

England's communications market in context

Key market trends

- **The year there have been trials of superfast broadband in many areas, including Cornwall and London.** BT and Virgin continue with the roll-out of fibre-optic services around the country, to bring much faster services to consumers. Next-generation broadband services began trials during the year and promise even faster connections in some areas.
- **Many companies are now undertaking trials and launching innovations which will bring rural areas to the forefront of technological advances in the coming years, such as the initiatives in Devon and Cumbria.**
- **The widespread adoption of smartphones and the emergence of tablet computers have increased demand for data across cellular networks.** Mobile network operators are exploring technologies that will enable faster connections with greater capacity. Ofcom will auction spectrum for 4G later this year, but some operators are already proposing trials of 4G services using their existing spectrum.
- **In many areas of the UK the creative industries are developing new hubs for innovation,** such as in Old Street in London, and have announced funding to help new filmmakers.

1.1 Broadband

Power-line broadband

In June 2011 the Cumbrian village of Shap became one of the first places in the UK to trial broadband supplied via power lines, in a project involving Cable and Wireless, US group Gridline and T-systems UK. Power-line broadband involves using electricity lines to transmit broadband signals. The method is generally used within blocks of flats and within houses, but Gridline's broadband over power lines (BPL) implementation is intended for longer distances. This may be particularly useful in rural areas where electricity supplies are available but where broadband installation would require greater infrastructure investment.

The scheme is one of several being trialled to see how to resolve the issue of high-speed rural broadband. The village of Shap is a suitable test-bed for such services, as it is in one of the pilot regions for the government's rural broadband drive, which aims to increase the number of rural areas with broadband connections.

The pilot will also be used to see whether power-line broadband can be used for the communications needs of smart meters. There are several trials going on, mostly using radio communications, to see how best to hook up the meters and help utility companies better monitor and control their networks. Smart meters monitor the amount of a utility, such as water or electricity, that a household uses, and relay this information back to a central hub run by the utility company.

Fastest-ever broadband trial

Virgin Media has undertaken a trial of 1.5Gbit/s broadband - much faster than any household in the UK can currently receive - in east London's 'Silicon Roundabout' area.

The 1.5Gbit/s trial used Virgin Media's existing fibre and cable infrastructure in the location, which is near Old Street. Current predictions are that it could achieve download speeds 15 times the fastest residential cable connections currently available in the UK and 240 times the average broadband speed.

The system uses Docsis 3 (Data Over Cable Service Interface Specification) technology, which supports IPv6.

Superfast broadband

Superfast broadband's roll-out proceeded during the year in Cornwall, with up to £53.5m of the funding coming from the European Development Fund (ERDF) Convergence programme. The pilot phase of the scheme has already provided superfast broadband to more than 14,000 customers.

BT pledges 300Mbit/s

BT has plans to offer 60,000 homes speeds of up to 300Mbit/s. The service will initially be available at six exchanges – Milton Keynes, Ashford in Middlesex, York, North London, Chester and St Austell. In these areas BT is, for the first time, installing fibre directly to homes, rather than to street cabinets with copper wire carrying the signal to the doorstep. BT claims that, with fibre to the premises, speeds of up to 1 gigabit per second will eventually be available. A 1Gbit/s trial is under way in Kesgrave in Suffolk.

Jeremy Hunt, the Secretary of State with responsibility for communications, has previously encouraged BT to speed up the introduction of fibre optics across its network.

1.2 Rural consumers

Rural mobile internet trials

During the year plans were announced to improve coverage for 12 communities in rural Devon and Cornwall; offering connection to the internet using new technology which boosts mobile phone signals. Vodafone is using 'open femto' technology which can provide connectivity, including 3G mobile internet, in areas with poor mobile signals. This follows an earlier Vodafone trial in the West Berkshire village of East Graston, which also used 'open femto' technology in places such as pubs, village halls and social clubs.

Orange rural tariff

Broadband customers in rural areas are now being offered a reduced rate tariff of up to 15%. The basic rate for broadband of £17.50, offered by Orange, is being reduced to £15 for those in rural areas covered by the offer. Ofcom had previously called for prices to be reduced where BT has a monopoly of supply to exchanges: this applies in 3,000 locations around the UK.

Countryside Alliance project

During the year the Countryside Alliance worked with Race Online and Three to provide mobile internet to rural communities. They launched a project aimed at providing mobile broadband in rural areas of poor or no coverage and announced that they would give away around four million MB of free connectivity, in 11 communities across the UK, together with the dongles needed for people to get online.

Three and the Countryside Alliance have set up the Rural Broadband Working Group, which will work with local councils to identify areas with poor or no coverage. The first village to receive free connectivity was Gringley-on-the-Hill in North Nottinghamshire. Access will be provided at the local pub and community centre.

1.3 4G developments

High-speed mobile internet

Three has tested high-speed mobile internet technology in the Thames Valley, while Vodafone has run three trials of 4G technology in the UK over the past three years, including a demonstration at its Newbury offices, in anticipation of the 4G auction in late 2012.

Cornish LTE trial

BT and Everything Everywhere have been running a pilot to test the LTE infrastructure by supplying 180 Cornish villagers with broadband internet access. Some homes received 4G dongles for their laptops while others received hubs providing access in the home. The Cornish trial ran until summer 2012.

