

**'21CN – the heart beat of Scotland's future'**

speech by

**Paul Reynolds, BT Wholesale, chief executive officer**

at

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Good evening ladies and gentlemen. I'm delighted to have the opportunity to talk to you this evening on a theme I know holds great interest for all of us.

The availability of advanced, secure communications provides the heartbeat for any modern society, for any advanced economy, in the 21<sup>st</sup> century.

Communications is a key to innovation and competitive advantage and a fundamental requirement for Scotland's position in the global economy. In particular, it's critical for Edinburgh's position as Europe's fourth most important financial hub.

Communications is central to Edinburgh and the Lothians' ability to retain and attract investment to the region ... and the jobs, the wealth and the opportunities that this inward investment brings.

At a time when many other economies, and other cities around the world, are trying to shift the balance of economic power from centres like Edinburgh, this city's competitiveness has never been more important.

But it's not just businesses, or Edinburgh's economic success, that rely on communications.

It's also a theme that really matters to the 800,000 people who live and work in Edinburgh and the Lothians.

The communications industry delivers information and knowledge to people so they can understand, learn and question more ... about ourselves, about each other and about the world around us.

What we do in the communications industry helps provide a lifeline for Edinburgh's house-bound, for the elderly and the infirm. We help bring Scotland's communities together.

Our networks help bring safety and security and enable the safe flow of traffic on Scotland's roads and motorways, on rails and in the air. And we facilitate the work of Government in Scotland and across the UK.

In the last financial year, Scotland represented around £1 billion in revenues for BT.

Scotland matters to BT. And as in all great relationships, BT matters to Scotland.

BT employs almost 12,000 people across Scotland. In Edinburgh and the Lothians we employ more than 2,000. These are important, skilled jobs.

BT is a major investor in Scotland's infrastructure. Around 10 percent of BT's capital investments in the UK are made in, and for the benefit of, Scotland and our customers here.

This means hundreds of millions of pounds invested in Scotland every year, ensuring that we continue to meet our customers' needs.

BT has a history of investing specifically for the benefit of Edinburgh's businesses and citizens. In the late 1980s and early 1990s, some of you may recall that we implemented a programme called Edinburgh Telezone in association with Edinburgh District Council.

Telezone was a dedicated programme to upgrade the networks and customer equipment within key areas of Edinburgh. We invested over £40 million in a

programme designed to help attract investment into the area. Much of the work prepared the way for investment in the then new business park at the Gyle, which is where BT's base in the city is today.

For many, the programme meant that we swapped out the old dial telephones, which were hard wired into the network and inflexible for customers.

We replaced this old equipment with modern telephones that connected to what we'd all recognise today as modern telephone sockets. It was very advanced at the time and delivered real benefits to Edinburgh.

What may have been less visible at the time were the improvements in service quality, reliability and repair, giving our customers in Edinburgh the best underlying quality of service in Europe.

Today, the City of Edinburgh Council and BT are working together to transform the way that public services are delivered in the city, making Edinburgh one of the most advanced councils in Europe. We're upgrading the Council's IT and communications system to make it more efficient.

House hunters and homeowners have been given greater flexibility and control as part of the Smart City initiative.

Council houses are now advertised on the Internet as well as in a special supplement in the Evening News. This has not only simplified the process for acquiring a council home but has helped to empower house hunters as they can proactively search for properties themselves.

Citizens can also pay their council bills or purchase services online securely.

With BT's support, the automation of Edinburgh's Planning and Building Control services has begun, including electronic applications for the submission of planning applications and building warrants and online advice.

And we provide the necessary infrastructure, software and hardware for Connect, the City Council's Library Learning and Internet Service.

BT is also installing wireless systems into schools so that pupils can access the Internet and online learning resources from laptop computers.

This will result in greater flexibility for pupils and teachers in terms of where, when and how they learn. We are also investigating the possibilities of video-conferencing in Edinburgh's schools.

BT is a major supporter of Scottish sport with the sponsorship of Scottish club rugby and Hampden Park which has been graced, although not as often as you might wish, by both Hearts and Hibernian.

And we are conscious of the need to be environmentally sensitive and are committed to Scotland's physical environment.

