Question 1:When do you consider it would be timely and efficient for next generation access investment to take place in the UK?:

3.7 proposes that ?one (early) deployment strategy may be for operators to continue to use ADSL2+ from the exchange for customers on shorter copper loops or directly connected to exchanges, use FTTC for customers on longer copper loops and deploy FTTH in new build developments?

This proposal highlights a rural issue. There is an assumption inherent in this statement that the current installed infrastructure will deliver:

??broadband access services that are capable of delivering sustained bandwidths significantly in excess of those currently widely available using existing local access infrastructures or technologies?

? Much of the current rural infrastructure cannot deliver.
? Fibre and new cable is unlikely to be deployed.
? Terrestrial fixed wireless access is an option but current thinking does not consider the barriers presented by large ?Areas of Outstanding Natural Beauty.?
? Fibre to the cabinet in rural areas should at least be considered.

The point noted in 3.8 should be emphasised; geography and access in rural areas do impact significantly on the cost of deployment. May rural locations exemplify the point that ?in some locations, poor copper quality or long local loops meant that exchange based DSL is subject to significant limitations on download and upload speeds."

3.15 Rural areas do not have the benefit of cable networks.

3.16 There has been some LLU:
? through the use of Bound DSL providing backhaul capability for small scale wifi deployment
? Through limited satellite services as a small scale backhaul solution for small scale wifi deployment
? Minor cooperative developments based on satellite or bound DSL
? Satellite provision to individual premises.

This level of LLU does not have a significant impact on the market position.

3.17 Costs of network deployment are greater. Few customers live in multi-dwelling units, much cable infrastructure is above ground and there is limited availability of municipal wayleaves.

The existing statistics for broadband coverage accurately shows the number of exchanges enabled for delivery of DSL services but masks the number of rural residences served by Digital Access Consumer Services (DACS), which cannot deliver DSL. Therefore existing infrastructure as a route to delivery of Next Generation Access is not a real option for rural areas. Any case for the early deployment of NGA investments based on the above would be unlikely to have significant impact in rural areas. We will argue in the rest of this response, however,

that there is a case for early investment based on deployment of new infrastructures which will address issues of equity, inclusion and business competitiveness and innovation.

Question 2: Do you agree with the principles outlined for regulating next generation access?:

There is a need for pre-emptive regulation.

There is a case for recognising the DeFRA definitions for Rural areas:

? Significant Rural: districts with more than 37,000 people or more than 26 percent of their population in rural settlements and larger market towns
? Rural 50: districts with at least 50 percent but less than 80percent of their population in rural settlements and larger market towns
? Rural 80: distructs with at least 80 percent of their population in rural settlements and larger market towns.

Regulation needs to allow for the difficulties of gaining adequate return, in particular, from Rural 50 or Rural 80 areas.

A principal likely to be recognised in the expected ?Update on plans for rural economies? report to the Prime Minister is:
?Enhancing opportunities for rural communities to provide, participate in and benefit from service provision or offset dis-amenities of some developments ?

Given the issues created by rural sparsity we believe that it is necessary to challenge the current ideas of a ?demand led? market as in rural areas this is currently ?supplier led?

Question 3: How should Ofcom reflect risk in regulated access terms?:

5.3 Agree strongly that applying traditional cost based approaches will not adequately reflect the higher risk profile and therefore will disincentivise investment.

5.4 There has to be a realistic re-appraisal about the potential technology mix available for rural areas.

? Assumptions about the capacity and availability of WiMax must be offset against the challenges provided by deployment in large Areas of Outstanding Natural Beauty.
? DOCSIS access via cable does not apply, as this is not available in rural areas.
? It is accepted that copper provision in rural areas is generally poor and that distances from the exchange are greater: Until now, rural areas have tended to lag behind urban areas in terms of internet provision.

