



LOCAL INITIATIVES ON NEXT GENERATION ACCESS IN THE UK: UPDATE OCTOBER 2009

INTRODUCTION

The Communications Consumer Panel was established under the UK Communications Act 2003 as an independent, evidence-based, advisory body. Its role is to influence Ofcom, the UK Governments, the EU, and service and equipment providers so that the communications interests of consumers and citizens are protected and promoted.

In September 2008, the Communications Consumer Panel issued a position paper entitled **“What is the value of next generation broadband?”** In that paper, we stated:

“Any large-scale investment programme by the private sector at this stage will be predicated on a roll-out to significantly less than 100% of UK homes. We believe that the question of how to deliver next generation broadband to homes likely to be outside such private sector investment plans cannot be left until some indeterminate point in the future; instead we must debate the issues now - and so avoid the possibility of creating a second physical digital-divide. We want to encourage exploration of public sector and other non-private interventions even at this very early stage, alongside commercial developments.”

To help facilitate this exploration the Panel published a paper in January 2009 cataloguing the growing number of local initiatives for the provision of NGA. Since the publication of this paper there have been a number of developments, including the government’s Digital Britain report. This addressed the issue of how to take NGA networks to what has been called ‘the final third’ of the country by proposing a levy to encourage funding of such projects.

At the same time, the national roll out plans of the major industry players have progressed. BT plans to make NGA available to 10 million households by 2012 (the first one million by Spring 2010). Initially, of these 10 million households only 1 million were going to be fibre to the premises (FTTP). However, since the publication of our January paper these plans have been revised and it is now intended that around £2.5 million will be FTTP. Since January 2009 Virgin Media has fully implemented its plans to up-grade all of its cable networks to provide NGA (although these only pass around half UK households).

More generally, there is underway a BT/industry consultation on fibre to the premise (FTTP) on brownfield sites. BT plans to start trials between January and March 2010, giving FTTP potential coverage nationally of up to around 5,000 - 40,000 premises passed, subject to interest from communications providers.

There have also been developments in the local initiatives catalogued in our original paper, as well as in the mechanisms for coordination and governance of these kinds of initiatives.

For local schemes to work technically and commercially, it is essential that there is a degree of co-ordination between them - something the Panel strongly support because it is in the interests of the consumer to have inter-working and the maximum choice of providers and services. To date, this coordinating role has been carried out largely by the Community Broadband Network (CBN). However, the CBN have now proposed that a new body should be created to represent and coordinate local next generation broadband networks and initiatives. This solution was proposed by the CBN and endorsed by government in the Digital Britain Final Report¹ and the work will now be taken forward by the Independent Networks Co-operative Association (INCA).

Given these developments, we felt it would be timely to revisit our original paper, providing an update on the progress of those initiatives we covered in the original paper as well as highlighting some new additions. We have also set out in more detail the new arrangements for coordination of these schemes. Since the original paper some schemes have been completed and have therefore not been included.

The projects have been arranged according to region. The criterion for inclusion is that the scheme is outside the national roll-out programmes of BT and Virgin Media, although there are a number of projects in those listed below that are initiated by BT, or by Openreach, BT's local access network division, but which are self-contained local trials/schemes that do not form part of the national roll-out programme.

The initiatives are of various different sizes and at very different stages and deploy different technical solutions and different business plans. Some are simply plans and may not come to fruition, but many are firmly-based and on the way to offering services.

EAST

New projects identified since January 2009

The Fairfield partnership is proposing a new community on land north-east of **Elsenham** in the Uttlesford District in Essex that promotes best practice in low carbon development forms and, as part of this, fibre networks are under consideration. The delivery model would be what is called a MUSCO (multi-utility service company) which would be financed and owned by a new community co-operative the Elsenham Co-operative Ltd (ECL). The preferred option would be a scheme involving 4,000 homes.

Link: Elsenham Co-operative Ltd http://www.elsenham-info.co.uk/documents/elsenham_cooperative_limited_outline_business_plan.pdf

Progress on projects identified in the January 2009 paper

¹ Available at <http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf>

Prior to its two local FTTC trials in Muswell Hill, London and Whitchurch, South Glamorgan, Openreach is running a technical trial in the **Foxhall** exchange area of Kesgrave, Suffolk. Some 35 homes are involved.

