences in income between it and the rest of the European Union. The Peace II programme is currently the main European Union funding scheme in operation in Northern Ireland. However, since several less wealthy member states have joined the EU, Northern Ireland has moved down the chain of eligibility for funding. (Figure 2.3)

Figure 2.3 Average weekly household income and expenditure

(GBP/week)



Source: Office of National Statistics, Family Spending, A Report on the 2004-2005 Expenditure & Food Survey 2005 Edition. ONS published 10 March 2006 Edition. Crown copyright material is reproduced with the permission of the Controller of HMSO)

Figure 2.4 shows the geographic and socio-economic profile of the United Kingdom, comparing the percentage of ABC1s per nation/region to the percentage of urban dwellers. Northern Ireland has the largest rural-based population in the UK at 35% (UK average: 12%). The remaining 65% live in urban areas such as Belfast and Londonderry/Derry. The nation also has the highest proportion of C2DEs at 53% (UK average: 45%). The remaining 47% of the population are ABC1s; this is lower than the UK average of 54%. (Figure 2.4)

Figure 2.4 The geographic and socio-economic profile of the UK

Source: Indicative analysis based on Business Geographics 'Urban Indicator' and Office of National Statistics, Census 2001 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

2.1.3 Geographic, cultural and political characteristics of Northern Ireland

2.1.3.1 Geography

Northern Ireland covers 13,576 square kilometres and constitutes about a sixth of the island it shares with the Republic of Ireland. Northern Ireland comprises six counties – Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone – and its principal city is Belfast.

Northern Ireland's landscape is primarily low hill and drumlin country, although there are two mountain ranges: the Mournes and the Sperrins. Lough Neagh, the largest freshwater lake in the British Isles and one of the largest in Europe, accounts for a sizeable portion of the middle of the country, spanning 151 square miles (392 km).

2.1.3.2 Language and culture

English is the first language of the vast majority of people in Northern Ireland, but the 2001 Census found that 10.4% (or 167,490 people) also have some knowledge of Irish. The Northern Ireland Life and Times survey reported in 1999 that Irish was the main language spoken in 1% of homes (about 6000 households).

Ulster Scots is also recognised as a distinct language in Northern Ireland by the European Charter for Minority Languages. The 2001 Census did not include a question on Ulster Scots, but the 1999 Northern Ireland Life and Times Survey found that 2% (approximately 30,000) of Northern Ireland residents claimed to be able to speak it.

2.1.3.3 Politics

Northern Ireland has had an unsettled history and for much of the last 35 years has been governed directly from Westminster. Devolution has returned to Northern Ireland on 8 May 2007 and, following the elections held in March 2007, the Northern Ireland Assembly reconvened. In those elections, of the 108 seats in the Assembly the DUP won 36, Sinn Féin, 28; the UUP, 18; the SDLP, 16; the Alliance Party, seven; the Green Party, one and the PUP, one. Dr. Ian Paisley of the DUP and Martin McGuinness of Sinn Féin have become First Minister and Deputy First Minister respectively.

The devolved Northern Ireland Executive will has 11 Government Departments. There are also 26 local councils, 4 Health Trusts and five Education and Library Boards.

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2.2 Recent developments in Northern Ireland

Some recent developments which have taken place in the Northern Ireland communications market are as follows:

2.2.1 Television

Digital switchover in Northern Ireland – scheduled for 2012
In June 2006 the Regional Radio Conference was held in Geneva with the aim of reaching agreement on the co-ordination of spectrum across Europe and beyond. Such agreement has been reached but the need to co-ordinate with a neighbouring country was one of the reasons why Northern Ireland was placed towards the end of the digital switchover process (2012) – in common with the London, Meridian and Channel television regions, where spectrum use had to be co-ordinated with France. The Geneva Treaty allowed for analogue services from the Republic of Ireland to be protected until 2015. (The Republic of Ireland has not yet committed to switching off its analogue services, although it aspires to do so by 2012, as part of the general European move to meet this date).

Independent production and network programming in Northern Ireland
While Northern Ireland has more local programming for local audiences than any other nation in the UK, (local programming on UTV and BBC NI accounts for 6% of all output from broadcasters in Northern Ireland), it also has, by contrast, significantly less presence on the network than any other nation. Secretary of State for Northern Ireland, Peter Hain MP, has expressed concern that coverage of Northern Ireland on the UK networks has neither been adequate nor properly representative and has encouraged the Department of Culture, Arts and Leisure (DCAL) and the Northern Ireland Film and Television Commission (NIFTC) to take up the issue. As a result they hosted a conference about network production, *Shifting Brilliances*, in September 2006, with the support of the Arts Council for Northern Ireland and Equity, which was attended by representatives of the main networks.

BBC Northern Ireland – changes in personnel and governance
Peter Johnston succeeded Anna Carragher as Controller, BBC Northern Ireland in November 2006. New Heads of Programming, Public Policy and Corporate Affairs, and Governance and Accountability were also appointed.

Rotha Johnston was appointed the BBC's first National Trustee for Northern Ireland in October 2006 and a new Audience Council has been established to represent local audience interests.

An Audience Council-led consultation on minority language services, aimed at informing the BBC Trust's decision-making on 'appropriate provision' in this area over the next three to five years, was launched in early 2007.

Minority language programming
There is no statutory requirement for Northern Ireland broadcasters to deliver Irish language programming. However, there is Governmental recognition both of Irish and Ulster Scots, as well as specific commitments to Irish language broadcasting, in the Belfast/Good Friday Agreement (1998).

The Irish Language Broadcast Fund, established in June 2005 with an annual budget of £3m to support Irish language programming for Northern Ireland and to provide skills training for

Irish speakers, commissioned 81 hours of programming during 2006, most of it broadcast, or due to be broadcast, on TG4.

TG4, the Irish language channel broadcasting from the Republic of Ireland, was made available on the Virgin Media platform in Northern Ireland in early 2007. The channel is also available via terrestrial overspill, via an analogue signal boost from the Divis transmitter in Belfast and via Satellite.

2.2.2 Radio in Northern Ireland

Three of the six community radio stations in Northern Ireland which received licences in 2005 launched services during 2006: Down FM, providing broadcasting opportunities for students at East Down Institute in Downpatrick; BFBS, broadcasting to members of the armed forces and their families stationed in Lisburn; and Fáilte FM, providing an Irish language service to Irish speakers and learners in Belfast.

Stations in Northern Ireland are eligible to apply to the Community Radio Fund, administered by Ofcom, for grant aid towards the running of their stations. In the last round Down FM’s bid for funding was successful and it was awarded a sum of just over £9,000 to assist with the appointment of a Community and Content Co-ordinator. The latest round of Community Radio licensing in Northern Ireland closed in January 2007. Nine applications were received, and awards are expected later this year.

Consolidation in Northern Ireland’s radio market
2006 saw consolidation of ownership in the Northern Ireland radio market. In March 2006 Northern Media Group (owners of Seven FM) purchased Mid 106 from CN Group (owners of CityBeat) and the station was re-branded as Six FM. Following their successful bid to win the Newry Licence (Five FM), the group then purchased the three Q Radio Network stations based in Londonderry/Derry, Coleraine and Enniskillen/Omagh.

Emap, the new owners of former Scottish Radio Holdings stations, Downtown Radio and Cool FM, is undertaking restructuring at both stations. CN Group-owned CityBeat moved to new studios in the centre of Belfast, and in February 2007 BBC Radio Ulster increased its broadcast hours, transmitting a range of specialist music programmes from 0000 – 0100, seven days a week.

The BBC launches new DAB transmitters
The BBC has recently added three new DAB transmitters at Brougher Mountain, Limavady and Sheriff’s Mountain (Londonderry/Derry), bringing the estimated coverage of its national multiplex to 87% of the Northern Ireland population.

2.2.3 Fixed-line telephony

BT's Undertakings in Northern Ireland
Owing to the relatively small size of BT’s business in Northern Ireland, the structural change that has taken place within BT's operations in the rest of the UK, agreed to by BT in its Undertakings following Ofcom's Strategic Review of Telecoms, has not been introduced in Northern Ireland and consequently, there is no separate Openreach operation. All other elements of the Undertakings, however, apply in Northern Ireland. To address any concerns this might raise with competing telecommunications operators, and to ensure greater transparency, BTNI established its own Regulatory Compliance Committee (RCC) in 2006 and local telecoms providers have been invited to attend the Committee's meetings. A Code of Compliance is also in place and all BTNI staff are obliged to undergo compliance training.

Furthermore, during 2006 Ofcom Northern Ireland facilitated the creation of a Northern Ireland Telecoms Stakeholder Forum, made up of representatives from a variety of local telecoms providers, to enable any concerns they might have to be discussed openly with BTNI. Ofcom's and the Equality of Access Board's quarterly reports have also included regular updates on Northern Ireland.

22 BT exchanges supported LLU in 2006
Approximately 22 BT exchanges in Northern Ireland have been subject to local loop unbundling (LLU) in the last year, most notably by Carphone Warehouse, which accounts for 7% of fixed line customers in Northern Ireland. It is expected that further unbundling will take place as other operators roll out their telephony services. LLU requires significant investment and, therefore, it is possible that it may not extend much beyond the urban centres of Northern Ireland. There are several 'lines & calls' providers in Northern Ireland catering for the residential and business markets. These include Clarity, Rainbow and UTV Talk. BTNI and the majority of resellers and broadband service providers in Northern Ireland now also offer Voice over Internet Protocol (VoIP) services. Some 15% of people in Northern Ireland say they have used VoIP.

2.2.4 Infrastructure upgrade initiatives are widespread in Northern Ireland

A large number of initiatives are currently under way in Northern Ireland with a view to upgrading and modernising the communications infrastructure. These include pilot schemes to bring fibre optic cable to the home and to the kerb; widening the availability of broadband wireless networks and improving the integrity of communications infrastructure connections with the Republic of Ireland and beyond. Initiatives include:

BT's 21st Century Network: In February 2007 BT announced that it was spending £335m across the island of Ireland on its 21st Century Network, with £260m of that specifically targeted at Northern Ireland, with an estimated project completion date of 2010, a date currently ahead of other parts of the UK.

Londonderry/Derry to Letterkenny link: In October 2006 a new dedicated broadband communications link was launched between the Londonderry/Derry campus of the North West Institute for Further and Higher Education and Letterkenny Institute of Technology in the Republic of Ireland. Part-funded through the European Union's (EU) Interreg IIIA Community Initiative programme, the project aims to improve the reliability of the connection between the networks provided by NIRAN (Northern Ireland Regional Area Network) and HEAnet (Ireland's Higher Education Authority Network), thus enabling better collaboration in teaching, learning and business development in the North West of Ireland.

Armagh - Monaghan link: As part of the Armagh Monaghan Digital Corridor a 1Gb fibre link has been constructed between Armagh and Monaghan with backhaul provided through Belfast to the rest of the UK and to Dublin. The link is now operational and has commercial customers.

Bytel Belfast - Dublin link: Part-funded through the EU's Interreg IIIA Community Initiative programme, a Tier 1 link has been put in place between the Bytel Point of Presence (POP) in Belfast and INNEX in Dublin. The EU has classified the project as coming under the State Aid Small/Medium Enterprise (SME) exemption.

Joint ComReg – Ofcom award of spectrum: Ofcom and its counterpart in the Republic of Ireland, ComReg (Commission for Communications Regulation), agreed to co-ordinate the auctions of licences for radio spectrum in the 1785-1805Mhz band, providing the potential for the creation of the first all-island wireless communications service. The auction was announced in December 2006 and is due to take place in May 2007. There are no restrictions on the use of the licences, but the most likely uses are wireless broadband access, special event broadcasting, video or closed-circuit television links, or making extra capacity available for mobile phone services.

Belfast Wireless City: A consortium made up of Belfast City Council, the Department of Regional Development (DRD), the Department of Enterprise, Trade and Investment (DETI), the Planning Service, the Department of Social Development (DSD) and the Department of Finance and Personnel (DFP) has been formed to explore the feasibility of delivering a range of wireless broadband services over street furniture in Belfast city centre. As part of the feasibility study the consortium has invited organisations and companies to register their interest in delivering wireless telecommunications services, including broadband internet, voice and data services to various locations in the City.

Londonderry/Derry Wireless City: Londonderry/Derry, in the North West of Northern Ireland, has been designated by DETI as Northern Ireland's Flagship project for the demonstration of wireless broadband technology. The project is supported under the EU Building Sustainable Prosperity programme and comprises a partnership of Derry City Council, the University of Ulster and the North West Institute of Further and Higher Education, aiming to create a wireless-enabled working environment in the city.

Fibre-to-the-kerb trial: DETI is currently conducting a trial in conjunction with Virgin Media to install a fibre-to-the-kerb service to 72 homes in a social housing project in South Belfast, with the potential to supply broadband access at up to 30Mbit/s.

Fibre-to-the-home trial: DETI is also working with Bytel on a trial to provide ten properties in Belfast with a fibre-to-the-home service.

Next-generation broadband feasibility study: Having made a strategic investment to ensure that broadband is available to 100% of the population of Northern Ireland under a contract awarded to BTNI in 2005, DETI is currently undertaking a study into the steps required to deliver equitable access to next-generation communications services throughout Northern Ireland.

Project Kelvin: A feasibility study has examined the possibility of providing direct international connectivity into the north-west of Northern Ireland. Potential benefits include improving resilience on the island of Ireland, reducing latency between Northern Ireland and the United States and increasing competition in the telecommunications market. DETI is currently considering the study's findings and will be entering into discussions with the Department of Communications, Marine and Natural Resources (DCMNR) in the Republic of Ireland about taking this project forward as part of the EU programme for Cross-Border Territorial Cooperation 2007-2013, which is currently out for consultation.

EU Programme for Cross- Border Territorial Cooperation (INTERREG IV) 2007-2013: The draft operational programme for this EU programme recently went out to public consultation. An allocation for cross-border telecommunications infrastructure projects is included in the draft programme. This allocation may be used for the international connectivity project (Project Kelvin) with the remainder of the funding being used for other smaller cross-border projects over the period 2007-2013.

2.2.5 Broadband

There are several projects under way to encourage take-up of broadband across Northern Ireland. These are often joint public and private sector initiatives and examples include:

Broadband awareness television campaign: DETI in Northern Ireland and DCMNR in the Republic of Ireland jointly funded a €500,000 television advertising campaign, launched in July 2006, to highlight the benefits of broadband, specifically in border regions.

Digital mapping: A major data collection exercise was undertaken during 2006 by the Delivery and Innovation Division (DID) of DFP to create a fully searchable information database of all public internet access points throughout Northern Ireland. Information includes location, opening times, contact details, disability access and the availability of ICT training. Users can find their nearest internet access point by calling or texting the service.

Internet Made Easy CD-ROM: During Adult Learners' Week in May 2006 every household in Northern Ireland was mailed an *'Internet Made Easy'* CD-ROM, providing information on how to use the internet for simple tasks such as booking a flight or internet banking. Details were also provided of local, free internet access points for those without access at home or work. The project was led by DID, together with the Educational Guidance Service for Adults (EGSA), and was supported by a range of public and private sector organisations.

Broadband Content Initiative: In April 2006 DETI launched the Broadband Content Initiative, aimed at finding projects that would best illustrate the creativity and skills of Northern Ireland companies or individuals in delivering services to consumers through broadband. The initiative was part of the £35m Skills and Science Fund, launched in early 2006 by Secretary of State for Northern Ireland, Peter Hain MP. The winning six projects, which will be available online by the end of 2007, covered a range of subjects including education/learning, training, entertainment, art, music, sport and computer games.

EverybodyOnline: A major digital inclusion programme devised by BTNI and DFP was launched in January 2007. EverybodyOnline is delivered by the national charity, Citizens Online, and aims to help disadvantaged communities and individuals engage with digital technology as a tool for social inclusion. Six projects have been identified. Two are based in specific geographic areas: Londonderry/Derry (focusing on assisting those from economically disadvantaged groups) and Fermanagh/South Tyrone (helping individuals and communities to gain access to, and increase awareness of, digital technology). The other four projects focus on the following areas: older people living at home, older people in residential or assisted care, people with physical disabilities, and people with learning disabilities.

Digital Inclusion Steering Group: The Digital Inclusion Steering Group (DISG) was established to mobilise the public, private and voluntary sectors to work together to improve access to the internet, create local relevant content, develop users' internet skills and demonstrate the benefits of the internet.

MyGroupNI: MyGroupNI is a DFP-sponsored digital inclusion initiative, bringing together the public, voluntary, community and private sectors to help 2,500 community-based groups across Northern Ireland to become 'digitally included' through a new online portal: www.mygroupni.com. The MyGroupNI concept provides small, local community-based groups with the tools, resources and support to create their own localised content through a sustainable and easy-to-use website that can link with other community-based sites.

Silver surfers: Business In The Community (BITC), DID, BBC NI and a wide range of partners provided volunteers who collaborated together to deliver Silver Surfers' Day in Northern Ireland on 26 May 2006. This included over 180 business volunteers teaching over 1500 senior people how to use a computer and the internet. The partners also gave Silver Surfer Awards to recognise seniors who were exemplars to others.

