



Digital Local

Options for the future of local video
content and interactive services

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Executive Summary

Background and objectives

- This report contains the findings of a programme of research and analysis into the future prospects for digital local video content and interactive services, conducted by Ofcom between June-December 2005.
- Local news, information and entertainment media services have existed in the UK since the first newspapers were established in the 17th century. Radio has contributed strongly in the past 40 years. More recently, the growth of digital content platforms has created a new impetus behind the development of video content and interactive services targeted at specific geographic communities. These services have the potential to create significant citizen and consumer benefits.
- Ofcom's remit in this area is twofold. First, in carrying out our duties we are required to have regard to the desirability of promoting the fulfilment of the purposes of public service television broadcasting (PSB). In our first statutory review of PSB carried out in 2004-05, we identified local TV as a potentially important element of the future PSB mix, serving audience needs that were not fully met by the current blend of national and regional broadcasting. However we also recognised that the economic viability of local services was not established and that audience demand for them had not been adequately assessed. We undertook to carry out more work on the prospects for digital local content services as part of our follow-up to the review.
- Secondly, and more specifically, if a new licensing regime is required for digital local TV services, it would be Ofcom's responsibility to develop and implement it, following an order from the Secretary of State for Culture Media and Sport. It is therefore incumbent on us to understand the likely future market for digital local services and the viability of alternative models, in order to inform the planning of any such regime.
- Our approach has been to start with a blank slate. The emergence of mass-market digital technologies opens up new opportunities for the provision of services that would have been technically impossible as little as ten years ago. The need is to understand what local content and interactive services could be in future, rather than what they are now, or have been in the past.
- Research suggests that local services continue to matter to people, despite technological, social and cultural changes in the last 20 years that might have been expected to reduce our attachment to locality. Digital local content could deliver a range of benefits in future, including more relevant local news, improved access to local services, better consumer information and advice, stronger involvement in community affairs, enhanced democratic participation, greater capacity for individuals and local organisations to make and distribute their own content, support for local production and training, and advertisers' access to local markets.

- We are in the early stages of a period of experimentation with digital local content services in the UK. A wide range of organisations including local and national media groups, community organisations, national broadcasters, local authorities and regional development agencies (RDAs) are exploring the potential for digital technologies to deliver enhanced content services to communities ranging from the very small (a few thousand households) to relatively large (metropolitan areas with a population of one million or more).
- As digital technologies roll out, further new services will become possible. Broadband, with its powerful interactive and on-demand capabilities, will be particularly important. At present most broadband services are available through computers or other web-enabled devices, and many local operators – including ITV and the BBC – are already taking this approach; but the availability across the UK of services delivered via internet protocol to TV sets within the next year or two offers significant new opportunities for the future.
- We welcome this innovation and diversity and would like to see experimentation continue, with different services designed to meet the needs of different communities and new entrants adopting new approaches.

Options for public policy

- We do not at this stage suggest that any specific policy or regulatory intervention is required or justified in this emerging market. Our principal objective here is to contribute research and analysis to help inform the wider debate about the future of local content services, rather than to set out new policy proposals or regulatory initiatives, which would require consultation.
- However, our analysis implies that it is possible that there is a case for public investment to support the delivery of local services that meet public purposes, although it is difficult to quantify the likely benefits of digital local content services at this early stage. We propose five public purposes for local content services, based on a version of the wider purposes of public service broadcasting identified in the PSB Review, adapted for local content.

The public purposes of digital local content and interactive services

- To inform ourselves and others and to increase our understanding of the world through news, information and analysis of current events and ideas, with particular focus on issues relevant to our locality
- To stimulate our interest in and knowledge of arts, science, history and other topics, particularly those relevant to our locality, through content that is accessible and can encourage informal learning
- To reflect and strengthen our cultural identity, particularly that based on shared local identities, through original programming at local level, on occasion bringing audiences together for shared experiences
- To make us aware of different cultures and alternative viewpoints, through programmes that reflect the lives of other people and other communities, especially those within our local area
- To support and enhance our access to local services, involvement in community affairs, participation in democratic processes and consumer advice and protection

- Our economic modelling indicates that commercially-funded local services could be sustainable in a digital environment, using all major distribution platforms to maximise reach and impact. However, commercial services are only likely to be viable in larger metropolitan areas, and are likely to have limited scope for commissioning high-quality local original content that could help meet these public purposes. Other services are likely to rely to a greater or lesser extent on support from public agencies or community organisations.
- There may, therefore, be a *prima facie* case for exploring ways of supporting the development of local content services that help meet public purposes. There are two broad options which we believe merit further consideration. Note that further cost-benefit analysis of these options would be required before any policies could be pursued on a nationwide basis, and the impact of these options on existing local press, radio and online markets would also need to be carefully assessed.
- If the case for supporting local services were established, one option would be to ask the BBC to develop local services that meet public purposes. The BBC has already indicated its willingness to take on this role, and has developed proposals of its own, with a pilot project already in operation. These proposals will need to be reviewed by the public value test and market impact assessment that have been proposed as part of the BBC's post-Charter Review governance arrangements, but notwithstanding the results of those reviews, the BBC's role in delivering local content is likely to be critical. It has an unrivalled local newsgathering infrastructure and a strong, trusted brand to help its local services achieve reach and impact.
- On the other hand, the BBC's local plans could discourage or crowd out other potential providers of public service content, leaving the BBC as the sole intervention in the local content market. There is a risk that this might stifle the innovation which is beginning to take place, while the BBC's plans may not be sufficient to deliver all the potential public benefits of digital local content.
- The second option is to explore ways of supporting the development of a range of other services, provided by both commercial and community providers, either as a complement to BBC services or delivered in partnership with them. The goal would be to create flexibility for local providers to develop services tailored to meet different communities' specific needs, within an overall strategy designed to meet public purposes in the most appropriate and cost-effective way in each area.
- Ways of supporting the development of other services could include:
 - Limiting the BBC's involvement to give maximum opportunity to commercial and community alternatives;
 - Reallocating some of the public funds earmarked by the BBC for its local services to other providers, possibly via a contestable fund;
 - Asking the BBC to develop partnerships, for example making content and training available to independent providers, or commissioning and distributing more content and services from independent providers;

- Providing central funding for services that meet public purposes, for example through a Community Media Fund or Public Service Publisher;
- Local funding, by local authorities, RDAs or national development bodies in Scotland, Wales and Northern Ireland;
- Offering licence benefits to qualifying operators, such as requiring cable operators to carry licensed services, or ensuring due prominence on electronic programme guides;
- Providing planned access to spectrum for digital terrestrial services.

Ofcom's role in the management of spectrum

- Many of these options for the future are for Government to consider, not Ofcom. However, Ofcom has a specific statutory duty to ensure the optimal use of the radio spectrum, which includes considering whether and how spectrum should be made available for digital terrestrial television (DTT) services. Although our analysis suggests that digital local services can make a contribution to public purposes, this does not automatically make them the best possible use for spectrum. Spectrum is and will remain a relatively scarce resource, even after digital switchover, and there are a range of alternative uses for the areas of spectrum that have been identified as appropriate for local television broadcast services.
- The process of identifying how the spectrum released by digital switchover should be awarded is only just beginning. Ofcom has recently launched its Digital Dividend Review, a major project to examine the full range of options arising from the release of spectrum afforded by the digital switchover programme, which we will carry out over the next year. This work needs to be completed before we can come to a final view on the various options for the delivery of local content on digital terrestrial television.
- We will therefore assess any potential basis for intervention in the allocation of spectrum as part of the work to be carried out under the auspices of the Digital Dividend Review. If any spectrum were to be reserved for local services, as the result of intervention in the allocation of spectrum, a dedicated licensing regime would probably be required, with Government issuing an order under section 244 of the Communications Act 2003.
- Regardless of the outcome of this assessment, we will seek to ensure that at least some of the spectrum available after switchover will be auctioned in a way that does not unduly prevent or disadvantage participation in that auction by independent local operators.
- Although there is no automatic continuation for existing analogue services into a digital environment, we recognise that the timescale for this ongoing work creates continued uncertainty for those going concerns broadcasting in analogue using Restricted Service Licences (RSLs). We will therefore offer to existing local RSL holders the right to extend their licences until the start of switchover in their region. This should give them sufficient time to plan for the future once they have more information about whether any spectrum can be

reserved for local services, and on what terms, which should be available by the end of 2006.

Next steps

- Ofcom will take forward its assessment of the prospects and potential role for local content and interactive services, in our continuing work on the future of public service broadcasting, and in the Digital Dividend Review. We will offer RSLs the opportunity to extend their licences immediately and continue to discuss with them, and other stakeholders, the options for the future.
- To help inform the wider debate about the future of digital local content services, we also intend to commission further research into the impact of existing local services and viewers' attitudes towards those services.
- At the same time, the BBC, ITV and others are piloting new approaches, which will provide a wealth of useful information. The Government may also wish to consider whether and how to create a new licence class of local services broadcasting in digital form via a television multiplex, using the powers granted to the Secretary of State in the 2003 Communications Act.
- Taking these developments together, we suggest that a possible programme of work on local content services over the next two years, for us and others, would be as follows:
 - Ofcom offers opportunity to extend licences to current holders of local RSLs: early 2006
 - Ofcom carries out further research into audience perceptions and use of existing local content services: Jan-Jun 2006
 - BBC carries out West Midlands pilot: Dec 2005 – Aug 2006
 - Public value test and market impact assessment of BBC proposals: Aug-Oct 2006
 - Ofcom carries out Digital Dividend Review and advises on availability of spectrum for local services: Jan-Dec 2006
 - Government assesses policy options and considers whether and how to support local services on all digital platforms: Jan-Dec 2006
- There are a number of possible platform solutions to local services. One of those might be for the government to establish a local TV licensing regime for DTT. If this is its preferred solution, then a number of further steps would be required. We suggest one possible timetable could be as follows:
 - If required, Government consults on order for local TV licensing regime for digital terrestrial services: early 2007
 - If required, Ofcom develops licensing regime according to terms of Government order and consults on spectrum allocation process for local digital terrestrial services: first half 2007

- If required and where appropriate, first DTT local licences advertised and awarded in selected areas: second half 2007
- Outside of the specific contexts of BBC activity and licences on DTT, we anticipate that development of local content services will continue strongly throughout this period and beyond.

Contents

Section	Title	Page
	Executive Summary	1
	Contents	7
1	Introduction	9
2	The History and Future of Local TV	15
3	Public Purposes	19
4	Delivering Local Services in a Digital Environment	35
5	The Economics of Digital Local Content	45
6	Options for the Future	65
Annex A	Overview of Current Restricted Service Licence Holders	81
Annex B	Findings of Economic Analysis <i>Independent report by Spectrum Strategy Consultants, published separately on Ofcom's website</i>	84
Annex C	Technical Options in the Interleaved Spectrum <i>Independent report by Crown Castle – now National Grid Wireless – published separately on Ofcom's website</i>	85

Section 1

Introduction

Context and objectives

- 1.1 Ofcom's first statutory review of public service television broadcasting (PSB) concluded in February 2005. Audience research carried out for the review suggested that television coverage of news and issues within viewers' local areas was highly valued, and not provided with a sufficiently local focus by existing regional services on ITV1 or BBC ONE. We suggested that the development of digital technologies created opportunities for imaginative new forms of local news, information and entertainment, delivered via digital TV and broadband.
- 1.2 Many respondents to our consultations for the PSB Review stressed the importance of local content to the future public service broadcasting landscape. Some saw a role for a Public Service Publisher (PSP) in delivering a local and communities service, offering news and information to local communities, ethnic, linguistic and religious communities, and other groups with shared interests. This could make innovative use of new media and peer-to-peer technologies as well as more traditional broadcast platforms.
- 1.3 We concluded that further work should be done on the potential for developing local digital content and interactive services, encompassing analysis of the commercial prospects for local services, the likely development of community not-for-profit models, possible future audience requirements, the roles of the BBC and a PSP and the possible use of spectrum for local terrestrial services.
- 1.4 In carrying out this project, therefore, Ofcom's ambitions are both to understand the prospects for local content services in a digital environment to inform our own decision-making, and to contribute to a broader discussion about the possible future evolution of local services.
- 1.5 Specifically, our objectives are to:
 - Evaluate the potential distinctive benefits of digital local content services
 - Identify alternative business models for the delivery of digital local services
 - Explore the commercial and technical viability of alternative models
 - Identify how audience needs for local content are likely to be best served in a digital environment
 - Assess the case for public intervention to support local content services
 - Evaluate the advantages and disadvantages of alternative policy options to support local services, including the role of the BBC

- 1.6 This is not a consultation document, because it is too early in the development of this rapidly emerging area to propose any specific policy interventions or regulatory remedies. At this stage, we seek to encourage debate about whether and how local content could make a contribution to public service broadcasting in the UK, and stimulate creative thinking about the opportunities created by digital technologies. We will continue to discuss the issues raised with our licensees and other stakeholders in our ongoing work over the next few years.
- 1.7 A significant amount of new work has contributed to the preparation of this report, including economic analysis of potential business models for local video content services (commissioned from Spectrum Strategy Consultants), a series of interviews with stakeholders and providers of local services, an assessment of international case studies and a technical evaluation of alternative methods of delivering local content.
- 1.8 Several elements of this project were developed collaboratively with the Department for Culture Media and Sport (DCMS), particularly the economic analysis of potential business models, which was jointly funded by DCMS and Ofcom. We are grateful to DCMS for their support for this project.
- 1.9 Nonetheless this is an independent study, in which we provide an objective assessment of the options for the future of digital local services. Our collaboration with DCMS on this analysis does not imply that we have a common policy, and of course nothing in this report commits Government to any particular course of action.

Scope and terminology

- 1.10 The focus of this study is not just traditional linear broadcast channels. Many of the most exciting developments in the delivery of local services exploit the potential of digital technologies to support interactivity and on-demand services. Peer-to-peer technologies and user-generated content will also be important to the future of local services.
- 1.11 We use the terms **video content and interactive services** or **digital local content** interchangeably to refer to the services we are interested in – that is, any service that consists mainly of moving images and sound and is targeted primarily at those who live or work in a particular geographic area. These terms are intended, broadly, to refer to content that ‘looks like’ TV programmes or video-based interactive services.
- 1.12 This study is platform-neutral, in the sense that how those services are delivered, and to what device, are not our primary concerns. We have considered services provided via terrestrial broadcasting, satellite, cable and broadband technologies; delivered to TV sets, PC screens and mobile telephones; broadcast to a linear schedule and made available on demand. The key question is: how effective are different methods of delivery in reaching the audiences who would benefit most from them and in providing the kind of services they would find most useful?

- 1.13 Note, however, that the term ‘digital local content’ for the purposes of this report specifically excludes digital radio services (which have been separately addressed by Ofcom in its review of the radio sector¹) or text-based local websites.
- 1.14 When we use the term **local television**, we generally intend the narrower usage of the 2003 Communications Act, which in Section 244 refers only to local services on digital terrestrial television.
- 1.15 We recognise that this terminology is not perfect. In particular, the boundaries between digital local video content and interactive services and other kinds of web content are very difficult to draw. We have not considered in this report the role of services such as Upmystreet, for example, which are undoubtedly local, but which do not have a particularly significant video element.
- 1.16 We have focused on local video content and interactive services because that is the area in which Ofcom has a direct statutory responsibility with respect to public service broadcasting.² This does not mean that other local media do not have a role to play in delivering the public purposes of local content, and we briefly describe the issues raised by other local media below.
- 1.17 Although different services may target communities of different sizes, we define ‘local’ services as any targeted at geographic communities ranging from a neighbourhood of a few hundred or thousand households, to a major metropolitan area with a million or more inhabitants. This includes services that are intended to meet the needs of particular population sub-groups (such as minority ethnic audiences) who may be dispersed over larger areas, but still have some element of geographic concentration. This is similar to the approach taken by the Community Radio Order 2004, which defined a ‘community’ as people who live or work or undergo education or training in a particular area or locality, or people who (whether or not they meet the former criterion) have one or more interests or characteristics in common.³

The role of other media

- 1.18 Other local media have a significant role and already make a major contribution to citizen and consumer needs at local level. Local radio, for example, provided by the BBC and independent local operators, is well established and delivers a highly valued service to listeners. At April 2005, there were 307 local commercial radio stations broadcasting in analogue, digital or both in the UK, and a further 46 local or Nations’ services provided by the BBC.⁴ Although local radio’s share of total listening has declined in recent years, it still accounts for a little under half of all radio listening. Local commercial radio remains a vibrant and profitable industry, with revenues up from £163 million to £175 million in 2004, representing growth of 7.6%.

