

Developing local economies with next generation broadband

When Northern Ireland's Department of Enterprise, Trade & Investment wanted to ensure the development of a modern, efficient infrastructure to bring next generation broadband to 85 percent of businesses by 2011, they chose to work with BT to meet this challenging target.



Promotional material used to advertise next generation broadband in Northern Ireland

Working in partnership, BT developed cost effective approaches and open solutions to help stimulate Northern Ireland's economy. In the same way, the benefits of faster broadband can be delivered more quickly for other local areas and UK regions.

Broadband in Northern Ireland

Northern Ireland has been a broadband pioneer since 2005, becoming the first region in the UK – and one of few in the world – to provide 100 percent broadband availability to all its citizens.

The Northern Ireland Executive's Programme for Government 2008- 2011 and Investment Strategy 2008 - 2018 states that the development of a modern, efficient infrastructure is essential for economic and social development.

One of the Department of Enterprise, Trade and Investment's (DETI) targets was to "increase the availability of next generation broadband speeds to 85 percent of businesses by 2011".

"Following a competitive tender exercise, I am pleased to announce that the Department of Enterprise, Trade and Investment has entered into a contract with BT for further development of Northern Ireland's telecommunications infrastructure, specifically the provision of Next Generation Broadband Services.

All of the technologies to be used will be fixed line with fibre being the predominant solution. There are few, if any, parts of the British Isles which will have anywhere near the amount of fibre that is going to be deployed in Northern Ireland, particularly in our rural areas.

This project will leave a significant legacy. The extent of fibre deployment deep into the network will mean further evolutions of broadband will be easier for us to achieve in the future."

**Arlene Foster, Enterprise Minister,
Northern Ireland Executive**



Ian Livingston, CEO, BT Group and Arlene Foster, Minister of Enterprise, Trade & Investment at the launch.

Recognising the importance of telecommunications to business and the economy the contract goes beyond BT's rollout plan for superfast broadband in Northern Ireland. As a result of BT's direct investment in fibre, and its investment in partnership with the Northern Ireland government, 89% of all lines will be connected to a fibre-enabled cabinet by March 2012.

"Broadband transforms how businesses operate and it enables us to compete effectively in the global economy. We have made very significant investments in our Northern Ireland network and will continue to do so. But there are locations, in every country and region, where costs do not make it financially viable for private operators to invest. By working in partnership, we have been able to develop an innovative commercial and technical solution to deliver next generation broadband for Northern Ireland."

Ian Livingston, CEO, BT Group

Northern Ireland's next generation infrastructure

Based on its experience of providing access to first generation broadband and understanding of the complex issues involved, Northern Ireland's requirements of the potential supplier were wide-ranging and explicit.

- **Working in partnership**

Northern Ireland wanted a private sector partner who could deliver higher speeds and next generation broadband (NGB) services with a cost effective, robust, future-proofed technology solution that would aid economic development and regeneration. It also wanted a partner with a proven track record who would remain committed to the whole five-year project and who had a real stake in its success.

- **Benefiting every business**

The formal target was to increase the availability of NGB speeds to 85 percent of businesses in defined rural and urban 'clusters' by 2011. The contract specified requirements for availability, downstream and upstream minimum speeds, maximum contention ratios, latency and minimum monthly limits on end user downloads. The minimum downstream speed requirement for rural areas (<10 businesses per km²) was set at 2 Mbps and for urban areas (>10 businesses per km²) at 10Mbps. Minimum speeds were mandated to ensure that, in practice, all businesses gain an improvement over their existing broadband speeds.

- **Creating an open broadband market**

The successful partner would need to create a solution at a wholesale level to ensure that all communications and service providers receive the same information at the same time, work under the same terms and conditions and at the same costs. This focus on creating an open market in broadband retail services encourages innovation in services and competitive pricing, delivering greater choice and value for end users.

- **Encouraging interest and take-up**

To help make the most of the open market in broadband services, the successful supplier would also be required to provide 'white label' marketing and communications support as an essential part of the contract.

- **Providing life-of-contract support**

The successful supplier had to demonstrate both financial stability and technological ability. Suppliers had to show a track record in project managing major network infrastructure rollouts. They also had to have the ability to provide all the maintenance, support and development services that would be required over a five-year contract to provide a reliable, resilient and high quality broadband network.

BT's challenge – taking faster broadband further

BT is proud of its long-standing record of investment and achievement in Northern Ireland. BT has a bold vision for next generation broadband and is looking for opportunities to partner with organisations at country, regional and local levels who share that vision. BT has invested close to £32 million in the DETI NGB Project to bring services into the heart of Northern Ireland's business community.

• Deploying the technologies

To achieve Northern Ireland's availability requirements, BT deployed more fibre optic cable deeper into urban districts, towns, villages and the countryside than anywhere else in the UK. The investment ensures Northern Ireland's broadband network is future-proofed.