2.3 Research into inadvertent roaming

2.3.1 Background

As part of its continuing work on the problem of inadvertent mobile roaming, which affects consumers living and working along the border between Northern Ireland and the Republic of Ireland, Ofcom conducted research into the impact upon people in a range of locations on the Northern Ireland side of the border.

Inadvertent roaming occurs when a consumer unwittingly or unavoidably makes or receives a call while on a network on the other side of the border.

The research used two techniques, both quantitative. Firstly, a sample of 954 people was asked about the problem of inadvertent roaming in a five-minute face-to-face street interview. Then a sub-sample of 160 people was asked to record all instances of inadvertent roaming they experienced which incurred cost over a seven-day period.

2.3.2 Research Objectives

- To identify the number of consumers who have experienced inadvertent mobile roaming in the border areas of Northern Ireland.
- To measure the frequency with which these consumers experience inadvertent roaming.
- To measure awareness and use of tariffs offered by operators to deal with the problem.
- To obtain information to make an estimate of the costs incurred by the consumers affected.

2.3.3 Executive summary

74% of mobile customers surveyed in border areas claim to have experienced inadvertent mobile roaming
Ofcom estimates that there are 142,000 mobile phones users (aged 10+) in the border region of Northern Ireland. Seventy-four per cent of those surveyed claim to have experienced the problem – suggesting that up to 105,000 are likely to have been affected.

One third (32%) of mobile customers surveyed in border areas claim to experience the problem on a daily basis

Mobile users who had experienced inadvertent roaming were asked where and how frequently they had experienced the problem. Thirty-two per cent claimed to experience the problem daily in at least one area.

In a diary study 48% of mobile customers reported experiencing inadvertent roaming and incurring costs at least once in a seven-day period – suggesting that 50,000- 68,000[4] consumers regularly experience the problem

[4] * - We have provided an estimated range (50,000 to 68,000) on the basis that diary participants were more likely to be knowledgeable about the topic. The lower figure assumes that all diary participants were knowledgeable about the problem. The higher figure assumes that they were no more or less knowledgeable than the main study participants.

The diary study was drawn from the larger sample and mostly consisted of those users who were already aware of the problem or had experienced it. The number of cost-incurring incidents recorded enabled us to estimate how often inadvertent roaming occurs across the whole region.

While the vast majority of mobile users are aware of the problem of inadvertent roaming, 80% are unaware of tariffs designed to reduce roaming costs
Eighty-five per cent are aware of the problem of inadvertent roaming, with varying degrees of knowledge. However, 8 in 10 mobile users are unaware of any of the special network tariffs available to deal with the problem. Only 7% of mobile users in border areas (equivalent to around 10,000 people) are using a special roaming tariff to mitigate the effects of inadvertent roaming.

54% in Londonderry/Derry reported being affected regularly
In Londonderry/Derry (Northern Ireland's second largest city) 54% of mobile customers surveyed had experienced the problem in the city and a quarter said they did so every day.

In total, Ofcom estimates that around 10 million instances of inadvertent roaming occur in border areas each year
The diary study suggests that approximately 26,500 cost-incurring calls which involve inadvertent roaming are made each day. (This equates to a total estimate of nearly 10 million per year for the whole region).

The annual cost to consumers of inadvertent roaming could be as high as £10.9m
If the average length of a mobile phone call made or received is assumed to last on average two minutes, the total estimated additional cost to mobile customers in the border areas of Northern Ireland would be around £30,000 each day or £10.9 million per year.

If the average call length were one minute the total annual cost would be £5.4 million.

This would mean that the 105,000 mobile customers in the border area affected by inadvertent roaming could each be incurring charges of between £50 and £100 a year.

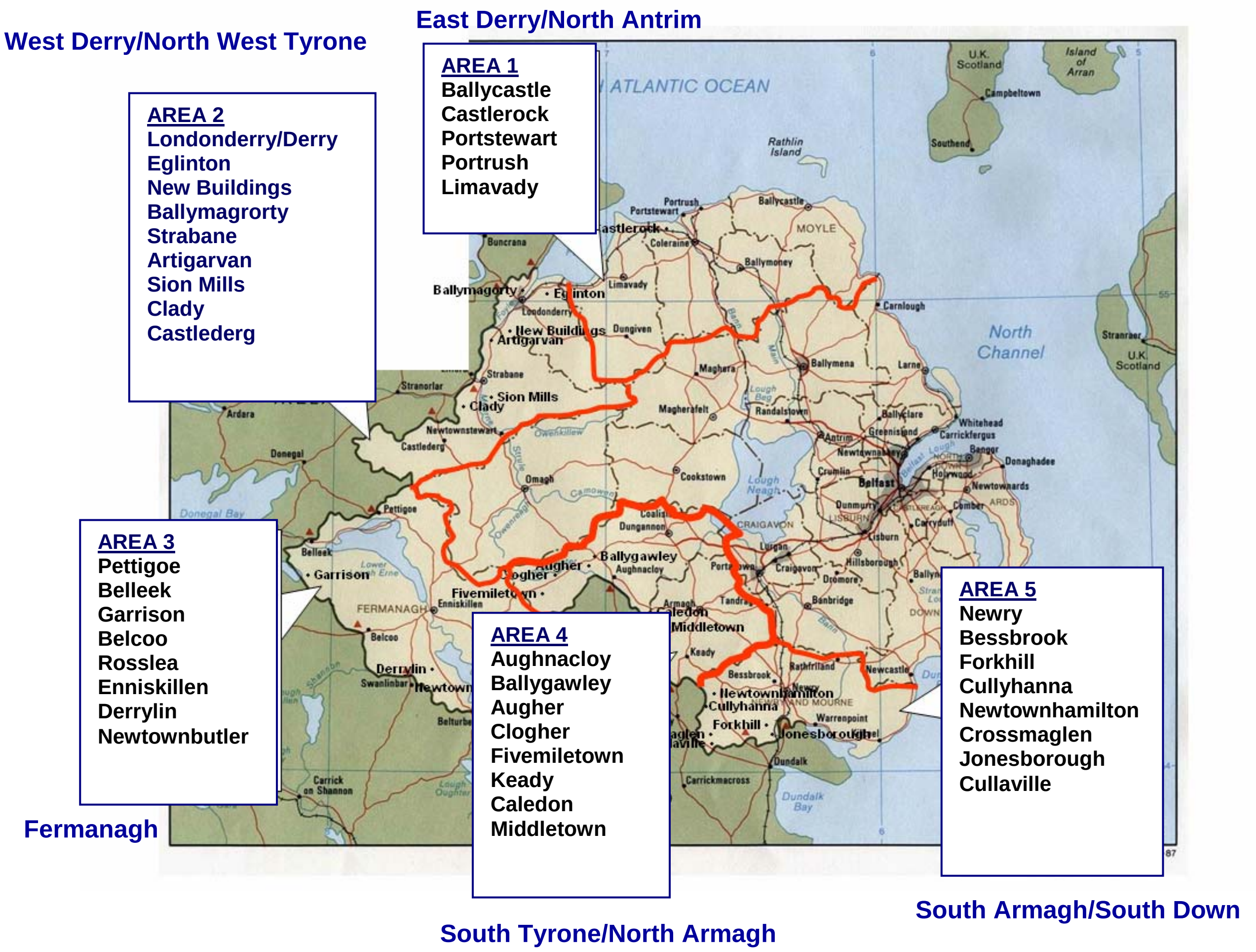
These are likely to be reasonably conservative estimates because they do not include extra costs for SMS messages, or take account of consumers from elsewhere in Northern Ireland, or indeed from elsewhere in the UK, who may also experience inadvertent roaming but less often than those interviewed. Also, the figure does not attempt to measure the 'opportunity cost' of calls that are not made.

2.3.4 Methodology

Quantitative sampling – main study
In all, 954 street interviews were conducted across the five border regions, as shown below. As the demographic profile of mobile phone users in the border regions of Northern Ireland was not known, a random sampling approach was adopted. Nonetheless, an even mixture of gender was recruited.

Although the survey sampled only mobile customers aged 16+ we are assuming that the survey findings apply equally to younger mobile phone customers, so when estimates of totals are given the numbers refer to all mobile phone users aged 10 and over in the border region.

Figure 2.5 Northern Ireland border regions where the survey took place



The survey targeted all mobile users in the border regions of Northern Ireland. The only eligibility requirements were that they were aged16 or over and owned a mobile phone. Respondents were selected randomly from multiple sampling points. Interviews were five minutes in length and were conducted using face-to-face street interview technique, with questionnaires being completed using paper and pen.

Questionnaire content

The questionnaire had the following structure:

- Screening and demographic questions;
- mobile network and whether PAYG or contract phone;
- knowledge and experience of inadvertent mobile roaming;
- awareness and use of special network tariffs;
- detailed section on location and frequency of mobile roaming experienced; and
- actions taken including complaining or avoidance of making/taking calls

Diary study

Of the sample of 954, 160 completed a diary study. These people were first briefed on how to spot inadvertent roaming on their mobile screen. They then recorded all instances of inadvertent roaming where costs were incurred by making/taking calls in a seven-day period. These 160 people were not drawn by quotas or randomly from the original sample – they were those who were willing to complete the diary, so tended to be drawn from those who had an interest in the problem.

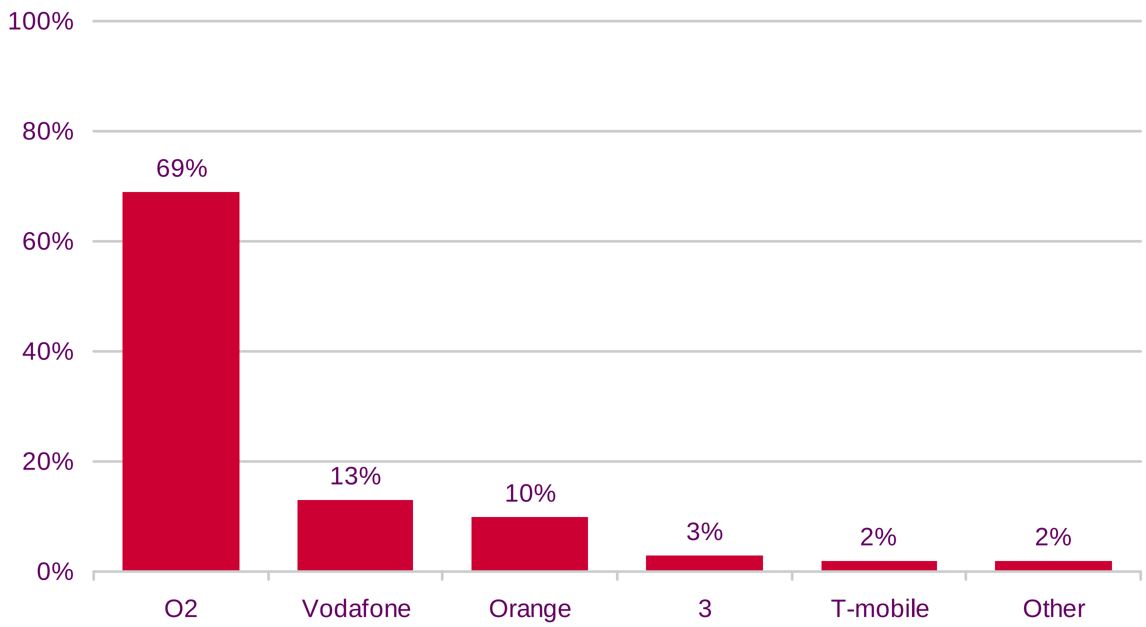
Fieldwork timing
Fieldwork took place from November 2006 to January 2007, with a break over the Christmas period.

Mobile networks used by consumers in survey
Figure 2.6 shows that approximately two-thirds (69%) of the sample were O2 customers. This reflects the profile of mobile users in the Northern Ireland border area because:

- O2 has a higher customer share in Northern Ireland generally compared to the rest of the UK (50% of mobile users in Northern Ireland use O2) source: *Ofcom Tracking Survey* April-June 2006); and

- there are fewer operators with network coverage in many of the border areas, which means that those that do have network coverage inevitably have greater customer share.

Figure 2.6 Mobile networks used by survey respondents



QS12: Which of these is your MAIN network provider? Base: All respondents; 954

Weighting of data
Data have been weighted by each of the five regions to reflect the populations in each region, as follows:

- Area 1 14.2%

- Area 2 48.9%

- Area 3 7.3%

- Area 4 9.3%
- Area 5 20.4%

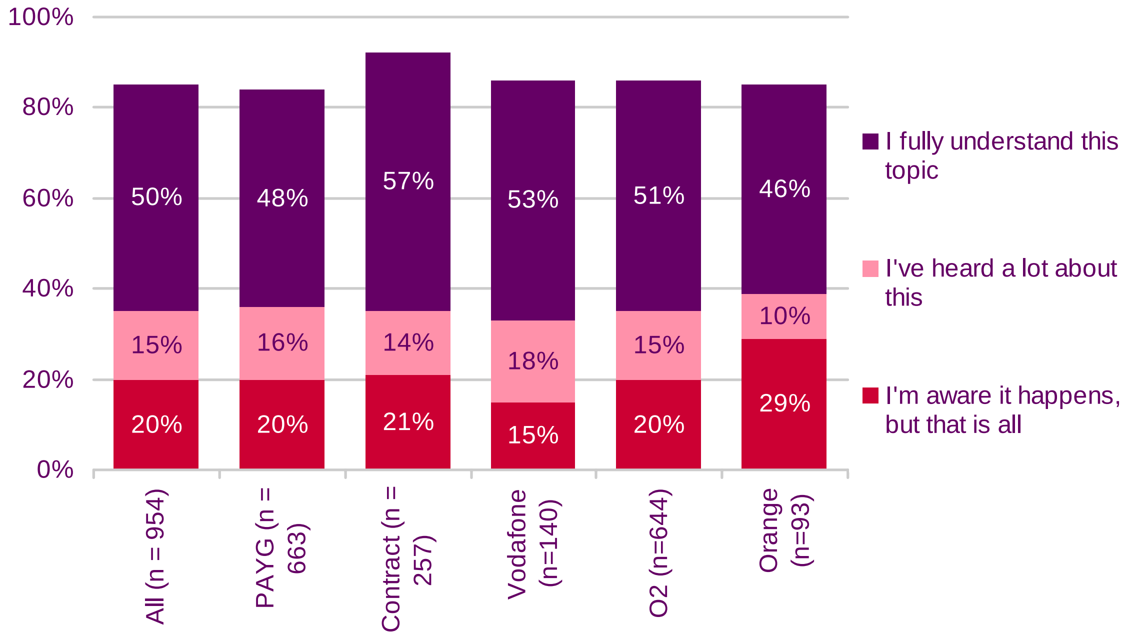
2.3.5 Research findings

Most mobile customers in the border areas are aware of the problem, with awareness highest among those on contracts
Eighty-five per cent demonstrate some awareness of the problem, with 65% having a high level of awareness (they either fully understand or have heard a lot about the problem).

Mobile users on a contract have greater awareness than pay-as-you-go customers (92% versus 84%).

Those aware of the problem tend to be conscious of the additional cost. Eighty-five per cent of all mobile customers know that it costs more to make calls when inadvertently roaming (Figure 2.7). Eighty-four per cent of all mobile customers know that it costs more to take calls when inadvertently roaming. Note that awareness is marginally lower among customers on the less popular mobile networks (not shown on chart below, due to small base sizes).

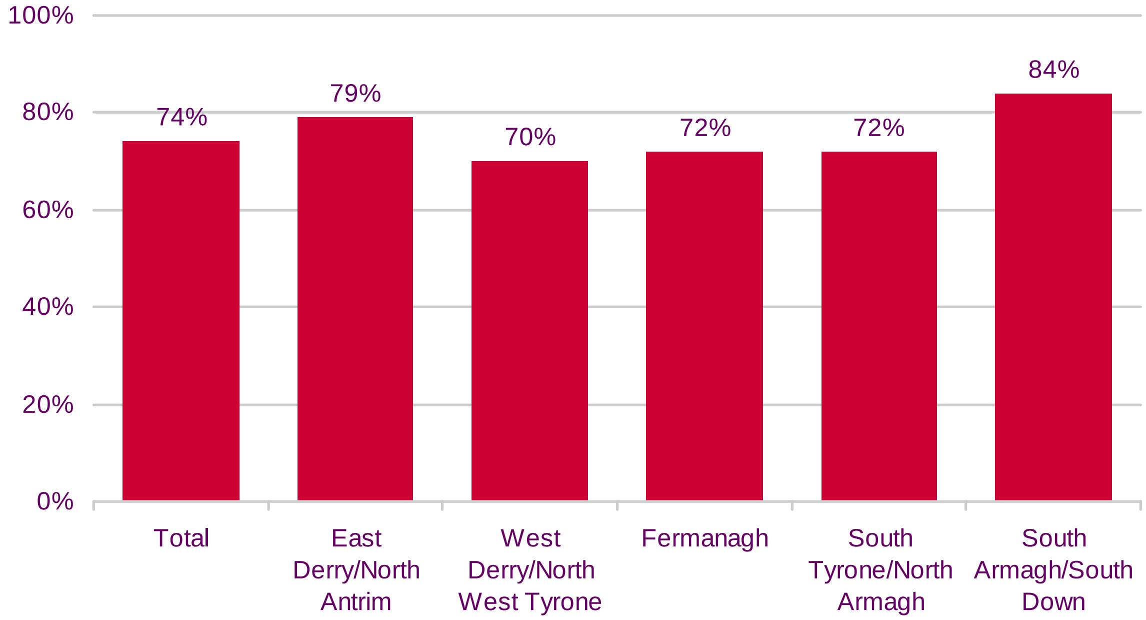
Figure 2.7 Awareness of inadvertent roaming



QA1: Before today, how aware were you of inadvertent roaming (the concept had been explained previously)? Base: All mobile customers in border areas – 954. Other mobile networks and those unsure what tariff they are on are not shown due to small bases.