¹ Ofcom, *Radio Review – Preparing for the Future*, 2004-05

² Communications Act (2003), Section 3(4)(a): “Ofcom must have regard, in performing [their] duties, to [. . .] the desirability of promoting the fulfilment of the purposes of public service television broadcasting in the United Kingdom”

³ Department of Culture Media and Sport, *Community Radio Order 2004*, 2004

⁴ Ofcom, *The Communications Market 2005*, 2005

- 1.19 The latest development in public service radio is the development of a new tier of community radio stations, which are now being licensed to complement existing local, regional, national and UK-wide services.⁵ Community radio was enabled by the Community Radio Order 2004, to provide for services covering a small geographical area and provided on a not-for profit basis. Community radio services are intended to deliver specific social benefits to enrich a particular geographic community or a community of interest, and must satisfy seven specific selection criteria set out in the Broadcasting Act 1990 and the Community Radio Order. By the end of 2005, Ofcom had awarded 62 community radio licences, serving communities as diverse as the south Asian population in central Glasgow, children and young people in Leicester and the residents of three villages in rural Hampshire.
- 1.20 The local and regional press also play a central role in delivering news and information about local issues and events to consumers. They are able to speak for the communities they serve and champion local causes in a way that no other medium can currently match, because of their wide reach and popular appeal: over 80% of all British adults read a regional newspaper, compared to just under 70% who read a national newspaper.⁶ In July 2005, according to the Newspaper Society, there were 1,286 regional and local newspapers in the UK, including both paid-for publications and free newspapers. Despite falling circulation figures in recent years, the commercial regional press sector remains robust, with growth in advertising spend of 5.8% in 2004.⁷
- 1.21 Finally, the Internet has enabled the development of a huge range of online services targeted at geographic communities as well as other communities of interest. Most of the UK's cities, towns and villages now have their own website, some aimed mainly at residents, others at visitors. Services like UK Villages and Upmystreet provide access to local news and civic information; others, like Friends Reunited, have local relevance even if that is not their main focus. Most local authorities are exploring ways of using the web and email as ways of keeping in touch with residents, enhancing their access to services and creating new opportunities for people to take part in local democratic processes.
- 1.22 It will be important before reaching a view about any potential policy intervention to support local content services to assess the likely impact on these existing markets, and on their ability to make a positive contribution to public benefit. However, it is important to be clear that for the purposes of this report we are primarily interested in content that 'looks like' TV – including video content and interactive services – as that is the area in which there may be significant new opportunities emerging for the delivery of public purposes.

⁵ See www.ofcom.org.uk/radio/ifi/rbl/commun_radio for details of community radio licence applications and the licensing process

⁶ Source: Newspaper Society, based on BMRB/TGI research, 2005

⁷ Advertising Association, *The Advertising Statistics Yearbook 2005*, 2005

About this report

1.23 This report has six sections:

- *This Introduction*;
- *The History and Future of Local TV*, which contains a short background on the history of local TV in the UK and the possibilities opened up by digital technology;
- *Public Purposes*, which assesses whether 'local' still matters in a networked society, identifies the kind of services that might provide value in a digital environment and sets out the potential public benefits of those services;
- *Delivering Local Services in a Digital Environment*, which discusses the technical options for distributing local content and the relative merits and disadvantages of different delivery methods from a consumer's perspective;
- *The Economics of Digital Local Content*, which models the costs and revenues of different local content models and assesses the economic viability of digital services delivered using a range of platforms;
- *Options for the Future*, which assesses whether there might be a case for public intervention to support digital local services, and if so, what policy options are available to secure public purposes. This section also sets out our approach to spectrum management and describes a proposed approach to the transition from the existing analogue licensing regime.

Section 2

The history and future of local TV

New opportunities

- 2.1 The emergence of new digital technologies has opened up opportunities for a wide range of original, distinctive services, including the provision of access to new local media and content services. Information and communication technologies – the Internet in particular – are often associated with diminishing geographic constraints on human interaction, and with the emergence of global communities of interest.
- 2.2 Yet new technologies also facilitate the development of innovative services aimed at place-based communities. These services might offer audiences access to deeper and richer news and information about local issues, events and developments. They might allow local shops, businesses and public service providers to reach audiences in cheaper or more user-friendly ways. Audiences might become better informed about their local communities, helping to foster a sense of community and building social capital. And consumers of content might become producers, using cost-effective methods of content development and distribution to communicate directly with other local people.
- 2.3 The following section of this report looks in more detail at the public purposes of digital local content services. It is important to bear in mind that digital services are likely to look radically different from the local offerings that have historically been available to audiences in the UK. Some digital technologies, particularly those using internet protocol, have characteristics which could transform the nature of local services:
- They are **interactive**, enabling a wide range of activities that rely on two-way contact – shopping, trading, gaming, personal communication, content sharing, content distribution;
 - They are **non-location-dependent** – broadband services can be targeted at anything from a few households to the entire world, unlike broadcast services which are constrained by transmitter locations;
 - They are available **on-demand**, as opposed to traditional broadcast content which is available only at a particular time on a particular channel;
 - They can be **personalised**, allowing audiences to select the content that appeals to them and repackage it in the way that works best for them.
- 2.4 The value of considering the future of local content services now is that on one hand, digital technologies are sufficiently far advanced to understand clearly their potential and limitations. On the other hand, there is sufficient time before digital switchover and the arrival of broadband as a mass market TV delivery mechanism to plan effectively for the future.

The local TV heritage

- 2.5 Although the analogue world was much more limited in terms of its scope for local content services, local TV services have existed in the UK in a variety of forms since 1972, when Greenwich Cablevision launched a local community television service from a shop in Plumstead High Street, in south London.⁸ A number of local cable networks were launched over the next few years, including both community and commercial operations, with pay-TV services launching from 1981. Local services were not mandatory, although many cable operators offered some local content in an attempt to differentiate their offering.
- 2.6 Local cable channels historically struggled in the UK, mainly because there is low cable penetration into the market compared to many other countries. Ambitious local news channels were launched with the backing of major newspaper groups for London, Birmingham, Liverpool and elsewhere, but these folded in the mid-1990s. Other local channels, like Live TV in London, tried a more general entertainment model, but also withered. There was a six-month experiment run on cable in Huntingdon by Eastern Counties Newspapers, but this also failed to make a significant impact.
- 2.7 The 1996 Broadcasting Act made provision for a new form of local television service, licensed under the Restricted Service Licence (RSL) regime. RSLs were introduced to make use of spare analogue frequencies for terrestrial television broadcasts, either to cover specific events (such as a festival) or to cover a particular geographic area or a single establishment (such as a university). The RSLs were short-term licences, initially fixed for a period of two years in the case of location-based services (subsequently extended to four years).⁹
- 2.8 The limited availability of spectrum in the television broadcasting band means that RSLs were not universally available, and in general only low power transmitters can be used. After three rounds of licensing, 23 RSLs were licensed, of which 13 are on air at the time of writing; Annex A in this document provides more details of the services currently on air.
- 2.9 RSL services have been hampered by the general lack of in-group frequencies, that is frequencies in the same range as those used by the main five channels at the local transmitter. This has meant that viewers have often had to buy and fit new aerials in order to receive the services. In addition, the operators have generally not been able to use the existing transmitter network (not least because of the cost of transmission on main masts and relays), which has further limited their reach. The high cost of production of news and other forms of original content, the lack of long-term licences and the absence of some of the prerequisites for a local advertising model (such as reliable viewing data) have also constrained the commercial prospects for local operators.

⁸ Chris Hewson, *Local and Community Television in the United Kingdom: A New Beginning?*, 2005

⁹ Ofcom renamed these services Restricted Television Services in 2003 (when the original licences were amended) to distinguish them from radio restricted service licences. However the industry has continued to use the term RSL and so, for the purposes of this report, we have used the old terminology.

- 2.10 Consequently it seems likely that the RSLs have not always been able to deliver significant impact on audiences, although evidence about viewing of local services is patchy. However a range of models exist:
- Commercial services, funded by local advertising revenues, most relying on a core local news service supported by a mix of acquired programming and varying levels of other locally-produced content (e.g. Channel M in Manchester, Six TV in Oxford and Southampton, TV York and Capital TV in Cardiff);
 - Community services, funded by local community groups, educational establishments, social charities and so on, and providing a blend of local news and open access programmes (e.g. Solent TV, which at the time of writing is planning to launch on satellite, and Northern Visions in Belfast); and
 - Services targeted at particular community groups, such as MATV in Leicester, which is a commercial service targeted at Leicester's Asian population, broadcasting news, current affairs and discussion programmes, locally-produced factual and entertainment output and acquired programming from south Asia.

Future opportunities

- 2.11 Digital local services will be able to use a wider range of platforms and could be freed from some of the technical constraints that have held back RSL operators. They will be capable of being delivered at much lower cost and will not need to broadcast on frequencies that will become unavailable in the medium term.
- 2.12 Therefore it is reasonable to expect that the business and distribution models for digital local content services will look very different to those of today's RSLs. New sources of funding may be expected to emerge for new operators providing radically different services. Indeed some of these services are already launched or are in development, as operators explore different ways of using the potential of broadband. The following section describes some of the services that are already available and that we might expect to see appear over the next few years.
- 2.13 Many new opportunities are not constrained by any particular regulatory requirements. Most broadband services do not require licences, and licences for cable and satellite channels are available from Ofcom for any service that adheres to our broadcasting codes.
- 2.14 In addition, the Communications Act 2003 reserved powers for the Secretary of State for Culture Media and Sport to make an order to create a new licence category of local television services broadcasting in digital form via a television multiplex (the order may not cover any other form of delivery). In practice, this section allows for the Secretary of State to extend and modify as necessary the existing legislative provisions under which Ofcom licences and regulates existing television services to include this new category. These powers could be used to create a new licensing framework for local digital terrestrial services, if the Secretary of State decides to do so.

Section 3

Public purposes

Does 'local' matter?

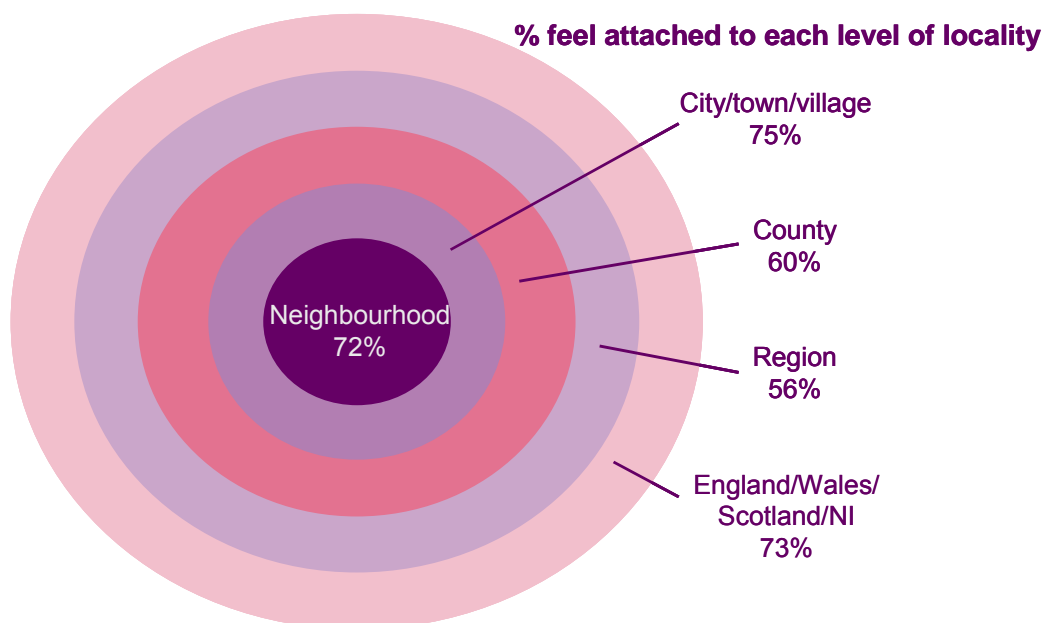
- 3.1 The growth of the Internet has enabled the development of new methods of communication between people that are much less dependent on geographic proximity and access to the means of production and distribution of media than those that predated the web. At the same time, identities based on membership of other kinds of community – based on religion, ethnicity, age, gender, sexual orientation and lifestyle choice, for example – have become more politically important and have enabled the forging of links between people who live thousands of miles apart.
- 3.2 It has been argued, for example by sociologist Manuel Castells, that information and communication technologies have weakened people's ties to shared localities, by providing access to global information and media, enabling larger and more dispersed groups to communicate and facilitating the development of services to niche communities that are not bound by geographical location or proximity to the service provider.¹⁰ Societies have become more fragmented by cultural diversification, a greater emphasis on self-determination and social mobility. We may have as much in common with somebody at the end of a telephone line in a different continent, as we do with our next-door neighbour, if not more.
- 3.3 In this context, it might be argued that local communities are no more nor less important from a policy perspective than wider communities of interest, and that we should be looking more broadly at 'community' services. Is there any particular reason for focusing on **local** content services, compared to (for example) services for particular ethnic or religious groups?
- 3.4 The experience of other local media suggests that 'local' does still matter and has a distinctive importance that is not necessarily replicated by other kinds of community. More people read a local or regional newspaper than read national papers, and local radio accounts for almost half of all radio listening. Our evaluation of Community Radio pilots found that significant numbers of the radio-listening population in the four station areas covered were aware of and listening to Community Radio. They felt it was clearly different to the existing radio product offered by either commercial or public broadcasters, and enhanced their sense of community.¹¹
- 3.5 In fact, geographic communities have been remarkably resistant to social change. Most people still live within a relatively small distance of their place of birth; the average house move involves moving less than 14 miles.¹² People have attachments to different geographic communities, but the strongest ties are to their local area and to their nation as a whole (Figure 3.1).

¹⁰ Manuel Castells, *The Rise of the Network Society* (1996), *The Internet Galaxy* (2002)

¹¹ Ofcom/Research Works, *Management Summary of Community Radio Research Findings*, 2004

¹² The Future Foundation, *Redefining Regions: Exploring Regional and Local Identity*, 2003

Figure 3.1: Levels of attachment to different geographic areas



Source: Ofcom

- 3.6 Similarly, most people still rely on local communities, services and businesses for most aspects of their day-to-day lives. Many of their everyday facilities can be reached within two or three miles.¹³ Government research has found that people feel strongly about the places they live and work in, especially with respect to safety, crime and vandalism, the local environment, access to local services, quality of schools and opportunities for young people,¹⁴ and there are strong correlations between place of residence and health, employment and life prospects.¹⁵ The Government has identified a need to strengthen the relationship between local authorities and other service providers and service users to drive enhanced service delivery.
- 3.7 The Internet has not, therefore, rendered local communities irrelevant – online “society” does not exist independently of existing forms of community relationships and must be additional to them. In fact, local needs remain one of the driving forces even for new technologies: one in four search engine queries is estimated to involve a hunt for local information.¹⁶
- 3.8 In a wider policy context, current Government thinking emphasises the importance of locality and the neighbourhood as the focus of devolved service delivery. The last few years have seen substantial commitment to initiatives on neighbourhood renewal, neighbourhood empowerment, sustainable communities and social enterprise.¹⁷ Again, information and communication

¹³ The Future Foundation, *Regional Renaissance*, 2000

¹⁴ Home Office, *Home Office Citizenship Survey: People, Families and Communities*, 2004

¹⁵ Social Exclusion Unit, *Neighbourhood Renewal: National Strategy Action Plan*, 2001

¹⁶ Kelsey Group, *Local Search Now 25% of Internet Commercial Activity*, 2004

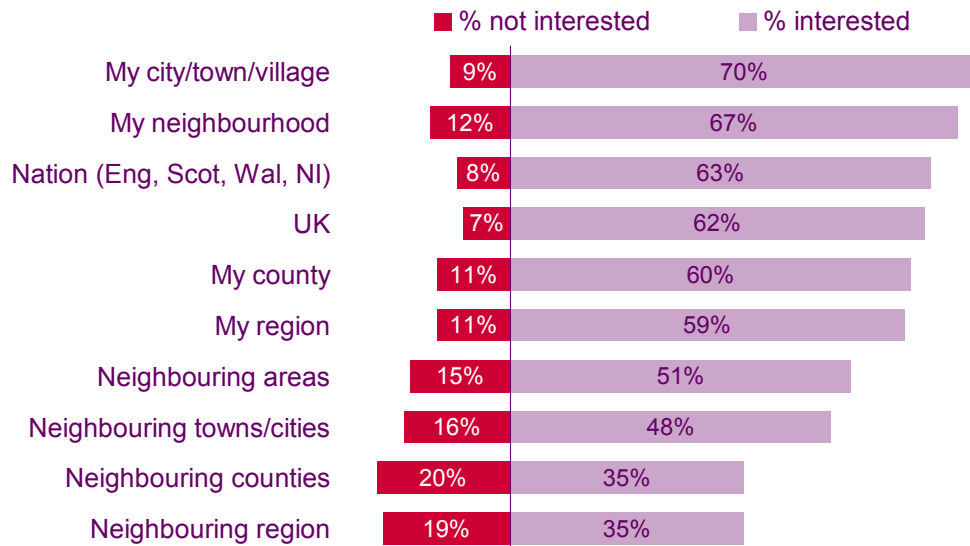
¹⁷ National Audit Office, *Getting Citizens Involved: Community Participation in Neighbourhood Renewal*, 2004

technologies have been drummed into service to support these initiatives, with a range of projects exploring the way new media can be used to improve services, engage communities, promote participation and democratic involvement and build new channels of communication between citizens and public service providers.