?Until recently this was due to rural areas experiencing ?noise? on telephone lines rather than a lack of access to broadband. Now lack of ?cable? and slower DSL speeds mean that, although access exists, performance is often slower.? The state of the countryside 2007 Living in the countryside

Therefore there needs to be additional incentives to invest in NGA in rural areas. The current rural economic environment means that NGA provision is not contestable. There are examples of State Aid been granted for Rural 80 areas in the West Midlands? The Commission has found that the aid granted is compatible with the EU rules on state aid (Art. 87 (3) (c) of the EC Treaty), since the subsidies are provided only to the extent necessary to develop the use of broadband services in the target areas. IP/05/1231 Brussels, 6th October 2005?

We agree with the assertion in 5.11 that contestability is vital in securing investment and delivering a competitive market place that meets customer needs however, we believe that specific consideration needs to be given to the rural issues either to create contestable conditions or to avoid late investment due to poor market conditions.

There is a need to challenge some of the assumptions of section 5.19:

? Demand aggregation works but in rural areas requires an appropriate level of community engagement. This requires proactive action to recruit local champions and realistic trigger points that are achievable in short timescales.

? Co-operative deployments assume the presence of multiple providers, clearly not the case in rural areas where there tends to be a provider with significant market power. A rural model would necessitate co-operation between small providers who currently provide niche services to small areas and large wholesale suppliers. Such arrangements would require a favourable regulatory environment, which would enable the supply of necessary wholesale products or access to passive components of the network on favourable terms to enable the participation of smaller providers.

We agree with the assertions of 5.21 to 5.24. Taking the risk headings suggested by Ofcom would mean that:

Risk Area:
(Economic Environment)
Supplier with Significant Market Power, Small niche providers locally, Means poor competition.
Risk Area:
(Investment)
High investment required in poor existing infrastructure.
Timing; Demand grows slowly
Location; Rural geography, Sparce population,
Difficult Areas of Outstanding Natural Beauty.
Technology; Mainly copper with some wireless

There is a real need to balance these risks and the disincentives to invest against the need for equity of access and economic need in rural areas. This would suggest that any approach would involve variable pricing and the need for opportunities to experiment with different pricing options.

In 5.26 to 5.29 there are a number of rural specific issues. A cost plus model would lend itself to the situation above where co-operative deployment would require advantageous pricing of upstream products so that downstream, small providers could

address local markets in rural areas. Whilst there are benefits to the regulator in the situation described in 5.28 this largely reflects the situation we have now and can allow a provider with significant market power to effectively protect its local market at the expense of the consumer. The situation in 5.29 does pose an attractive offer when set against the difficulties of rural deployment because it guarantees a return on new infrastructure investment whilst allowing the market for new products to be grown. However, the key is investment in new infrastructure given that there are limitations on rural infrastructure now.

Question 4: Do you agree with the need for both passive and active access remedies to promote competition?:

We must move away from the idea that notions or ?limited?, ?last? and ?best efforts? are acceptable economic measures of performance for service provision in rural areas, and bring ourselves to a view that requires us to consider concepts of ?equitable?, ?timely? and what is ?technically possible?.

We must challenge the assumptions that underpin section 6.1. In rural areas, there is not a market in the conventional sense so that significant market power prevails.

We strongly agree with the view expressed in sections 6.9 to 6.11 especially where adequate and cost effective backhaul provision will support small access providers.

We note the assertion in sections 6.15 to 6.19 that areas of sparse populations are more efficiently served by a model, which uses active components in the network. We acknowledge the difficulties created by passive LLU in particular the difficulties of increased intervention in rural areas where distances are greater. Whilst the drawbacks of active networks are noted, the assertion that the consequence is that rural areas may have to accept fewer service options is, in fact, little different to what exists now. This should not stand in the way of a regulatory environment that supports unbundling based on active components if that is what will create timely investment in rural NGA.

We would support activities such as are suggested in 6.25 which increases the innovation potential and we see advantages in deployment of IP based technologies such as Ethernet. Whilst we might wish to argue the case for widespread, highly flexible networks there is a case for simpler, rural networks which do not lose the potential for innovative services. The view expressed in section 6.30 highlighting the risk of next generation access active inputs discriminates against the view above that active components in simpler networks based on Ethernet would seem to be most appropriate for rural deployment.