Three-quarters of mobile users in the border areas report experiencing the problem
The problem appears to occur most frequently in the north-west and south-east of Northern Ireland– areas where a water border exists between Northern Ireland and the Republic of Ireland (Lough Foyle in the North West and Carlingford Lough in the South East); mobile signals travel more easily across water (Figure 2.8).

Figure 2.8 Number affected (consciously) by inadvertent roaming



QA2: Have you ever picked up a REPUBLIC OF IRELAND network on your mobile handset when in NORTHERN IRELAND? Base: All Respondents; 954, Area 1; 182, Area 2; 200, Area 3; 172, Area 4; 161, Area 5; 239

Half (49%) of those respondents having experienced inadvertent roaming claimed to have been alerted by text message when their phone roamed. Those on monthly contracts are more likely to mention text messages (60%) than those on pre-pay (44%). However, very few reported having received information via other means, for example leaflets or point-of-sale information in mobile phone shops, although several operators have been employing these as a customer information tool.

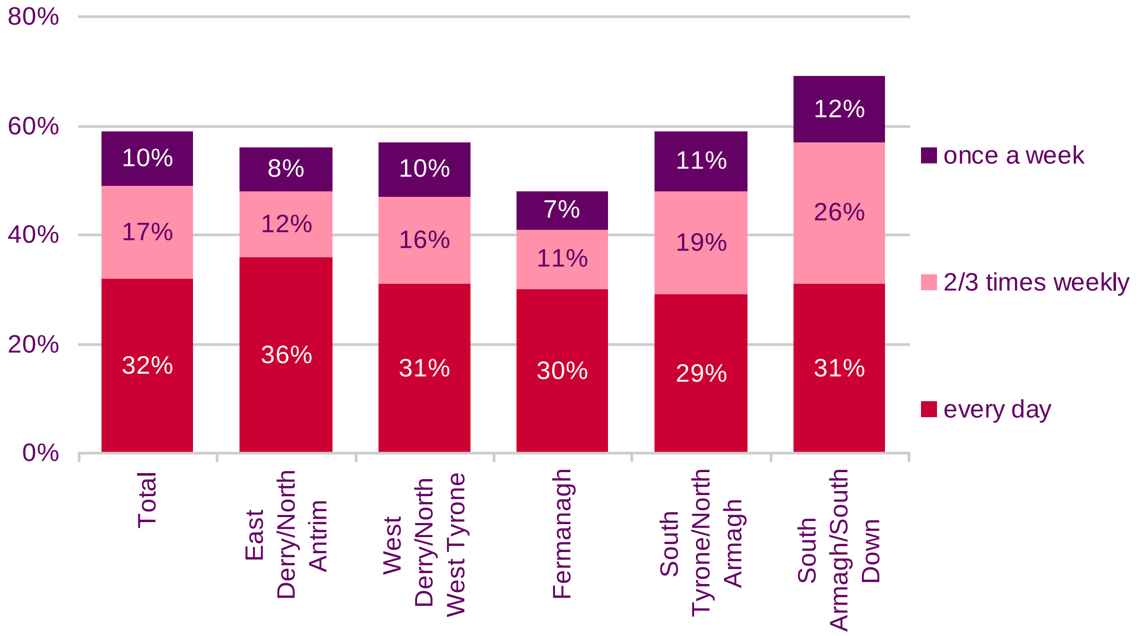
A third of mobile customers in border areas say they experience the problem every day

Many people claim to be affected daily in terms of their phone roaming to a Republic of Ireland (RoI) signal (Figure 2.9, Figure 2.10). Thirty-two per cent of mobile users experience the problem daily in at least one location. This does not imply that they incur extra costs at this frequency because they may not always make/take calls at the same frequency. Furthermore, they may be actively avoiding this when they know they are on a RoI network.

Figure 2.9 Numbers affected by inadvertent roaming in the major centres of population on the Northern Ireland border

Location of interview	Portstewart	Londonderry/ Derry	Enniskillen	Armagh	Newry
Base (respondents)	120	127	136	138	217
% aware of problem	85	83	79	86	89
% experienced in that place	58	54	18	25	30
% experienced daily in that place	24	25	2	4	5
% experienced weekly or more frequently in that place	42	45	13	19	22
% ever experienced in any place	83	65	68	69	8.

Figure 2.10 Maximum frequency of inadvertent roaming across locations experienced

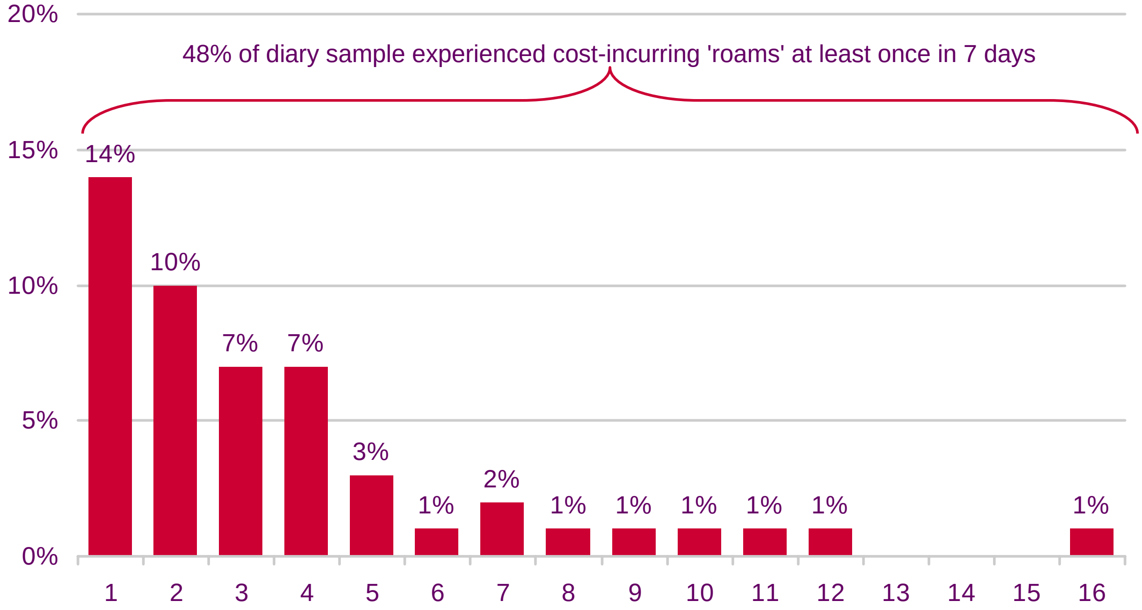


QB1 Can you tell me where you have been when you have picked up an ROI network on your mobile phone? QB2 How often does this occur? Base: All Respondents; 954

More people reported cost-incurring occurrences at least once in a seven-day period in the main survey (59%) than in the diary study (48%) (Figure 2.11). Possible explanations are:

- The claimed frequency of inadvertent roaming refers to roaming events without calls necessarily being taken or received.
- There may be a slight over-claim in the general (non-diary) figure.

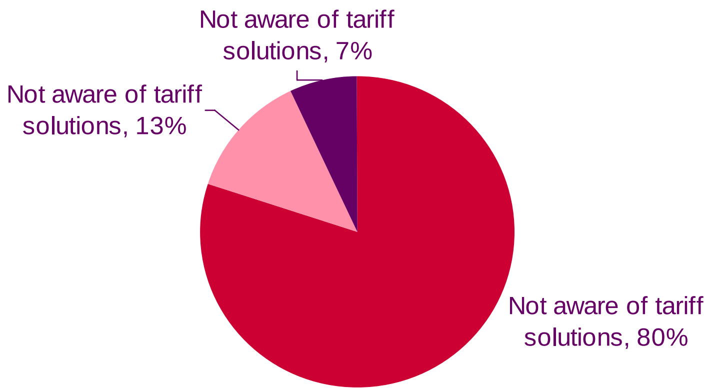
Figure 2.11 Number of diary study respondents experiencing cost-incurring incidents of inadvertent roaming during a seven-day period



Diary study. Base: 160

8 in 10 mobile customers are unaware of tariffs that may deal with the problem
8 in 10 mobile customers are not aware of tariffs that might help them to deal with the problem of inadvertent roaming (Figure 2.12). Among those who are aware of network tariffs, the number using them is small, equating to only 7% of mobile users in border areas, or around 10,000 people.

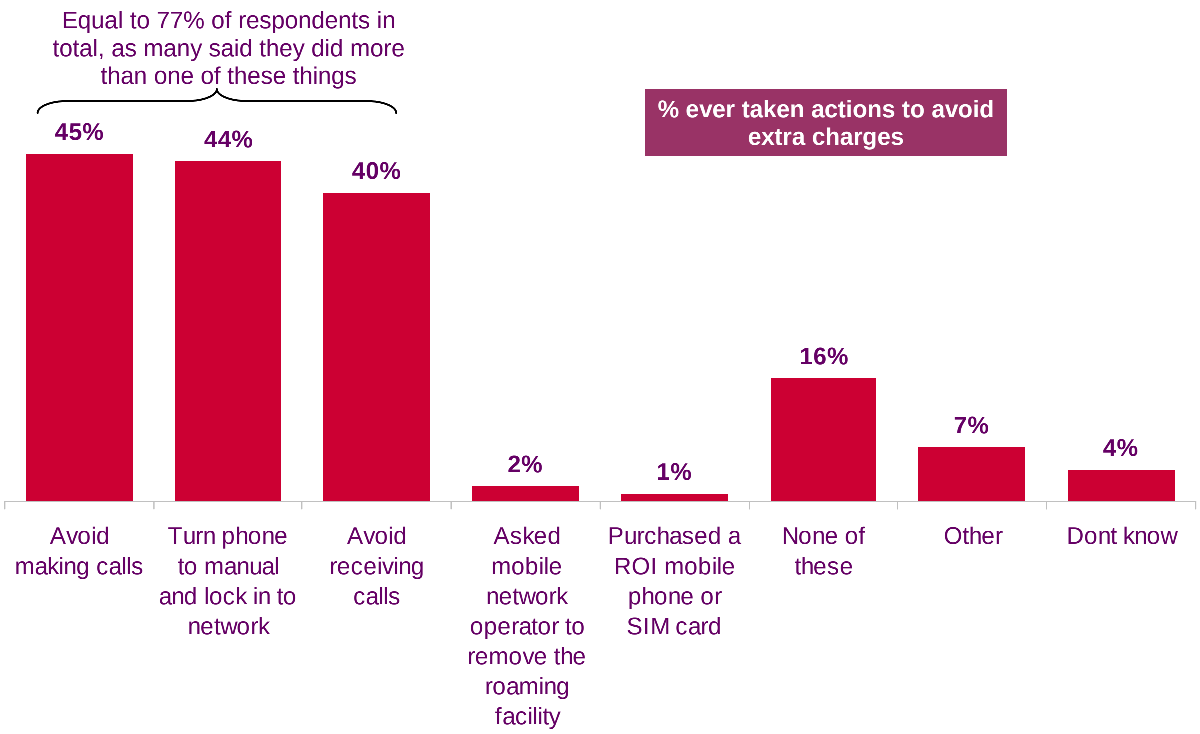
Figure 2.12 Awareness and use of special tariffs to deal with inadvertent roaming



QA6: Are you aware of any special tariffs available from your operator to deal with the problem? QA7: Did you use one of these special tariffs? (ask if yes to QA6) Base: All Respondents; 954

The most common ways to avoid paying extra charges are to avoid making calls, to avoid taking calls or to set a phone's network selection to 'manual' so it cannot roam to a Republic of Ireland network. Around three-quarters (77%) of those affected by inadvertent roaming used at least one of these three remedies (Figure 2.13).

Figure 2.13 Awareness and use of special tariffs to deal with inadvertent roaming



QB8: Have you ever done any of the following things to avoid paying extra charges when you pick up a Republic of Ireland network? Base: Respondents who have experienced inadvertent roaming. n = 722

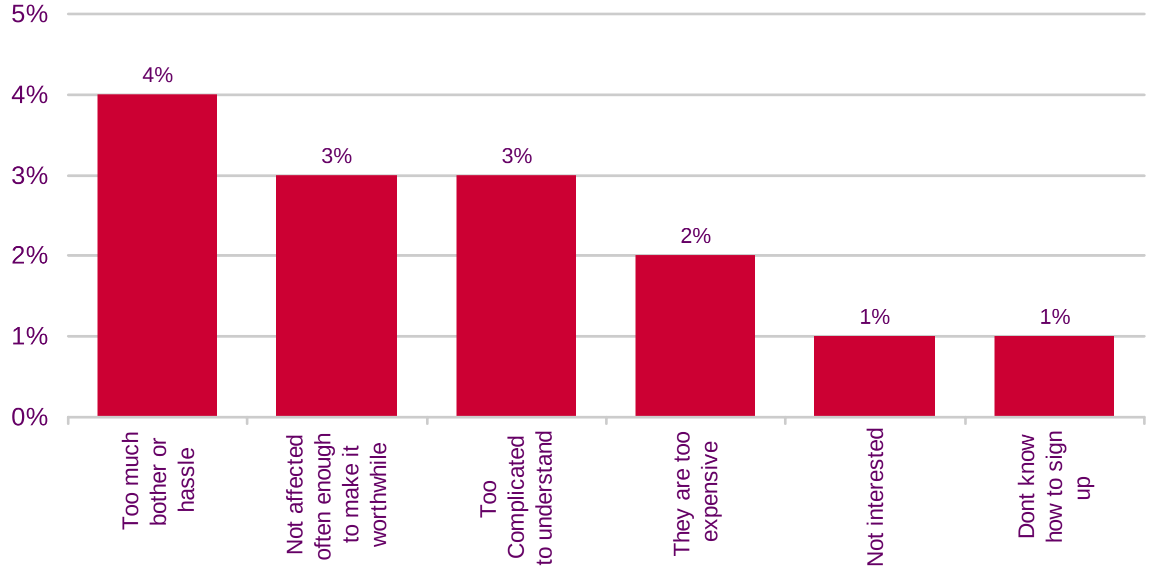
Too much bother and lack of understanding are the main reasons given for not using special tariffs

The number of people who use special tariffs is only 7% of all Northern Ireland border region mobile users. When asked about what kind of tariffs they used, they reported a variety of options. Many of these tariffs may not adequately deal with the problem:

- Various free texts and free minutes deals (O2, Vodafone, T-Mobile)
- Bolt-ons (inc Ireland Bolt-on)
- Call and text bundle (inc with O2)
- Off peak package (inc O2 Weekend/Leisure time)
- International tariff/ call saving
- Roaming (inc O2 roaming)
- Passport (inc Vodafone Passport)
- Call discounts in Ireland
- Special SIM card
- Text package

The perception that ‘it is not worthwhile’, and lack of understanding, are the main reasons given for not using special tariffs (Figure 2.14).

Figure 2.14 Reasons for not using a special tariff to deal with inadvertent roaming



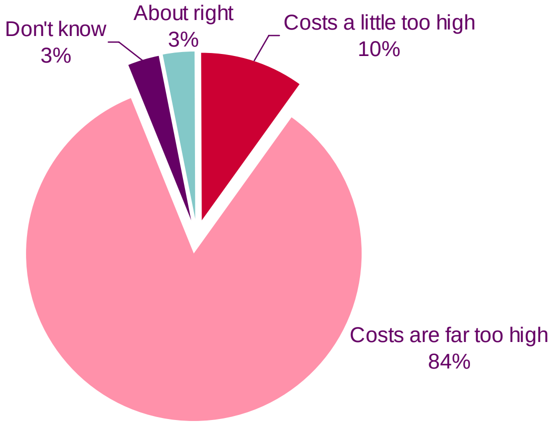
QA8b: Why don’t you use one of these special tariffs? Base: respondents who are aware of, but who do not use special tariffs 146 - Figures in charts based on entire sample of 954

Only a minority have ever complained to mobile network operators
Only a minority of respondents (6% of those of have experienced inadvertent roaming) have complained about inadvertent roaming, mostly to their network operator. Those on monthly contracts are more likely to have complained (13%) than customers on pay-as-you-go (5%). Survey responses suggested that advice given often did not address the problem; about half were dissatisfied with the response and/or advice they received.