- 3.9 This is the context that explains our focus on the importance of local digital content. This is not to say that the needs of other, non-geographic, communities are not important – indeed Ofcom has a range of duties, mechanisms and initiatives to ensure that different groups and communities are served fairly and equitably by its licensees.¹⁸
- 3.10 But locality arguably matters to every individual in the UK, and this is reflected in the importance people attach to content about their area and region. Viewers say they like to see TV about a range of geographic areas, including their region and neighbouring areas as well as the UK as a whole. But they are most interested in programming that reflects their city, town or village, or even their neighbourhood (Figure 3.2). This is an interest that is not currently well-served: according to our research, only one in eight viewers describes TV as their main source of news about their city, town or village, and only one in ten relies on TV for news about their neighbourhood.¹⁹

Figure 3.2: Interest in watching TV programmes reflecting different geographic areas

% interested and not interested in watching TV programmes reflecting...



Source: Ofcom

¹⁸ For example, Ofcom has specific duties in the 2003 Communications Act “to secure the availability throughout the UK of a wide range of television and radio services which (taken as a whole) are of high quality and calculated to appeal to a variety of tastes and interests;” and to have regard to “the different interests of persons in different parts of the UK, of the different ethnic communities and of persons living in rural and urban areas.”

¹⁹ Ofcom, *Review of Public Service Television Broadcasting Phase 2: Reshaping Television for the UK’s Nations, Regions and Localities*, 2004

- 3.11 This finding is backed up by other research, including evaluations of early trials of digital local content. Research into the BBC's broadband pilot in Hull found a clear demand for localised TV news,²⁰ and this was supported by the BBC's preparatory research for its pilot local TV service in the West Midlands, to be launched in late 2005.²¹
- 3.12 Despite enthusiasm for the concept of local TV content, viewers are aware of its potential limitations. In previous research for the ITC, local TV was seen as positive in terms of local people having a say, but there were concerns about coverage, poor reception and budget. The fact that some areas might not be catered for was seen to be unacceptable, as was the fact that local news might not be provided because the costs were prohibitive.²²
- 3.13 To address these issues, we have carried out more detailed technical and economic analysis of local content delivery, the findings of which are detailed in Section 4. We also consulted widely with local TV stakeholders, both current operators and those interested in getting involved in this emerging area. The following section summarises their views and discusses some of the emerging models.

Defining local

- 3.14 The preceding analysis does not define what 'local' actually means, and this is not a straightforward question. One definition is that 'local' refers to "the fairly immediate physical space and facilities around [a person's] home."²³ Various studies have defined local as anything up to 20-26 miles from people's homes.²⁴ Community radio services are not restricted to any particular size or type of locality.
- 3.15 In practice, 'locality' is a multilayered concept, which means different things in different places, and to the same person at different times. What counts as 'local' when we buy a pint of milk, go to work or vote for an MP may be three very different things.
- 3.16 Therefore, for our purposes, we have considered 'local' content and interactive services to be those that pertain principally to a specific geographic area covering anything from a few thousand homes (e.g. a neighbourhood), through a town or rural area with a dispersed population, to a large metropolitan area with a population of a million people or more.
- 3.17 Stakeholders have emphasised the importance of this pluralistic approach, with different services appropriate for different communities. For some, 'local' means sub-regional television, drawing on fairly broad locations (such as the East Midlands or Tyneside) - and there are already some commercial

²⁰ BBC, *BBCi Hull: Key Findings from the BBC's Broadband Television Trial*, 2003

²¹ Speech by Andy Griffie, BBC at Ofcom's seminar on local content and interactive services, 1 November 2005

²² Independent Television Commission, *Pride of Place: What Viewers Want from Regional Television*, 2002

²³ The Future Foundation, *Redefining Regions*

²⁴ Sources: The Future Foundation, *Redefining Regions*; ITC, *Pride of Place*; ITC, *New News, Old News*, 2002

stakeholders investigating the prospects for TV on that scale. It is also the scale being developed by the BBC in its local pilot in the West Midlands.

- 3.18 For other stakeholders, the concept of city-wide TV seems to be the most logical model. This focuses on a clearly defined area, with well-established local advertising markets, and a population with common interests shaping content (such as the city's news, entertainment and sport).
- 3.19 Finally, some stakeholders and interest groups – particularly those favouring not-for-profit community models – are developing much more targeted services, some as small as a single neighbourhood or estate.
- 3.20 A final variation on the local theme revolves around communities that are both geographically close, but also a distinct community of interest. The prime current example is MATV in Leicester, which is targeted chiefly at the city's Asian community via free-to-air terrestrial transmission and cable. Many community radio services also adopt this approach.

Stakeholders' plans for the future

- 3.21 As the previous section suggests, different stakeholders have different expectations of local content and interactive services. New and developing technologies open up a number of possibilities that are so far under-exploited, so any assessment of what local services might deliver in the future involves a degree of crystal ball-gazing. Nonetheless we can already identify a number of models for the future.
- 3.22 **Commercial** operators are seeking to explore the potential for local news and content to attract an audience to for-profit services funded by advertising. The costs of content production and distribution have come down in recent years, while regional advertising markets have grown,²⁵ and commercial operators see a niche market tapping into local advertisers who cannot afford other television outlets. Services such as Channel M, holder of an RSL for Manchester, are exploring the possibilities of multi-platform distribution to reach a wider audience and support future growth (see Box 3.1).

Box 3.1: Local content case study: Channel M – Manchester

Channel M is the best-funded of the existing RSL stations (also transmitted on ntl cable and – from early 2006 – on satellite). Launched in 2000, it is backed by the Guardian Media Group, which also owns the Manchester Evening News and other newspaper/radio interests in the area.

Output is based around a half-hour high-quality daily news programme, and supplemented by local entertainment and sports programming. Links to Salford University media school give access to student documentaries and other student output. Other acquired programming is sourced mainly from CHUM, a large Canadian media group which owns City TV Toronto plus

²⁵ WARC and Radio Advertising Bureau figures suggest that national newspaper advertising revenue declined 12% between 2000 and 2004, while regional press advertising increased by 40% over the same period; national commercial radio revenues dropped by 7% while local radio revenue grew by 26% (although national radio revenues have started to increase again since 2002)

a range of specialist entertainment channels, such as Fashion TV. Channel M is on air 19 hours a day, seven days a week. It is funded through advertising, and has links to local websites and commercial portals.

The station is moving to a state-of-the-art media facility in Manchester's Urbis Centre at the end of 2005. The move will coincide with a channel re-launch, based around a rolling City TV news format (four hours of news per day by mid-2006, with a three-hour breakfast programme to follow later). There are plans for further expansion of the entertainment and local sports output – the channel has a belief that there's an "insatiable appetite" for sports 'chat' in such a well-endowed sporting area. In total, the channel will employ 104 staff by mid-2006.

Fact-file

- Platform(s): terrestrial/cable/satellite (from end 2005)
- Potential audience: 2.7 million maximum (audited IPSOS audience: 116,000)
- Output: - local programming (approx per day): currently 2-3 hours of new locally produced programmes, supplemented by repeats; but this will rise to 8 hours of new local programming per day by mid 2006
 - acquired: currently around 6 hours (mainly CHUM)
 - shared (other channels' output): currently six hours Euro News daily, to be replaced by local breakfast programme in 2006.
- Types of content: locally produced news (rising to four hours by mid 2006); local entertainment; local sport (football, rugby); acquired music, fashion and showbiz.
- Employees: 104 (by mid 2006). Currently about 45.

3.23 **ITV plc** is a relatively recent entrant into this market, with pilots launched in Brighton and Hastings, and a joint project with HomeChoice in Islington, all available initially on broadband. Its trial in Brighton and Hastings leverages its existing news gathering activity and infrastructure, combining local news and weather with local films and music, an entertainment guide and classified advertising, through which it hopes to fund the service on a commercial basis.

3.24 One of the key features of ITV's trial is that it hopes to exploit the growing interest in user-generated content and the potential of interactive technologies, as do many other operators in this area. The success of blogging, online communities, photo sharing sites and other forms of 'social media' suggests a latent appetite amongst consumers to produce and distribute their own content. For example, ITV's trial creates the opportunities for viewers to upload their own 'Citizen's TV' reports, film-makers to access a new channel for distributing their productions, and local sports teams to upload videos of their matches.

3.25 **Community** providers are characterised by a focus on delivering benefit to the community they serve, rather than securing a commercial return, although different services have developed different approaches towards this goal. Their content tends to be concentrated on 'people issues' and local events (hobbies, exhibitions, local services, council meetings). A common theme is 'open access' or community-produced programming, with (for example) Tenantspin in Liverpool showing films made by local estate residents, accompanied by live online discussions.

- 3.26 Two of the current RSL operators, broadcasting in analogue, are community-oriented and not-for-profit (Solent TV and Northern Visions in Belfast). Other services, such as Carpenters Connect in east London (see Box 3.2), have focused on interactive and on-demand services and have established broadband networks serving very small communities. The Shoreditch Trust, also in east London, is currently working with Video Networks (the provider of HomeChoice) to deliver a community service including Community Safety, Education, Health, Consumer and Employment channels, in addition to the HomeChoice service and broadband internet access.
- 3.27 There are also isolated examples of community cable services, such as Channel 7 at Immingham in Humberside. The area has unusually high cable penetration (around 60%), and the local college operates Channel 7 as a training ground for media students, with funding from European, educational and RDA grants.

Box 3.2: Local content case study: Carpenters Connect– East London

Carpenters Connect is micro-scale, being targeted at just 500 households on a social housing estate in East London (300 currently take up the facility). The project is led by Newham Council, originally with backing from the Department for Education and Skills and the Office of the Deputy Prime Minister under the e-innovations programme. The ongoing funding requirement, excluding capital investment and set-up costs, is around £70,000 per annum.

The service is delivered by broadband to TVs via a set-top box, using an estate-wide cable network installed by the council. There is no linear transmission of local content, but instead a menu provides access to civic information, community-produced films and local current affairs, as well as access to terrestrial digital and satellite channels, all delivered to the TV screen. The service also provides residents with general internet access, e-mail, an estate website for interactive feedback, plus access to videos and other entertainment material.

There is a bare minimum of full-time staff, and residents are given advice and technical assistance to make their own programmes. Civic information is also provided in video form, and there are links for gathering feedback. The estate is being redeveloped, and the TV project has been used to gain residents' views. The system is widely used on the estate, possibly because it is provided free in view of its experimental nature. Any future similar system is likely to involve some form of payment.

Fact-file

- Platform(s): broadband.
- Potential audience: 500 homes.
- Output: original programming as available, largely provided by local community residents.
- Employees: one full-time and two part-time, plus unpaid volunteers, "anyone who wants to be involved."

- 3.28 The Community Media Association (CMA) has developed a blueprint for not-for-profit local TV based on the model already applied to community radio under the Community Radio Order 2004. They suggest that viability depends on a network of such stations being able to swap material. Generally their programme output would not compete with mainstream programmes, but

offer an entirely different kind of output not seen elsewhere, based on community involvement and including open access output.

- 3.29 **Public agencies** have begun to explore whether and how local content services could help them foster stronger links with local communities, deliver services more effectively or efficiently and engage residents in local democratic processes. Virtually all local authorities, regional development agencies (RDAs) and national agencies in Scotland, Wales and Northern Ireland already have their own websites, with varying levels of information, transactional capability and scope for interactivity and feedback.²⁶ Now some are considering the potential to extend the reach of electronic local government by delivering similar services to TV sets (see Box 3.3). Several have set up enclosed local networks providing news, civic information and service updates via plasma screens in visible locations, such as hospital waiting rooms, bus stations, fast food outlets, shops and leisure centres.²⁷
- 3.30 For many of these organisations, broadband again offers a critical opportunity, because of both its lower costs and its interactive capability. RDAs and local authorities' plans often revolve around the provision of 'information', rather than 'news,' and/or the ability to gauge public opinion via feedback and engage local residents in democratic processes. All these functions are best delivered on-demand.
- 3.31 This, of course, does not rule out some element of linear transmission, and some consultants who have conducted feasibility studies have concluded that the most viable approach is a convergence model, which retains the ability to allow audiences to view broadband transmission 'as TV' as well as providing access to interactive, on-demand services. Some RDAs, such as Yorkshire Forward, are also exploring the possibilities of other digital platforms including satellite and digital terrestrial television.
- 3.32 Some authorities have explored the possibilities of partnerships with commercial operators. Under this model, the authority would provide funding and civic content, and the partner would provide the infrastructure, operational management and the remaining commercial programming.

Box 3.3: Local content case study: North West Digital Platform – NW England

The North West Digital Platform (NWDP) is an ambitious 'digital vision' aiming to embrace the concepts of both region and locality. The original concept was championed by Phil Redmond of Mersey TV. At present, it is at feasibility-testing stage, under the aegis of the North West Regional Development Agency. Plans are at a very early point, but some level of service may be online in 2007.

The core of the proposal is to move away from the idea of a 'channel' towards an emphasis on 'content', while ensuring delivery on as many platforms as possible - broadband TV, internet, mobile phones and so on. Although most NWDP content will not appear on a traditional linear TV service, it is envisaged that a 'showcase' TV channel will be transmitted on satellite, in order to promote the more local digital services available via broadband.

²⁶ SOCITM, *Better Connected*, 2004

²⁷ See www.ccn.uk.net

NWDP would be funded primarily through users purchasing segments of airtime. Advertising and sponsorship may be considered to support general public or community group access.

At its core, NWDP would provide a platform for regional and sub-regional civic, arts and community information. Video content would be provided by groups at all levels on-demand - from the RDA itself, through city and district council level, to local charities, schools, utilities and museums. All would have open and 'unfiltered' access to the platform. There would also be open access opportunities for individuals or organisations. Content would be listed in a menu organised according to location, allowing easy access to material of direct relevance.

Fact-file

- Platform(s): broadband, via TVs and internet, with a 'showcase' channel on satellite.
- Potential audience: 7.5 million people in the North West RDA area.
- Output: civic and other public authority material; commercially produced programmes; educational and community material; open access output; internet.
- Employees: no estimates available.

- 3.33 **The BBC** announced plans for digital local services in its early contribution to the review of the BBC's Royal Charter, *Building Public Value*. It set out plans for a network of 50-60 local services across the UK, based largely on existing local radio coverage areas, intended to offer audiences "genuinely relevant local news and information, not just at 6.30pm but throughout the day."²⁸
- 3.34 The BBC launched an initial pilot service in five areas in the West Midlands in late 2005, designed to test audience demand for local content and to provide evidence to contribute to a subsequent public value test and Market Impact Assessment. The service consists of ten-minute packages of news and local features, broadcast every hour on a rolling basis on satellite, and available on demand on broadband. In addition there is a permanent on-screen headline text service relevant to each area. The pilot is due to last nine months, with a £3 million budget.
- 3.35 The BBC's initial qualitative research found strong audience demand for local news, and that the text service was also popular. The intention is to refresh each ten-minute package at least once every 24 hours, with broadband content refreshed as and when the satellite service is updated. The ambition by the end of the pilot is for up to 25% of content to be made in the community with dedicated personnel responsible for developing relationships with community groups, sourcing likely material, setting up partnerships and helping with content generation.
- 3.36 At the time of writing, the BBC was exploring the possibility of delivering a similar service on cable; there are no plans for DTT transmission in this pilot, although the BBC has said it will explore the costs and feasibility of launching the service on Freeview.²⁹ Our current understanding is that this would not be possible before digital switchover.

²⁸ BBC, *Building Public Value*, 2004

²⁹ *Ibid.*

- 3.37 If the service proves successful, and meets the requirements of the proposed public value test and market impact assessment, a similar approach will be taken nationwide. There are plans to launch six Scottish services in 2007, after a separate pilot in late 2006, which will learn from the West Midlands initiative. The BBC has said that it sees the key test as being whether these services extend the reach of BBC news services across all platforms; its target is to reach 15% of the available audience on a monthly basis.³⁰
- 3.38 Finally, there are a number of **ethnic and linguistic groups** that could use local services to provide for communities that are geographically defined to some extent, but also have other, and more significant, shared identities. MATV serves the Asian audience in Leicester, for example, and Channel 9 in Derry and Northern Visions in Belfast have received funding for Irish language programmes to be produced and broadcast on their analogue local services. In Scotland, the Gaelic community is exploring options for a Gaelic language channel, initially to be broadcast on satellite, and online services. These initiatives would serve the Gaelic-speaking minority in Scotland, but also the wider diaspora throughout the UK and, in the case of online services, in the rest of the world.

International experiences

- 3.39 Most developed countries have a more extensive local TV sector than the UK. Both North America and continental Europe have very significant numbers of such channels. Most were established many years ago, and local TV is now an integral part of the media environment in many countries.
- 3.40 There are a number of factors explaining why local TV has developed in other countries more than in the UK:
- Greater cable availability and take-up in many other countries;
 - The rapid consolidation of the cable industry in the UK, which some stakeholders suggested has contributed to little demand for local content from cable operators;
 - More active intervention by other local, regional and central governments to develop local services that would not have been viable on a strictly commercial basis;
 - In the US, large urban markets with significant advertising potential;
 - The limited availability of frequencies and the constraints on the licensing regime for analogue local TV in the UK, and the less rigorous regulation of frequencies in some other countries.
- 3.41 However, there is no single model for local services elsewhere, nor for the factors that have driven its growth. Different funding models have been deployed, with different degrees of state intervention. Cable, terrestrial and satellite platforms are all used to a greater or lesser extent, and some countries have begun to explore the potential of emerging technologies; for example local neighbourhoods in the Netherlands are starting to use wireless

³⁰ Andy Griffie's speech at Ofcom seminar, 1 November 2005

networks to create very local TV stations. The examples provided by several different countries are discussed in Box 3.4.