Late last year, we announced the world's largest purchase of green electricity in a move that will see almost all of BT's electricity needs in the UK supplied from environmentally friendly sources.

I was delighted that the Prime Minister, Tony Blair, born here in Edinburgh of course, found time to recognise BT's initiative and stressed that the actions of leading companies such as BT are living proof that significant cuts in greenhouse gas emissions need not come at the cost of economic growth.

Billions of pounds in international trade flows through Edinburgh's financial sector every day, thanks to BT's secure communications networks that connect Edinburgh to all corners of the globe.

BT enables the electronic transfer of funds across the electronic banking systems system and we enable the processing of card payments in Edinburgh's shops, restaurants and other businesses.

You may not be aware that the first electronic cash transactions took place in Jenners in Princes Street, where shoppers had their American Express cards swiped at the tills back in the 1980s – the first in the UK.

BT's networks help the flow of vehicles across the capital every day by connecting Edinburgh's traffic lights to central control. We also hope that we will play an important part in managing Edinburgh's congestion charge, if citizens support its introduction, as we do successfully today in London.

Communications networks provide a heartbeat for the social, economic and cultural well-being of Edinburgh and BT provides the communications power to make it happen.

BT matters to Edinburgh.

For the first eighty years of the communications revolution, communications meant a single service ... the telephone.

Twenty years ago, mobile communications became a reality. Ten years ago, the internet arrived and the data revolution began. Now, the internet is as much a part of our lives as television.

It is this rapid rate of innovation ... the acceleration of the way people embrace new technology, which means that nothing in communications stands still.

For the last four years, the ability to transmit voice calls, data and video at great speed across existing networks has been fuelling another revolution, the broadband revolution.

After an admittedly slow start, BT has embraced Broadband Britain and has invested heavily to make it a reality.

To date, we've invested almost £100 million to bring broadband to over 92 percent of Scotland's businesses and consumers and - whether they're BT customers or not.

We all know that Broadband Scotland is difficult to achieve. The economics mean that making broadband available to people in more remote, outlying areas is economically challenging.

BT is actively investigating a range of different economic and technical solutions to make broadband a reality for everybody in Scotland.

You might be aware that the Scottish Executive has gone to tender for the remaining exchanges to take broadband coverage much closer to 100 percent. We in BT hope to be part of this initiative.

But I don't want you to think that Scotland is lagging in terms of broadband availability.

In fact, at over 90 percent availability today, broadband is more widely available in Scotland than in the majority of the G7 nations.

Here in Edinburgh, the broadband revolution is well advanced and available to practically everyone. No doubt you'll be delighted that the rate of take up of broadband connections is higher here than it is at the other end of the M8 motorway.

Broadband take up in Edinburgh is more than 12 percent and growing.

Edinburgh has over 30,000 broadband customers today, around 10 percent of all the broadband connections in Scotland.

So why is this important? It's important because Broadband Britain is central to the vision of the digital networked economy ... the knowledge driven economy, and the continuing competitiveness and success of the UK ... and Scotland ... in the 21<sup>st</sup> century.

Broadband gives people the ability to participate in the new world. It gives Scots the flexibility to decide how they want to lead their lives. It offers people the possibility of making their lives more productive, more flexible and more rewarding.

Of course, people want the flexibility of broadband connections not just when they're at their desks or at home, but also when they are on the move.

This means they will want to watch the news on mobile telephones as they commute to work. We're starting to see the beginnings of this today and BT innovation is driving it.

People will want to be able to access data anywhere on any device. We're already starting to see people accessing their office emails on mobile devices such as Blackberries.

All of this is what we refer to as convergence – the convergence of fixed and mobile communications, working seamlessly together.

There's another type of convergence happening – the convergence of traditional information technology and communications. It's referred to as ICT. In BT, we call it the Digital Networked Economy.

The digital networked economy promises to make businesses more efficient and the lives of consumers more rewarding.

Edinburgh's businesses can become more competitive, more successful, when they are connected to the digital network economy. BT is helping to drive this today.

All these advances present big opportunities for the future but they require a communications infrastructure that will deliver exciting, compelling new services effectively. BT's response is our 21<sup>st</sup> century network initiative, or 21CN.