2.3.6 Financial impact of inadvertent roaming

Most think that inadvertent roaming costs are far too high
The vast majority of those affected by inadvertent roaming (84%) think the costs are far too high (Figure 2.15).

Figure 2.15 Opinion of costs associated with inadvertent roaming



QA5: How do you feel about the costs associated with inadvertent roaming? Base: All respondents who experienced extra costs while roaming; 532

Frequency of occurrence
An estimated 50,400 mobile customers in border areas incur a cost each week as a result of inadvertent roaming. On average a mobile customer in the border area can expect to incur a cost because of inadvertent roaming once every four days. In total (as a group) mobile customers in the border area incur costs an estimated 26,500 times every day (nearly 10 million occurrences a year).

Financial impact on consumers
If the average length of a mobile phone call made or received is assumed to last two minutes, the total estimated additional cost to mobile customers of inadvertent roaming would be £29,777 each day or £10.9 million per year. If the average call length is assumed to be one minute then the estimated total additional cost would be £5.4 million. This would mean that the 105,000 mobile customers in the border area affected by this problem could each be incurring charges of between £50 and £100 a year.

These are likely to be reasonably conservative estimates because they do not include extra costs for SMS messages, or take account of consumers from elsewhere in Northern Ireland, or indeed from elsewhere in the UK, who may also experience inadvertent roaming when visiting a border area but less often than those interviewed. Also, the figure does not attempt to measure the 'opportunity cost' of calls that are not made.

There is also a significant (though unquantifiable) 'opportunity cost' to mobile customers who choose not to make or take calls when they experience inadvertent roaming (74% of those who experience inadvertent roaming say that they at least occasionally avoid taking calls, and 83% say they avoid making them).

These estimates are based on call cost data from Pure Pricing[5]. The workings and assumptions are detailed in Annex A.

Many of the tariffs available are not specifically designed for the Northern Ireland situation. One that is, however, is the Ireland Bolt-on from O2. Unlike some tariffs, this is available to pre-pay customers (who make up 73% of all customers in Northern Ireland) and for £1.99 a month it enables users to roam to any Republic of Ireland network and only pay their

[5] www.purepricing.com

standard rates. Although the majority of all mobile users in the border areas are with O2, few customers appear to be using the tariff and might therefore be unaware of the O2 bolt-on. It is hoped that the publication of this report will draw attention to this and to other offerings, such as the more recently introduced *3 Like Home*, which can effectively eliminate the problem of inadvertent roaming for consumers living in the border areas of Northern Ireland.

2.4 Communications services in rural and urban areas

2.4.1 Introduction and background

The 2006 *Nations and Regions Audit* found that levels of take-up and consumption of communications services were connected to whether consumers lived in an urban or a rural area of the UK. To understand this rural-urban split more fully, Ofcom commissioned a set of quantitative research surveys in each of the UK's nations to allow comparisons to be made between the behaviours and attitudes of consumers in urban and rural areas in each country.

The research objectives were:

- to explore *perceived* levels of communication services availability across urban and rural locations across the UK and claimed levels of take-up;
- to identify the proportion of consumers in rural and urban areas who wanted to acquire a service they currently believed was not available to them; and
- to examine the attitudes held by people in both urban and rural areas towards widening communication services access in rural regions.

The findings discussed in this section are drawn from a telephone survey conducted in Northern Ireland by ICM Research. Respondents in Northern Ireland were classified according to an approach recommended by the Northern Ireland statistics and research agency[6]; ICM spoke to 402 people living in urban locations and 401 in rural locations;

Owing to the fact that three separate pieces of research were undertaken to build a UK-wide picture, there is limited comparability between the results from each nation. Comparisons in the following section should therefore be regarded as indicative only.

A note on survey data in this section
Some of the survey data in this section suggest different levels of take-up of communications services compared to Ofcom's tracker survey**.** The primary purpose of the research in this section was to measure differences between urban and rural areas. The differences are explained by several reasons:

- **Sample**. The research was conducted by a different research agency, using a slightly different sampling approach
- **Methodology**. The use of a telephone survey meant that about one in 10 consumers (who use only mobile phones) were excluded from this survey. Telephone research does not allow the use of showcards, which can help explain services more clearly to respondents.
- **Question wording.** As the surveys had different objectives, some slight differences in question wording may have had an impact.
- **Timing.** The tracker research data is based on a survey conducted continuously throughout 2006, whereas the data in this section are based on research conducted at a single point in time in 2007.

The figures on digital radio use should be treated with some caution, as many consumers might not realise they have access to digital radio via a TV set top box and there may also be some confusion with digital tuners on analogue radios.

[6] http://www.nisra.gov.uk/statistics/financeandpersonnel/DMB/ur_main.pdf

2.4.2 UK-wide picture

Three issues connected to the perceived *availability* and take-up of communications services in urban and rural areas of were explored in the research - perceived availability of communications services in the rural and urban areas of the UK's nations; demand for service from those who perceive themselves to be deprived of services, and attitudes towards widening access to communications services in rural locations.

Take-up of communications services in urban and rural areas across the UK
From the perspective of services *take-up*, there was a consistent picture of lower levels of service take-up in the rural areas of Scotland, Wales and Northern Ireland, but to a lesser extent in England. The gap in claimed take-up was widest for broadband (54% versus 45% in Scotland, 57% versus 58% in Wales and 56% versus 45% in Northern Ireland). The claimed gap in digital television take-up was also substantial in Wales and Northern Ireland (95% versus 91% and 77% versus 61% respectively).

2.4.2.1 Perceived availability of communications services across the UK

From the perspective of perceived *availability*, urban and rural consumers in England held similar views about their access to communications services. In Scotland, Wales and Northern Ireland, by contrast, there were substantial gaps in perceived availability of 3G mobile and DAB digital radio.

For 3G mobile, urban consumers across Scotland and Wales expressed relatively high levels of perceived availability (82% 51% respectively), which contrasted with substantially lower perceived levels in rural locations (68% and 39%). In relation to DAB digital radio, large perception gaps existed in all three nations. In urban locations in Scotland, Wales and Northern Ireland 92%, 69% and 62% of consumers respectively believed the service was available to them. This contrasted with sharply lower levels of perceived availability in rural locations – 75%, 61% and 53%. In addition, there was a substantial gap in perceptions connected to Broadband availability in Wales – 90% of people in urban areas believed the services were available to them, contrasting with 82% of people in rural locations.

2.4.2.2 Demand for communications services that are not yet available to consumers

The research examined the extent to which people who perceived themselves to be deprived of communications services would like access to those services. In both England and Scotland, few people who believed they could not access communications services said that they would use them if they were available. This contrasted with Wales and Northern Ireland, where there were a larger number of people who wanted access to services they believed they could not get.

DAB emerged in both countries as the service where this 'latent' demand was highest, with 11% in Wales and 9% in Scotland saying that they would use DAB digital radio if they were able to receive it.

3G had the second highest level of demand among those without perceived access, with 7% and 8% respectively saying that they would take up the service if it were available to them.

2.4.2.3 Consumer attitudes towards widening communications services in rural areas

The final topic in the research explored in this research related to consumer attitudes towards making communications services available to consumers in rural locations.

There was strong agreement across all nations and all locations (rural and urban) that people in rural areas should have equal access to communications services that were already available in urban locations; that said, many people in urban locations in Scotland did believed that people in rural locations could not expect the same range of services as those in urban regions.

2.4.2.4 Take-up of communications services in urban and rural areas in Northern Ireland

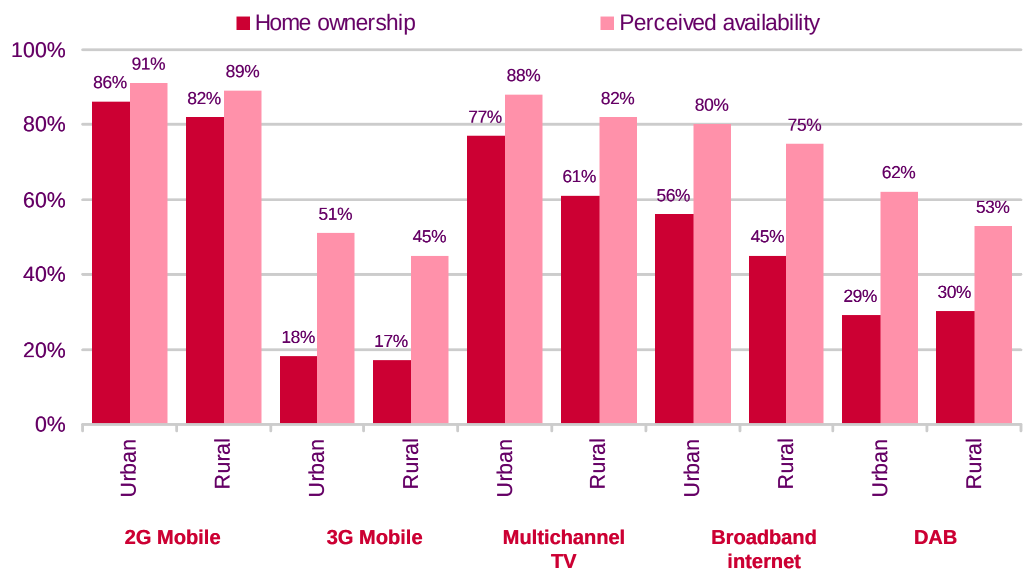
The survey in Northern Ireland examined differences between urban and rural areas. The population profile of Northern Ireland is such that the west of Northern Ireland tends to be more rural than the east (which of course includes Belfast, where there is a population concentration). As such, the description of the survey that follows also refers to differences between the east and west of Northern Ireland.

Figure 2.16 shows that take-up of multichannel TV and broadband are significantly lower in Northern Ireland's rural areas than in the urban areas. Mobile phone household penetration is also slightly lower in rural areas.

The total proportion of homes with internet in rural areas lags behind urban areas by five percentage points. Broadband penetration stands at 56% of urban and 45% of rural homes.

Given the differences between urban and rural areas, households in the east of Northern Ireland are significantly more likely to have broadband and multichannel TV than those in the west.

Figure 2.16 Claimed ownership and perceived availability of communications services in urban and rural areas in Northern Ireland



Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
Perceived availability of narrowband was not asked (telephone survey)
DAB radio also includes those with digital radio accessed through a TV set top box.

2.4.2.5 Perceived availability of communications services in urban and rural areas in Northern Ireland

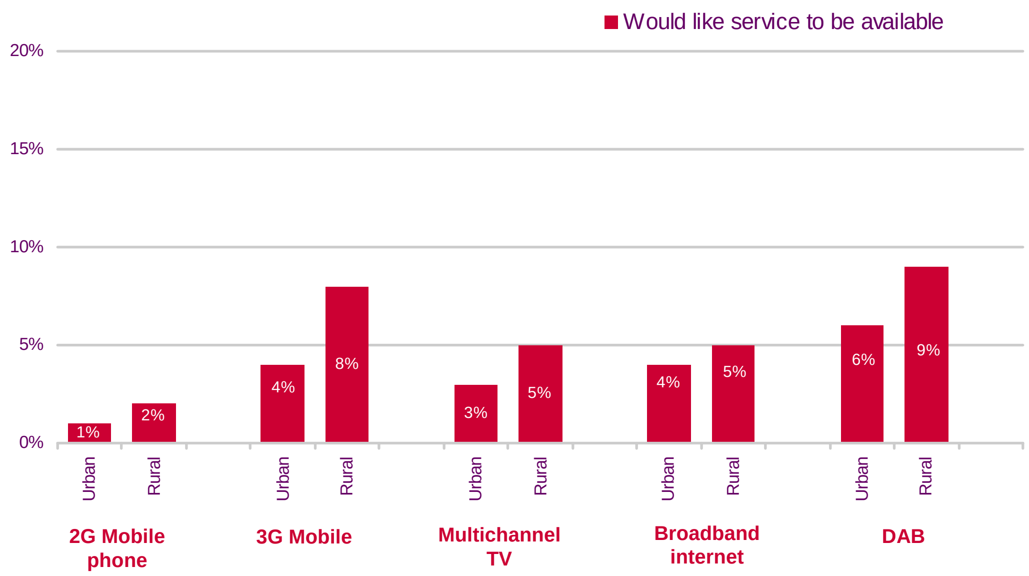
The perceptions of communications service availability also differ between rural and urban areas. As shown in Figure 2.17, the data indicate lower perceptions of availability in rural areas of 3G mobile, multichannel TV, broadband and DAB digital radio.

2.4.2.6 Demand for communications services that are perceived to be unavailable in Northern Ireland

Of all of the UK's nations, those living in Northern Ireland appear to have the greatest overall desire for access to communications services that they currently perceive to be unavailable. Between 5% and 10% of consumers in urban and rural areas say they would like 3G, multichannel, broadband and/or DAB digital radio to be made available. Consistent with the perceived levels of availability, desire for these services appears greater in rural areas.

The survey results on service availability in the west of Northern Ireland are similar to the findings in areas defined as rural, due to the close overlap in the data sets.

Figure 2.17 Desire for services to be made available in Northern Ireland



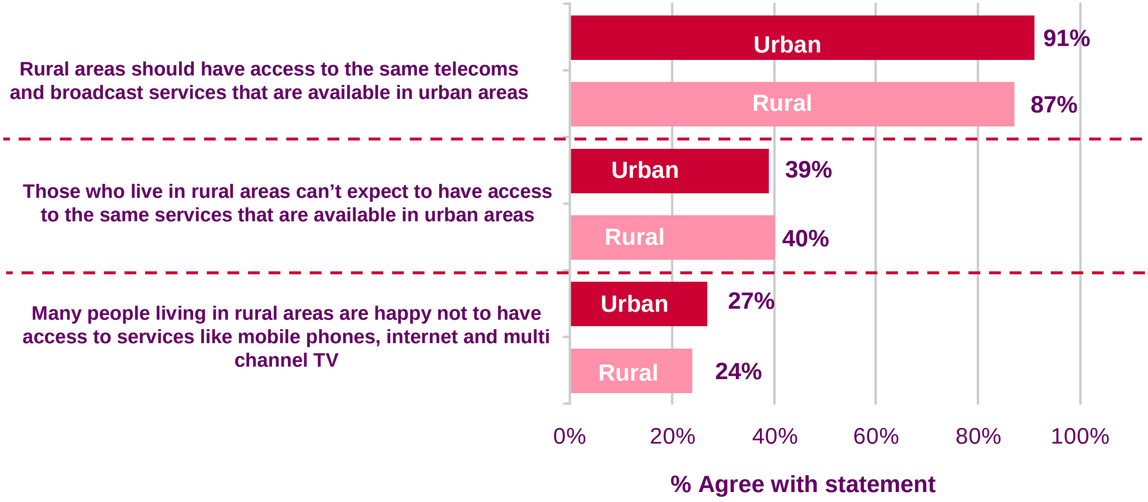
Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
Perceived availability of narrowband was not asked

2.4.2.7 Consumer attitudes towards widening communications services in rural areas in Northern Ireland

Attitudes to service availability are fairly similar in urban and rural areas in Northern Ireland. The majority (about nine in ten) agreed that telecoms and broadcast services should be equally available in urban and rural areas. However many also agree that those in rural areas cannot realistically expect to have access to the same communications services as those in urban areas.

About a quarter of all adults believe that many people in rural areas are actually quite content without access to services like mobile phones, internet and multichannel TV.