Box 3.4: Case studies of the development of local TV overseas

Germany

Cable TV in Germany achieved 80% penetration quite quickly after its mass market introduction in the 1980s. A large number of cable companies – some serving just a single town or city, or even a neighbourhood – provided a competitive environment which fostered relatively cheap and easy access for local services. In addition, from 1986 the federal government sanctioned a system for funding local TV through a 1% levy on the national licence fee. The system was operated separately by individual states (Länder), who had freedom to develop local TV according to local conditions. In many areas, open access channels were set up allowing members of the public to make their own television programmes for transmission on local TV. Elsewhere, the money was used to subsidise commercial operators.

Similar conditions for development (high cable penetration, a mix of fully commercial and publicly funded local stations) have also applied in, for example, the Netherlands, Belgium and Scandinavia.

Spain

In contrast to Germany, local TV developed in Spain almost entirely through terrestrial transmission as a result of a lack of regulatory control. Dozens of local stations used small-scale transmitters to reach local audiences on 'grabbed' terrestrial frequencies. The practice of setting up without a licence – particularly in rural areas - became commonplace. The result is a country with more than 1,000 local channels, with target audiences ranging from single villages (or a few local villages), through city-wide TV, to regional TV.

As digital switchover approaches, the national authorities have begun to close down scores of illegal local stations. In Madrid alone, the regional government shut 21 TV channels (and 33 radio stations) and imposed a 1.5 million euros fine on one residents' association for pirating the signal of 14 legitimate TV channels.

However, an outline digital plan includes provision for a large number of local TV channels post-switchover. Alongside the anti-piracy drive in the Madrid district is a process to award 53 new local TV licences, which come with a requirement that the stations are in operation by the beginning of next year (2006). 44 different companies have made 115 bids for those licences.

United States

Although there is some limited public funding available in the United States, the overwhelming majority of local TV services have developed under a free commercial market, and the many large urban markets represent attractive audiences to advertisers. Most American cities have at least one local TV station. More recently, more than 100 webcast TV stations have developed including commercial offerings, Christian networks, and local government services.

As with Germany and other northern European countries, a very high level of cable penetration encouraged the initial proliferation of channels. Rival cable companies competed to drive down carriage charges. But there are also peculiarly North American factors that have little relevance to the UK. The US is a vast country and – culturally – communities look to their nearest big town as the focal point. Local news is often seen as much more important than national news. As a result, the concept of localism is deeply ingrained in the regulatory framework.

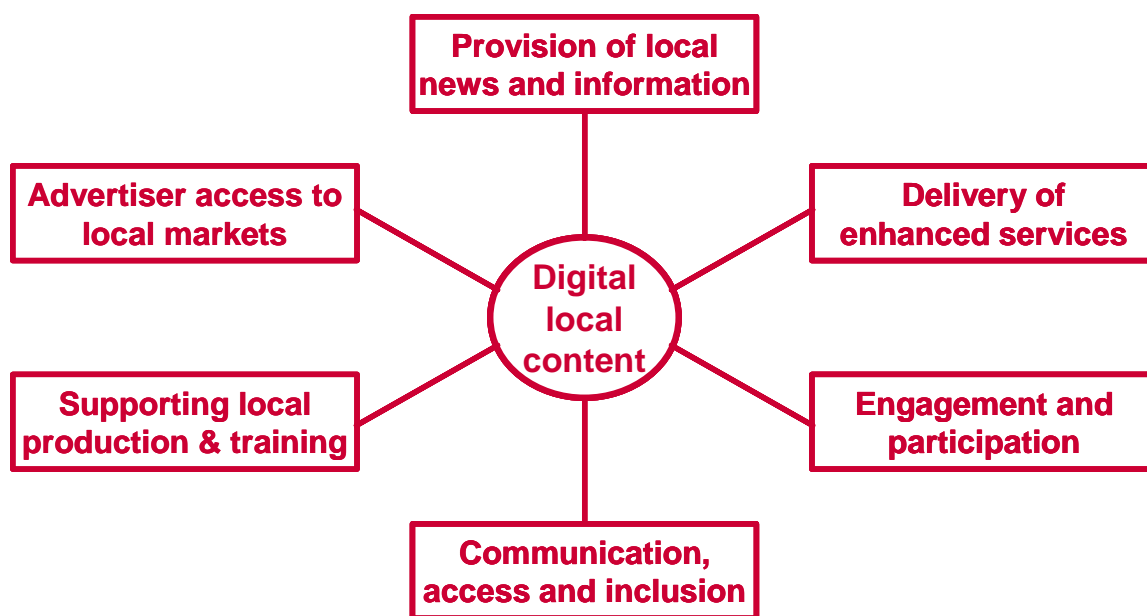
It is also important to note that many local TV stations in the US are not stand-alone companies, but are affiliated to one or other of the main US networks, ensuring viability and access to high quality network programming. There have been concerns that the pressures of the network model have led to a diminution in the local character of 'local' stations, with 35% now providing no local news.³¹

The public purposes of digital local content

3.42 What public purposes could local content fulfil? It is difficult to be certain about the techniques that will most effectively meet audience needs when many services and technologies are still in the early stages of development, and relatively little evaluation of alternative approaches has been carried out. Nonetheless the experiences and aspirations of local TV stakeholders, the successful development of online services in some analogous directions and the evidence of international operators may provide guidance about the potential future benefits of digital local content.

3.43 We believe there are six distinctive roles of digital local content services that might generate benefits to consumers, producers and society as a whole (Figure 3.3). In identifying these distinctive roles, we do not mean to suggest that these are the only potential benefits of local content, nor that local services are the only means of carrying out these functions. However, we believe that local services are particularly well-suited to fulfilling these roles, in which they could make a distinctive contribution.³² The remainder of this section contains a further discussion of these roles.

Figure 3.3: The distinctive roles of digital local content



Source: Ofcom

³¹ Federal Communications Commission, *Notice of Inquiry in the matter of Broadcast Localism*, 2004

³² This framework is partly based on the Cabinet Office's assessment of the wider benefits of digital technology. See Cabinet Office, *Enabling a Digitally United Kingdom: A Framework for Action*, 2004

- 3.44 In the interviews we conducted, **news and information** was identified by almost all stakeholders as being at the core of local content services. Local news is often the primary driver of audience interest in local services – the BBC’s broadband trial in Hull found that local news and video diaries were the most demanded content offered by the service.³³ Other areas of particular interest include local sport, programmes about local people or issues and entertainment magazines.
- 3.45 Local authorities and other service providers are also seeking to use local content services to disseminate information about services and raise awareness of local initiatives. This might include providing up-to-the-minute information about GP availability, school performance or job vacancies. It could also be useful for immediate or urgent situations, such as health scares, or for providing information in an emergency. There is some evidence that this can bring social benefits – for example, evaluation of a community network in Hastings suggests that information on local safety and crime reduction has helped reduce fear of crime.³⁴ Delivering content via TV sets could help reach difficult-to-reach audiences, such as older or disabled people, who may have less access to other forms of digital technology.
- 3.46 Local content services also fulfil a valuable role in protecting consumers with misleading or harmful practices, by creating channels for authorities to disseminate information about scams and abuses, and by enabling consumers themselves to compare experiences and share information about service providers.
- 3.47 Both commercial and public providers are exploring the opportunities offered by digital media to deliver **enhanced services** to their audiences or users. TV platforms will be part of the Government’s ongoing efforts to ensure that “people are able to access [electronic] services when, where and how they want,”³⁵ with DirectGov seeking to implement the electronic delivery of services in a way that groups them around intuitive audience groups (parents, carers, motorists) rather than government functional silos. NHS Direct already attracts 500,000 visitors to its website each month, and 100,000 calls to its telephone helpdesk.³⁶
- 3.48 At a local level, service providers will seek to improve the effectiveness of services as well as reduce costs. For example, schools and students might use local interactive services to prepare and deliver coursework and homework assignments including self-produced video content, an extension of the online approaches already taken by many schools. Surgeries could offer remote booking systems and the ability to chat online with a GP or nurse. Social services departments could administer pensions and benefits via an easy-to-use on-screen accounts system.
- 3.49 From a commercial perspective, many of the services that have developed online over the last few years could transfer to the TV set. Local service providers could advertise on-screen, while potential customers could watch or

³³ Source: BBC

³⁴ Government Office for the South East, *Annual Report 2004-05*, 2005

³⁵ Cabinet Office, *op. cit.*

³⁶ Cabinet Office, *op. cit.*

read the reviews of other customers and buy or make a reservation online. And ITV is already planning to use the equivalent of local classified ads to fund its local broadband pilot.

- 3.50 One of the goals of local e-government initiatives is to strengthen local **engagement and participation**, and in turn improve service delivery, increase democratic legitimacy, build institutions of co-governance and improve citizen satisfaction. The decline in people's trust in elected representatives and public service providers is well documented, and it is hoped that by giving people more opportunities to participate in the decisions that affect their lives this trust might be rebuilt.
- 3.51 Local authorities are already experimenting with a range of approaches including use of online opinion surveys and discussion fora, online consultations, questions to Councillors and provision of detailed performance data.³⁷ The focus is on giving people the widest possible range of opportunities to participate, and the widest range of settings in which to do so.³⁸ Many of the approaches under consideration could be delivered by interactive TV platforms, with the added advantage of digital TV's ease of use and ubiquitous presence after switchover. Again, some early evidence is encouraging – 75% of adults voted in a ballot for local estate management on the Carpenters estate, where online voting was available through the broadband network.
- 3.52 As well as engaging with formal authorities, local content services can enable enhanced **communication, access and inclusion** in wider society. This goal lies at the heart of most open access services, which seek to build people's confidence, skills and self-expression by giving them access to the means of creating and distributing their own content. Evidence from very local initiatives such as Carpenters Connect and Tenantspin suggests that participation helps people identify with their locality, building more cohesive communities and reducing isolation.³⁹ In an experiment carried out in a newly-designed middle-class suburb of Toronto known as 'Netville', the local broadband network was used extensively for communication between residents, lobbying the estate managers and campaigning on local issues. Subsequent research found that those with access to the network knew three times as many neighbours, talked with twice as many and visited 50% more of their neighbours than unconnected residents.⁴⁰
- 3.53 Local services could also help to reinforce other kinds of cultural identity, that are related to geographic communities but which have wider relevance, and support social inclusion of dispersed populations. Ofcom's Community Radio research found that the concept of Community Radio was easier to communicate when applied to communities of interest than to communities defined purely by place,⁴¹ and this lesson might also apply to local video content and interactive services. For example, cities with high black and

³⁷ IPPR, *Modernising with Purpose: A Manifesto for a Digital Britain*, 2005

³⁸ Demos, *Start with People*, 2005

³⁹ William Davies, *Proxicomunication: ICT and the Local Public Realm*, 2004; Leeds Metropolitan University, *Local E-Democracy National Project*, 2005

⁴⁰ Keith Hampton, *Grieving for a Lost Network: Collective Action in a Wired Suburb*, 2000, reported in William Davies, *op. cit.*

⁴¹ Ofcom/Research Works, *op. cit.*

minority ethnic populations might support services aimed at particular ethnic groups. In Scotland, new technologies might enable the development of online and digital TV services targeting the Gaelic-speaking population, which is particularly strong in the Highlands and Islands but has a presence throughout Scotland.⁴²

- 3.54 It is important to recognise the potential limitations of digital content services in these respects. Simply because new opportunities exist, does not mean that they will be taken up. Not everybody wants to participate or communicate in this way; it may be that those least likely to take up such services are also those who are most excluded from democratic and community life. Furthermore, watching TV remains a fundamentally different activity to using a computer, and the kind of interactive communities that have developed online might not succeed when provided through a TV set into the living room.
- 3.55 Even if the kinds of services described above do find an audience, there are significant questions about the level of reach and impact they might be expected to achieve. The content market is highly competitive, with a wide range of compelling services available via a multitude of platforms and devices. Limited evidence suggests that take-up of many e-government services, for example, has so far been relatively low.⁴³
- 3.56 Nonetheless the development of a wide range of commercial interactive applications and online social media (often with little promotion or orthodox marketing) suggests that there is at least some public appetite for new forms of access to services, communication and interaction. Use of many of these services is highest amongst younger people, who traditionally are the hardest to engage in local democratic processes.⁴⁴ And experiments with new forms of public consultation have found strong enthusiasm amongst participants for the opportunity to have their say.⁴⁵
- 3.57 It therefore seems inappropriate and pre-emptive to conclude that there is little future for the kind of interactive local services described in this section. Indeed the level of experimentation already taking place suggests that many stakeholders believe that a wide range of services could add public value as use of digital technologies continues to grow. The next few years should be a period of innovation and exploration in which different approaches are tested, refined, taken up more widely and developed into a new sphere of public and commercial activity. Many approaches will fail, but others will succeed, and it is too early to tell which will work and which will fall by the wayside.
- 3.58 The four roles outlined so far are what we might define as the **public purposes** of digital local content (see Box 3.5). In addition there are two benefits to stakeholders, which although still important are less significant in terms of the **public** value they contribute:

⁴² Ofcom, *Statement on Programming for the Nations and Regions*, 2005

⁴³ IPPR, *Public Value and E-Government*, 2004

⁴⁴ According to a recent ICM poll for *The Guardian*, 31% of 14-21 year olds with access to the Internet at home – nearly 20% of all 14-21 year olds – have their own weblog or internet site. Most spent more time chatting in online communities than playing video games or watching TV

⁴⁵ IPPR, *Citizens' Juries: Theory Into Practice*, 1997

- **Supporting local production and training:** helping to develop the next generation of film-makers and provide access to new distribution channels is the explicit goal of several initiatives, such as Grimsby College's Channel 7, and Cornwall's Web.TV. Higher education institutions may have a role to play in this respect, although it seems unlikely that local services would have the resources and expertise to train new employees to the same level as, for example, the major broadcasters and leading production companies;
- **Advertiser access to local markets:** some commercial services expect to be able to attract new advertisers who would not have wanted, or been able to afford, to advertise on national TV. From the advertiser's perspective, they may be able to reach a much more targeted and relevant audience and deliver richer and more interactive advertising than is available through radio, press or online channels.

Box 3.5: The public purposes of digital local video and interactive services

Ofcom's Review of Public Service Broadcasting and the Government's Green Paper on the future of the BBC defined a set of public purposes for television.⁴⁶ We propose a set of public purposes for digital local video and interactive content that is largely based on a tailored version of these wider PSB purposes, with the addition of a particular requirement to improve our access to local services and participation in the local community:

- To inform ourselves and others and to increase our understanding of the world, with particular focus on issues relevant to our locality, through news, information and analysis of current events and ideas
- To stimulate our interest in and knowledge of arts, science, history and other topics, particularly those relevant to our locality, through content that is accessible and can encourage informal learning
- To reflect and strengthen our cultural identity, particularly that based on shared local identities, through original programming at local level, on occasion bringing audiences together for shared experiences
- To make us aware of different cultures and alternative viewpoints, through programmes that reflect the lives of other people and other communities, especially those within our local area
- To support and enhance our access to local services, involvement in community affairs, participation in democratic processes and consumer advice and protection

3.59 This section has explored the potential future of digital local content and interactive services, and identified a set of possible public purposes for them. The following sections look at the practicalities of delivering these services: the technical options (Section 4), and their economics (Section 5).

⁴⁶ Ofcom, *Review of Public Service Television Broadcasting Phase 3 – Competition for Quality*, 2005

Section 4

Delivering local services in a digital environment

The advantages and disadvantages of different delivery platforms

- 4.1 This report is technology-neutral, in the sense that the means by which local content services could be delivered are not our main concern. Nonetheless, it is important to recognise that different delivery platforms have different strengths and weaknesses, driven by their different technical characteristics. These different strengths and weaknesses will shape business models for commercial services and help public service providers assess which approaches might offer maximum public value.
- 4.2 There are several important consumer requirements for successful local content services. The following factors are additional to cost and revenue considerations, which are dealt with in more detail in the discussion of the economics of local services in Section 5:
- **Ease and convenience:** local content must be easy to obtain – the experience of the RSLs suggests that viewers will not be prepared to go to significant additional lengths specifically to acquire a local content service, such as acquiring a new aerial;
 - **Access to service information:** services must be readily accessible to users, for example, if broadcast, through electronic programme guides (EPGs);
 - **Quality of broadcast reception:** broadcast services must not alienate viewers through intermittent or poor quality signals, which have been a common complaint of RSL operators;
 - **Cost:** local content must be available at minimal additional cost to users – again, the experience of the RSLs shows that viewers will, in general, not wish to incur additional expense (e.g. a new aerial) specifically to receive local content;
 - **Relevance:** local services must have an editorial coverage area that users find meaningful;
 - **Distinctiveness:** local content must offer distinctive advantages to users compared to other kinds of TV, for example by exploiting the interactive and on-demand potential of some digital technologies.
- 4.3 For the purposes of this report, we have assessed the potential of four platforms to meet these requirements: digital terrestrial television, digital satellite, digital cable and broadband.
- 4.4 This does not mean that other platforms, such as mobile or wireless technologies, could not make an important contribution to the delivery of local content. However, mobile media platforms are generally at an earlier stage of

development than any of the four platforms we have looked at in detail, and it is difficult to predict whether and how they might develop. We have therefore focused our attention on the four platforms that are already widely available and taken up.