BT deployed fibre to the cabinet (FTTC) technology to a majority of businesses, delivering improved speeds deeper into the local access networks, reaching areas that would not otherwise be commercially viable. Although FTTC is the predominant technology, other fixed line solutions were used depending on the geography of each area, to ensure that businesses covered by the NGB project receive faster broadband speeds than they previously had.

• Achieving next generation speeds

By taking the approach of specifying minimum speeds rather than the more commonly 'up to' speeds, Northern Ireland set an absolute baseline for quality of service and network performance. In practice, many businesses will receive much faster speeds than the minimum.

• Stability and expertise

BT was able to demonstrate the necessary financial stability and technological ability to win the contract. Our track record in project managing major network infrastructure rollouts counted strongly, as did the acknowledged resilience of our national networks. BT has a team of experienced and expert people in place to provide the maintenance, support and development services that will underpin reliable, resilient and high quality broadband network services over the term of the contract.

• Partnership and funding

BT has extensive experience and welcomes the opportunity to work with partners in central, regional and local government to deploy next generation broadband. By adapting the standard commercial model to factor in the public sector funding and BT's own investment, BT and the Northern Ireland government have developed an innovative technical and commercial model that sets the pace for others to follow.

BT's solution – delivering faster broadband faster

- 6 counties
- 166 exchange areas
- 1175 cabinet access points
- 29,000 businesses covered
- Minimum 2Mbps for rural areas
- Minimum 10 Mbps for urban areas
- 100 percent fixed line solution
- Contract awarded December 2009; first areas went live April 2010; construction completed in April 2011
- Wholesale solution to stimulate competition, encourage innovation and keep prices low
- Awareness, demand and recognition through white label marketing and PR - to drive demand and usage plus recognition of partners

"The initial construction phase of this project to develop Northern Ireland's telecommunications infrastructure completed on time and on budget and Next Generation Broadband Services are now ready for ordering. Telecoms is one of the jewels in our crown and we must exploit it to the full so that all of Northern Ireland can reap the benefits of a dynamic and innovative economy."

"The aim of the project is to stimulate the competitive market, delivering more choice and using a variety of technology. Other communication providers of broadband services will benefit from this investment by being able to use the enhanced access".
**Arlene Foster, Enterprise Minister,
Northern Ireland Executive**



Gaining the benefits, making the difference

Northern Ireland's experience with first generation broadband showed that it is an essential factor in stimulating the growth of new businesses and in maintaining competitiveness in an increasingly global economy. This significant development in telecommunications infrastructure is expected to bring immense benefits to businesses, to competition and to the economy of Northern Ireland.

- **Boosting business in Northern Ireland**

Businesses can exploit faster broadband speeds to innovate, increase efficiency, improve productivity and compete effectively, which will help to boost growth and economic regeneration. Businesses can take advantage of the latest approaches and applications to transform their services and their customers' experiences. NGB will help keep costs low while enabling new functionality and will also provide businesses with, greater control over the quality of their services, backed with tighter security management.

- **Potential for residential broadband**

Although improved services are not mandated, communications and service providers may choose to use the capacity that next generation broadband networks provide to offer home services. In any event, service providers will want to be aware of the growth of interest in, and the residential demand for faster broadband.

Working in partnership across the UK

What has worked for Northern Ireland can work for other countries, regions and areas in the UK. BT has announced plans to invest up to £2.5 billion into the rollout of super-fast, fibre-based broadband if the conditions are favourable. BT is actively looking for opportunities to extend this rollout further. BT wants to work in partnership with central and devolved governments, with regional and local authorities and with industry and special interest partners to help bring the benefits of next generation broadband to communities who may really benefit but for whom it is not possible to justify the immediate investment on commercial grounds alone.

BT can help you review the status of your current network provision and understand the range and combinations of possible technology solutions that match your needs. We can work with you to scope your project, define its specific aims and targets and to organise and manage the work to implement your tailor-made solution.

Next generation broadband offers new opportunities to encourage social and economic regeneration, to support inward investment in local economies, and to stimulate business growth.

“With this major investment in network development, Northern Ireland is truly setting the pace for other economies around the world to follow. Next generation broadband services will underpin business growth here, and help organisations to find innovative ways to evolve and thrive.”

**Ann McGregor, Chief Executive,
Northern Ireland Chamber of Commerce**

Taking the next step

Talk to us and we'll show you how you can bring the benefits of next generation broadband to the people in your area. We will be happy to review your current plans and help you realise your vision. Speak to the BT regional partnership director for your part of the country – contact details can be found via our website www.bt.com/btregions

“Experience from across the globe has demonstrated that partnerships are a very effective way for new technology to be deployed. We look forward to bringing the benefits of next generation broadband speeds to rural and urban businesses. Importantly, all communications providers will have open access to this future-proofed network, driving greater competition and choice for all.”

Ian Livingston, CEO, BT Group

More information

Find out more about faster broadband in Northern Ireland from www.fasterbroadbandni.com

See the range of BT Business faster broadband products and services at www.bt.com/businessfibre

Offices Worldwide

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