Figure 2.18 Attitudes towards communications service availability in rural areas in Northern Ireland



Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
Perceived availability of narrowband was not asked

2.5 Comparative analysis of Northern Ireland and the UK

2.5.1 Television

2.5.1.1 Programme spend

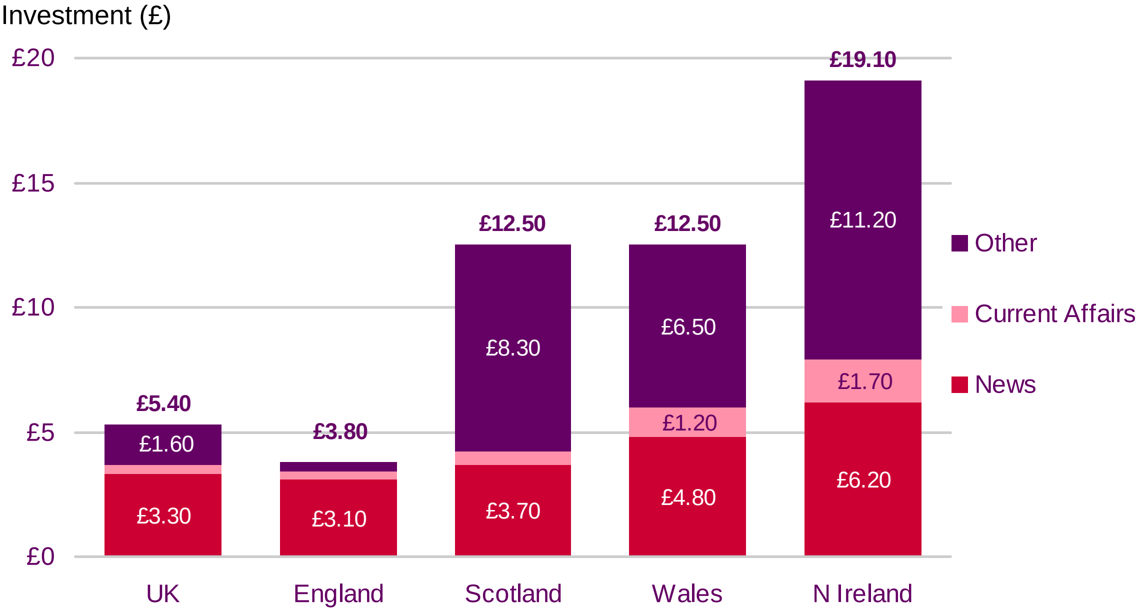
Highest spend per head on regionalised output but lowest on networked programmes
Regional programme spend in Northern Ireland totalled £33m in 2006, representing 10% of the UK's total regional expenditure in that year. Spend in Northern Ireland fell at an average annual rate of 5.1% over the five years to 2006 compared with the national average of 3.8%.

By genre, local news accounted for 33%, or £11m of the £33m total, while 'Other' output (i.e. non-News and Current Affairs output) accounted for 58% or £19m. The remainder of the budget - £3m - was invested in Current Affairs programming.

Viewers in Northern Ireland received the highest per-capita investment of any UK nation, at £19.10, compared to UK-wide spend totalling £5.40 per capita in 2006 (see Figure 2.19). 'Other' (i.e. non-News and Current Affairs output) in Northern Ireland was the genre with the highest spend per head totalling £11.20 in 2006. Northern Ireland's local news cost £6.20 per head.

Conversely, spend in *network* production across the five analogue terrestrial channels was lowest in Northern Ireland, at £3.85 per head compared to the UK-wide figure of £32 across all five terrestrial broadcasters in 2006.

Figure 2.19 Regional programme investment per head, 2006



Source: Broadcaster returns and Ofcom calculations

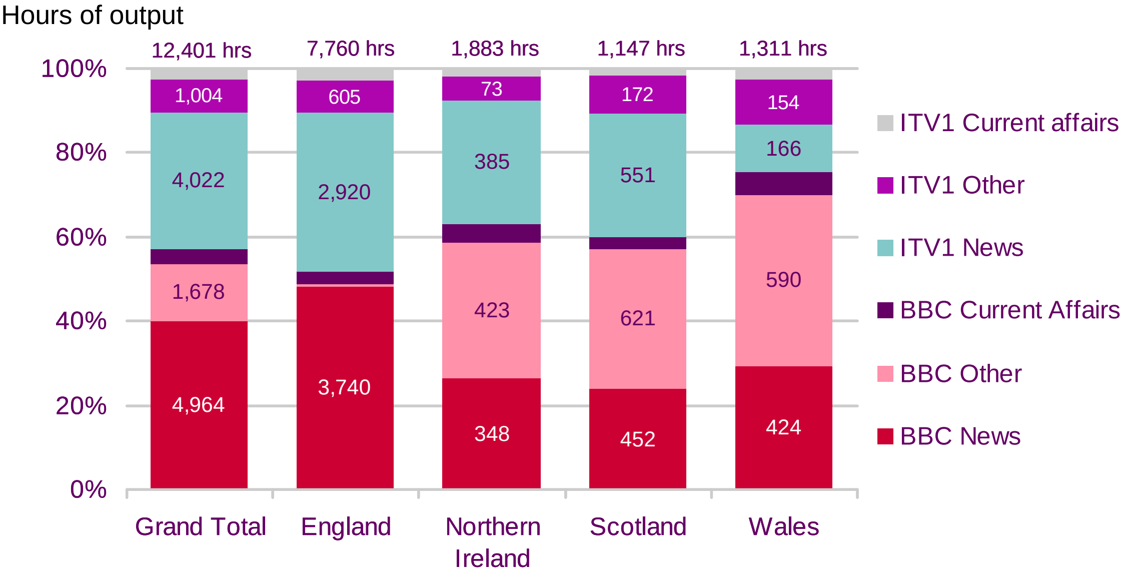
Over time, spend in Northern Ireland's 'Other' output fell by 35% between 2001 and 2006 (compared to the national average of 38%), and national and regional News investment fell by 10% (compared to the national average reduction of 3%).

2.5.1.2 Programme output

BBC Northern Ireland and UTV schedules together are most regionalised in the UK
Northern Ireland had the lowest absolute volume of regionalised television output in 2006, at 1,311 hours. That total fell by 7%, or 98 hours, in the five years to 2006 compared to the UK average over the same period of 17% (see Figure 2.20). There was a higher incidence of regionalised output in the schedules of BBC One Northern Ireland, BBC Two Northern Ireland and UTV than in any other UK schedule, with 5.5% of all hours devoted to regional output (compared to the UK average of 3.8%).

Reflecting the distribution of spend across the three national and regional genres in Northern Ireland, broadcast hours were dominated by News and 'Other' output - 56% and 38% of all hours respectively.

Figure 2.20 Hours of regional output by nation, broadcaster and genre



Source: Broadcaster returns

2.5.1.3 Cost per hour

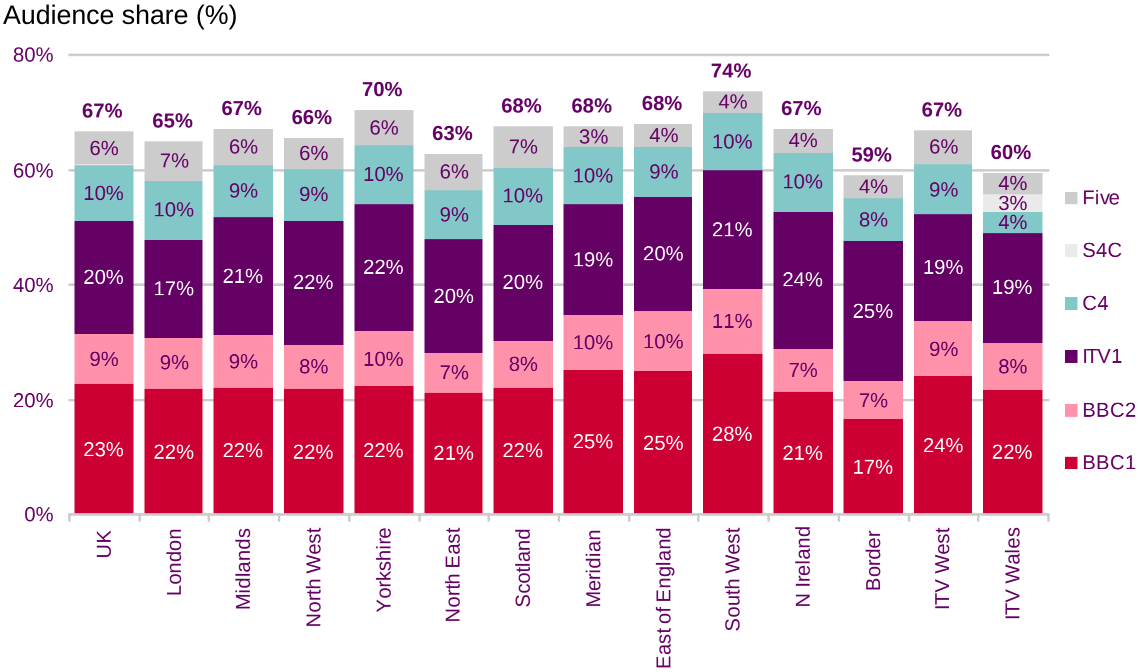
On a cost-per-hour basis, Northern Ireland output stood at £25k per hour in 2006, compared to the UK average of £26k per hour. Programme spend per hour fell by 19% in the five years to 2006, driven by a fall in the cost of 'Other' output..

Independent producers in Northern Ireland benefited from the second highest cost per hour for commissions in 2005, at £49k per hour – only Scotland's indies came in higher (£57k per hour).

2.5.1.4 Market shares

Figure 2.21 illustrates that in 2006 the five terrestrial networks attracted a 67% share of viewing in Northern Ireland homes – in line with the UK average. BBC One and BBC Two attracted four percentage points less share in Northern Ireland compared to their UK averages of 23% and 9% respectively. UTV picked up four percentage points, with a share of 24% compared to ITV1's national average share of 20%.

Figure 2.21 Audience share of the five terrestrial channels, all homes, in 2006



Source: BARB

In multichannel homes, the BBC's channel portfolio attracted the second lowest share in the UK, at just 25% (compared to the UK average of 31%). UTV combined with ITV's spin-offs, meanwhile, secured a share of 23% (UK 22%) while Channel 4's share was the same as the UK average at 11%. Five proved less popular with viewers in Northern Ireland, reflecting less than universal availability, with a share of 4% relative to the national average of 5%.

Along with the ITV1 West region, North East of England and Yorkshire, the Northern Ireland television market was unique in seeing all five terrestrial networks and their spin-off channels increasing in market share in multichannel homes over the period 2002-2006; in the case of Northern Ireland the share increased by 6 percentage points. By contrast, the UK average multichannel share for BBC and ITV1 fell by 1 and 6 percentage points respectively.

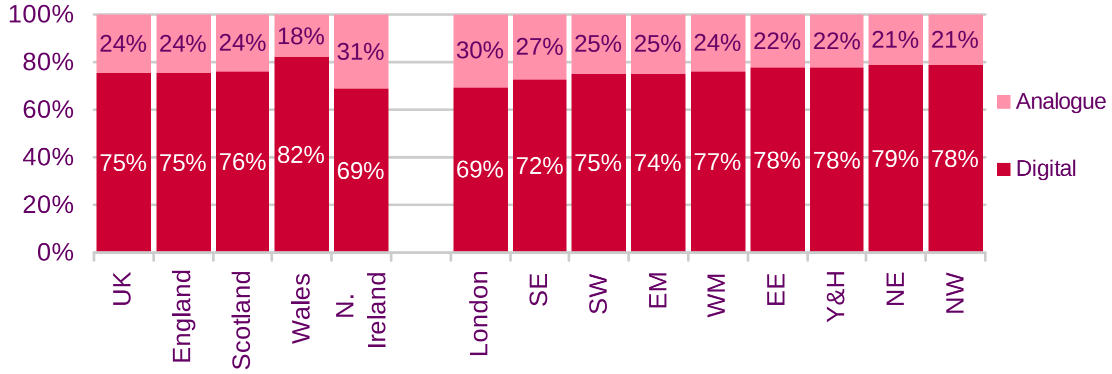
2.5.1.5 DTV availability and take-up

At 58% Freeview availability in Northern Ireland was substantially lower than the UK average of 73%. Similarly digital cable coverage stood at 30% of all homes compared to the national figure of 45%.

DTV penetration lowest of the four nations at 69%
An average of 69% of individuals claimed access to digital television in 2006 (see Figure 2.22), the lowest of the four nations; in that year, the UK-wide DTV figure stood at 75%.

Figure 2.22 Methods of receiving television on the main set in the home (2006)

Proportion of individuals (%)



Source: Ofcom research, 2006

Of those Northern Ireland homes that subscribe to digital television, 84% chose digital satellite services - the highest proportion in the UK and well above the UK average of 70%.

2.5.1.6 Consumption

People in Northern Ireland watch less television

On a per-capita basis, Northern Ireland television viewers consumed fewer hours of television than any other part of the UK in 2006 - 3.34 hours per day compared to the UK average of 3.75 hours in the same year. This figure was 11.9% lower than the equivalent viewing figures in 2002, with viewing per person per day falling further in Northern Ireland than anywhere else in the UK.

Viewing of television by day part varies widely across the UK's nations and regions. The all-day 2006 average showed greatest variance at 21:15, when 47% of people in the North East were watching television, compared to just 37% of Northern Ireland viewers .

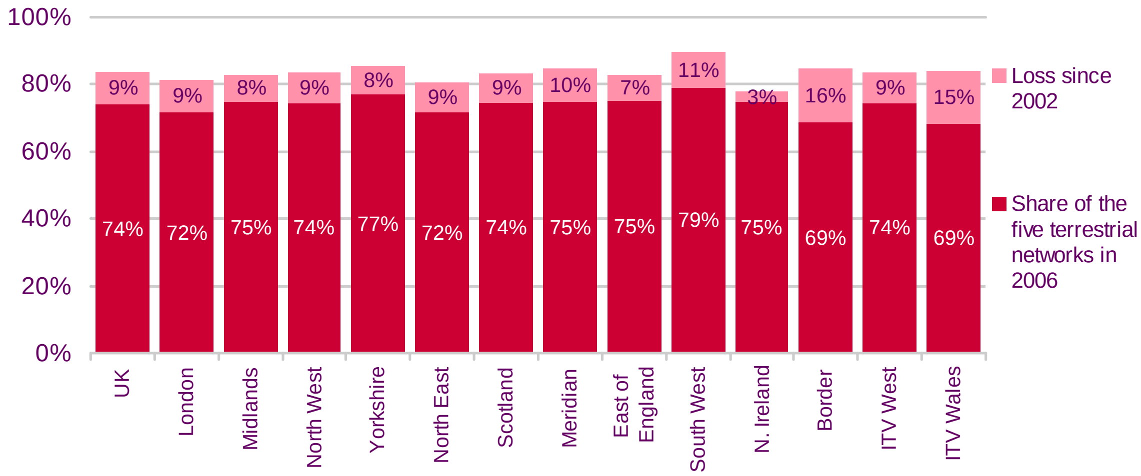
Reflecting the lower levels of consumption of television, fifteen-minute all-television weekly reach (that is, the proportion of the total available audience that watch television for at least fifteen consecutive minutes per week) in Northern Ireland was one of the lowest in the UK during 2006 at 91.2% (compared to the national average of 92.8%). Across the five terrestrial networks, reach in Northern Ireland was 86% in the same year against a national average of 89%.

In 2006 Northern Ireland was one of only two regions where the Channel 3 licensee had a greater share of viewing than the BBC, with UTV attracting an audience share 2.2 percentage points ahead of BBC One – the UK average had BBC One leading ITV1 by 3.1 percentage points.

Historically, the combined share of the five terrestrial networks has been low in Northern Ireland (possibly explained by the availability of services from the Republic of Ireland). In 2002 combined share stood at 72% compared to the national average of 78%. By 2006 however, their combined share had only fallen by five percentage points to 67%, with the result that share in Northern Ireland was fully in line with the UK average (Figure 2.23).

Figure 2.23 Share of the five terrestrial networks, 2002 - 2006

Share (%)



Source: BARB

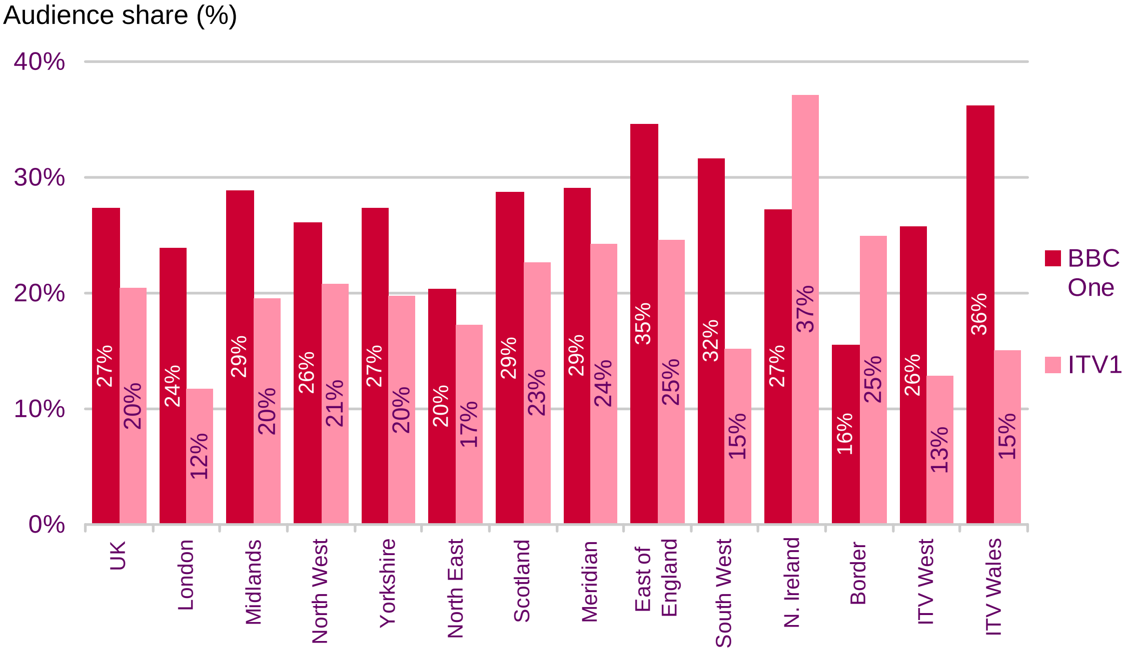
Meanwhile, when comparing 'all day' to 'peak time' viewing, the share increment that UTV attracted in 2006 was greater than that in any other ITV region, at 9% compared to a network average increment of 6%.

