Hull City Council

Briefing Note/Green Paper to the Housing, Neighbourhood & Urban Regeneration Overview and Scrutiny Commission

22nd April 2008

The IT and Connectivity Network in Hull

Briefing Note of the Head of Regional Development

1. Purpose of the Briefing Note & Summary

1.1 The briefing note reviews the issues and opportunities around the ICT and connectivity network in Hull. It responds to the call by the Commission for a combined briefing paper on the IT Network in Hull & the Role of Culture in Regeneration. Because of the nature of the issues involved, this note focuses on the IT and connectivity network issues, rather than the role of culture in regeneration. This will be the subject of a subsequent briefing note.

1.2 The briefing note is being submitted to highlight issues and to promote a discussion about what the Hull needs in terms of IT and connectivity networks, and the options for meeting these needs. It reviews the increasing requirement for good ICT and connectivity to underpin cities in the modern world, the perceived state of play in Hull today (including the specific issues facing the City), and takes a headline look the options for doing something about it.

2. Background

2.1 The issue of broadband, wireless, Internet and telephony services has been the subject of much comment in Hull for the best part of 20 years. It is something the Council has a long term track record in as a provider of telecoms services, a stakeholder in private sector service provision, and as an actor in the attempts to improve connectivity over recent years in the interests of the wellbeing of the City, its citizens, and its businesses. The sale of the remaining stake in Kingston Communications, now KCOM, has also contributed to the recent development of the debate.

2.2 The discussion about services in Hull has increased rather than diminished over last few years. The influencing factors include the growing realisation of the importance of connectivity and IT to the modern economy and for businesses, increased personal experience of digital technology and the Internet (particularly over broadband) and the expectations this creates, and the practical experience of businesses, 2.3 Despite the unusual circumstances in Hull, these issues are also increasingly played out around the world as cities struggle to make sure they succeed in increasingly knowledge driven economies, cope with the rising expectations of citizens, and avoid the dangers and costs of a two speed society where digital exclusion becomes an important factor in social exclusion. These apply in Hull as much as they do in Manchester, Amsterdam, Cleveland Ohio, or Qingdao in China. Whole countries are taking the view that connectivity is critical to their future prosperity. The examples of Korea, Japan, Singapore, Sweden and Finland are well known. China is increasingly focused on this agenda, particularly in terms of economic development, social cohesion and service transformation. As an example, the creation of comprehensive healthcare for all citizens by 2010 will include the substantial use of ICT and connectivity networks as a key part of achieving this ambitious goal using new, technology enabled models of service delivery.

2.4 One of the confusing aspects of the connectivity issue is the sometimes bewildering array of technologies, acronyms and terms that are used. This sometimes creates barriers rather than understanding, which is ironic bearing in mind that people use the technologies in their daily lives, often without being aware of them. The ICT network and connectivity debate covers a range of different technologies that are good for different, complimentary and overlapping purposes. It is not just about one technology, e.g. fibre, ADSL, wireless technologies and whether connectivity can be delivered through power lines and sewers, rather it is about how any flow of information and transactions pass through these technologies on their journeys between the user and providers. The infrastructure that enables people to connect supports layers of services like Internet provision, mobile services, payments, TV, applications (that allow people to do specific things like talk, buy, pay, organise businesses and agencies, and swap pictures and music) and the functions that are needed to support them. A key issue emerging is next generation connectivity. This is very fast connectivity that can support combinations of high bandwidth uses, rather than what people commonly expect to be 'broadband' at the moment.

2.5 The issues that affect the ability to use the technology include the scale of connectivity available, how it is made available and how it flows together, its prices and its costs (which in terms of a business or organisation may be much more than the price paid for a service), the range of services available, and its quality, particularly from the perspective of the end user, and how easy it is to access. Choice is a big issue. For the citizen, this is a standard choice like any other about what to buy, for how much, and who from. For businesses, this extends their choices about where they will locate to be able to run their businesses most effectively. This was the key issue for the City of Stockholm when it decided to intervene in the

2.6 It is not solely about the technology that is or is not being used. It is primarily about the benefits it enables, i.e. does it enable better business and jobs, does it improve education, does it help people to be healthier, does it enable people to make more of their lives, and does it enable public services to rise to the challenges they face in delivering the best possible services for citizens and businesses?