Given the situation above an appropriate response to sections 6.34 onwards as illustrated in figure 9 page 53 would be:.
? Passive access via duct presents a problem as duct tends to be owned by the incumbent supplier with market power and tends to be poorly maintained, especially in more remote areas.
? LLU based on wavelength partitioning at the exchange is expensive and unlikely to be viable in the short term.
? Active line access at the street cabinet requires its own backhaul but this could be

addressed through regulation of appropriate products to promote cooperation between suppliers with significant market power and smaller, niche providers.
? Whilst active line access at the exchange suggests loss of backhaul flexibility it is cheaper and offset by the potential for innovative services over Ethernet at the expense of more complex, more flexible networks

We would, therefore, be supportive of the remedies outlined in section 5.52 and believe that sub-loop unbundling with appropriate supporting backhaul products and Ethernet based, active line access products would help the deployment of NGA in rural areas.

Question 5: Do you consider there to be a role of direct regulatory or public policy intervention to create artificial incentives for earlier investment in next generation access?:

We believe that section 7.1 should specifically take account of the issue of equity in rural areas. Similarly, in section 7.2 it should be noted that rural areas are subject to a supplier of significant market power and therefore it cannot be argued that the market operated efficiently in the last round of xDSL deployment.

With regard to section 7.3 we believe that there should be research into the importance of the value creation impact of NGA in rural areas in particular and the extent to which it provides opportunities for the development of horizontal supply chains and innovation in rural businesses. We strongly support the role of NGA in delivering significant social value. We feel the case for potential social welfare delivery needs to be made with respect to rural areas and would highlight the interdependency of rural business, local economy and social welfare delivery.

We feel that the emphasis on residential services such as HDTV, whilst important, does not adequately make the business case for NGA in rural areas. The ?Intensity and Scope? axes of the Figure 10 do not adequately reflect the rural situation:

? Business location in a rural setting is a high intensity potential
? Peer to peer file sharing offers a digital ecosystem that benefits rural business as well as offering new delivery routes for third sector and statutory bodies.
? Home working is a high intensity issue in rural areas and impacts on the delivery chain for many businesses
? E-Government, voting and form filling represents a high intensity activity where access to services is a key issue.

We would argue, therefore that to concentrate on residential applications, while reflecting the bulk of market demand, does not adequately make a rural proofed business case.

We acknowledge the issues identified in 7.28 regarding service adoption by both residences and SMEs. The experience of ?Switch on Shropshire? a 3 year ERDF project in the rural west, was that proactive intervention is necessary to promote take up in both residences and businesses. However, experience has shown that community engagement and business as an early adopter can lead to higher take up of services and, for businesses, a GVA improvement of £31k per employee per year.

The experience of the deployment of DSL technology was that rural areas were considered last because they represented higher risk of service take up and higher investment potential in plant. The timescale for the current NGA offering from the supplier of significant market power is that this will be true this time around again with the rural west scheduled for completion in 2011 and no current evidence of significant infrastructure renewal so that service limitations will remain.

There is, in our view, a strong case for early investment in rural provision to create a true market and, within that market, opportunities for smaller suppliers to create innovative services for rural areas. This may be at the expense of a fully flexible network giving a simpler offering. This would suggest that NGA service regulation needs to be tailored for rural areas with a view to variable pricing structures, which acknowledge the particular difficulties in Rural 50 and Rural 80 areas. Such regulation should give due acknowledgment to social equity, the potential for social value and service delivery, and the business case for supporting rural SMEs and the opportunities for innovation and value creation.

Additional comments:

This is a Director's response on behalf of Economic Development through Nick Taylor, Assistant Director, Economic Development. Approved by Members, Cllr Mike Owen, Cabinet Member for Community Well Being and Cllr John Hurst-Knight, Cabinet Member for Waste and Economy.

Shropshire?s Challenges
? Sparsity ? the County is one of the most sparsely populated in England. Research completed in 2000 found that a very high proportion of Shropshire?s land area in inhabited (97%). Delivering services to communities living throughout the county?s 600 settlements, and many additional isolated dwelling is perhaps Shropshire?s greatest service delivery challenge.