Turning to television genres, on an 'all day' basis Northern Ireland viewers preferred Soaps to Drama and News. In peak time this preference was particularly significant with 21% of all viewer hours dedicated to Soaps, compared to the national average of 17%.

In the top ten programmes of 2006, the World Cup did not (in contrast to other regions) prove especially popular with viewers in Northern Ireland. Instead, *Coronation Street* and *Emmerdale* topped the list, followed by *The X Factor*.

Local News, meanwhile, was more popular in Northern Ireland in 2006 than in any other region (Figure 2.24). Together, the early evening local news bulletins of UTV and BBC1 Northern Ireland attracted a share of 64%, in comparison to the national average combined share of 47%. UTV's evening bulletin, UTV *Live At Six*, led BBC1 Northern Ireland's evening news programme, *Newsline,* by 10% (in comparison to BBC 1's network lead over ITV1 of 7%). BBC1 Northern Ireland's evening news has, however, grown in popularity over the last four years, adding four percentage points of share over that period, while UTV lost one percentage point.

Figure 2.24 ITV and BBC early evening regional news share (2006)



Source: BARB

2.5.1.7 Minority language television

Northern Ireland has two indigenous minority languages, Irish and Ulster Scots, both of which received recognition in the Belfast/Good Friday Agreement (1998). Unlike the situation in Wales and Scotland, there are no statutory requirements or statutory funding relating to the broadcasting of either Irish or Ulster Scots. However, TG4, the Republic of Ireland's Irish language channel, is widely available in Northern Ireland.

TG4 in the Republic plays a role similar to S4C in Wales; just as BBC Wales supplies a significant amount of Welsh programming to S4C, so too does RTÉ to TG4. Government policy has been directed at ensuring that its availability should be widespread in Northern Ireland.

The establishment of the Irish Language Broadcast Fund, the majority of whose commissions are for TG4, is funded by the Northern Ireland Department of Culture, Arts and Leisure and supplies a Northern Ireland dimension to TG4's output. As a commissioner-publisher, the ILBF plays a role that is similar to, but much comprehensive than that played by the Gaelic Media Service in Scotland. In Scotland, as in Wales, BBC Scotland makes significant use of GMS funding as well as commissioning and broadcasting Gaelic programmes itself. It is also working with the GMS in planning the delivery of the new Gaelic Digital Service for Scotland.

BBC Northern Ireland produces and broadcasts a small but significant amount of Irish language programming each year, some of it with the assistance of the ILBF. The BBC's Audience Council is undertaking, during the early part of 2007, a consultation seeking views on how BBC Northern Ireland should best serve the interests of both its Irish language and Ulster Scots audiences.

There is no broadcasting fund for Ulster Scots – the focus of government aid to date has been in areas other than broadcasting – but BBC Northern Ireland broadcasts some Ulster Scots programming each year and both it and UTV also broadcast programming which, while targeted at the general audience, is likely to be of particular interest to the Ulster Scots community.

2.5.1.8 Attitudes towards television

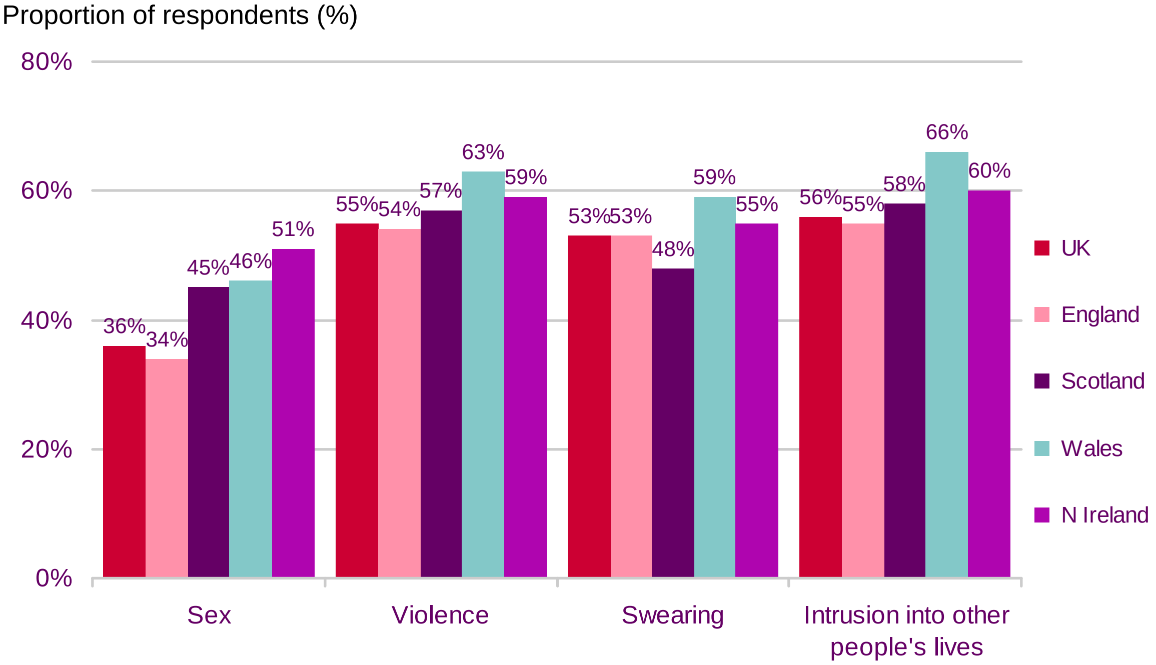
TV relied on as main source of local news
People in Northern Ireland claim to turn to the television for international news far more than in other regions. Ninety per cent of respondents in Northern Ireland cited television as their primary source; the UK-wide figure was 72%. UTV was more frequently cited as the preferred source of local news.

In 2006 a larger proportion of viewers in Northern Ireland believed that the quality of television content had deteriorated, with 33% of respondents to Ofcom's tracking study expressing this view, compared to 26% on a UK national basis.

Viewers in Northern Ireland were also most likely to believe that TV programmes show unfair treatment of certain groups, with 41% of respondents expressing this view; the UK-wide figure was 35%.

The portrayal of sex on television was of particular concern to viewers in Northern Ireland, with 51% of respondents believing there is too much sex on television today, in comparison to the average UK figure of just 36% (Figure 2.25).

Figure 2.25 Attitudes towards levels of sex, violence & swearing on TV (2006)



Source: BARB

2.5.2 Radio

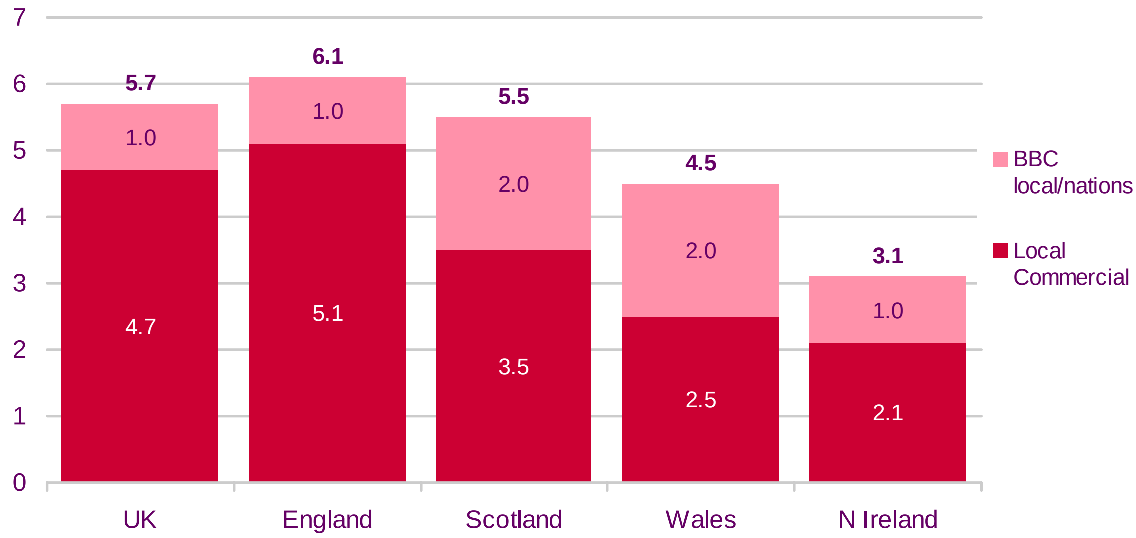
2.5.2.1 The radio industry

Choice of commercial stations per head lowest in Northern Ireland
There are ten local commercial radio stations in Northern Ireland, along with two national BBC services (BBC Radio Ulster and BBC Radio Foyle). There are also currently three community radio stations on air in Northern Ireland with a further three licences awarded and another nine community licence applications currently being considered. The typical radio

listener in Northern Ireland has access to 3.1 local stations (including both local commercial and BBC stations for Northern Ireland). This compares to the UK average of 5.7 stations per person.

Figure 2.26 Choice of analogue radio stations in the UK

Average number of radio stations per head



Source: Ofcom research, 2006

Turning to the question of radio station coverage, five of Northern Ireland's stations cover areas of more than 250,000 people, with five covering small areas with fewer than 100,000. The picture is similar to that in Scotland, with most stations covering either larger urban areas or smaller rural areas and fewer medium sized stations.

BBC investment per head in Northern Ireland radio services second highest in the UK
Northern Ireland listeners benefit from the second highest spend on programmes per head of population at £6.77, above expenditure in England and Scotland but below that of Wales.

Figure 2.27 BBC investment in local radio programming 2005-06

BBC programme spend per head (£ per head)

Source: BBC annual report 2005/06, the cost of BBC programmes in the nations and regions.

Apart from the BBC, the major radio operators in Northern Ireland include commercial radio groups such as Northern Media, which owns six of Northern Ireland's ten commercial stations. The Emap radio group owns two stations with the CN Group and UTV owning one each. Commercial radio revenue generated by these ten stations stood at £11m in 2006 and was equivalent to around 2.4% of UK total local commercial radio revenue. When this figure is corrected for population size, Northern Ireland station revenue equates to £6.66 per person, compared to the UK average of £7.89.

Figure 2.28 Commercial radio revenue per head 2006

Source: Ofcom research, 2006
Note: Chart shows net broadcasting revenues as based on returns received by Ofcom for the year 2006. The UK total also includes the UK-wide commercial stations: Classic FM, TalkSPORT, and Virgin 1215

2.5.2.2 Radio services availability

DAB available to just under 90% of the population of Northern Ireland
Analogue radio is available to almost all of Northern Ireland, while digital radio coverage via the BBC and the local DAB network is estimated at 87- 89% of the population. Digital radio services in Northern Ireland are provided by the BBC's national multiplex along with a local multiplex operated by Emap. Emap estimates that its local multiplex coverage is currently 88.6% of the population of Northern Ireland, although this is an indicative figure. The BBC meanwhile has recently extended the coverage of its multiplex in Northern Ireland, with the addition of three new transmitters at Brougher Mountain, Limavady and Sheriff's Mountain in Londonderry; bringing BBC DAB coverage to around 87% in 2006.

Through the BBC and local multiplexes, Northern Ireland listeners have access to 20 DAB stations. These include the 11 UK-wide BBC stations (BBC Radio 1 to Five Live, Five Live Sports Extra, 6Music, BBC7, World Service and The Asian Network), BBC Radio Ulster, and two of the UK's national commercial stations (Classic FM and Talk Sport). An additional six stations are available through the local DAB multiplex in Northern Ireland.

BBC Radio Ulster is also available on DTV and the internet, while BBC Radio Foyle is available on the internet and Freeview.

Figure 2.29 National BBC radio stations available via digital radio in N Ireland

Station	DAB digital radio	bbc.co.uk	Freeview	Sky	Virgin Media
BBC Radio Ulster	Yes	Yes	89	118	932
BBC Radio Foyle	No	Yes	720	No	No

Source: BBC

2.5.2.3 Consumption

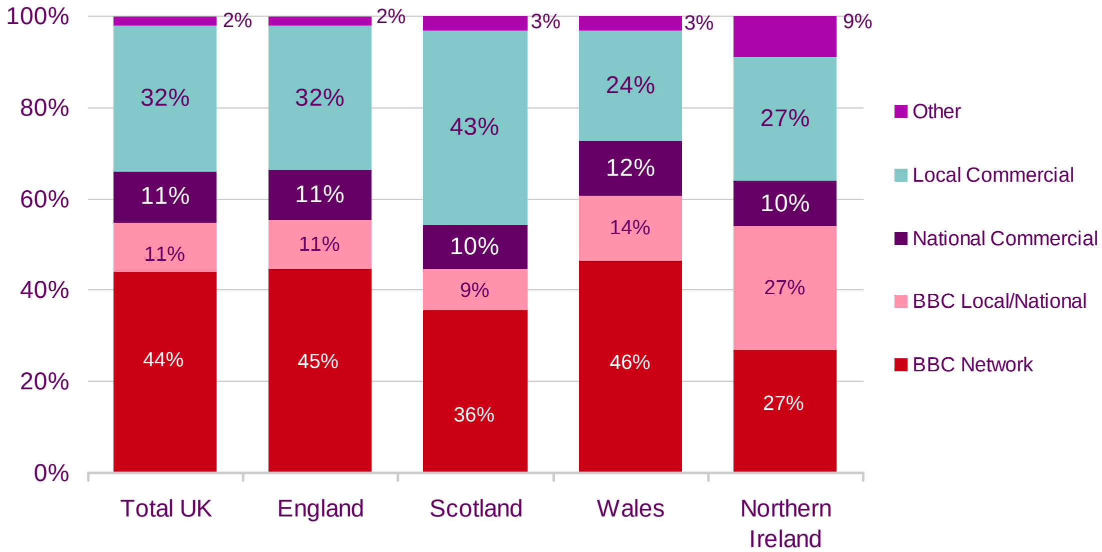
BBC local radio most popular in Northern Ireland
Radio reaches 90.7% of the Northern Ireland population on a weekly basis, slightly above the UK average of 90.0%. Average hours per listener in 2006 were also higher at 23.0 hours per week during 2006, compared to the UK average of 23.5 hours.

Listening to the BBC's local radio services is significantly higher in Northern Ireland than in any other nation. Listening to all BBC services accounted for a 54% share of all listening, which was in line with the UK average, but a much larger proportion of this listening is to BBC national / regional radio; listening to BBC Radio Ulster and Radio Foyle accounted for 26% of listening share, compared to the UK average of 10%. Share of listening to the BBC network stations stood at 27% in 2006, 17% below the national average.

Listening to commercial radio had a 37% share in the same year, compared to 43% across the UK. This can be explained partly by the lower levels of availability of national commercial radio in Northern Ireland compared to the rest of the UK. Listening to 'Other' radio stations, including RTE Radio and the community radio and short term licensed stations (RSLs), was also much higher in Northern Ireland at 10% compared to an average of 2% in the UK.

Figure 2.30 Share of radio listening across the UK

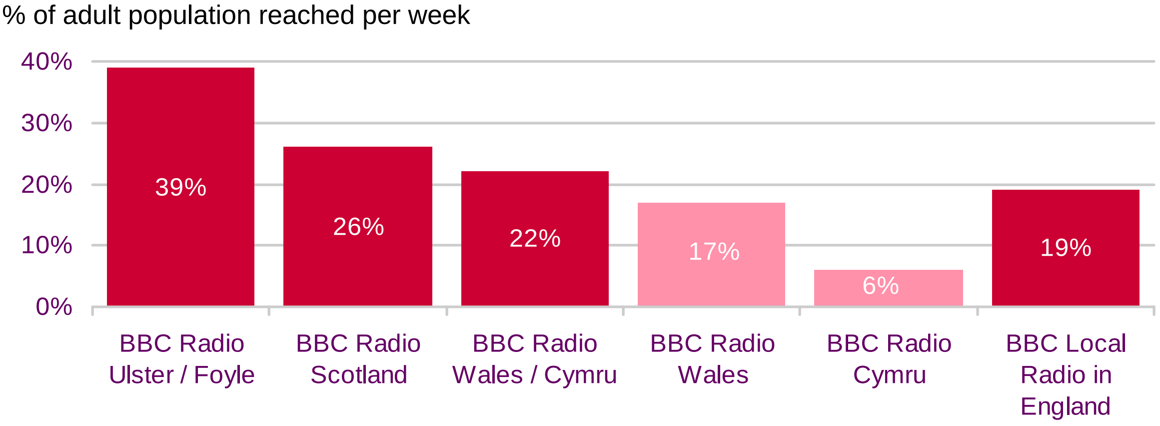
Share of listening hours by nation



Source: RAJAR 2006

Of the BBC national and regional radio stations, BBC Radio Ulster and Radio Foyle were the most popular of the BBC's national services, with a combined 39% of adults (aged over 15) in Northern Ireland listening to the stations on a weekly basis.