4G network trial in London

A large-scale nine-month LTE trial network has been launched in London by O2. Over 25 4G sites went live in November 2011 across an area of 40 square kilometres, from Hyde Park in the west to the O2 arena in Greenwich, in addition to Canary Wharf, Soho, Westminster, the South Bank and Kings Cross.

Initially, the O2 trial does not involve phones, because no compatible handsets exist. Samsung dongles will be handed out to attach to tablets and laptops, as well as portable miniature modems that can create small WiFi hotspots linked to O2's 4G infrastructure.

1.4 Wi-fi

Europe's largest free wi-fi zone

The London boroughs of Westminster and Kensington and Chelsea worked with O2 to create Europe's largest free WiFi zone, which was operational until June 2012. The trial used transmitters attached to street furniture.

1.5 TV and radio

BBC sells Television Centre

The BBC has put Television Centre in West London up for sale. The 14-acre site in White City is home to approximately 5,000 employees. The BBC is moving production of many programmes to Salford's Media City as part of its *Putting Quality First* project.

New Coronation Street set

ITV has started building a new Coronation Street set at Media City:UK. The flagship ITV programme will move to its new location in 2013. The new set will replicate the famous cobbles but be on a much larger scale, to meet the demands of high-definition TV.

Sky starts local news

Sky launched its first regional news and sports service in the Tyne and Wear region of northern England in autumn 2011. The service uses mobile video journalists, who are given the facilities to record and edit content on the road. The service is available via local free digital TV platforms, on mobile phones and the internet.

Commercial radio re-brand

Orion Media announced that Birmingham's BRMB and its three Midlands sister stations - Mercia, Beacon and Wyvern - would be renamed as Free Radio Birmingham. BRMB was the UK's fourth commercial radio station when it launched in 1974.

BBC local radio review

In January 2012 the BBC Trust asked the BBC to reconsider its savings proposals for BBC local radio. The trust asked the BBC:

- to scale back plans for local radio to share programmes in the afternoon, "although we accept that in some cases that might still be the best option";
- to ensure that local stations have "an adequately staffed newsroom"; and
- to protect specialist content, e.g. local sports and specialist music shows, outside peak times..

Local TV

Ofcom began the process of identifying the areas which would be licensed for local radio, and putting in place the mechanisms to manage the licensing process that will begin later in 2012. So far there have been 58 expressions of interest for the 30 first- and second-phase locations in England.

Local news

GMG radio has announced that it is to reduce its news team and no longer provide 24/7 local news content. GMG runs Smooth Radio, Real Radio and Real Radio XS. The broadcaster will continue to broadcast local and national news content during peak hours, and at other times will use external news agencies.

1.6 London 2012

Superfast athletes

All the athletes staying in the Olympic village will be able to use superfast broadband for the duration of the Olympic and Paralympic games. The competitors and officials at both events will receive a free connection in their apartments in the east London village.

3D Olympics

The Olympics organisers and Panasonic have announced that some of the Games events will be broadcast in 3D. Ten hours of coverage each day will be distributed to broadcasters..

Super hi-vision sport

Super hi-vision coverage of the Olympic Games will be broadcast in public spaces in London and Glasgow. Super hi-vision is approximately 16 times the definition of current HD and is similar to the definition in IMAX cinemas. The BBC will erect screens at Pacific Quay in Glasgow and at Broadcasting House in London. The technology being used is not expected to be in homes for at least a decade.

Olympic radio

A dedicated Olympics radio station will be broadcast during the Games. The station, BBC Five Live Olympics Extra, will broadcast live games coverage. BBC Three will replace all its normal programming during the period with Olympics coverage, and all the events will be broadcast live on the BBC's website.

Underground wireless

Transport for London (TfL) will roll out WiFi coverage in 120 stations on the London Underground by the end of 2012. The service will be free to all during the Olympic Games. Virgin Media is providing the service, and its customers will be able to continue to access the service for no additional charge after the end of the trial.

1.7 England's creative and screen agencies

First Chief Executive at Creative England

Caroline Norbury was appointed as the first Chief Executive of the new organisation: Creative England in September 2011. Creative England replaces the regional screen agencies in supporting film making and film culture across England.

Northern Film and Media goes private

Northern Film and Media is no longer considered a regional screen agency, having changed its status to become a private limited company. The agency aims to expand its portfolio of commercial investments in creative content and sell its services by establishing new partnerships.

Support for creative jobs

Northern Film and Media has also announced a new pilot fund to support creative jobs. The Creative Jobs Fund (awarded by ERDF) has £75K for 'ready-to-go' film, TV or digital media projects which will immediately produce work. NFM chief executive Tom Harvey was awarded the MBE in the New Year Honours.

1.8 Digital content

New digital art gallery

Cambridge School of Art (part of Anglia Ruskin University) has installed the UK's first fully digital art gallery. It has 32 HD screens and the world's first 103" 3D fully-HD plasma screen.

Sale of EPIC studios

EPIC studios is to be sold to Extreme Video, a specialist facilities and production company based in Norwich. These are the old Anglia drama studios, which were bought by the Council and the RDA when Anglia announced it had no further need for them in 1995. Extreme Video will run the studios as an open facility and continue to support young companies as tenants.

1.9 Small and medium enterprises

Google to advise businesses

Google's UK division has launched a pilot scheme in Liverpool to advise small businesses on increasing their online potential. The plan could be rolled out to other regions if successful.

Old Street hub

A new technology hub was opened by Google at “Silicon Roundabout” in Old Street, London. It aims to facilitate innovation by creating an environment where small technology companies can meet and collaborate..