Link: Openreach announcement

<http://www.openreach.co.uk/orpg/news/productbriefings/nga/nga003.do>

The East of England Development Agency (EEDA) is discussing with a major supplier a possible NGA project based in **King's Lynn/ West Norfolk**.

On a more strategic level, the Agency is also working on the final details of what it hopes will be a ground breaking uplift scheme for next generation broadband across the region.

Link: EEDA <http://www.eeda.org.uk/>

EAST MIDLANDS

Progress on projects identified in the January 2009 paper

LightSpeed **Derby** is a project with two ambitious targets for this Midlands city. By 2012, it would like to have a locally managed core fibre network linking up the premises of all public sector agencies, all major businesses, business parks, and all major new developments. By 2016, it would like to have next generation broadband access available to 100% of households.

Link: city projects <http://www.thisisderbyshire.co.uk/news/City-s-ambitious-bid-lure-big-hitters/article-361806-detail/article.html>

Accelerate **Nottingham** is leading a group of its partners which has a clear desire to implement municipal wireless (MW) and next generation access (NGA) networks in the conurbation of Greater Nottingham. The partners in Accelerate Nottingham, particularly Nottingham City and Nottinghamshire County Councils, the PCT, Nottinghamshire Police and Nottingham Trent University), already understood some of the benefits that NGA and MW networks offer, and they asked for the help of the Community Broadband Network (CBN) to take this forward, finding the best route to promote broader engagement.

Links: Accelerate Nottingham <http://www.acceleratenottingham.com/>
Community Broadband Network <http://www.broadband.coop/Delivering-better-public-services/Making-Next-Generation-Access-and-Municipal-Wireless-relevant.html>

A company called Independent Fibre Networks Limited (IFNL) is providing fibre systems to local developers around the country. In **Corby**, some 6,000 homes are planned to be provided with FTTH.

Link: IFNL <http://www.ifnl.net/index.php>

LONDON

New projects identified since January 2009

BT is to begin its first brownfield fibre-to-the-home pilot in **Highams Park**, north-east London, following a greenfield trial in Ebbsfleet, Kent. The pilot will mark BT's first such deployment in an existing residential area with a copper-based telecoms infrastructure. BT has not confirmed the timing of the test. More generally, there is underway a BT/industry consultation on fibre to the premise (FTTP) on brownfield sites. BT plans to start trials between January and March 2010, giving FTTP potential coverage nationally of up to around 5,000 - 40,000 premises passed, subject to interest from communications providers.

At the **Elephant and Castle** in London, Southwark Council has selected a consortium of Dalkia, Veolia and Independent Fibre Networks Ltd (IFNL) to run a Multi Utility Service Company (MUSCo) for a planned total of 5,300 new homes. The scheme will involve an openaccess fibre network with the MUSCo itself having a telecoms service provider but providing access to the network to other service providers on an exactly equivalent basis. Link: Independent Fibre Networks <http://www.ifnl.net/index.php>

Progress on projects identified in the January 2009 paper

Openreach has selected the two sites for operational pilots of fibre to the cabinet (FTTC) which began in summer 2009. One of the two exchanges is in **Muswell Hill**, London and the pilot involves up to 15,000 customer premises. End user customers in this trial will experience headline speeds of up to 40 Mbp/s. As well as this consumer trial, Muswell Hill will be used for some technical trialling to complement that taking place at Foxall. BT expects to announce detailed plans for the initial market deployment of the Openreach product in early 2010.

Link: Openreach announcement

<http://www.openreach.co.uk/orpg/news/productbriefings/nga/nga003.do>

In **Wembley**, north-west London, Quintain Estates and Development plc is the company behind the continued regeneration of the area of land either side of Olympic Way leading to the new Wembley Stadium. The development will include some new housing and optical fibre may be used to link up these homes to the Net.

Links: Wembley City <http://www.wembleycity.co.uk/>

New Wembley development <http://www.new-wembley.com/>

Looking more to the future, the **Olympic Village** being built in East London for the Olympic Games in 2012 is expected to deploy local fibre connections. Once the Games are over, the village will be converted to homes and again fibre will be provided.