Figure 2.31 Weekly listening to BBC radio services across the UK

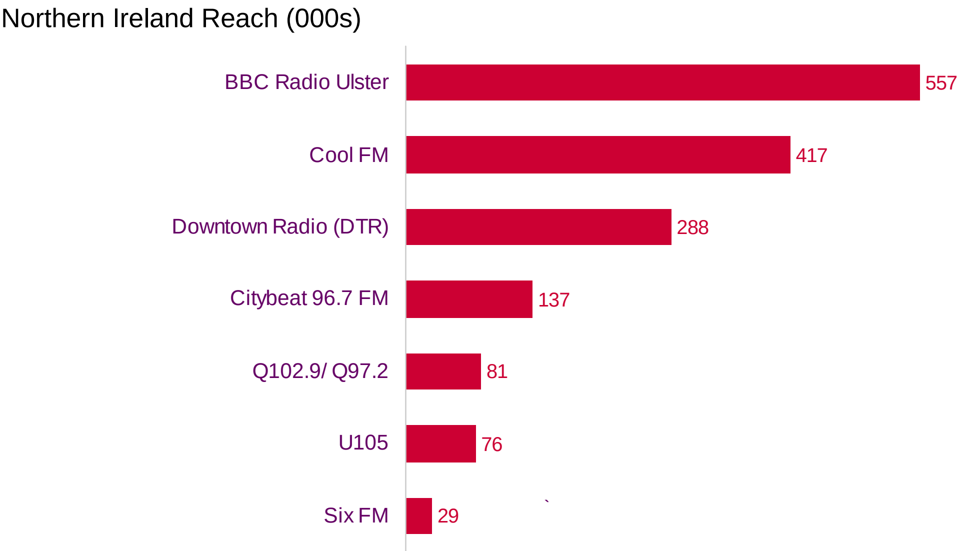


Base: All
Source: RAJAR Q4 2006

Of the local and national stations broadcasting in Northern Ireland, BBC Radio Ulster and Radio Foyle was the most popular station in terms of total reach in 2006, with a weekly reach of over half a million listeners. In terms of percentage reach of local population, the most popular local station was Cool FM, with 38% of people in the coverage area tuning in. This compares to 34% of people listening to BBC Radio Ulster and Radio Foyle across the whole province. When looking at adult listening only, BBC Radio Ulster is the most popular station, but when the under-15s are included, Cool FM reaches more people each week. BBC Radio Ulster has the highest number of average hours at 13.5 hours per listener per week.

Belfast's CityBeat reaches around a quarter (24%) of the local population each week. Likewise, stations Q102.9 and Q97.2 reach 24% of their local population. Q102.9 serves Londonderry and the North West, with Q97.2 serving Coleraine, Portrush, Portstewart, Ballymoney, and the Causeway Coast. Six FM reaches a similar percentage of the local population, with 23% of people in the middle region of the country tuning in weekly.

Figure 2.32 Reach of Northern Ireland radio stations, Q4 2006



Source: RAJAR 2006

Claimed radio listening in Northern Ireland

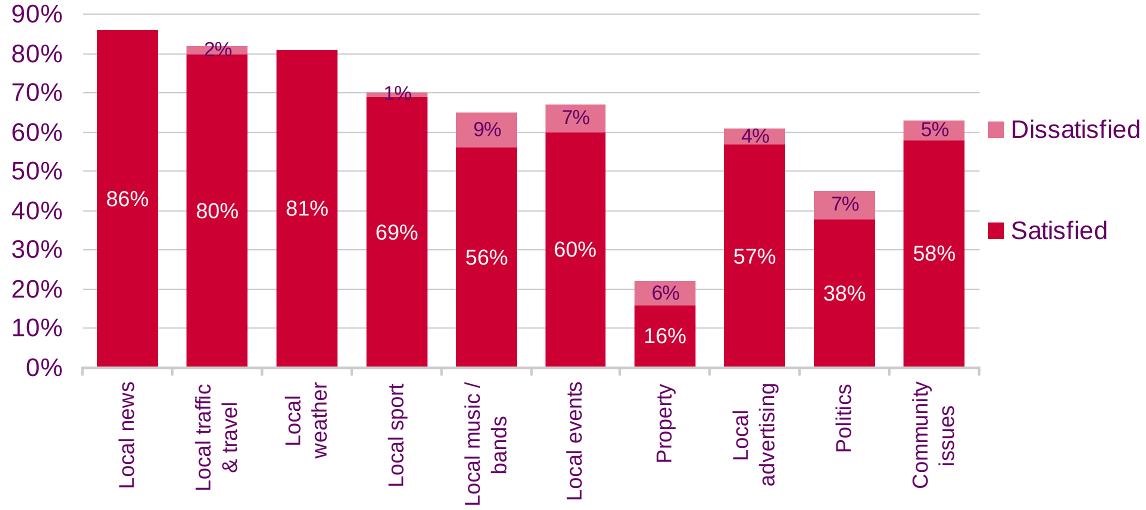
Ofcom's research (2006) found that 70% of people in Northern Ireland listen to the radio every day, which is broadly in line with the UK average of 71%. Ten per cent of people in Northern Ireland also said radio was their main source of news, consistent with the UK average of 11%. In terms of digital radio ownership, 11% of people in Northern Ireland claimed to have access to a DAB radio set in their home, in comparison to 18% of UK households. Twenty-one per cent also said they listened to some form of digital radio either through DAB, DTV or over the internet.

Satisfaction with local radio services in Northern Ireland
Satisfaction with radio services was generally high in Northern Ireland, with 93% of people satisfied with the choice of stations and 95% satisfied with the content carried by radio services. Respondents in Northern Ireland were also asked about their satisfaction with coverage of a variety of topics on local radio. The highest levels of satisfaction were with local news and weather, traffic and travel. The highest levels of dissatisfaction were with coverage of local music, local events, politics and property news.

Figure 2.33 Satisfaction with local radio's coverage of selected issues

How satisfied are you with the coverage of the following local issues and events on the radio?

Proportion of respondents in Northern Ireland (%)



Base: All who listen to radio
Source: Ofcom Communications Tracking Survey 2006
Note: Remaining percentage points are accounted for by either 'not dissatisfied' or 'don't knows'.

2.5.3 Telecommunications

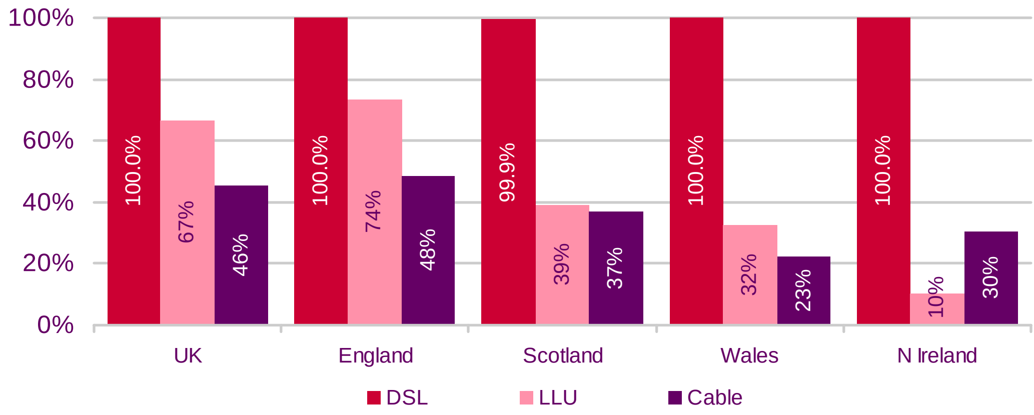
Availability of fixed-line services
BT and Kingston Communications (the incumbent in Kingston upon Hull) together have a universal service obligation (USO) to make fixed lines available to all UK households at a standardised charge, although additional connection charges apply in areas where installation is costly. The USO means that there are no significant issues regarding the availability of voice telephony and value-added services in the UK; although a small number of remote premises in Northern Ireland, and elsewhere in the UK, may have difficulty in connecting to the fixed network.

Narrowband internet
As the only requirement to enable access to narrowband internet services is a suitably equipped computer and a fixed line, the availability of narrowband services mirrors that of fixed lines and narrowband internet availability is almost universal across the UK.

Broadband internet
The two main technologies for supplying broadband in the UK are digital subscriber line (DSL) over a telephone line connected to a DSL or LLU-enabled local exchange or cable modem over Virgin Media, Wight Cable or Small World's networks. Figure 2.34 below shows the proportion of premises connected to a DSL or LLU-enabled BT exchange and the proportion of households passed by cable infrastructure which is capable of supplying broadband.

LLU allows an operator to provide service by locating equipment in a BT or Kingston Communications local exchange, and those premises connected to an LLU-enabled exchange are likely to have access to a wider choice of DSL broadband and fixed-line services. Although satellite broadband and wireless broadband services are available in some parts of the UK they make up less than 0.1% of UK broadband connections.

Figure 2.34 Proportion of premises connected to a DSL or LLU-enabled exchange and households able to receive cable modem broadband, by nation



Source: Ofcom / operator data; December 2006 data

Almost all UK premises were connected to a DSL-enabled exchange at the end of 2006, although a small proportion of these will not be able to receive service or may only be able to do so at limited speeds. Across the whole of the UK two-thirds (67%) of premises were connected to an LLU-enabled exchange while the household availability of cable modem broadband services averaged 46%.

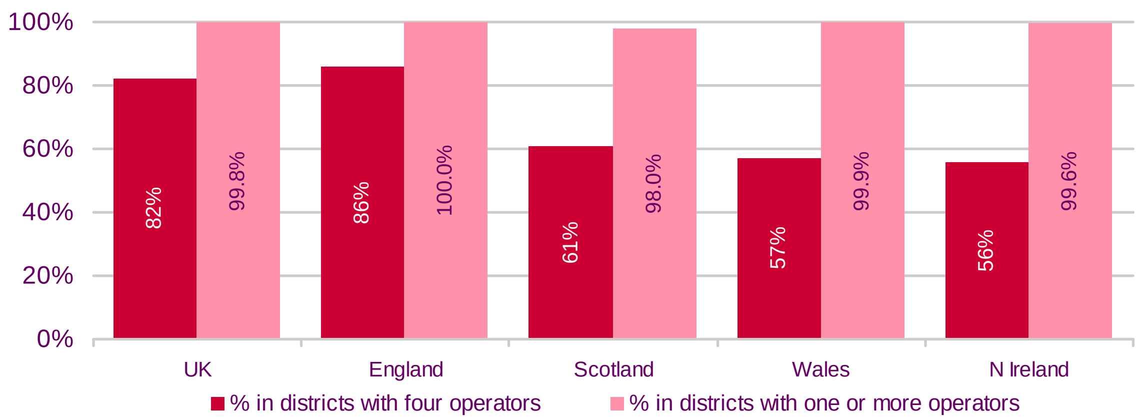
Fewer premises in Northern Ireland connected to an unbundled exchange compared to UK average
In common with England and Wales, virtually 100.0% of premises in Northern Ireland were connected to a DSL-enabled exchange at the end of 2006 (in Scotland the figure was 99.9%). Under the terms of its construct with DETI, BT Northern Ireland also provides a broadband satellite service at a subsidised maximum price to all premises too far from an exchange to receive DSL. The proportion of premises connected to an unbundled BT exchange in Northern Ireland (10%) was the lowest among the UK nations by a significant margin; the next lowest LLU availability was in Wales at 32%. Cable modem broadband availability in Northern Ireland was the second lowest among the UK nations with 30% of households being able to receive these services, compared to 23% in Wales, 37% in Scotland and 48% in England.

2.5.3.2 Availability of mobile telephony

2G mobile
Data obtained by Ofcom show that across the whole of the UK at the end of 2006 99.8% of people lived in a postcode district with at least 95% 2G mobile coverage by one or more networks, while 82% lived in a postcode district with 95% coverage by all four 2G networks. Figure 2.35 shows that 2G mobile population coverage in Northern Ireland was similar to the UK average. Details of geographic 2G coverage can be found in Section 5 of this report.

Comparing 2G availability from at least one operator with that in the other UK nations, population coverage in Northern Ireland (99.6%) was similar to that in England and Wales and higher than in Scotland (98.0%). Population coverage by all four 2G networks was the lowest among the nations in Northern Ireland at 56%, compared to 57% in Wales, 61% in Scotland and 86% in England.

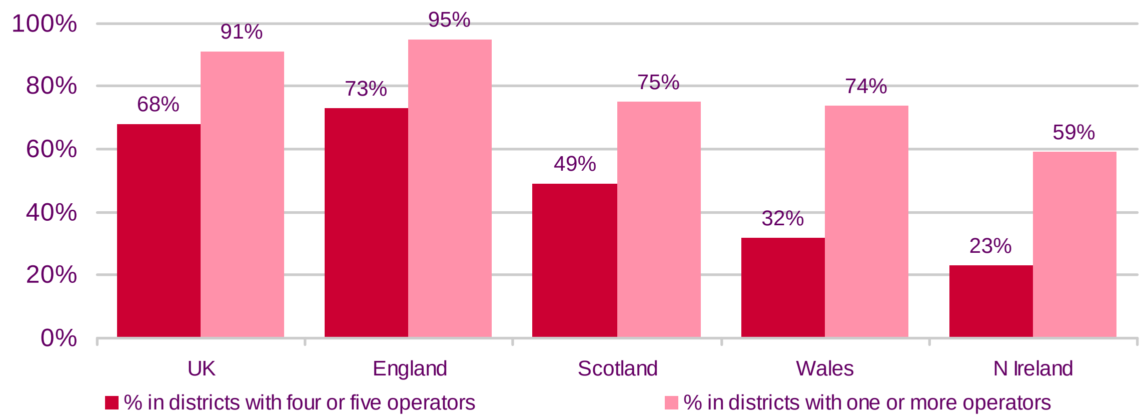
Figure 2.35 2G mobile phone population coverage, by nation



Source: GSM Association / Europa Technologies; Q1 2007
Note: Figures show the percentage of population within postal districts where at least one operator or four 2G operators have at least 95% area coverage.

3G mobile
Similarly, data obtained by Ofcom showing population coverage at a 50% area coverage threshold for 3G services indicated that across the whole of the UK 91% of people lived in a postcode district with at least 50% 3G mobile coverage by one or more mobile networks while 68% lived in a postcode district with the same area coverage by four or five 3G networks. Comparing 3G mobile availability in Northern Ireland to the other nations, population coverage by at least one 3G network (59%) was the lowest among the nations, as was coverage by four or five operators (23%).

Figure 2.36 3G mobile phone population coverage, by nation



Source: GSM Association / Europa Technologies; Q1 2007
Note: Figures show the percentage of population within postal districts where at least one operator or four or five 3G operators have at least 50% area coverage.

2.5.3.3 Take-up of fixed-line telephony

Take-up of fixed-line services averaged 90% among individuals and 92% among SMEs across the UK during 2006 (Figure 2.37). Fixed-line take-up among individuals in Northern Ireland (90%) was similar to the UK average as well as those in England (90%) and Wales (89%), and was higher than in Scotland (85%). Take-up of fixed-line services among SMEs in Northern Ireland (91%) was similar to that in England (92%) while it was higher than in Scotland (83%) and lower than in Wales (98%).

Figure 2.37 Fixed-line take-up, by nation

Base: All adults 15+ / all SMEs
Source: Ofcom research, 2006

2.5.3.4 Internet take-up

Internet take-up in Northern Ireland the lowest, both among individuals and SMEs
Across the UK 61% of individuals reported that they had a home internet connection and 77% of SMEs used the internet (Figure 2.38). Internet take-up among individuals in Northern Ireland (56%) was similar to that in Scotland (57%) and Wales (59%) and was lower than in

England (62%). Internet take-up among SMEs in Northern Ireland (71%) was similar to that in Wales (64%) and lower than in England (79%) and Scotland (80%).

