

BT TO SWITCH VOICE CALLS TO IP AS 21ST CENTURY NETWORK TAKES SHAPE

*First 1,000 customers to trial high quality voice services on new IP network link
BT to trial limited wider use of optical fibre in access network*

BT's transformation of its network to deliver the next generation of communications services took a step forward today with the announcement of a pilot for the switch-over of voice calls to an end to end IP (Internet Protocol) based network.

BT also announced trials of niche deployments of fibre to the premises, aimed at testing the technical and commercial issues involved.

BT Wholesale chief executive Paul Reynolds said: "We've been talking about our vision for our 21st century network and today marks the start of the transition from planning stage to physical implementation.

"The 21CN programme will deliver today's services at better cost by removing duplication in our networks and underpin the delivery of services customers will want in the future. For customers, the end result will be a complete experience – one based on convenience and ease of use of all communications services including mobility, video, data services and voice."

As a precursor to large scale migration of voice and other PSTN based services from 2006, the first stage in the migration pilot will involve the bypass of the core PSTN network link between two major network nodes at Cambridge and Woolwich. An extension is planned later to Faraday exchange in London.

From October 2004, BT will divert voice calls between these network nodes to the 21CN specific IP network. Calls will be carried using IP packet technology rather than the circuit switched technology used on PSTN. The switch-over will be seamless from the customer's perspective and service quality will be the same or better than on PSTN.

The next stage of this pilot involves the installation of new equipment at 18 exchanges in South East London, Kent and East Anglia – which are connected to the network nodes in Cambridge and Woolwich. This equipment, known as multi service access nodes (MSANs), will carry voice and data services onto the core IP based network, initially for 1,000 customers by January 2005.

Paul Reynolds added: “We want to be absolutely clear that using IP technology in our network for our premium quality voice services is a gulf apart from the new budget voice over the internet services being launched almost daily by a wide range of providers.

“We believe we can provide these services over IP at the same or better than the high standards of quality and reliability people expect from the PSTN today. These calls are not going over the internet. They will be carried on our dedicated high capacity IP networks which also carry data and broadband services.

“Adopting IP as the common transport method is both cost efficient and facilitates technology, systems, product and service convergence. BT's vision is that voice will be one of many applications run over an IP network in our 21st century network world.”

BT today also announced 21CN programme fibre to the premises trials at Martlesham Heath, Suffolk; at Kents Hill, the Bolbeck Park and Walnut Tree developments in Milton Keynes; and at the Waterfront Studios business centre, at Silvertown in London's Docklands.

The trials will provide telephone and broadband services over fibre for up to 1,500 homes and businesses. The first trialists will have their fibre lines installed and working in October 2004 and the trial will run until September 2005.

Paul Reynolds said: "As part of our 21CN programme, BT is looking at the potential that fibre in the access network can deliver for our customers and the investment and operational requirements that go with it. If the commercial case is proved, we could begin to consider the role that fibre may have further out in the network in the future.

"We expect the real benefits of this trial to be in informing our thinking on the relative costs and benefits of deploying fibre, rather than copper, to homes and businesses in green-field sites or new-build developments."

BT's 21CN programme aims to migrate the company's existing multiple, service specific networks to a single converged multi-service IP based network. It includes work towards increasing the bandwidth of services provided over the copper access network as well as the trials of fibre deployment.

Paul Reynolds added: "At this stage we don't envisage a widespread deployment of fibre to the premises or the cabinet in the near or medium term. While we believe the use of fibre can help deliver better operating costs in terms of maintenance, we need to balance this against the cost of installation and systems developments. These trials will help to shape our thinking and help us make strategic investment decisions."

Note to editors:

Photographs of Paul Reynolds, BT Wholesale chief executive, and 21st Century Networks related images are available via BT's picture library hosted by Vismedia at www.vismedia.co.uk

PSTN to IP transformation trial

The initial customers to use IP based networks for end-to-end services previously carried on the PSTN will largely be BT employees in the exchange areas below. The deployment to these trialists will provide valuable information about the technicalities and practicalities of the future large-scale migration of services. The pilot will be extended to 3,000 customers in June 2005 prior to large-scale migration in 2006.