3. European and National Policy Issues

3.1 IT and connectivity is a key requirement for achieving the EU's Lisbon Agenda, which aims to make Europe 'the most dynamic and competitive knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment by 2010'. It requires the right technologies and skills to be in place to maintain and grow Europe's position in the world and its contribution to prosperity. This is also the UK agenda, with a clear recognition that the UK's prosperity will depend on having the right ICT and connectivity networks to underpin the competitiveness and success of the economy, including knowledge based growth sectors, and creative industries.

3.2 Similarly, Hull's focus on a number of growth sectors will require the right ICT and connectivity networks as a key factor in engaging with these opportunities for growth. This is particularly important in a world that increasingly depends on people (and their talent) and technology. Cushman and Wakefield's European Cities Monitor of 500 Companies ranked telecommunications in third place of importance behind skills and market access, but ahead of transport and office space. ICT and connectivity have been key success factors in turning around some of the Finnish cities like Tampere and Oulu, from being depressed old economy places into highly successful cities of the knowledge economy. This has enabled them to deal with some of the key drivers of success, e.g. doing things better, faster, and cheaper, the productivity of people, and the demand for choice. Barcelona is another good example, where physical regeneration, e.g. the new creative and digital industries driven 22@ quarter is underpinned by new IT infrastructure, which itself is required to underpin wider business competitiveness, education and citizenship in the Barcelona region. Amsterdam is forecasting a 20% uplift in whole City asset value as a consequence of achieving next generation connectivity (their CityNet proposal, which includes private sector funding, has just got all the necessary EU clearances).

3.3 It is also about changing how things are organised. There has been an enormous impact of ICT and connectivity in the private sector around the world, and in how many citizens live their lives. This is increasing the pressure on the public sector to ride the same wave of technology enabled change. This is a growing issue for governments. It was at the heart of the Government decision to run the Digital Challenge competition in

3.4 A major development in UK policy came with a speech by the then Department of Business, Enterprise and Regulatory Reform (BERR) Minister, Stephen Timms. He asked whether there was a case for public intervention in broadband to enable Britain to 'compete successfully on a global basis'. The speech kicked off a high level summit and follow up work involving the national Broadband Stakeholder Group and Ofcom. This includes work on defining the public value of broadband (for policies, services and citizens) and a review by Ofcom into what the regulatory environment should be for achieving next generation connectivity. The Ofcom study is in addition to its recent broadband market review (see below). BERR has subsequently commissioned an independent review into how the Government can pave the way for better broadband, on the grounds that this is crucial for future economic success.

3.5 The DC10[1] group has also created a Connected Neighbourhoods Forum[2], with BERR and the Department of Communities and Local Government (DCLG) which will contribute to answering this question by developing the models for achieving inclusive and next generation connectivity to address key goals, including competitiveness, education, health and social and digital inclusion, and how the switchover to digital television by 2012 can be more fully exploited in the public interest. The emerging policy drivers, in addition to competitiveness, are education, health, worklessness, cohesion and public service transformation.

3.6 In the broader national policy environment, DCLG says it will seek to include digital inclusion in Local Area Agreements in 2010. It has already commissioned research into how this will be measured in Comprehensive Area Assessments. The Department for Children, Schools and Families has recently consulted on creating home access for all families with children (Germany announced its delivery programme in January). This is directly relevant to the needs of programmes like Building Schools for the Future, which will enable new ways of education in schools and in the community. DCLG has also issued its 'Lifetime Homes, Lifetime Neighbourhoods' national strategy for preparing housing to cope with the demands of an ageing population, which includes specific references to the use of technology and telehealth, which will require good ICT and connectivity networks.