Link: 2012 Olympic Games <http://www.london2012.com/index.php>

NORTH-EAST

New projects identified since January 2009

FibreStream has created a strategic partnership with the Goodwin Trust Housing Association called NextGenUs to deploy NGA in **Hull**. Phase 1 installation is due to commence shortly, providing the necessary technical training and creating local jobs and connecting 1000+ residents. Phase 2 with possible matched EU funding will enable NextGenUs to extend coverage to the entire Great Thornton St area and beyond across Hull, connecting 5000+ residents. FibreStream talks of its offering as FiWi which is said to be a convenient term to express the natural and complimentary nature of fibre and wireless technologies

Link: NextGenUs <http://www.fibrestream.co.uk/2009/06/23/daddy-of-all-broadband/>

Progress on projects identified in the January 2009 paper

Gateshead Council has joined forces with Alcatel-Lucent Telecoms to provide high speed Internet access to one of its biggest employment sites, the **Baltic Business Quarter** development. This is being done through a joint venture company called Gateshead Technology Innovations Ltd (G-ti). The project was announced in October 2008 and it is now live with the first provider signed up.

Link: Gateshead technology Innovation <http://www.g-ti.net/>

DurhamNet is a major backbone network that provides interconnectivity and services to a range of organisations across **County Durham**. Capital costs to finance the building of the infrastructure were secured from SRB6² and 'single pot' sources, which, together with sub-regional partnership backing, formed the basis for developments into public, education and private sectors. The remit of the project is to provide services to every school, library, social service office and local authority, with additional provision to many community centres and any site that offers free public access to DurhamNet and the Internet. Initially, the project was valued at over £3million with a 5-year business plan and aims to connect over 500 sites across County Durham. The project goals were met and DurhamNet continued to grow over subsequent years.

Link: Durham Net <http://www.durhamnet.org.uk>

NORTH-WEST

Progress on projects identified in the January 2009 paper

² SRB stands for Single Regeneration Budget. It is funding from the Government to help regenerate run down areas. The funding is known as SRB6 as it was the sixth round of bidding from the government programme.

Manchester's Digital Development Agency (MDDA) – a part of the city council - has contracted the Community Broadband Network (CBN) to look into the feasibility of creating a pilot NGA network as the first step in a wider deployment across the city. CBN was requested to look at business models that maximise community involvement and "stakeholding" in the evolving NGA network. The pilot will be a "*Living Lab*" experiment allowing lessons to be drawn on the potential for the technology for economic development and regeneration. In the Oxford Road corridor in central Manchester, there is to be a £500,000 investment by the North West Development Agency (NWDA). This investment was approved by NWDA investment committee in November 2008. The first properties are expected to be connected by the end of 2009.

Link: Community Broadband Network <http://www.broadband.coop/Projects/>

In nearby **Salford Quays**, a huge project is underway called MediaCityUK and this will involve the deployment of next generation broadband to a range of small businesses on the site. The total project covers 200 acres of space in and around an established waterfront with space for the BBC and other major broadcasters, other big media corporations, and a myriad of smaller creative businesses. By 2010, the first stage is planned to be complete with the creation of 15,500 jobs.

Link: MediaCityUK <http://www.mediacityuk.co.uk/>

The Cumbrian parish of **Alston** is one of the most sparsely populated areas of England with around 900 homes. When first generation broadband was being deployed by BT, it was unsurprisingly one of the areas initially deemed nonviable. This precipitated the creation of Cybermoor, among the first community-run broadband projects in the UK. Cybermoor intends to maintain its pioneering position by using fibre-optic technologies to turn the project into Fibremoore. The Community Broadband Network (CBN) was commissioned to write a feasibility study, looking at the potential network architectures and business models that might support NGA on Alston Moor. The cost is estimated at around £2,900 per household with long-term financing. Cable installation is now well-advanced.