Three of Shropshire?s districts are PSA 4 Indicator Districts (lagging areas): North Shropshire, Oswestry and South Shropshire.

? Ageing Population ? Since 1991, Shropshire?s population has risen significantly. The 2001 Census shows that of the population living in settlements of below 1500 people, nearly 24% are over 60 years old

? Deprivation ? Nearly half (49%) of the County?s population fall within the most disadvantaged fifth of Super Output Areas

Within Defra?s Rural Strategy 2004, South Shropshire is identified as being one of the most deprived Districts in England

? Transport ? In a rural county, many journeys are made by car. However in Shropshire 23% of households do not have a car. In rural areas, social exclusion for people without access to a car is a problem particularly for children, the elderly and disabled people who require access to services and facilities.

? Low Skilled Economy ? Within Shropshire, there is a high concentration of employment in sectors which are declining nationally, together with a low incidence of employment in national growth sectors

While education attainment levels are good in Shropshire, the benefits are not captured within the workforce, mainly because of sustained patterns of net out-migration among young adults. The result is that skill levels within the resident workforce are lower than they should be county-wide. This issue is accentuated in more rural areas.

? Entrepreneurship ? In 2002 there were 880 new VAT registered businesses in Shropshire, representing 7.5% of all VAT registered companies in the county. This is compared to a 10.1% start-up rate in Great Britain and reflects a picture of limited entrepreneurship and innovation and a picture of micro businesses trading below the VAT threshold
? Agriculture ?With an aging workforce, farm succession issues, radical changes in the Common Agricultural Policy and competition on a global scale, Shropshire?s agricultural industry faces many challenges.

? Quality Environment ? Shropshire is England?s largest land-locked county and has a wide diversity of habitats that reflect the physical characteristics of the County?s geology and landform.
Shropshire?s natural environment as we see it today is a product of, and a major contributor to, many of the county?s economic sectors in particular agriculture and tourism
Shropshire?s Economic Opportunities
Enterprise
? Shropshire?s Local Area Agreement Economic Development and Enterprise Outcome LPSA7 ? Shropshire?s key target is to significantly increase growth and sustainability of enterprise and businesses in key future growth, technology and knowledge-intensive sectors. This seeks to counteract the over reliance on traditional sectors. A third of jobs are currently within sectors which are predicted to decline.

? Shropshire has good economic opportunities in the growing environmental technologies sector, ICT business, food technology and processing, home based enterprise and high value-added engineering. Shropshire is seeking to drive up new business start-ups and encourage innovation and enterprise in these areas.

Innovation
? Shropshire is working to establish a higher education presence focused upon the needs of the County?s growth business sectors. This is seen as critical in ensuring an equal spread of innovation and R&D benefits in the County.

? Shropshire is encouraging private business to participate in R&D in alternative, sustainable technology as a priority, using opportunities provided by the High Technology Corridor to Shrewsbury and AWM ICT, New Media and Environmental Technology clusters

Skills
? Shropshire?s skills priorities are:

i. Building a knowledge rich workforce by increasing the number of graduates and stimulating demand for better qualified employees in higher value companies
ii. Embedding a commitment to continual learning and personal development among learners and businesses within target groups
iii. Retraining workers from declining sectors to meet the needs of growth sectors

Economic Activity
? Shropshire is looking to address:
i. Over dependence on single, large employers in some market towns
ii. Low average earnings
iii. Under-employment and uncertain employment (seasonal/casual)

Quality of Life
? Shropshire will focus on safeguarding the high quality of life offered in rural areas whilst at the same time:
i. Realising the potential for establishment and growth of high technology/knowledge intensive industries
ii. Realising the potential for home-based business and home working
iv. Driving the greening of the region and promoting sympathetic development for economic return. The environment is an economic asset for tourism

Access
? Working to increase access to affordable housing in rural areas
? Improving rural public transport via demand responsive solutions
? Providing innovative access initiatives to improve services to rural areas
? Promoting flexible working arrangements and use of ICT to promote home/local based working and reduced need to travel
? Address ICT infrastructure issues that may perpetuate the digital divide.