Digital terrestrial television

4.5 Terrestrial delivery is still seen by many operators as the default means of delivering a service to viewers. The advantages to consumers of delivering local services via digital terrestrial television (DTT) transmitters are that:

- Terrestrial television is still the dominant means by which services are received by viewers;
- There are fewer channels than on cable or satellite so local services are less likely to be lost in a large EPG;
- Extending coverage to secondary sets should be easier than for satellite and cable, although advances such as Sky+ and availability of video senders (that legally transmit television signals in-house) will erode this advantage; and
- No subscription is required to access the platform.

4.6 However, there are also a number of disadvantages of terrestrial television:

- The potential coverage areas are determined by transmitter locations, not necessarily by communities' real needs and natural boundaries;
- The most effective way of ensuring consumers can receive local services would be to co-locate them with national services on the main transmitter network, which could be costly; and
- DTT services lack the sophisticated interactive and on-demand capabilities required to deliver enhanced services, due to the lack of return path capabilities in set-top boxes.

4.7 Of all the digital platforms, DTT delivery presents the greatest number of variations by which local television services could be broadcast, each with distinct features. A number of options are presented below, most of which are not exclusive and in principle a combination of them could be used together. It should be emphasised that the potential to move ahead with any of these options will be dependent on the outcome of the Regional Radio Conference (RRC) in May 2006, and Ofcom's Digital Dividend Review, later in the year. Certain options might also require implementation of a specific licensing regime for local digital TV services, under section 244 of the Communications Act.

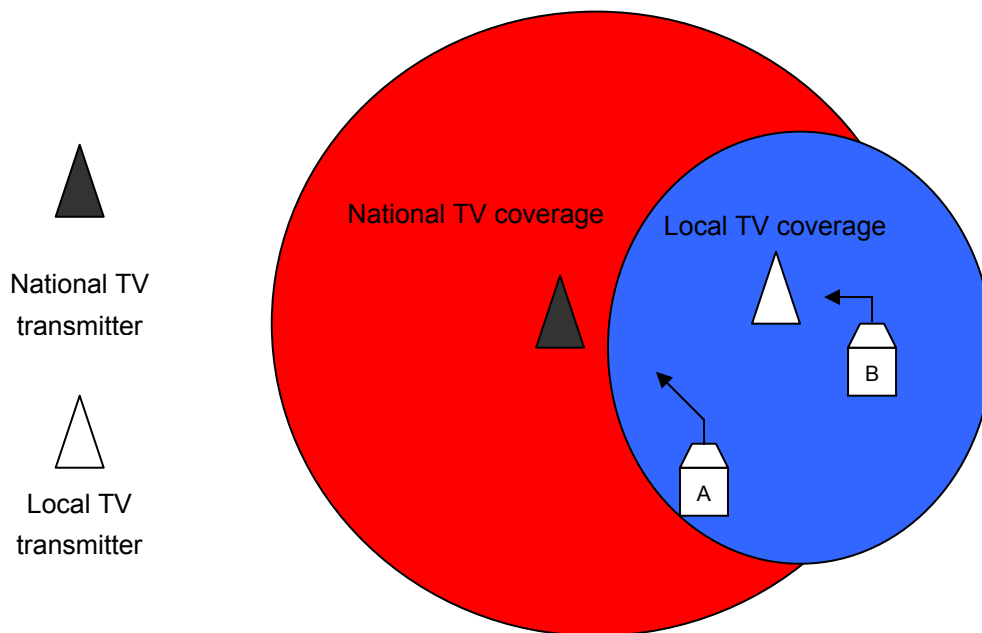
1. Develop local multiplexes independently of national services (not co-located). This approach is similar to that taken for analogue RSLs. Ofcom would identify areas where local television services could be licensed, much as is the process for local radio (although once a frequency had been approved, it could be left to the market to determine its usage, rather than relying on a 'beauty contest'

licence award, as with analogue radio). It would then be for local multiplex licensees to identify sites for their transmitters to cover the target area as effectively as possible. Potential coverage of the UK could be between 35-60% of the population, but in reality is likely to be towards the lower end of the range due to compromises over transmitter site location.

As the ITC's experience with RSLs showed, co-siting of local television services with national services is important as viewers will not generally pay for a separate aerial specifically to achieve good reception of local TV. Any television service that is not co-located with the national multiplexes could therefore be disadvantaged because viewers' aerials will not be pointing in the correct direction. For the same reason it is also highly desirable that the frequencies allocated to local TV are within the aerial group⁴⁷ used by the national services in that area.

Figure 4.1 illustrates how the coverage of a local terrestrial TV service may be much less than that achieved by a national multiplex, and be further compromised if not co-sited. In this example, reception of local TV in Community A may not be possible even though it falls within an area of adequate signal levels, because aerials in Community A are likely to point at the transmitter carrying national services and away from the local TV transmitter.

Figure 4.1: Indicative transmission patterns for local terrestrial TV services not co-sited with national multiplexes



Source: Ofcom

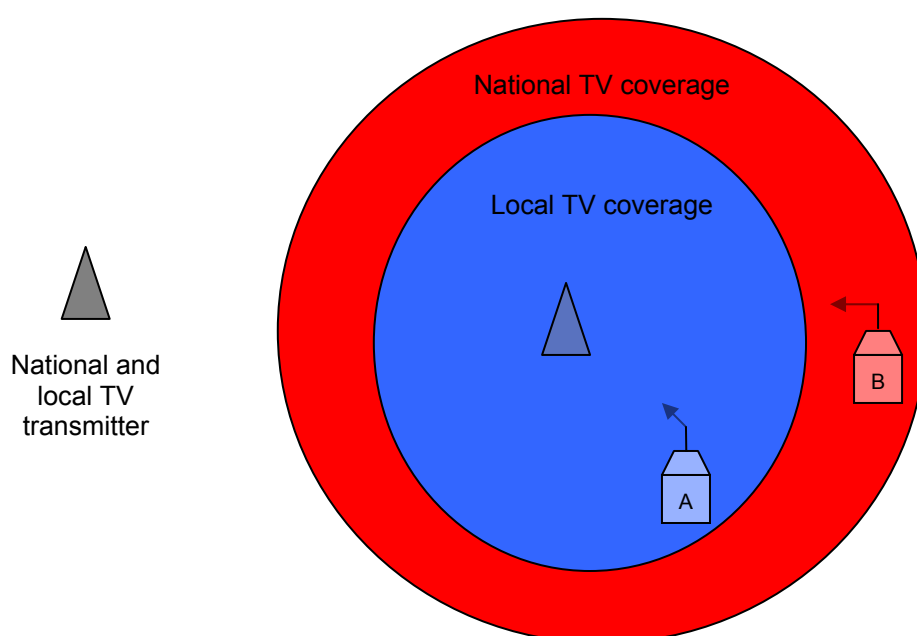
2. Local multiplexes planned and co-sited with national services. A number of transmitters that broadcast the national multiplexes could also broadcast local

⁴⁷ Most television aerials will only work over some of the frequencies allocated to TV broadcasting. Aerials are therefore classed into three frequency ranges, labelled Group A, Group B and Group C/D. In most cases, all of the analogue TV services from a particular transmitter are broadcast on frequencies that fall in to one of these groups. An aerial used to receive a service broadcast on a frequency outside its group will not work efficiently.

television multiplexes. These local multiplexes would be broadcast on frequencies interleaved amongst the national multiplexes and their presence would involve a small loss of coverage for the national multiplexes. The actual coverage that could be achieved by the local multiplexes and the potential damage to national multiplex coverage depends upon the planning approach taken, but indicative figures are that a local TV multiplex could achieve coverage up to around 65% of the UK.⁴⁸ In-group frequencies may be available at the majority of transmitters for at least one local multiplex, but further work will be required to confirm this in light of outcomes of the RRC and the eventual plan adopted for digital switchover in the UK.

Figure 4.2 illustrates this option. Aerial alignment is now correct for Communities A and B. However, as the coverage of the local TV multiplex may be less than that achieved by the national services, Community B will only be able to receive the national television services.

Figure 4.2: Indicative transmission patterns for local terrestrial TV services co-sited with national multiplexes



Source: Ofcom

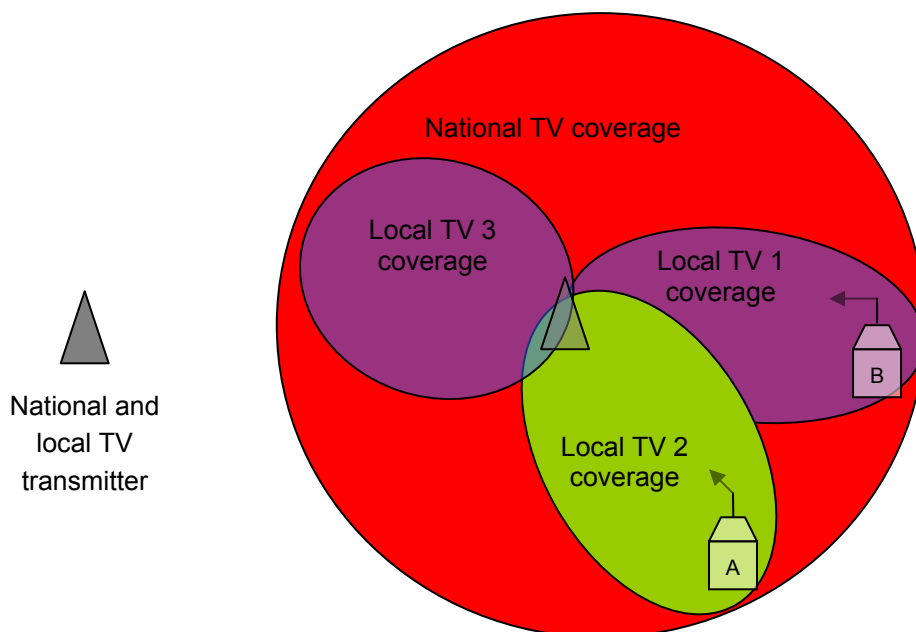
In order to maximise coverage, local multiplexes would ideally share broadcasting antennas (or at least use similar characteristics) at the transmitter with the national multiplexes. However, a challenge for local terrestrial TV is that a number of the national transmitters serve very large areas containing diverse populations and would provide coverage more akin to regional television. For example, the Winter Hill transmitter north of Manchester serves all of Manchester together with numerous

⁴⁸ May 2005. Crown Castle (now known as National Grid Wireless) prepared a study for Ofcom (available on Ofcom's website as Annex C to this report) which modelled the coverage that could be achieved by adding either one or four local television multiplexes to each of the 80 transmitters that currently carry DTT services. The study predicted that if only one additional multiplex was broadcast, its coverage would be approximately 63%. The study further predicted that each additional local multiplex would achieve less coverage, between 51% and 47%. The penalty to the PSB multiplexes would be a loss of coverage of approximately 0.03% if one local multiplex is broadcast at 80 sites, and 0.25% for four local multiplexes at each site.

sizeable towns including Warrington, Bolton, Bury, Wigan and much of Merseyside. There may be sufficient demand from viewers in each of these towns for their own local service. This could be addressed by broadcasting directional beams from Winter Hill, with each beam broadcasting a different service targeting a specific geographical area. Targeted coverage would permit a more efficient re-use of broadcast frequencies with each one used several times, but in different directions. However, this approach still only offers limited flexibility, and exact matching with the boundaries of specific communities might not be possible. There could also be some degree of overlap.

Figure 4.3 shows three targeted local TV multiplexes broadcast from a single transmitter. In this example Communities A and B receive different services. Multiplexes 1 and 3 could use the same frequency as there is minimal overlap in their coverage.

Figure 4.3: Indicative transmission patterns for targeted local terrestrial TV services co-sited with national multiplexes



Source: Ofcom

3. Local TV within existing multiplexes (the ‘add/drop’ proposal). Capacity on one (or more) of the existing DTT multiplexes could be used for broadcasting local television services. Specific local services would be ‘added in’ to the national multiplex(es) at transmitters where they are required. Allowance has to be made nationally for the capacity used by the local services, and this capacity could remain unused at transmitters where no local service is injected, or could be occupied by a nationally distributed ‘local TV network’ that would carry low-cost filler programmes.

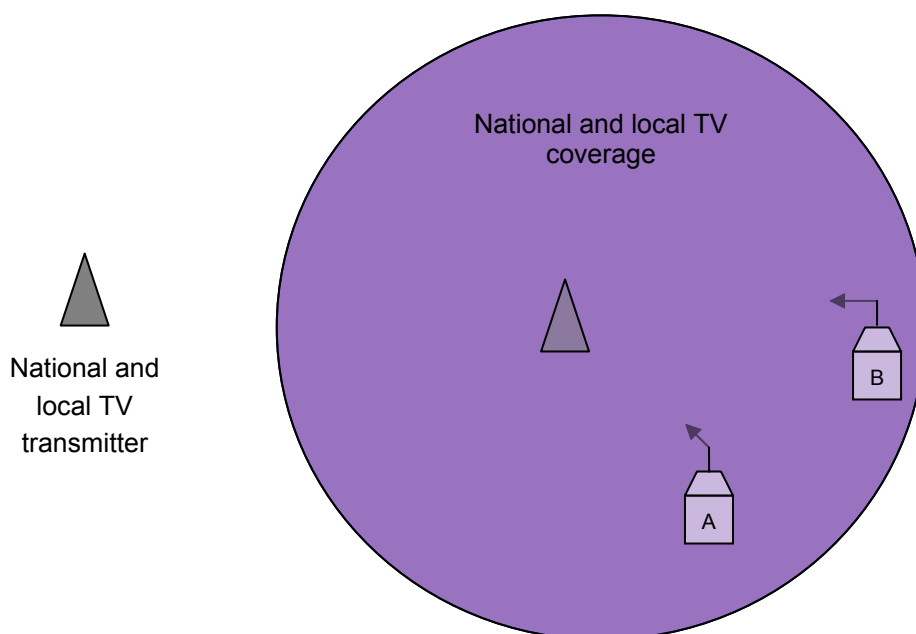
For the viewer, this option offers the most consistent and convenient solution, and potentially offers the widest reach for local TV of all of the terrestrial options. As the local service would be broadcast within a multiplex, its coverage would be the same as for the other services carried on that multiplex from each transmitter.

However, the use of a dedicated slot to carry local services on a national multiplex

would represent a significant opportunity cost to the national multiplex operator whose capacity was used. This cost (which on current commercial rates could be in the region of around £10 million per annum) would have to be taken into account when considering the cost of this option. In addition, it would be impossible to target specific towns with local services broadcast from the larger transmitters unless several multiplexes were required to carry local TV services, targeting different communities within the wider transmitter coverage area, which would increase opportunity costs proportionally.

Figure 4.4 illustrates these points. Communities A and B can both receive the local TV service, but it is not possible to target these areas separately. The only solution is to broadcast more than one local service on the national multiplexes, each of which would again be available throughout the whole national multiplex coverage area, but perhaps only be relevant to viewers in a part of it.

Figure 4.4: Indicative transmission patterns for local terrestrial TV services inserted on a PSB multiplex



Source: Ofcom

Digital satellite

- 4.8 A clear advantage offered by satellite delivery of television content is that it offers immediate, extensive coverage of the UK. Reception via satellite is an accepted and widespread means of receiving television services and offers convenient and consistent delivery to a consumer's main set.
- 4.9 In order to receive local satellite services, further equipment and expenditure would be required if viewers do not already have satellite TV, or if they want to watch local services on multiple sets in the household, but this would not necessarily mean any ongoing subscription payments. BSkyB already offers a free-to-view satellite service, consisting of professional installation, a minidish and a digital receiver box for a one-off payment of £150. In September 2005 the BBC and ITV announced plans to launch an unencrypted satellite offering

to compete with the subscription-free BSkyB service. This will allow viewers to receive the BBC and ITV channels by purchasing a satellite dish and set-top box independent of BSkyB, the need for BSkyB-specified installation or any decoder cards. The details and costs of this new service had not been announced at the time of writing.

- 4.10 A local service delivered via satellite would offer good coverage to viewers in almost any part of the UK. This in turn permits local services to achieve good availability to any target area (large or small) unrestrained by either cable or transmitter network topography. However, each local service would occupy a full national 'slot' on the satellite and would therefore be available to viewers across all of the UK and parts of mainland Europe as well. This is not necessarily a problem *per se*, and regionalisation services are available from BSkyB, but the costs of carriage would be as for a nationwide service, even for a channel targeted at a single small community.
- 4.11 Costs of carriage on the satellite platform are much lower than the current cost of capacity on digital terrestrial multiplexes, and therefore may be a more cost-effective way for local services to reach their target audience. Indeed, several local services are already, or are planning to be, carried on satellite. Nonetheless costs may prove prohibitive for some local services, particularly as capacity may become scarcer (and therefore more expensive) as demand for new high-bandwidth services such as high-definition TV develops.
- 4.12 As satellite offers a large amount of capacity for broadcasting television, radio and data services, an extensive EPG is essential to enable viewers to locate individual services. Local services on satellite would need to obtain positions on the satellite service EPG and, like any individual channel, would need to compete for the attention of viewers amongst the several hundred other programme services.