Link: Community Broadband Network <http://www.broadband.coop/Projects/>

SOUTH-EAST

Progress on projects identified in the January 2009 paper

Fibre to the premise (FTTP) is being deployment in the **Ebbsfleet Valley** part of the Thames Gateway project in Kent. BT Openreach is supplying the infrastructure, but BT Retail and its competitors will offer access to the high speed lines on a wholesale basis. The top available speed will be 100 Mbit/s. The plan was initially to connect around 600 new houses, but the recession has slowed down developments considerably, and fibre connections are still only a little over 70. It is hoped that the development will eventually have some 10,000 homes and up to 9 million sq.ft. of commercial offices, retail, leisure and community facilities, but the whole project could take until 2020 to complete.

Link: Openreach

http://www.openreach.co.uk/orpg/products/newproducts/ftp/downloads/6332_Ebsfleet_Proof%203.pdf

A company called Independent Fibre Networks Limited (IFNL) is providing fibre systems to local developers around the country. This will be a series of local projects, one of which is a housing development in Hampshire near **Andover** where IFNL is providing a fibre to the home (FTTH) scheme.

Link: <http://www.ifnl.net/index.php>

SOUTH-WEST

New projects identified since January 2009

Formed in 2002, H2O Networks – now part of the i3 Group is shortly expected to announce a number of new projects, one of them in **Plymouth**.

Link: H2O Networks <http://www.h2onetworksdarkfibre.com/>

Progress on projects identified in the January 2009 paper

Formed in 2002, H2O Networks – now part of the i3 Group - provides next generation broadband via the sewers. **Bournemouth** has been selected as the first such exercise in partnership with Wessex Water. This will be the largest Fibrecity project in Europe (Fibrecity is the brand name for a local NGA scheme provided by H2O Networks) and the company will be funding and providing the network at a cost of around £30 million. Cabling commenced in summer 2009 and will be completed in early 2011 when 85,000 homes will be passed. Of the first 200 homes passed, 84% accepted the offer of free installation of a Fibrecity box on the outside of the house. The fibre will provide download and upload speeds up to 100 Mbit/s, but H2O itself will not provide services which will be provided by a range of competing providers.

Links: H2O Bournemouth <http://www.h2o-networks.uk.net/news/?news=Bournemouth-becomes-the-UKs-first-Fibrecity>
Fibrecity <http://www.fibrecity.eu/>

Although it is at a very early stage, a FTTH scheme has been proposed for **Bradley** - a hamlet situated in the Candover valley roughly in the middle of a triangle bounded by Winchester, Basingstoke and Alton, that has multiple communications problems. A local resident has, through his consultancy Aanonxe, done some bid evaluation work for the European Social Fund. It is understood that Hampshire County Council has a knowledgeable partner willing to assist the project dubbed Bradnet.

In **Bristol**, the Community Broadband Network (CBN) has had discussions with Connecting Bristol, the city council Digital Challenge initiative, in relation to proposals for

30,000 new homes in the south of the city. They are interested in investigating an NGA infrastructure in part to avoid thousands of additional commuters travelling into the city centre. CBN has involved a master planning consultancy LDA Design and expects initial feasibility work during late 2009.

Link: Connecting Bristol <http://www.connectingbristol.org/>

Building on ACTNow, the scheme that enabled first generation broadband to be taken to all parts of Cornwall and the **Isles of Scilly**, with support from EU Funding is a new scheme: Convergence. Convergence is the new European economic regeneration programme that runs until 2013. It is expected, in part, to do what ACTNow did but for next generation broadband. It consists of two funds: European Regional Development Fund (ERDF) and European Social Fund (ESF). Digital investments will deliver “the roll out of improved broadband technology” and “access to 'future proofed' IT infrastructure”.

Link: Convergence <http://www.convergencecornwall.com/>

WEST MIDLANDS

New projects identified since January 2009

H2O Networks is shortly expected to announce a number of new NGA projects, one of them in **Milton Keynes**.

Link: H2O Networks <http://www.h2onetworksdarkfibre.com/>

Progress on projects identified in the January 2009 paper

Walsall Regeneration Company is leading the way in developing the first community-owned FTTH project in the West Midlands based on the 'OnsNet' scheme in The Netherlands. WRC is planning a major new business development in the centre of the town including high speed fibre connections. The Community Broadband Network (CBN) was asked to produce a scoping study looking at the potential for a FTTH project in Birchills, a poor community next to the centre. This was followed up in July 2008 with a successful one day conference bringing together local stakeholders from the housing, health, education, business, regeneration, social enterprise and other sectors.