[1] www.dc10plus.net
[2] www.connectedneighbourhoods.org.uk

3.7 In parallel, the EU is paying more attention to connectivity. The Commission is currently reviewing the regulatory rules, focusing on significant deregulation of markets, more choice through more competition, reinforced tools for regulators (e.g. separating service types), promoting the wireless economy, strengthening consumer choice, and reaping the Digital Dividend, including the switchover to digital TV. The aim is to reinforce Europe's position as a world leader in telecoms, increase competition leading to more innovation and investment, and to help European citizens get the most out of these technologies.

3.8 The EU has also taken a more enabling view of specific initiatives by local and regional authorities, giving both regulatory and state aids approvals to initiatives in Amsterdam, North Yorkshire, and South Yorkshire. The European Commission recognises that markets do not work in practice in all areas because of geography (e.g. rural areas) or in urban areas where competition is constrained.

3.9 As an example, one of the practical expressions of what this could mean is in health. Telehealth is a fast developing concept and opportunity. There is already large scale investment in the products and services, but the bit that has been missing is how this is applied to produce public value, including people living longer, happier and more effective service provision. The focus now is on developing viable business models, which is something Hull is already taking a lead position in. This is an opportunity that does not sit in a single box marked 'health'. It is as much about economic opportunity as it is about service transformation (though the latter drives the former), which is the approach the North East is taking in its focus on the related ageing agenda. It links into issues including independent living, social care, housing regeneration, worklessness, business development and education. It is not just a UK challenge, all countries will have to deal with the challenge of providing affordable healthcare in an era of ageing populations and growing need.

3.10 Achieving both public and private value is becoming a key challenge, as is how connectivity is developed and organised to make sure the benefits achieved go to the many rather than the few (including existing telecoms operators). The issue of the role of monopoly, and the difference between its public and private forms and where it applies in the connectivity value chain, is becoming a significant issue.

4. The Issues & Impacts for Hull

4.1 Historically Hull was considered to be ahead in terms of connectivity for residents, businesses and public services. Not only did it have a connectivity network operated in the public interest (for economic, social and public service benefits), it was also the most cabled City in the UK – Council houses were built with Rediffusion cable TV and radio installed. But the current perception is that Hull is being left behind in comparison to the rest of the country. Hull is largely served by a single, vertically integrated service provider (KCOM), with other services being available to a limited degree in the general business market. Not all forms of

4.2 There is a consistent set of messages and commentaries about the issues in Hull that comes through the media, the web fora, from representative groups, from public and private services, and from individual businesses and citizens. The predominant message is that there is something wrong in Hull and something needs to done about it, though this is not representative of all opinion (some say Hull is not a big enough market to attract alternative providers). Unpublished independent research in 2005 indicated that compared to other UK cities and to sister cities abroad, Hull was the expensive and had fewer services. Local opinion research concluded that there were three types of businesses: those that were happy, but would like some competition (the biggest group); those who were unhappy with the quality of services; and the technology experienced who were unhappy with prices. Since then, the lack of availability of new commercial offerings in the business and residential broadband markets has added to negative perceptions locally.

4.3 It is worth noting that concerns sometimes turn into attempts at positive action (including by the Council, businesses, agencies, the third sector, and individuals), but none of these have succeeded. They have tended to stoke up the view that the real problem, rightly or wrongly, is KCOM's de facto monopoly position (it is not a legal monopoly) and its focus on its national business strategy at the expense of the wellbeing interests of the City and its businesses, residents and agencies. KCOM has expressed its own views about the market position in Hull and why alternative providers are not providing services. KCOM challenges many of the assertions critical commentators make. This will needs to be addressed by discussions with all interested parties including KCOM. The key issue, of course, is establishing what the real issues actually are.

4.4 One of the issues frequently raised is what the Council is doing about it, as the guardian of the City's wellbeing? The sale of the remaining stake in KCOM is perceived as an opportunity to take action unconstrained by the obligation of share ownership, emphasising more the Council's role as community leader and as a major customer for any connectivity service provider, including to support operations and major investment programmes like Gateway, BSF, health and economic regeneration.