Exchange	County	RDA
ADDISCOMBE	Greater London	London
BELSTEAD	Suffolk	East of England
BEXLEYHEATH	Greater London	London
BROMLEY	Greater London	London
CATFORD	Greater London	London
CHERRY HINTON	Cambridgeshire	East of England
CRAYFORD	Greater London	London
DARTFORD	Kent	South East
ELTHAM	Greater London	London
FELIXSTOWE	Suffolk	East of England
GROVE PARK	Greater London	London
IPSWICH TOWN	Suffolk	East of England
KESGRAVE	Suffolk	East of England
ORPINGTON	Greater London	London
SIDCUP	Greater London	London
WHITTON	Suffolk	East of England
WOODBIDGE	Suffolk	East of England
WOOLWICH	Greater London	London

BT has selected the following companies to support the PSTN to IP pilot:

- Marconi is supplying core network Softswitches and multi-service access nodes (MSANs) for voice services.
- Alcatel is providing IP ethernet switching equipment.
- Siemens is supplying metro media gateways and Juniper core and edge routers.

Fibre to the premises trial

The fibre to the premise trial will involve the installation of new fibre optic cables between a BT exchange and the property of those taking part. Telephone and broadband services provided will be on a second line in parallel to services currently provided over the BT network. Optical network units at the exchanges and customer premises to manage the interface between the fibre and BT and customer equipment.

ECI is supporting the fibre to the premises trials by supplying optical network units for use at customer premises and optical line termination equipment at the exchange.

Supplier contracts

BT is today formally launching the procurement process to select long term suppliers for 21CN, which may not necessarily be those involved in the trials and early implementation stages. Contracts for the main rollout phases will be awarded following a formal competitive tendering process that will be concluded by the end of 2004.

Forward-looking statements - caution advised

Certain statements in this press release are forward-looking and are made in reliance on the safe harbour provisions of the US Private Securities Litigation Reform Act of 1995. These statements include, without limitation, those concerning: transformation of BT's networks and cost base; benefits to customers of the 21CN programme; anticipated capital spend on 21CN transformation and expected cash savings; timescales for delivery of 21CN; and delivery of instantly available broadband.

Although BT believes that the expectations reflected in these forward-looking statements are reasonable, it can give no assurance that these expectations will prove to have been correct. Because these statements involve risks and uncertainties, actual results may differ materially from those expressed or implied by these forward-looking statements.

Factors that could cause differences between actual results and those implied by the forward-looking statements include, but are not limited to: material adverse changes in economic and financial markets conditions in the markets served by BT; future regulatory actions and conditions in BT's operating areas; technological innovations; developments in the convergence of technologies; and the anticipated benefits and advantages of new technologies, products and services, including broadband, not being realised. BT undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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About BT

BT Group plc is the listed holding company for an integrated group of businesses providing voice and data services in the UK and overseas, particularly in Europe, but also in the Americas and the Asia Pacific region. British Telecommunications plc, a wholly-owned subsidiary of BT Group plc, holds virtually all businesses and assets of the BT group.

BT is one of Europe's leading providers of telecommunications services. Its principal activities include local, national and international telecommunications services, higher-value broadband and internet products and services, and IT solutions. In the UK, BT serves over 20 million business and residential customers with more than 29 million exchange lines, as well as providing network services to other licensed operators.

BT consists principally of three lines of business:

- **BT Retail**, serving businesses and residential customers and including BT Openworld, one of the UK's leading ISPs.

- **BT Wholesale**, providing network services and solutions within the UK, including ADSL, conveyance, transit, bulk delivery of private circuits, frame relay and ISDN connections.
- **BT Global Services**, BT's managed services and solutions provider, serving multi-site organisations worldwide. Its core target market is the top 10,000 global multi-site organisations with European operations.

There are a number of other businesses within the BT group, including **BT Exact**, an internationally renowned centre of excellence in IT and networking technologies. It is also BT's technology and research and development business.

In the year ended 31 March 2004, BT's turnover was £18,519million with profit before goodwill amortisation, exceptional items and taxation of £2,016million.

For more information, visit www.bt.com