Link: Community Broadband Network <http://www.broadband.coop/Projects/>

Digital **Birmingham** identified the need for specialist advice and input on NGA issues and engaged the Community Broadband Network to undertake a short project to outline the issues and opportunities for developing a viable approach to the development of next generation broadband services in the city. CBN made recommendations indicating potential next steps required to develop a comprehensive business case and feasibility study. To make the issues tangible, CBN worked closely with Digital Birmingham and the City Council's regeneration and planning team in generating ideas that can be implemented as pilot and demonstration projects.

Links: Digital Birmingham <http://www.digitalbirmingham.co.uk/>
Community Broadband Network <http://www.broadband.coop/Projects/>

The 'market town' concept for the regeneration of the **Longbridge** car factory site is being developed in partnership with Openreach to ensure that NGA is built into the infrastructure and design from the outset to deliver FTTH as a market driven 'feature' rather than a post construction retro-fit. The project is supported by the RDA Advantage West Midlands.

Link: RDA <http://www.advantagewm.co.uk/news-media-events/news/2009/02/governments-green-light-for-750-million-longbridge-plan.aspx>

A similar partnership arrangement is being formed for the development of the **Rotherwas** Industrial estate in Hereford where the Local Authority is leading on NGA facilitation by potentially utilising spare capacity on their existing council network to supply the backhaul to the network for the estate. The project is supported by the RDA Advantage West Midlands.

Link: RDA <http://www.advantagewm.co.uk/case-studies/rotherwas-futures.aspx>

YORKSHIRE

New projects identified since January 2009

H2O Networks is shortly expected to announce a number of new NGA projects, one of them in **York**.

Link: H2O Networks <http://www.h2onetworksdarkfibre.com/>

FibreStream is laying fibre along the railway track of the **North Yorkshire Moor** steam railway. The network will eventually serve a series of communities including Newton, Stape, Levisham, Goathland and Grosmont, and the coastal town of Whitby.

Link: coverage on BBC online <http://news.bbc.co.uk/1/hi/technology/8035902.stm>

FibreStream is developing a very localised NGA project for the Royal National Lifeboat Institute (RNLI) **Humber Station** in East Yorkshire. The Humber lifeboat crew and their families (29 people) live on a small, inaccessible spit of land known as Spurn Point and currently they have little or no broadband.

Link: Humber Station <http://blog.fibrestream.co.uk/2009/05/21/rnli-next-gen-access-challenge/>

Progress on projects identified in the January 2009 paper

There is an ambitious NGA project in **South Yorkshire** called Digital Region. This project

is supported by a partnership of Objective 1 (European Commission funding), Yorkshire Forward (the Regional Development Agency), Barnsley Metropolitan Borough Council, Doncaster Metropolitan Borough Council, Rotherham Metropolitan Borough Council and Sheffield City Council. Following a European Union procurement process, Thales Communication Services Ltd has been selected as the provider for the project which will use fibre to the cabinet (FTTC) to offer 25 Mbit/s+ to around 550,000 households and 40,000 businesses in the region. The Network Operating Centre (NOC) will be in Doncaster.

Although the project has taken longer than expected, the first customers are now likely to access the new broadband network in late 2009 with the full infrastructure being completed within 3 years. This will allow Digital Region and its partners another 7-12 years to fully exploit the technology for the benefit of businesses, citizens and the public sector. The network will use 12km of fibre, of which 700m will be new as the majority will be existing dark fibre or private circuits. The business case is based on 20% take-up, with the contract being a 10+5 years. Thales expects to see a return on investment by years 7-8.

Link: Digital Region <http://www.digitalregion.co.uk>

NYnet is a public and private sector commercial venture created in order to provide a communications network for **North Yorkshire** that is capable of delivering multiple high quality services to citizens, business and public sector bodies. The lead role is taken by North Yorkshire County Council with support from Yorkshire Forward and Government Office Yorkshire and Humber. The private sector technology partner is BT who will work with NYnet to deliver, monitor and maintain the network.