4.5 The issues are not just about actual or perceived relative prices and lack of choice. The range of services available in Hull compared to elsewhere is also a significant issue, though it is fair to say KCOM has been offering some new regulated services in response to the requirements of Broadband Capital as it delivers the Council's Broadband TV (branded as Stream) and related programmes. KCOM's recent announcements about wholesale and retail prices and service changes is also potentially

4.6 A key issue is the degree of substance underpinning the perception that there are price, process and service barriers to either introducing competition into the Hull market or to using services from external providers, and that Hull service users pay more than they should for a narrower range of services than if they if were located outside the Hull area, including services provided by KCOM subsidiaries. The key issue, of course, is establishing an evidence based view of what the real issues actually are. In addition, the lack of choice means users cannot experience how good or bad alternative service providers are so that they could take a balanced view of the services currently on offer.

4.7 Ofcom's review of the wholesale broadband access markets (consultation of the proposals regulation closed on 14th February) recognises that KCOM has 'significant market presence' in the Hull area. It proposes to continue with a significant set of regulatory remedies in the Hull area to address this problem. But in itself, this is no guarantee that things will change. This may require more positive intervention at the local level, as is happening in cities elsewhere in Europe and in North and South Yorkshire. The situation in Hull is more unusual than areas outside, where BT is recognised as having significant market presence (i.e. where there are less than three or four alternative providers). The situation in Hull is exceptional.

4.8 Another significant factor in any consideration is KCOM's role in Hull as a major investor, large-scale employer and significant local business. The issue is how any change in the City will impact on investment and employment levels in Hull and the company's interest in maintaining functions, jobs and offices in the City.

4.9 Overall, the situation in Hull means businesses and other broadband users feel constrained and there is a lack of alternative provision that affects decisions about where to invest - businesses do not like to invest where they cannot switch to an alternative service because service failures impact on critical business systems (this is similar to the requirement for public services to have alternatives so that they can deal with emergencies). It is particularly significant for knowledge based businesses, which increasingly depend on the sharing and transfer of information. It is likely to have specific impacts in the growth markets identified for Hull and the Humber. Connectivity also affects how businesses operating in and from Hull organise themselves. As companies become more connected and networked internally and with partners and customers, ICT network and connectivity services are critical to how they operate, including how they achieve better performance, efficiencies, and profits

4.10 The cumulative impact of any connectivity constraints in economic terms is that Hull would become increasingly uncompetitive and the delivery of public policy initiatives will not be optimised. This is a current issue for

4.11 Though the work has not been done yet to establish definitive numbers, it is clear that scenarios and models could be developed using both local information and comparative evidence, to look at what could happen if things do not change and what could happen if things did. There are several options for how things could be changed, each of which may produce different outcomes overall and for different stakeholders individually.

4.12 In a similar vein, some work is being done locally and nationally on the specific potential impacts of networked services in transforming service delivery and achieving public policy priorities. More will appear on this as the DCLG's research into how digital inclusion will be featured in LAAs and CAAs becomes available. But already, the evidence is stacking up that those who are connected have better life chances, e.g. employment, incomes, education, and health, than those who are not. This is beginning to apply between countries, which is why there is considerable investment in connecting societies around the world. However, it also applies within societies. The work being carried out by Government shows that the socially and digitally excluded overlap a great deal. This is part of why there is more interest in the digital inclusion agenda, because its potential contributions include increased life chances, transformed services, better and cheaper services, and new solutions for some of the more intractable policy problems connected to social exclusion.

4.13 The situation that has developed in Hull has not arrived suddenly. It has developed over time, becoming an unusual anomaly in the broader national picture. There have been several attempts to focus the issues and to develop ways of dealing with them. The Hull MAN (Metropolitan Area Network) proposition in 2001 was an ambitious proposal to both aggregate need and create the connectivity capabilities needed by the City. After this failed, an attempt was made to co-ordinate the City's needs through a partnership venture called Hull CityDigital and through a memorandum of understanding with KCOM about how the Council and the company could work together to achieve common goals. For a range of reasons, both these routes did not produce significant changes in the ICT and connectivity environment in Hull.