Cable

- 4.13 Local television via cable is an established delivery mechanism and some cable systems still offer local programming. Like satellite, cable offers a large amount of capacity for television services and provides an EPG for viewers to navigate across channels. In practice, the number of services carried on cable is fewer than on satellite, and some cable systems offer a specific category for local TV which makes those services easy to find. The potential for adding interactive features is a plus point for digital cable with much higher data rates available than through a dial-up telephone connection as used by current satellite boxes.
- 4.14 The principal disadvantages of cable delivery are that it is limited by cable company network geography, and only available to customers paying a subscription charge for the service. At present principally only large towns are cabled, with approximately half of UK homes passed by a cable company. Subscribers pay a regular monthly fee for their service, although no additional expenditure is then required to view local TV on the main set where local services exist. Again like satellite, extension to secondary sets would involve some additional cost to the viewer.

Broadband

- 4.15 Delivery of audio-visual services via broadband is still in its infancy, but is likely to grow rapidly in the UK and elsewhere over the next few years. Major organisations including the BBC, BSkyB, ITV, Google, BT and Yahoo! have all launched or announced plans to deliver television content via the internet.
- 4.16 Thus far, delivery of video content via broadband has mostly been over standard internet connections and has been limited by low data rates and monthly download limits imposed on subscribers by internet service providers. Recently, the broadband internet market has become more competitive with near UK-wide availability now offered, connection speeds increasing, prices falling, and monthly download limits being increased or lifted completely.
- 4.17 It is likely that this trend of increasing speed and reducing cost will continue in the future, enabling greater use of online services for accessing and downloading video content. Several organisations including the analogue RSL Capital TV in Cardiff and Glasgow City Council already deliver local television content in this way. ITV is also experimenting with internet delivery of targeted local content in Brighton and Hastings, and in Islington, north London.
- 4.18 However, it seems likely that broadband TV services will only gain widespread acceptance when content is delivered to viewers' living rooms through their TV sets. The increasing penetration of connections offering speeds of 2mbps or more makes delivery of good technical quality television content to TV sets, rather than to computers, a realistic proposition.⁴⁹
- 4.19 The availability of television services delivered via broadband to TV sets (known as internet protocol television, or IPTV) is consequently about to increase dramatically. In the UK, IPTV services are currently only available from HomeChoice (in London and Stevenage) and Hull (from Kingston Interactive Television). However, BT has said it will launch an IPTV service in 2006, combining a digital terrestrial tuner, personal video recorder, 'catch-up TV' and access to a video on demand (VoD) library; ntl, BSkyB and a number of broadband service providers have also indicated their intention to expand into this area.
- 4.20 This growth in turn is likely to stimulate a market for set-top boxes to enable internet TV to be viewed on a normal television set, without the need to sit in front of a computer. Some industry estimates suggest that the cost of a basic set-top box for IPTV could be similar to that for an entry-level digital terrestrial box, although IPTV boxes are likely to come with more sophisticated functionality – PVRs, VoD, the ability to upload user-generated content – that could add value but increase costs.

⁴⁹ Some online services can accommodate a lower bitrate than 2mbps, and new technologies may enable the delivery of broadcast-quality TV at 1mbps or less, but at present anything less than 2mbps is likely to require reductions in picture resolution that viewers would be unlikely to accept on their living room TV

- 4.21 One recent report predicted that the number of IPTV subscribers across Europe would rise to almost 9 million by 2009, from less than 700,000 today.⁵⁰ Growth was expected to be slower in the UK, due to strong competition from existing satellite, cable and digital terrestrial multichannel services, but IPTV was nonetheless expected to reach one million UK homes by 2009.
- 4.22 The ability to tailor broadband services to niche audiences and their relatively low costs of capacity make them particularly well-suited to carrying local content, especially services targeted at small areas for which digital terrestrial or satellite distribution may not be cost-effective. Several local video content services are already available online, including the BBC's and ITV's trials, as well as websites carrying local content of many other kinds.
- 4.23 Broadband also offers the scope for much greater personalisation of content and sharing of users' own content than any other platform – in France, Alcatel has developed an application that would allow every individual, family or local organisation to have their own 'channel' containing content such as home movies, photo collections and video logs. Generally speaking, IPTV offers much richer interactivity and on-demand potential across the UK than any of the other platforms discussed here.
- 4.24 Broadband delivery does have disadvantages, however. Services available over the internet face the challenge of competing for viewers against the huge breadth of information available online. A lack of an established EPG or other widely used content navigation tool might make it difficult to find local content services, although this may change in future.
- 4.25 Video on demand services delivered to conventional television sets come with an EPG that would make navigation between services and location of local services straightforward. However, a monthly subscription payment will be required, at least for broadband internet access and possibly additionally for the IPTV service. At present IPTV services are geographically limited to areas where the VoD provider has suitably enabled exchanges, although availability is likely to increase in the near future and may become nationwide with the launch of BT's service in 2006.

Summary

- 4.26 Figure 4.5 summarises the relative advantages and disadvantages for delivering local content services via different platforms from a consumer perspective. Put crudely, the advantages of digital terrestrial services are their low cost to consumers, access to service information – as long as a way can be found of transmitting service information as part of the broadcast stream – and (under some options) their ease of access. They are constrained by their limited interactivity and on-demand potential, which may prevent their development into the kind of innovative services that might be required to deliver the distinctive public purposes of local content.

⁵⁰ Screen Digest, *European IPTV: Market Assessment and Forecast*, 2005

4.27 The advantages and disadvantages to consumers of broadband services are to some extent the opposite – they have huge potential for delivering innovative, distinctive content, but are likely to be more costly, and it may be harder for users to find local information and services.

Figure 4.5: Advantages and disadvantages of different distribution platforms from a consumer perspective

Platform (evaluated as at digital switchover)		Consumer requirements					
		Ease of use	Access to service info	Reception	Cost	Relevance	Distinctiveness
Digital terrestrial	Co-sited mux		*				
	Separate service		*				
	Capacity on PSB mux		*				
Digital satellite							
Digital cable							
Broadband	Internet						
	TV via set-top box						

= very poor; = excellent

* If SI cross-carriage issues can be resolved.

Source: Ofcom

Section 5

The economics of digital local content

New business models for video content and interactive services

- 5.1 As we stated in Section 1, an essential part of understanding the potential for innovative new local services to contribute to public value involves an assessment of their economic viability.
- 5.2 The lessons from the experience of current RSL operators are valuable but should not be taken as an indication of the potential for digital local services to be economically viable. A number of characteristics of the current local services regime – such as, for example, the limited availability of analogue spectrum – have constrained the success of RSLs, both in terms of their reach and financial viability. New digital technologies and increasing consumer sophistication offer opportunities for more targeted and more interactive services that could be delivered with fewer of the constraints associated with the analogue model.
- 5.3 We believe that there may be potential for a range of new models for digital local services to develop, both for- and not-for-profit, with varying degrees of locally originated content and public service benefit. In order to assess the economic viability of these different models of delivering local content and interactive services, we commissioned jointly with the DCMS a study from independent consultants. In this chapter, we provide a summary of the study and its key findings. Annex B to this document, available on Ofcom's website, contains the consultants' independent report on their findings.
- 5.4 It is important to note that this modelling is based on a number of simplifying assumptions, described below. There are a wide range of strategies that could be pursued to manage costs and maximise revenues, using different platforms and mixes of services; for digital terrestrial services, the costs of distribution will depend substantially on the particular approach adopted to securing capacity and transmission.
- 5.5 Moreover it is also important to note that the drivers of costs and revenues could change dramatically in future. Emerging technologies could lead to even greater, and currently unforeseen, disruptions in the way content services are delivered and consumed. It is reasonable to expect that the costs of distributing content will continue to decline rapidly, but at this stage we do not necessarily know how this will affect business models and reshape consumer incentives. The technical and cost constraints on which our modelling is based may therefore not apply in a few years, which could create further opportunities for local service providers.

Methodology and key assumptions

- 5.6 Our approach has been to model the costs and revenues associated with digital local content services, to explore: (a) whether commercial services, operating on a profit-maximising basis, are likely to be sustainable after switchover, and if so under what assumptions; (b) the likely 'funding gap' for

services that are not commercially viable, but might deliver sufficient public benefit to justify support from public bodies or community groups.

- 5.7 We have not made any explicit assumptions about the potential value of non-commercially generated sources of revenues, such as grants from educational establishments, support from local community groups and other charitable foundations or funding from public agencies. However, our assessment of the likely profitability of different models suggests the scale of funding required to support the service and can serve to indicate the required level, and the relative importance, of non-commercial sources of revenue in making the service viable.
- 5.8 Although we recognise that many future local services may be run on a not-for-profit model, we have assumed that all services would seek to capitalise on the revenue opportunities presented by growing local advertising markets.
- 5.9 It would be impossible to model all possible variants of current and future business models for local services. Instead our consultants developed a set of indicative scenarios, based on different assumptions about the content strategy and reach of hypothetical services, and using cost and revenue data based on existing distribution technologies.
- 5.10 These scenarios are not intended to suggest that we think digital local services could or should develop in any particular way. Instead they are intended to cover a wide range of possible models, with sufficiently realistic (if not exhaustive) assumptions about the drivers of costs and revenues to allow us to draw some general conclusions about the viability of digital local content services.
- 5.11 The scenarios that were modelled in the study were defined along two key dimensions – reach and content characteristics:

Potential reach

- We considered four reach categories as potential coverage areas of local content and interactive services – micro-community (small community within larger area, often contained in a geographically small area), dispersed community (including geographically dispersed rural and ethnic minority communities), urban and vicinity community and metropolitan community.
- The reach categories were defined in terms of the size of population covered by the service – from as low as a few thousand to as high as upwards of 2.5 million households – and in terms of the sense of community amongst the service users. A tight sense of community, that is, a high degree of common interests, was assumed to increase the levels of viewing of the service. Detailed reach category assumptions are provided below in Figure 5.1.

Figure 5.1: Key reach category assumptions (year 3 after digital switchover)

	Micro-community	Dispersed communities	Urban and vicinity	Metropolitan
Population characteristics				
Population	↓20k	20k – 100k	100k – 750k↑	↓1m – 2.5m
Population density	Dense	Dispersed	Dense / dispersed	Dense
Population chosen in core scenario	20k	60k	500k	1.5m
Sense of community	Tight	Tight	Wide	Wide
Uplift on audience (viewing/users) due to cohesiveness of community	50%	50%	0%	0%
Advertising revenue assumptions				
CPT rate	£ 3.35	£ 3.35	£ 3.35	£3.35
sell-out rate	72%	72%	72%	72%

Source: Spectrum Strategy Consultants

Content characteristics

- In order to keep the model scenarios sufficiently distinct, we considered four broad content categories of local services. These categories were based on the source of original content (whether it was user-generated or locally produced), its type and amount, as well as the level and quality of acquired material and the amount of repeats on the service. Detailed content category assumptions are provided below in Figure 5.2.
- In addition to programme content, we also considered a range of potential interactive services that could be offered to local audiences, from TV shopping to quiz shows and access to local information. Although we believe that there is potential for these services to generate revenues, we have been cautious in our assumptions about the levels of such revenues; the demand for interactive services is difficult to predict with any degree of certainty and business models in this area are still being developed.
- We did not assign a direct measure of the public benefit that would be delivered by each of these content categories – that would be dependent both on the precise nature of the content and the way it was made.

Figure 5.2: Key content category assumptions (year 3 after digital switchover)

	User-generated	Minimal local news and low-cost acquired content	Local news and acquired content	Local news and originated content
User-generated / free (donated) content (at £0 per hour)	4 hours	4 hours	2 hours	2 hours
Local news (at £1,115 per hour)	-	30 minutes	1 hour	2 hours
Original non-news (at £390 per hour)	-	-	1 hour	2 hours
High-cost acquired (at £835 per hour)	-	-	-	2 hours
Low-cost acquired (at £280 per hour)	-	1 hour	2 hours	2 hours
Total “first run” content	4 hours	5 hours and 30 min	6 hours	10 hours
Total repeats	-	3 hours and 30 min	12 hours	8 hours
Total hours of content per day	4 hours	8 hours	18 hours	18 hours
Uplift in viewing share due to higher content appeal	0%	0%	25%	50%
New on-demand / interactive content per day (derived from originated content)	Max. 4 hours	Max. 4 hours and 30 min	Max. 3 hours	Max. 4 hours

Source: Spectrum Strategy Consultants

5.12 From the 16 scenarios generated by combining different reach and content categories, we identified eight core models of potential local content and interactive services for detailed assessment. The eight core scenarios represent a wide range of potential services both in terms of the cost of delivery and their revenue-generating potential (see Figure 5.3).

5.13 We used EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) as a measure of profitability of the service – it illustrates both what a service is likely to achieve commercially as well as the funding gap that would need to be met in order for the non-commercial services to operate on a break-even basis. Each core model was also tested for its sensitivity to changes in key revenue and cost assumptions.

Figure 5.3: Matrix of reach and content categories

Reach categories (pop) \ Content Categories	1 Micro community (20k ↓)	2 Dispersed community (20k – 100k)	3 Urban and vicinity (100k – 750k↑)	4 Metropolitan (↓1m – 2.5m)
A User-generated	I • Core scenario	II • Alternative scenario	III • Alternative scenario	IV • Alternative scenario
B Minimal local news	V • Alternative scenario	VI • Core scenario	VII • Core scenario	VIII • Core scenario
C Local news and acquired content	IX • Alternative scenario	X • Alternative scenario	XI • Core scenario	XII • Core scenario
D Local news and originated content	XIII • Alternative scenario	XIV • Alternative scenario	XV • Core scenario	XVI • Core scenario

Key distribution platforms (broadband, DTT, Cable, DSAT)

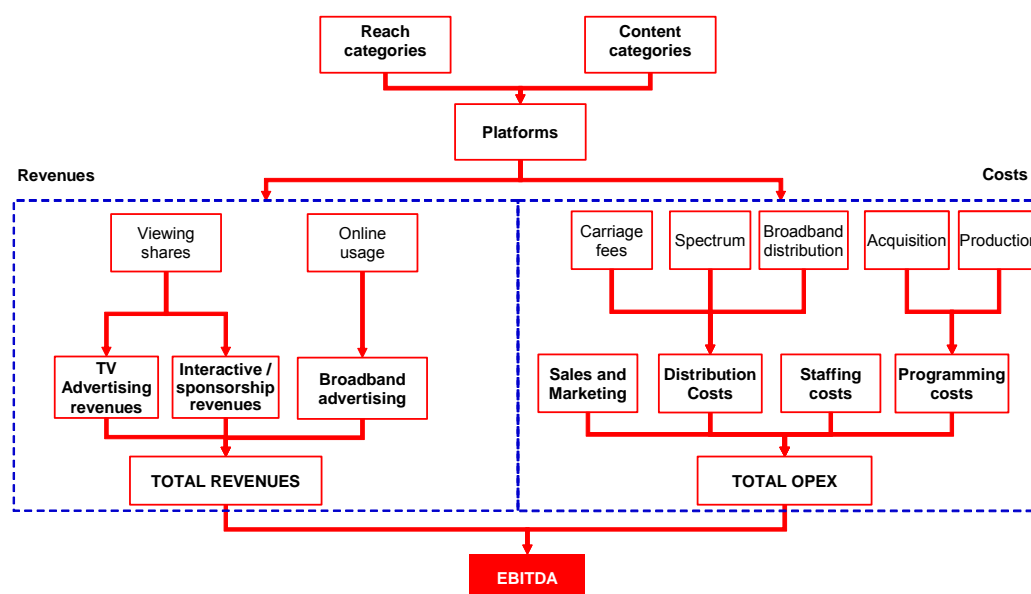
Source: Spectrum Strategy Consultants

5.14 In terms of distribution, each core model scenario assessed in the study was based on an initial set of assumptions regarding the distribution platforms on which the service would be made available. For example, in small reach scenarios, broadband was assumed as the initial delivery platform due to its lower costs, while in the larger reach categories, such as metropolitan, all delivery platforms were assumed to play a role. However, we also tested the impact of the use of different delivery platforms in each core scenario.

Summary of core model scenario results

5.15 In modelling the viability and funding requirements of each scenario, we have considered a full range of revenue and cost drivers, as set out in Figure 5.4.

Figure 5.4: Model inputs and outputs



Source: Spectrum Strategy Consultants

5.16 The revenue and cost assumptions in the model were arrived at using data from multiple sources:

- Financial and viewing data available from current RSL operators;
- Benchmarks from national terrestrial and multi-channel services as well as from local radio services;
- Industry data and, in particular, BARB data.