Link: NYnet <https://www.nynet.co.uk/>

NORTHERN IRELAND

Progress on projects identified in the January 2009 paper

The provision of NGA is being planned for the Titanic Quarter development in **Belfast**. Titanic Quarter is a £5 billion development co-promoted by the Port of Belfast and Titanic Quarter Limited. The NGA exercise is led by Redstone which is installing the fibre and Packetfront technology in all the homes and businesses in this new build regeneration project.

Link: Titanic Quarter <http://www.titanic-quarter.com/>

SCOTLAND

Progress on projects identified in the January 2009 paper

Formed in 2002, H2O Networks – now part of the i3 Group - provides next generation broadband via the sewers. **Dundee** has been selected as the second such Fibrecity in partnership with Scottish Water. H2O will be funding and providing the network at a cost of around £30 million. Cabling has not yet commenced but is due to be completed in late

2011 when 73,000 homes will be passed. The fibre will provide download and upload speeds up to 100 Mbit/s, but H2O itself will not provide services which will be provided by a range of competing providers.

Links: H2O Dundee <http://www.h2onetworksdarkfibre.com/latest-news.php?n=dundee-residents-and-businesses&page=7>
Fibrecity <http://www.fibrecity.eu/>

West Whitlawburn Housing Co-operative (WWHC) is a progressive housing charity on the outskirts of Glasgow where it organises 500 households. It is embarking on the **Cambuslang** project to build a further 100 new homes alongside their existing apartments, and is keen to offer the tenants the kinds of services being enjoyed by their counterparts on the continent. Having visited Nuenen and seen the impact that NGA is having on that community, WWHC has appointed the Community Broadband Network (CBN) to design and deliver a solution for their new homes with the aim of fitting it to the existing homes soon after the building work is complete. The overall investment in the project is around £15M and funders include the Scottish Government and the South Lanarkshire County Council. The first connections were installed in Spring 2009 and now West Whitlawburn has a similar number of fibre to the home (FTTH) connections than the BT scheme at Ebbsfleet (in both cases about 100).

Link: Community Broadband Network <http://www.broadband.coop/Projects/>

The **Angus Glens** are an area on the edge of the Highlands with limited access to telecommunications of any kind. The Community Broadband Network (CBN) is working with the community to find solutions to their needs with some additional help from C-Plan and Emtelle, both Scottish specialists in fibre-optic networks. It is hoped to have plans for their area which will deliver super-fast broadband to homes and businesses, bringing not just fast broadband and digital television but also eHealth.

Links: Angus Glens <http://www.angusglens.co.uk/glensbroadband/broad.php>
Community Broadband Network <http://www.broadband.coop/Projects/>

Cardenden is an ex-mining town in Fife where the local social landlord is planning to install a combined heat and power system in the town and the Community Broadband Network (CBN) has been commissioned to help them overlay an open access fibre network at the same time. This is an example of how the environmental agenda and the NGA agenda live very well together since, if the ground is being opened for one, the incremental cost of installing the other is quite small. The goal is to have fibre in the ground during 2009.

Link: local contract
<http://www.tendersdirect.co.uk/OurService/TenderView.aspx?ID=%20000000002336962>

WALES

Progress on projects identified in the January 2009 paper

FibreSpeed is a project which provides **North Wales** with a high-performance optical fibre network. It stretches some 312 km from Holyhead to Wrexham and on to the UK's fibre backbone in Manchester. After winning a competitive tender from the Welsh Assembly Government, Geo, FibreSpeed's parent company, was selected as the prime contractor to build the network which was done in 15 months with the launch in January 2009. The network was initially planned to connect 14 strategic business park locations in North Wales which it now does with some 12 service providers. However, overall the network could potentially expand to incorporate around 50 locations across Wales. The project costs £30M funded over 15-20 years. Financing has come jointly from the European Regional Development Fund (ERDF), the Welsh Assembly Government and Geo Networks Ltd.