21CN is a vision that is designed to give Britain ... and Edinburgh ... a communications infrastructure for the future.

It is the most radical, exciting and innovative business transformation programme underway anywhere in the communications world ... and it's happening today.

21CN is designed to be the enabling infrastructure for growth ... for BT, for other operators in the communications industry, and for our customers.

It will support the launch of new types of services ... converged services ... that are simple for customers to use.

It will enable customers to have direct control and choice of the services they use and when they use them. Customers will have the ability to manage and change services themselves.

If you want to increase the speed of your broadband connection for a short period because you want to download a film, or the latest pop video or music files, you'll be able to do so, and only pay for the faster service for the period you use it.

This is very different from the way that services are made available and managed today.

21CN will be a single network capable of supporting multiple services and will allow BT and others to develop products and make them available for customers to use much faster than we can today.

Delivering 21CN is a gargantuan technical and logistical challenge for BT. Equipment needs to be replaced in all of our 6,500 telephone exchanges across the UK.

It will take five years or more working at full speed to deliver. Sometimes, the scale of the technical challenge we are taking on can be daunting. It's never been done before.

But I believe the human challenge, the way we work together to achieve it, is even greater.

We're moving the communications industry into uncharted waters, and moving it decisively to a broadband industry.

21CN is re-writing the rules for the communications industry and the industry worldwide is watching how we're doing it very closely. Britain is leading the world.

You should be aware, however, that this is not yet guaranteed. We are in the midst of a programme in the regulatory arena which would undermine and push our plans off course.

Ofcom, the regulator, is conducting a full review of the regulatory regime in which we work. We are working closely with Ofcom to agree a regime that is best suited to the world we want to embrace, a competitive world where those who make investments and take financial risks are fairly rewarded.

Both BT and Ofcom are committed to something called local loop unbundling, or LLU. LLU requires other operators to make capital investments to gain access to BT's exchanges.

If we get the balance right, the advent of LLU will help create a vibrant, competitive marketplace.

But if we get the balance wrong, too much investment will be made in densely-populated metropolitan areas.

If this happens, rural areas could be starved of investment and innovation ... and the digital divide, something BT is working tirelessly to eliminate, could be exacerbated.

This would be very bad news for many of our customers – and many of your customers and partners, in large parts across Scotland.

Did you know that the telecommunications industry represents seven percent of all fixed capital investment in the UK ... and that BT is responsible for half of that investment?

We need to invest between £2 and £3 billion every year for the rest of this decade to deliver 21CN. To put that into context, that's more than the government invests every year in motorways and trunk roads in the UK. 21CN is big.

That's why we are working closely with Ofcom to agree a regulatory framework that would provide certainty that BT can reap a financial return that is commensurate with the risk and scale of what we're planning to achieve.

It is ground-breaking; industry-changing stuff. 21<sup>st</sup> Century stuff.

We've been working on our 21CN programme for almost two years now. The work we've been doing gives the UK first mover advantage. But we need to move quickly.

New technology can be disruptive and the rate of technology change means that the advantage we've banked today can be quickly eroded by others.

But success will generate a cycle of innovation around it.

21CN will put the UK at the forefront of innovation and it will deliver real advantages to Edinburgh, and to businesses that choose Edinburgh as their location of choice.

It will allow the City of Edinburgh Council and the other public authorities tasked with attracting inward investment, and for the City to continue to develop and to succeed in the 21<sup>st</sup> century.

I hope our plans excite you. If you want to learn more, get in touch with us and we'll be happy to explain more.

The right communications infrastructure is central to Edinburgh's competitiveness and economic success. It is a fundamental pre-requisite for any business considering Edinburgh for a global headquarters or a European base.

The economic success that Edinburgh enjoys today is attractive to other cities across the world. We need to keep investing and innovating to ensure we maintain and enhance Edinburgh's significant power in the global economy and its position as a leading world city.

BT wants Edinburgh to remain a leading city for the future ... a 21<sup>st</sup> century city for the people who work and do business here, as well as those who choose to call Edinburgh and the Lothians home.

Thank you.