4.14 An attempt was made in 2004 to restart the connectivity agenda with the commissioning of the initial business case for a significant intervention, labelled as Connected Hull, using the South and North Yorkshire models. During 2006 and 2007, work on addressing this at a Humber level took place. This was supported by Yorkshire Forward, which has the aim of transforming broadband in the region over the next eight years This has also moved slowly, emphasing the need to be clear about what Hull

[3], the Council controlled company set up to deliver the Broadband TV programme (branded as Stream) and other digital programmes, and to make technology enabled contributions to City and Council priorities including the economy, education and health.

4.15 The consequences are that the fundamental problems have remained largely untouched, despite some significant expenditure of effort on all sides. The key question of whether ICT networks and connectivity networks are critical to the future of the city has not been clearly answered yet and actions organised accordingly. In the meantime, external interest in providing services continues. Several providers are interested in creating wireless connectivity. More broadly, there is interest in some more transformational investment in services in the City, using largely external capital investment (though these have not been tested). KCOM is also responding to the opportunity to engage in the discussion about what the City needs and how it can be delivered. Crucially though, the position of the Council will be significant to their progress.

5. Options for going forward

5.1 There are several options for taking things forward that will play out over different timeframes and which could have different effects. Many of these are now well developed and are being applied in cities and regions around the world, including in the EU and in the UK itself. There are also options for getting Hull up to the level that other cities are at now, and for ensuring Hull keeps up with the competition as they move into the era of next generation connectivity.

5.2 Raw competition is not the only option for creating change. The concept of contestability is increasingly discussed. This is when a market behaves as though there is lots of competition when in fact there may only be a single provider. It is a concept that is being developed in the health service, but also applies to other areas. At its root, the behaviour of the players in the market is conditioned by the possibilities that new players can enter the market easily, though there is a big question about how it would work in practice in the connectivity sector.

5.3 How this could work is related to the re-emergence of the concept of natural monopoly. This may not be in the form of the old vertically integrated public monopolies and their privatised descendents that dominated telecommunications, rather that some specific part of the value chain, particularly the base infrastructure, might be more suitable for monopoly solutions, e.g. the base infrastructure that requires longer term investment, rather than the services that run over networks. This is the model used in Stockholm and which has been adopted by some Dutch cities and in South Yorkshire. There is also the issue of who gets the benefit, including the public interest or private stakeholder interest. A

[3] www.broadbandcapital.co.uk

5.4 Some of these issues will be developed and tested through things like the Connected Neighbourhoods Forum and the work of the Broadband Stakeholder Group. It is also something that will be tested on the ground, which is something Hull is well placed for because of the City's practical experience in telecommunications over the years and in areas like Digital Switchover (where Hull is seen as the national lead in terms of public service opportunities), the deployment of new services like Telehealth, and the opportunities arising from the major regeneration programmes being developed and delivered in the City and the drive to transform public services locally.

5.5 At its heart though, this is a local discussion about Hull's needs and what could or should be done to achieve them. This will need input from all stakeholders, including KCOM.

5.6 The headline options for Hull at the moment include:

5.6.1 Do nothing, which largely leaves things as they are and assumes the market will change things.

5.6.2 Facilitate a change in the local connectivity business model, which would also involve a renegotiation of the relationship between KCOM and the City.

5.6.3 Do things alone as a Council, i.e. concentrate on the Council's specific needs rather than the community as a whole (though this could also use the Council's leverage as a major customer).

5.6.4 Getting one or more alternative providers to deliver services in the area, (which would require a convincing business case and probably need the Council as an 'anchor tenant', to minimise the risks for investors, local or otherwise).

5.6.5 Creating a new infrastructure and service model on open access lines (which is a model developing elsewhere) that holds the prospect of being more transformational in the longer term, but which also requires a clear and focused effort.