5.17 Additionally, the model assumptions were tested in a number of interviews with current local TV operators.

5.18 One important revenue assumption concerns the revenue opportunities that can be realised on the broadband platform. For modelling purposes, we have assumed that advertising revenues would come solely from online ads and that the service would not be generating spot ad revenues on programme transmissions. We recognise, however, that with an increasing penetration of broadband and a growing number of players delivering audio-visual content over the platform, there may be opportunities for the linear advertising model to be adopted on broadband too.

5.19 Our assessment of the distribution costs for the services was based on current carriage costs of different platforms. For DTT, the model was based on national commercial DTT carriage costs scaled down to lower reach areas. These are only rough assumptions, and should not be inferred to represent the likely true cost of local digital terrestrial distribution, since no meaningful benchmark data exists. These estimates, however, provide a starting point for this indicative modelling. The distribution assumptions are detailed below in Figure 5.5.

Figure 5.5: Summary of distribution platforms assumptions (year 3 after digital switchover)

	Micro-community	Dispersed community	Urban and vicinity	Metropolitan
DTT				
Universe of viewers	10k	29k	240k	720k
Cost of spectrum	£1k	£2k	£16k	£48k
Cost of transmission	£20k	£61k	£49k	£41k
Total cost	£21k	£63k	£65k	£89k
DSAT				
Universe of viewers	8k	25k	205k	615k
Total cost	£496k	£496k	£496k	£496k
Digital cable				
Universe of viewers	2k	5k	42k	125k
Broadband				
Monthly unique users	1.1k	3.4k	28k	84k
Max number of concurrent users	0.2k	0.7k	6K	17k
Total cost	£7.6k	£7.6k	£7.7k	£8.1k
Initial platform distribution	Broadband	Broadband/ DTT	DTT/ Cable/ Broadband	DTT/ Satellite/ Cable/ Broadband

Source: Spectrum Strategy Consultants

5.20 The profitability scenario was assessed for year three of operation and assumes the services are launched at switchover.

1. User-generated service in micro-community

5.21 The first scenario we tested was a user-generated service delivered to a micro-community over broadband. A possible model would be a service delivered to a housing estate or an area of a few streets where the content on a range of local issues is provided entirely by local residents, community groups or local businesses. In the model, the low reach of the service resulted in low advertising revenues of £1.5k. Hence, the costs of running the service approximate to a funding gap that would need to be met in order to operate the service on a break-even basis. That funding gap amounted to £40k in year 3 of operation (see Figure 5.6).

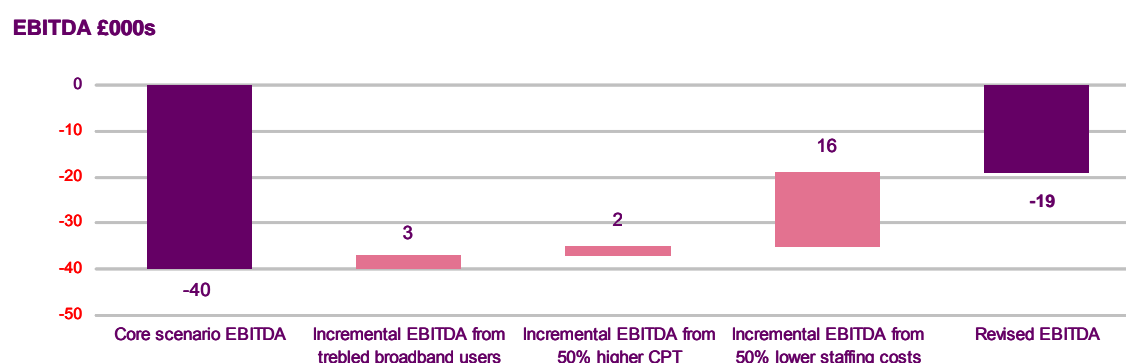
Figure 5.6: User-generated service delivered to a micro community – core scenario results

	Year 3 after digital switchover
Platforms used	Broadband
Population covered	20k
Peak time viewers	-
Viewing share	-
Broadband unique users	1.1k
TV Advertising revenues	-
Broadband advertising revenues	£1.5k
Other revenues	-
Total revenues	£1.5k
Programming costs	-
Distribution costs	£7.6k
Sales and marketing costs	£0.2k
Staffing costs	£33.4k
Total costs	£41.2k
EBITDA	-£39.7k
EBITDA (%)	-2,646%

Source: Spectrum Strategy Consultants

5.22 We tested the scenario for a number of sensitivities, including trebling the number of broadband users, a 50% improvement on advertising rates – measured by Cost Per Thousand exposures (CPT) – and a 50% decrease in staffing costs. While the combined effect of the changes in assumptions lead to an improvement in profitability, the service still generated a loss of £19k in year 3 of operation. It had the effect, however, of halving the funding required to operate the service on a breakeven basis (see Figure 5.7).

Figure 5.7: User-generated service delivered to a micro-community



Source: Spectrum Strategy Consultants

5.23 We also analysed the effect on profitability if the service were delivered over a different combination of platforms. Only the addition of cable distribution had a positive, albeit minimal, effect on profitability, leading to a £1k reduction in year 3 losses on the assumption of zero cable distribution costs. The addition of satellite and DTT distribution increased losses by £489k and £13k in year 3

respectively, as the additional revenues from increased audiences failed to compensate for the large increase in distribution costs. This analysis suggested that broadband offered the best potential to deliver the service cost effectively.

2. Minimal local news service in a dispersed community

5.24 The second scenario we tested was a minimal local news service delivered to a dispersed community over DTT and broadband. A dispersed community could include an ethnic minority community dispersed over a particular geographic area, as well as a rural community, for example. Although this service generated both TV and broadband advertising revenues, they are not sufficient to cover the programming and operational costs of the service and led to a funding gap of £335k in year 3 of operation (see Figure 5.8).

Figure 5.8: Minimal news service delivered to a dispersed community – core scenario results

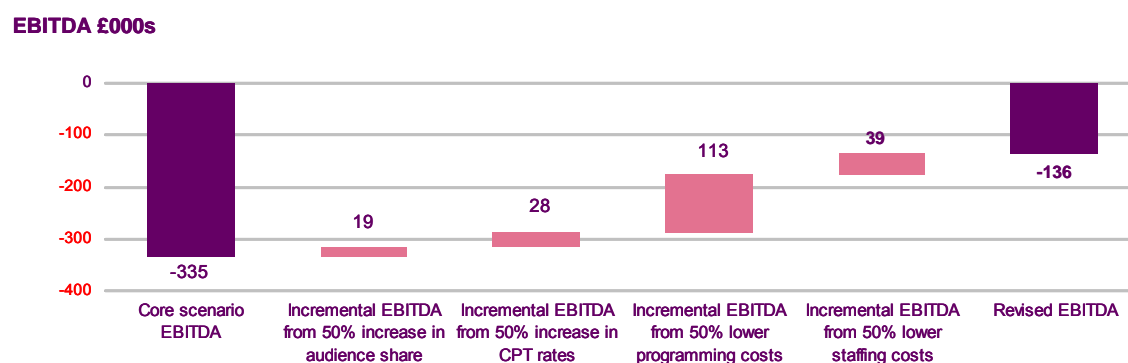
	Year 3 after digital switchover
Platforms used	DTT and broadband
Population covered	60k
Peak time viewers	0.4k
Viewing share	4.8%
Broadband unique users	3k
TV Advertising revenues	£41k
Broadband advertising revenues	£4k
Other revenues	£3k
Total revenues	£49k
Programming costs	£227k
Distribution costs	£71k
Sales and marketing costs	£7k
Staffing costs	£78k
Total costs	£383k
EBITDA	-£335k
EBITDA (%)	-685%

Source: Spectrum Strategy Consultants

5.25 The scenario was tested for a number of sensitivities, including 50% increases in audience levels and CPT rates, as well as a 50% reduction in programming and staffing costs. The combined effect of the changes in assumptions resulted in a loss of £136k in year 3 of operation (see Figure 5.9).

5.26 The service was hence commercially unsustainable. The introduction of programming costs in this scenario meant that the level of funding required to operate the service on a break even basis was considerably higher than in the scenario where only user-generated content was featured on the service.

Figure 5.9: Minimal local news service delivered to a dispersed community



Source: Spectrum Strategy Consultants

5.27 The effect of changes in distribution platform assumptions was not sufficient for the service to become commercially sustainable. The addition of satellite distribution increased losses by £463k in year 3 operation. The removal of DTT distribution led to £25k uplift on profitability in year 3 of operation as the costs of DTT distribution were higher than the incremental advertising revenues associated with the platform.

3. Minimal local news service in an urban and vicinity community

5.28 We also considered a scenario in which a minimal local news service was delivered to an urban and vicinity community using DTT, cable and broadband as distribution platforms. In our model, the service was able to generate revenues of £327k in year 3 of operation but the programming and operational costs were not fully covered and the service generated a funding gap of £134k in year 3 of operation (see Figure 5.10).

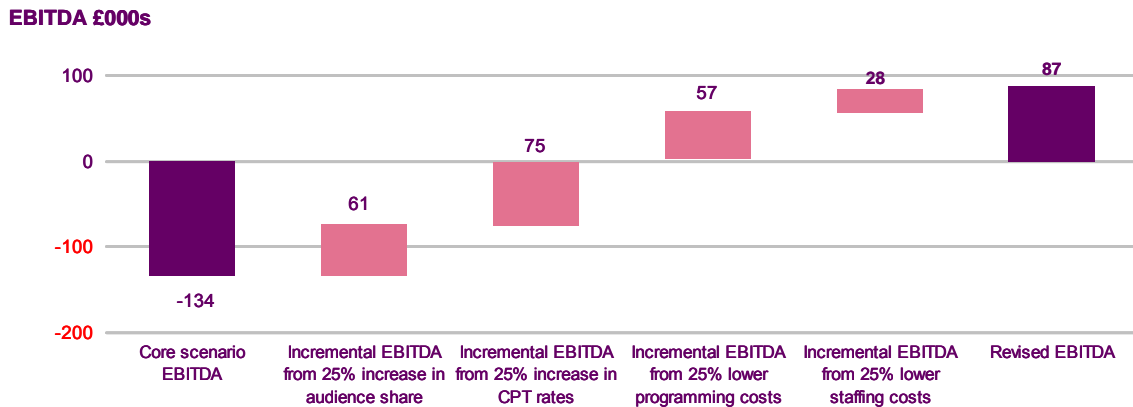
Figure 5.10: Minimal local news service delivered to an urban and vicinity community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, cable and broadband
Population covered	501k
Peak time viewers	2.6k
Viewing share	3.2%
Broadband unique users	28k
TV Advertising revenues	£268k
Broadband advertising revenues	£37k
Other revenues	£21k
Total revenues	£327k
Programming costs	£227k
Distribution costs	£73k
Sales and marketing costs	£49k
Staffing costs	£111k
Total costs	£461k
EBITDA	-£134k
EBITDA (%)	-41%

Source: Spectrum Strategy Consultants

5.29 We found that by varying the revenue and cost assumptions in the model, the service could reach a level of commercial sustainability that the previous two scenarios considered could not. For example, assuming a 25% improvement in audience levels and CPT rates, and a 25% reduction in programming and staffing costs, the service generated a profit of £87k in year 3 of operation (see Figure 5.11).

Figure 5.11: Minimal local news service delivered to an urban and vicinity community



Source: Spectrum Strategy Consultants

5.30 In terms of platform distribution, we found that an addition of satellite distribution increased losses in the core scenario by £316k in year 3 of operation. The removal of DTT and cable also had a negative impact on profitability, increasing losses by £134k and £37k in year 3 of operation respectively. Both DTT and cable distribution were hence important in enabling the service to reach a commercially sustainable level of operation.

4. Minimal local news service in a metropolitan community

5.31 Finally, we considered a scenario in which a minimal local news service was delivered to a metropolitan community using all available distribution platforms – DTT, satellite, cable, DSL and broadband. In our model, the service was profitable, generating revenues of £1.7 million and a profit of £446k in year 3 of operation (see Figure 5.12).

Figure 5.12: Minimal local news service delivered to a metropolitan community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, satellite, cable, TV over DSL and broadband
Population covered	1.5m
Peak time viewers	14k
Viewing share	3.2%
Broadband unique users	84k
TV Advertising revenues	£1,436k
Broadband advertising revenues	£112k
Other revenues	£113k
Total revenues	£1,661k
Programming costs	£227k
Distribution costs	£594k
Sales and marketing costs	£249k
Staffing costs	£145k
Total costs	£1,215k
EBITDA	£446k
EBITDA (%)	27%

Source: Spectrum Strategy Consultants

- 5.32 As the core scenario assumptions resulted in a profit-making operation, we did not test the impact of changes in assumptions for this scenario. It is clear, however, that any additional revenue opportunities as well as potential to reduce programming and operational costs would increase the profitability of the service.
- 5.33 All distribution platforms had a positive impact on enabling the service to reach a profitable level of operation. The removal of satellite and cable distribution led to a reduction in profitability of £43k and £109k respectively. The most notable effect was from removing DTT from distribution – this led to reduction of profitability of £539k in year 3 of operation.

5. Local news and acquired content service in an urban and vicinity community

- 5.34 We then tested the profitability of offering a more comprehensive local news and acquired content service in an urban and vicinity community using DTT, cable and broadband as distribution platforms. In our model, the service was unprofitable in year 3 of operation generating £451k in advertising revenues but operating at a loss of £833k, largely due to high programming costs. The funding needed to provide this level of content at breakeven point was considerably higher than in the previous scenarios (see Figure 5.13).

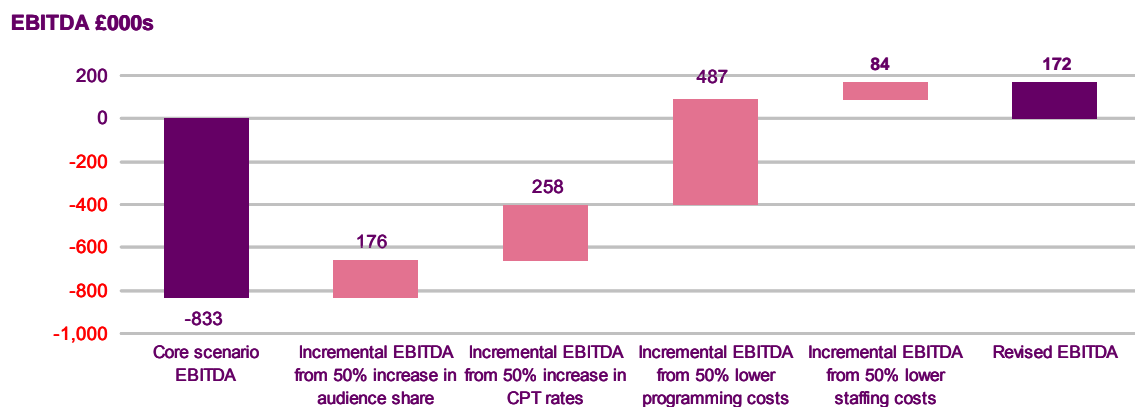
Figure 5.13: Local news and acquired content service delivered to an urban and vicinity community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, cable and broadband
Population covered	501k
Peak time viewers	3.3k
Viewing share	4.0%
Broadband unique users	28k
TV Advertising revenues	£385k
Broadband advertising revenues	£37k
Other revenues	£29k
Total revenues	£451k
Programming costs	£975k
Distribution costs	£73k
Sales and marketing costs	£68k
Staffing costs	£167k
Total costs	£1,284k
EBITDA	-£833k
EBITDA (%)	-185%

Source: Spectrum Strategy Consultants

5.35 The sensitivity analysis suggested that a set of significant changes in revenue and cost assumptions could result in the service’s operating at a commercially sustainable level. Assuming a 50% increase in audience levels and CPT rates, and a 50% decrease in programming and staffing costs, the service returned a profit of £172k in year 3 of operation (see Figure 5.14).

Figure 5.14: Local news and acquired content service delivered to an urban and vicinity community



Source: Spectrum Strategy Consultants

5.36 The removal of DTT and cable as distribution platforms resulted in a negative impact on profitability, increasing incremental losses by £234k and £53k respectively. The addition of satellite distribution also increased the losses of

the operation by £283k as the incremental audience gain failed to compensate for the large additional distribution costs.

6. Local news and acquired content service in a metropolitan community

5.37 In our next core scenario we considered delivering a local news and acquired content service to a metropolitan community using all available distribution platforms. The larger audiences assumed in this scenario resulted in greater advertising revenues than were achieved in the previous scenario – the service generated £2.3 million in revenues in year 3 of operation and a profit of £191k. In our model, therefore, this core scenario was commercially sustainable (see Figure 5.15).

Figure 5.15: Local news and acquired content service delivered to a metropolitan community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, satellite, cable, TV over DSL and broadband
Population covered	1.5m
Peak time viewers	17k
Viewing share	4%
Broadband unique users	84k
TV Advertising revenues	£2,060k
Broadband advertising revenues	£112k
Other revenues	£154k
Total revenues	£2,327k
Programming costs	£975k
Distribution costs	£594k
Sales and marketing costs	£349
Staffing costs	£217k
Total costs	£2,136k
EBITDA	£191k
EBITDA (%)	8%

Source: Spectrum Strategy Consultants

5.38 As before, since the core scenario was a commercially sustainable operation, we did not test the impact of changes in assumption on the service's profitability.