Links: Fibrespeed <http://www.fibrespeed.co.uk/en/index.html>

Geo <http://www.geo-uk.net/>

Openreach – BT's local access network division – has announced the two sites for operational pilots of fibre to the cabinet (FTTC) which began in summer 2009. One of the two exchanges is in **Whitchurch**, South Glamorgan and the pilot involves up to 15,000 customer premises. End user customers in this trail will experience headline speeds of up to 40 Mbp/s. BT expects to announce detailed plans for the initial market deployment of the Openreach product in early 2010.

Link: Openreach announcement

<http://www.openreach.co.uk/orpg/news/productbriefings/nga/nga003.do>

COORDINATION OF PROJECTS

In his report for Government "*The Next Phase Of Broadband UK*", Francesco Caio recommended more local provision of next generation broadband and suggested that the Community Broadband (CBN), as a co-operative of many of those already in existence, should take the lead in establishing procedures and standards to make this work.

In response to this, CBN launched a 'National Framework for Local Action' at the Next Gen '08 conference in Manchester on 4 November 2008. This aims to bring together local initiatives to enable them to speak with one voice and co-operate in providing solutions to service providers, as well as creating a mechanism for establishing technical standards and modes of operation for local projects.

Subsequently the "*Digital Britain Final Report*" supported local schemes in these terms:

“Localised and community network developments have a role to play in developing next generation broadband and where we can we should look to support their capacity, scale and expertise.”

The report backed the proposal by CBN to create a body to represent and coordinate local next generation broadband networks and initiatives. The Government has given a £150,000 grant for this body, but it will be mainly membership funded. The Independent Networks Co-operative Association – INCA – was launched in Manchester on 23 June

2009. INCA held its first meeting of founder members in July 2009.

INCA will:

- act as a unified voice for local projects to government and industry
- promote common technical & business standards
- create a body of expertise supporting next gen projects
- develop a 'Joint Operating Network' (JON) providing technical and operational support
- create a development service to promote local project opportunities
- encourage public sector investment in innovative local schemes
- focus rural investment on next generation, not simply catching up with first generation broadband

INCA's JON is seen as the network that will 'sew together' the 'patchwork quilt' of local NGA schemes.

Link: INCA <http://www.inca.coop>

More widely, the Broadband Stakeholder Group has held two meetings – in London and Hull – to promote something called the Commercial, Operational and Technical Standards Project for Independent Local Access Networks (the COTS Project). This is an industry-led project to examine what needs to be done in order to ensure consumers have access to a full range of service providers, regardless of the underlying network ownership or technology. It will promote a degree of standardisation and harmonisation at both the technical and process levels.

The starting point is the establishment of a project steering group to develop the three core elements: product set, operational, administrative & maintenance (OAM) standards, and commercial and contractual arrangements. The steering group will include INCA representatives. The first meeting was planned for September 2009.

Link: COTS Project

http://www.broadbanduk.org/component/option,com_docman/task,doc_view/gid,1153/Itemid,63/

CONCLUSION

The number of local initiatives mentioned in this paper – over 40 – is not necessarily a totally comprehensive review but will certainly surprise many. The various schemes are of very different sizes and at very different stages of development, but collectively they represent a range of funding and business models and of technical delivery options that should contribute significantly to the national debate on the timing and form of NGA roll-out in the UK.

The Communications Consumer Panel hopes that it has done a service in bringing together this most comprehensive review to date. We would welcome further information on any of the initiatives mentioned and on any schemes not covered by this review.

GLOSSARY

Fiber-to-the-home (FTTH) - fiber reaches the boundary of the living space, such as a box on the outside wall of a home.

Fiber-to-the-building (FTTB) - fiber reaches the boundary of the building, such as the basement in a multidwelling unit, with the final connection to the individual living space being made via alternative means.

Fiber-to-the premises (FTTP) - this term is used in several contexts: as a blanket term for both FTTH and FTTB, or where the fiber network includes both homes and small businesses.

Fiber-to-the-cabinet or fiber-to-the-curb (both abbreviated as FTTC, although FTTCab is sometimes also used) - fiber is terminated in a street cabinet typically closer than 300m of the customer premises, with the final connection being copper.

Fiber-to-the-node (FTTN) - this is very similar to FTTC, but the street cabinet is further away from the user's premises; it can be up to several kilometers away.