5.7 The positive intervention options are not exclusive. There may be combinations. They also depend on aggregating sufficient requirements, expressed as spending or investment, to drive the wheels. Each will have different degrees of benefit and risks attached. They could also use combinations of technologies (it is not a case of one club fits all). There will be options for how each is organised for development and delivery, and how they are funded and over which time period. They would also have to be assessed in terms of how they would affect KCOM (positively

6. Consultation

6.1 The issue of the ICT infrastructure has been subject to extensive public and private consultation over the years. As mentioned previously, it is not hard to get views or tap into views as they are expressed voluntarily (the Hull Daily Mail website is only one place where the views of the public can be monitored). KCOM is also commenting publicly about the market situation in Hull in these fora[4], it is talking directly to its customers in Hull, and will wish to engage in further discussions. The specific initiatives in Hull have also being subject to extensive consultation and specific opinion research, including with KCOM (the latter has been a more or less continuous dialogue over the last ten years). Some of the responses to Ofcom's consultations are available from their website, though many are kept confidential at the consultees' requests. More broadly, the options for change are subject to ongoing consultation with stakeholders, interested parties and communities of best practice, including Eurocities and national groups like the DC10 and the Connected Neighbourhoods Forum.

7. Council Priorities

7.1 Hull's ICT network and its connectivity is a key infrastructure and service environment that directly impacts on Hull's priorities, i.e. earning, learning, healthy and safe, and drive for service transformation. These priorities do not sit in separate boxes. They interconnect. They will require a common set of ICT capabilities and connectivity to support achieving them. This is the approach other cities are taking, recognising that any City will be severely constrained in a citizen centred, globalised world where information is a key factor in collective and individual success. The current situation in Hull is a significant impediment to achieving the City's and the Council's goals and objectives.

7.2 We already have indicators of how the current environment is negatively affecting at least three of these priority areas (earning, learning and health), how it is affecting the ability of public services to operate (including the efficiency of operations) and to innovate and transform services (including implementing the Council's Target Operating Model) to achieve better outcomes, effectiveness and efficiencies. The future environment of partnership working also puts a premium on the ability to connect between agencies, and with the citizen and the business. This situation is also a problem for KCOM.

[4] As an example, see the Letter headlines 'No ifs, not buts, the broadband market is open to competition' letter in the Hull Daily Mail on 6th March 2008

8. Going Forward

8.1 If there is an accepted case for intervention, the options will need to be worked up and worked through to develop an appropriate proposition with a robust and credible business case, including what it produces and for whom (citizens, agencies, businesses, and very importantly, connectivity service providers, including KCOM). Being clear about what Hull needs and focusing on making the IT and connectivity networks fit for 21st century purposes would be critical. If this stacks up, the development of a robust funding and delivery programme would be required.

8.2 There may be opportunities to use external funding and partnership support for the development of appropriate models and to position Hull at the front of opportunities to pilot these on the ground. These could include Digital Switchover and Next Generation Connectivity pilots funded from national sources and using national and international know how. Development and delivery programmes like telehealth and education are also opportunities to develop, test and deliver the new models. This agenda is also developing as a regional opportunity, as indicated by current discussions with Yorkshire Forward.

8.3 Some key benchmarks that will need to be considered include: is change and intervention necessary; are the options for promoting change viable, and can sufficient will, energy and resources be assembled to make it happen? The impacts and opportunities for KCOM will also be a significant consideration, though any proposition would have to stack up with or without KCOM's involvement. However, there may be an opportunity to achieve a win win, i.e. something good for the City and something good for the company (though as in any intervention that involves telecoms, this will need full regard to regulatory, state aids and competition rules that apply).

9. Conclusions & Next Steps

9.1 The quality and capabilities of the ICT and connectivity networks in cities that increasingly underpin their daily life and roles in the world is a major challenge across the globe. Hull is no exception. The City finds itself in an apparent state of disadvantage in comparison to other cities. This impacts directly on a wider range of activities and policy priorities, and the efforts to achieve significant and sustainable change. The key question is whether the situation is significant enough to justify positive action, when, and how, particularly in terms of the benefits that will be gained as a result. The flip side of this question is what benefits the City will lose if nothing is changed. If the situation is significant enough and the timing is right (and the debate and developments in the City and elsewhere suggest it is), it will require a sustained commitment to working out the options for intervention, then following through to implementation.

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Background Documents: -

(i) A large number of background documents, relevant reports are available and have been used in the preparation of this briefing note.

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