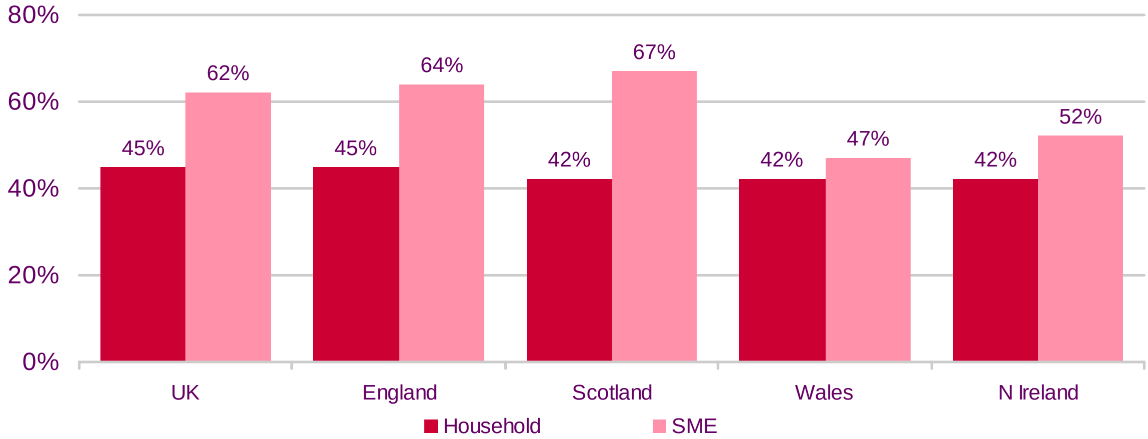
Figure 2.38 Internet take-up, by nation

Base: All adults 15+ / all SMEs
Source: Ofcom research, 2006

2.5.3.5 Broadband take-up

Northern Ireland consumer broadband take-up in line with the UK
Across the UK 45% of individuals responded that they had broadband at home during 2006 while 62% of SMEs indicated that they used a broadband connection (Figure 2.39). Broadband take-up among individuals in Northern Ireland was in line with that in England (45%). Scotland (42%) and Wales (42%). As with SME take-up of internet services, Northern Ireland had the second lowest SME broadband take-up among the nations (52%), compared with 67% in Scotland, 64% in England and 47% in Wales.

Figure 2.39 Broadband take-up, by nation



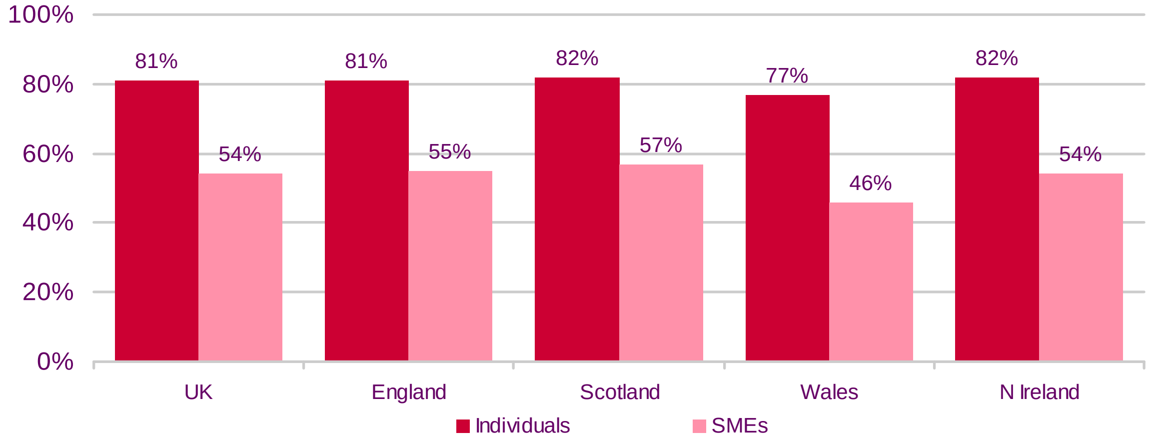
Base: All adults 15+
Source: Ofcom research, 2006

2.5.3.6 Take-up of mobile telephony

On average, 82% of adults and 54% of SMEs in Northern Ireland used mobile phones, compared to the UK averages of 81% and 54% respectively (Figure 2.40). Mobile phone take-up among individuals in Northern Ireland was similar to that in the other nations, while SME use of mobile services in Northern Ireland was, at 54%, equal to the UK average and also similar to take-up levels in the individual nations.

As far as mobile subscriptions are concerned, consumers in Northern Ireland have a different profile to the UK average, with higher numbers of mobile customers using pre-pay packages (73% compared to the UK average of 64%). Mobile take-up by network is markedly different to the rest of the UK, and O2 has a much greater share in Northern Ireland (50%) than anywhere else in the UK. The reasons for these differences are unclear, although they may be related to the younger population profile.

Figure 2.40 Mobile take-up, by nation

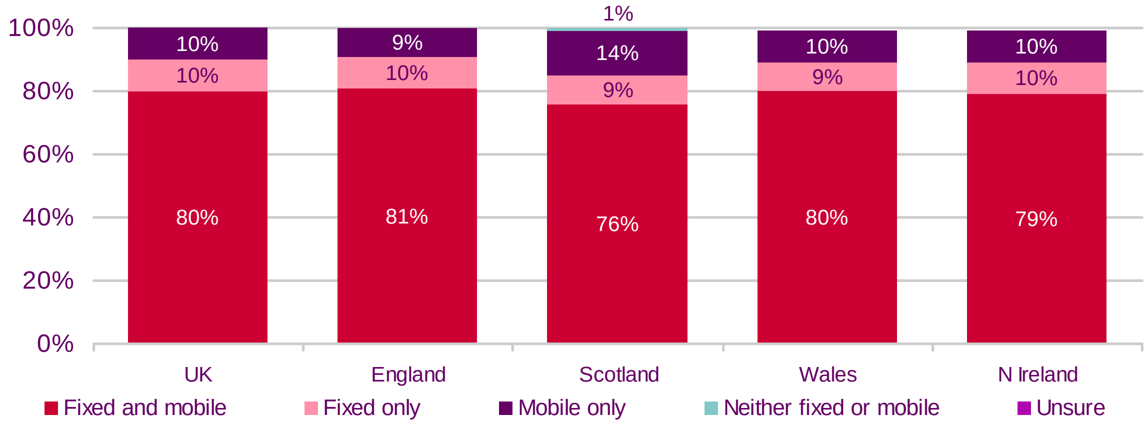


Base: All adults 15+ / all SMEs
Source: Ofcom research, 2006

2.5.3.7 Cross-ownership of telecoms services

Our research suggested that on average in Northern Ireland 79% of individuals lived in a household with both a fixed and mobile phone, 10% of people lived in a fixed line-only household and 10% of people in a household which relied solely on mobile telephony (Figure 2.41). The proportion of people living in fixed-only households in Northern Ireland was in line with the other nations, as was the proportion in households with fixed and mobile phones. The proportion of people living in mobile-only households in Northern Ireland was similar to that in England (9%) and Wales (10%) and lower than in Scotland (14%).

Figure 2.41 Cross-ownership of telephony services, by nation



Base: All adults 15+
Source: Ofcom research, 2006

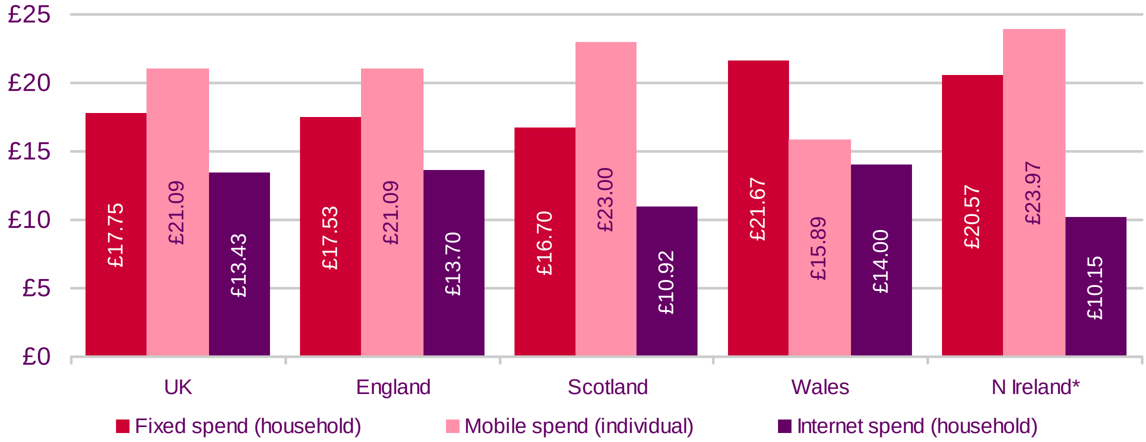
2.5.3.8 Consumption of telecoms services in Northern Ireland

From Ofcom consumer research data we have calculated average claimed monthly household spend on telephony and internet services, along with average individual monthly mobile spend. Figure 2.42 below shows that, on average, UK households spent £17.75 a month on fixed-line services and £13.43 on internet services, while on average individuals spent £21.09 on their mobile service.

Due to a small sample size, average spend figures for Northern Ireland are only indicative.

Northern Ireland spend on mobile the highest in the UK
Average monthly mobile spend by individuals with a mobile living in Northern Ireland (£23.97) was the highest of all the UK nations, at nearly £3 a month more than the UK average. Average household monthly fixed-line spend in Northern Ireland (£20.57) was the second highest among the nations after Wales (£21.67). While fixed-line and mobile spend in Northern Ireland were both higher than average, monthly household internet spend was the lowest among the nations at £10.15, over £3 a month less than the UK average.

Figure 2.42 Average monthly telephony spend, by nation

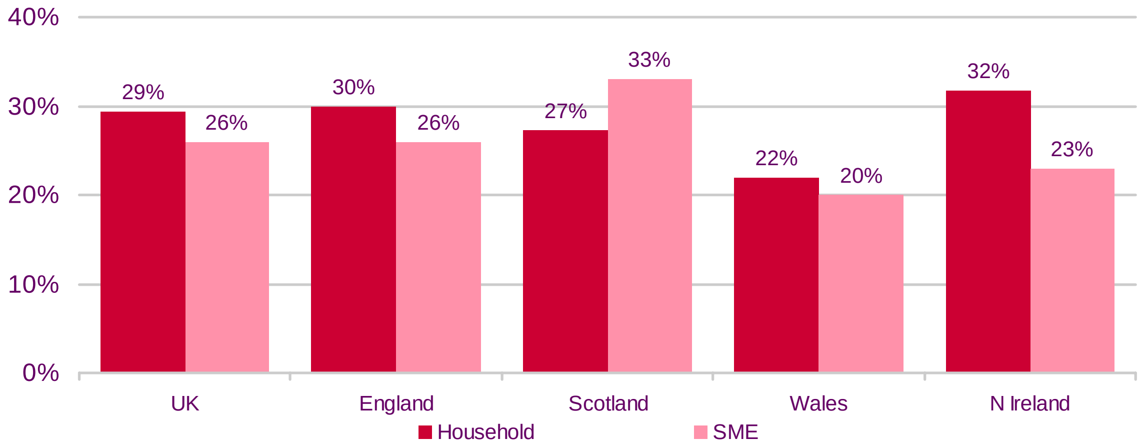


Base: All adults 15+ with fixed phone / with a mobile phone / with the internet at home
Source: Ofcom research, Q1 2006
Note: *Figures for Northern Ireland should be treated with caution due to a small sample size

People in Northern Ireland most likely to bundle telecoms with other services
The bundling of telecoms services has become an increasingly popular way for consumers to reduce their overall telecoms and communications spend by taking advantage of the discounts offered to those taking more than one service. Figure 2.43 below shows that across the whole of the UK 29% of UK households and 26% of SMEs bought two or more telecoms services from the same operator in 2006.

Bundling is increasing as broadband take-up and LLU availability grows; in 2005 25% of UK households bundled telecoms services suggesting growth of four percentage points in 2006, mainly in the bundling of fixed and broadband services. Residential use of bundled telecoms services in Northern Ireland (32%) was the highest among the nations and compared to between 22% and 30% in the other nations.

Figure 2.43 Bundling of telecoms services, by nation

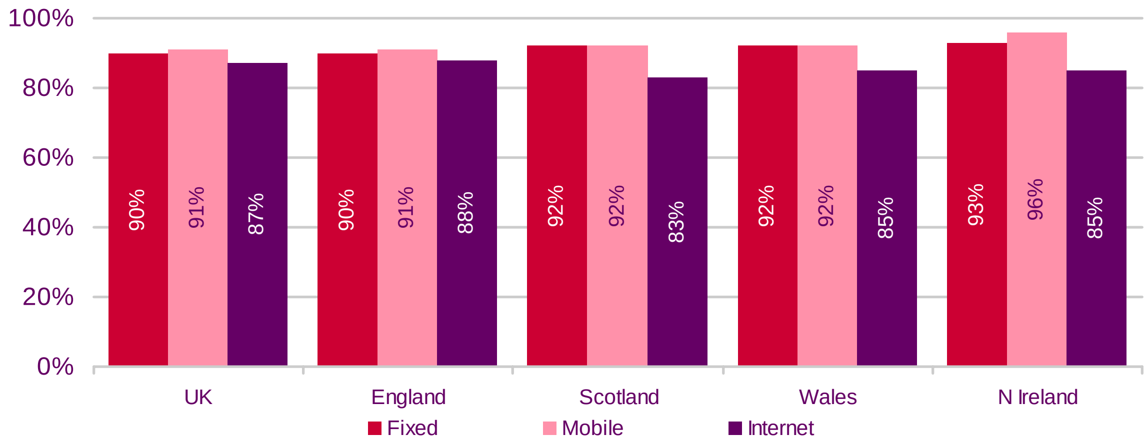


Base: All adults 15+ who have a mobile phone
Source: Ofcom research, 2006

2.5.3.9 Satisfaction with fixed telephony service

Ninety-three per cent of individuals in Northern Ireland were either ‘very’ or ‘fairly’ satisfied with their overall fixed service, as were 96% of those who used a mobile phone (Figure 2.44). Both these levels of satisfaction were the highest among all of the UK nations, where fixed and mobile satisfaction levels averaged 90% and 91% respectively. Over four out of five (85%) of internet users in Northern Ireland were ‘very’ or ‘fairly’ satisfied with their internet service (85%). This is in line with the UK average, although lower than satisfaction with fixed and mobile services.

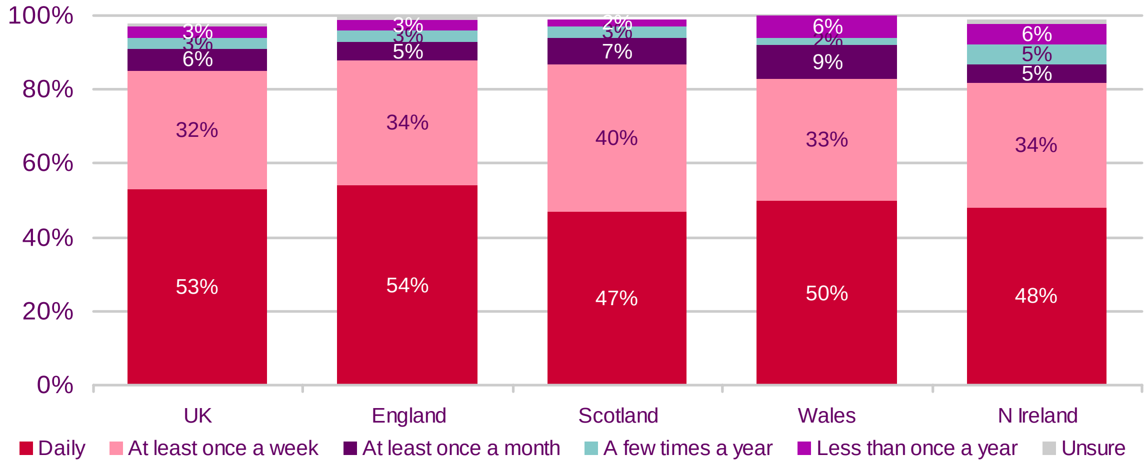
Figure 2.44 Overall satisfaction with telecoms services, by nation



Base: All adults 15+ with fixed phone, mobile phone or internet access
Source: Ofcom research, 2006

Across the UK 53% of internet users said that they accessed the internet at least daily. The survey indicated that 48% of internet users in Northern Ireland went online daily, while 82% did so at least weekly (Figure 2.45). Five per cent of internet users in Northern Ireland reported that they used the internet only a few times a year and six per cent said that they went online less often than once a year.

Figure 2.45 Frequency of using internet at home, work or elsewhere, by nation



Base: All adults 15+ who use the internet
Source: Ofcom research, 2006

2.5.3.10 Use of Voice over IP services

Voice over Internet Protocol (VoIP) uses the internet to transfer voice communications. Typically VoIP providers are able to offer cheaper international call services than traditional fixed-line providers. Figure 2.46 below shows that on average across the UK 18% of residential internet users indicated that they had ever used a VoIP service, with internet users in Northern Ireland reporting the lowest VoIP usage levels of all the UK nations at 15%, compared to 16% in Wales, 18% in England and 19% in Scotland.

Ofcom's research suggested that SMEs in Northern Ireland were less likely than the UK average to have used a VoIP service, with 7% reporting that they had ever done so, compared to 9% in Wales, 13% in Scotland and 16% in England.

Figure 2.46 Use of Voice over IP, by nation

Base: All adults 15+ who have access to the internet at home / all SMEs
Source: Ofcom research, 2006