5.39 All distribution platforms were necessary in ensuring the service was profitable but DTT distribution was particularly important for profitability. The removal of cable and satellite distribution reduced the services profitability by £156k and £276k respectively. The removal of DTT, however, had the most marked impact on profitability, leading to incremental losses of £808k in year 3 of operation. Without DTT, the service would not have been able to generate a profit.

7. Local news and originated content in an urban and vicinity community

5.40 Finally, we considered delivering the most comprehensive service tested in the model, namely local news and originated content, to an urban and vicinity

community using DTT, cable and broadband as distribution platforms. In our model, this core scenario was commercially unsustainable. In year 3 of operation, it generated £534k in revenues and operated at a significant loss of £1.7 million. The richness of content provided by the service meant that a much larger investment would be needed to operate the service on a breakeven basis (see Figure 5.16).

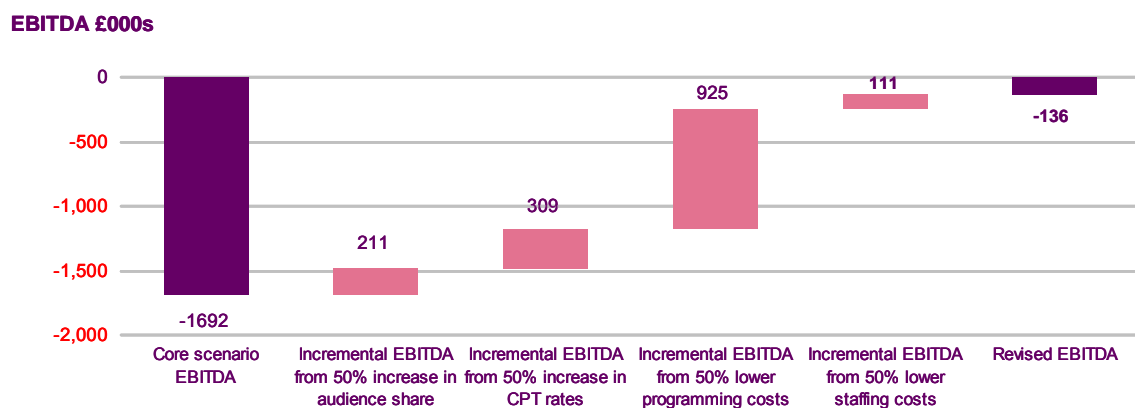
Figure 5.16: Local news and originated content service delivered to an urban and vicinity community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, cable and broadband
Population covered	501k
Peak time viewers	3.9k
Viewing share	4.8%
Broadband unique users	28k
TV Advertising revenues	£462k
Broadband advertising revenues	£37k
Other revenues	£35k
Total revenues	£534k
Programming costs	£1,849k
Distribution costs	£73k
Sales and marketing costs	£80k
Staffing costs	£223
Total costs	£2,225k
EBITDA	-£1,692k
EBITDA (%)	-317%

Source: Spectrum Strategy Consultants

5.41 Changes in revenue and cost assumptions indicated that the service could get close to break-even point but were not sufficient to render the service profitable. For example, a 50% increase in audience levels and CPT rates reduced the service losses by £520k. A 50% reduction in programming and staffing costs reduced losses by a further £1m but the operation still had a funding gap of £136k in year 3 of operation (see Figure 5.17).

Figure 5.17: Local news and originated content service delivered to an urban and vicinity community



Source: Spectrum Strategy Consultants

5.42 As in the previous scenarios considered that were delivered in an urban and vicinity community, the removal of DTT and cable distribution had a negative impact on profitability, leading to incremental losses of £294k and £63k respectively. Satellite distribution was not economically viable due its high costs – the addition of it decreased profitability by a further £187k.

8. Local news and originated content in a metropolitan community

5.43 Our last core scenario considered the profitability of delivering a local news and originated content service in a metropolitan community using all available distribution platforms. In our model, this service generated £2.8 million in revenues in year 3 of operation. The costs of delivering the services, however, were marginally higher at £3.2 million resulting in a loss of £379k. The higher reach area of the service meant that the level of funding support to break even was considerably smaller than when the service was delivered in an urban and vicinity community (see Figure 5.18).

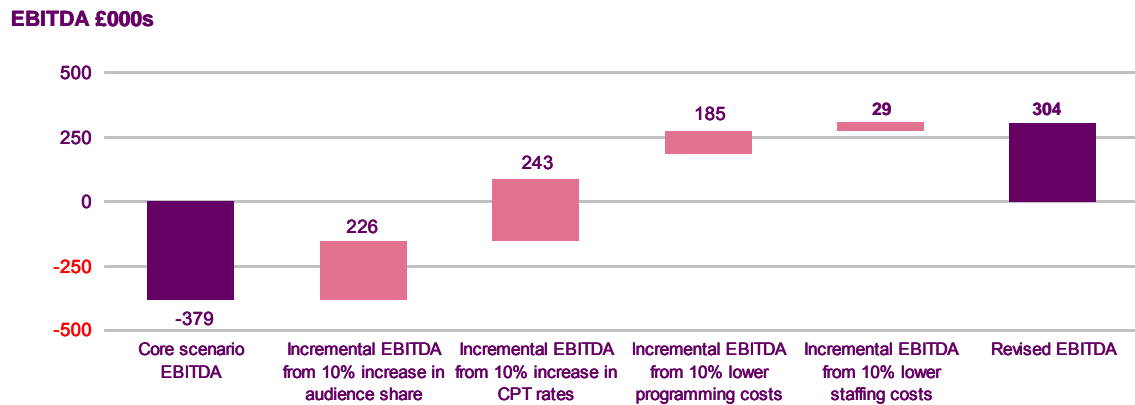
Figure 5.18: Local news and originated content service delivered to a metropolitan community – core scenario results

	Year 3 after digital switchover
Platforms used	DTT, satellite, cable, TV over DSL and broadband
Population covered	1.5m
Peak time viewers	21k
Viewing share	4.8%
Broadband unique users	84k
TV Advertising revenues	£2,472k
Broadband advertising revenues	£112k
Other revenues	£185k
Total revenues	£2,770k
Programming costs	£1,849k
Distribution costs	£594k
Sales and marketing costs	£415k
Staffing costs	£290k
Total costs	£3,148k
EBITDA	-£379k
EBITDA (%)	-14%

Source: Spectrum Strategy Consultants

5.44 The sensitivity analysis of the core scenario indicated that small changes to the revenue and cost assumptions would make this service profitable. For example, a 10% increase in audience levels and CPT rates led to a £469k uplift on profitability while a 10% reduction in programming and staffing costs increased profitability by a further £214k. The combined effect of these changes resulted in a profit of £304k for the service in year 3 of operation (see Figure 5.19).

Figure 5.19: Local news and originated content service delivered to a metropolitan community



Source: Spectrum Strategy Consultants

5.45 The removal of any of DTT, satellite and cable distribution platforms had a negative impact on profitability. Again, distribution over DTT was particularly important for the service’s sustainability – the removal of DTT distribution increased losses by £987k.

Minimum conditions required for the services to reach profitability

5.46 As an additional part of the analysis, we considered the reach and distribution circumstances under which services with different degrees of local content would reach a break-even point.

5.47 In our model, a user-generated service could break even if it were delivered over DTT, cable and broadband to an area with population between 300k and 350k. This corresponds to our urban and vicinity reach category.

5.48 A minimum local news service was profitable in a metropolitan area. Our analysis suggested that it could break even if it were delivered over DTT, cable and broadband to an area with population between 700k and 800k. Again, this corresponds to our urban and vicinity reach category.

5.49 A break even point for a more comprehensive local news and acquired service required distribution over all available platforms – DTT, satellite, cable, DSL and broadband – in an area with population between 1300k and 1400k. This corresponds to our metropolitan reach category.

5.50 Finally, a local news and originated content service could break even if we assume distribution over all available platforms to an area with population between 1700k and 1800k. This also corresponds to our metropolitan reach category.

Summary of findings

5.51 The detailed assessment of the eight core scenarios suggests that a range of local digital content services could be commercially sustainable. In addition, a

range of services could also be supported with help from non-commercial sources of funding. Such sources of funding would be particularly important for services that focus on smaller communities and/or feature user-generated content in a large part of their schedule.

- 5.52 Commercially viable services may only be possible assuming relatively large reach categories, such as urban and vicinity and metropolitan. They are also likely to have limited scope for commissioning high-quality local original content.
- 5.53 Below, we summarise some key findings regarding the role of distribution platforms and the potential size of programming budgets required to deliver different levels of service. We also discuss a number of factors which could offer local digital services opportunities to increase their revenues and generate cost savings.

Role of distribution platforms

- 5.54 For lower reach categories, such as micro community and dispersed community, broadband was the most economical distribution platform. The relatively low audience levels in these reach categories limited the opportunity to generate the level of revenue that would be necessary to support the higher distribution costs associated with DTT or satellite. Cable distribution had a positive impact on profitability, on the assumption that costs of carriage are comparatively low (and could be zero).
- 5.55 Service profitability in higher reach categories, such as urban and vicinity and metropolitan, depended on a wider range of platforms being used to deliver the service. The removal of any platform had a negative effect on profitability suggesting that, in those reach categories, the incremental revenues from increased audience levels associated with each platform more than compensated for the costs of platform distribution.
- 5.56 The removal of DTT distribution in particular had a significant impact on the profitability of services delivered in a metropolitan community suggesting that DTT platform was key in enabling the service to reach a level of commercial sustainability. The removal of DTT distribution had a similar, although less marked, effect in scenarios involving a somewhat smaller urban and vicinity community.

Programming budgets

- 5.57 The programming budgets that were associated with the various services assessed in the model were relatively modest. For example, a local news and acquired content service operating on an 8% profit margin could support a programming budget of around £1 million assuming it was able to generate revenues of around £2.5 million, while a local news and originated content service operating on the same 8% margin could support a programming budget of around £1.8 million assuming its revenues amounted to around £3.5 million.
- 5.58 It was possible, however, to envisage a local service operating on a much lower programming budget. For example, the programming costs associated

with providing first run content for a minimal local news service were assumed to amount to £227k per year. We also assumed that a user-generated content could be obtained at no cost – this has the potential to be an important part of the content mix for local services.

Opportunities for increased revenues and cost savings

- 5.59 There are a number of factors which could influence the potential for local services to increase their revenues, the most notable one of which is through richer, more locally relevant material that audiences would be drawn to. In the model, however, we have focused on the potential impact of three specific scenarios:
- Cross-media ownership;
 - Network affiliation between local services;
 - Partnerships with local public and private organisations.
- 5.60 The opportunities that **cross-media ownership** would present for increasing the awareness and visibility of the service would most likely result in increased viewing for the service, which in turn would strengthen the advertising power of the service and hence its CPT rates. Cross-media ownership would also most likely increase the effectiveness of ad sales and allow the local service to sell more of its ad slots.
- 5.61 Cross-media ownership would offer opportunities for cost savings too, for example, through sharing of resources, including journalist and managerial staff. It could also lead to a reduction in overall marketing costs which were assumed to represent an important and relatively large part of the overall expenditure (assumed in the model to amount to 15% of revenue).
- 5.62 Higher revenues and lower costs that could arise as a result of cross-media ownership could be sufficient to make an otherwise unprofitable service commercially sustainable. For example, assuming a 10% increase in audience levels and CPT rates and a 10% decrease in programming and other operational costs, local news and originated content service delivered in a metropolitan area could move from a loss of £379k in the core scenario to a profit of £278k. Different levels of cost saving could be achieved depending on the specific structure of joint ownership.
- 5.63 The financial performance of a local service could be similarly improved if we assumed that local services operated on a **network affiliation model**. Most importantly, network affiliation would allow independent local services to share the cost of higher quality acquired programming as well as their originated programming. This would have the potential to increase the quality of the service significantly – thus leading to higher audience levels and advertising revenues – even while also reducing each individual operator’s costs. In addition, joint sales of airtime to advertisers would offer local services greater scale and would increase their CPT rates as well as make them more attractive to advertisers.

- 5.64 As in the cross-media ownership example, we tested the potential impact of network affiliation on the profitability of a local news and originated content service delivered in a metropolitan area. We assumed that network affiliation would generate a 10% increase in audience levels and CPT rates (reflecting higher quality programming afforded by a network), a 25% decrease in originated programming costs and a 10% decrease in operational costs. The combined effect of these changes in assumptions takes the service from a £379k loss in the core scenario to a £328k profit.
- 5.65 Finally, local services could benefit from **partnerships with a range of local public and private organisations**. Local authorities, educational institutions and non-governmental organisations could all serve as important commissioners of programmes or providers of free or low cost originated content.
- 5.66 Local services could also benefit from cooperation with colleges and universities which could enable them to gain access to staffing resources. In return, local services would serve to provide important training and act as a point of entry to industry.

Section 6

Options for the future

The role of public policy

- 6.1 Ofcom's PSB Review suggested that local TV could make an important contribution to the delivery of the purposes and characteristics of public service broadcasting. Local services were one of the core elements we proposed for the future model of national and regional programming, including a potential role for a Public Service Publisher (PSP) in providing local content. We recognised the need to carry out more work on the prospects for digital local services, while pointing out general support for our view that innovative local services represented a new and potentially more attractive way of meeting viewer needs than existing regional provision.
- 6.2 Our further work to date supports our initial assessment, that local content and interactive services could deliver distinctive forms of public value in a digital environment. In Section 3 of this report we argued that local services could generate a range of public benefits as the take-up of digital technologies and sophistication of content services increase.
- 6.3 We suggest that the next few years should be a period of experimentation and innovation, characterised by a proliferation of different services using different business models and different distribution platforms. We want, and expect, to see a variety of different providers trialling a range of different approaches using a mix of commercial and public funding, and for other providers to be able to learn from their experiences.
- 6.4 Specifically, we want to see the widespread emergence of services that contribute to the public purposes proposed in Section 3, services that could make a significant contribution to the delivery of public service broadcasting in a digital environment. The Communications Act also sets out a range of goals for any services licensed under the terms of an order from the Secretary of State, including the delivery of social and economic benefits for the people living in the areas covered and the provision of a broader range of content in the area and made about the area.⁵¹
- 6.5 In this section, we begin to address the question of whether any form of public policy intervention might be required to support the development of services that meet public purposes, and what options Government and Ofcom have available to them to achieve this goal.
- 6.6 We use 'intervention' here in a broad sense, to refer to any use of public resources to support the delivery of local video content and interactive services that provide public benefits, whether in the form of local grants, central funding, planned access to spectrum or any other benefit with a public cost. It is important to point out that many of these decisions are ultimately for Government and Parliament to make, not Ofcom. Our role is to advise the

⁵¹ Section 244, Communications Act (2003)

government on the technical and economic issues that will affect the development of local services, to manage the radio spectrum in the most efficient way, and to licence broadcasters within the terms set by Parliament in the Communications Act. The wider policy issues, including (but not limited to) deciding whether a dedicated licensing regime is required for local services, are for Government to take forward, with Ofcom's input where Government would find it useful.

- 6.7 Therefore, in this section our intention is to set out options to inform the Government's deliberations and to stimulate wider debate. We also describe our intended approach to the areas for which Ofcom has direct responsibility, specifically spectrum management and the licensing of existing services.
- 6.8 There are some good arguments – outlined below – to suppose that policy intervention to support the development of local services would not be justified. In this context it would be imperative before any particular form of intervention were introduced to show that:
- Public purposes would not be met without that intervention;
 - Other media – including commercial and community radio, the local and regional press, and local websites – do not adequately meet public purposes, and could not do so more efficiently than local video content and interactive services;
 - Other local media markets would not be unduly adversely affected by policies to support local video content; and
 - The benefits of the proposed intervention outweigh the costs.
- 6.9 Addressing these questions would require significantly more detailed assessment, which lies outside the scope of this initial study. For example, more detailed cost-benefit analysis would be required to determine whether the public benefits of local content are of sufficient magnitude to warrant intervention, and if so which if any of the possible forms of intervention would be merited. In addition the risk of policy failure – where policies fail to secure their intended goal due to their unforeseen consequences – would need to be carefully assessed.
- 6.10 Note that one corollary of our analysis is that intervention to support digital local services is only justified if, and to the extent that, they deliver public benefits. Where services do not deliver demonstrable public benefit, there may be no case for intervention. This may sound obvious but it might require the development of a method for evaluating the public contribution of individual services and ensuring delivery of stated objectives, which in itself could be costly.
- 6.11 One important factor in determining the scale of public benefits of local services, of course, is the number of people likely to watch them and the value they attach to them. Although it is difficult to assess viewers' reactions to services they have never seen, and that may be significantly different from the services that exist today, we believe there would be value in better understanding the reach and impact of existing local services. We will carry

out some further research in this area over the next six months to provide further insight into audience perceptions and use of local services.

Arguments for and against intervention

- 6.12 There are good reasons for arguing that there is no need for further intervention, by Government or Ofcom, to secure our aims. There is already significant activity in this field, with a wide range of providers developing or piloting services, from the BBC and ITV at one extreme to micro-scale community services, with very limited resources, at the other. It is important that any public intervention does not simply replace private sector investment that would come in time through ordinary processes of market development.
- 6.13 From a commercial point of view, there are already very few regulatory barriers to entry into this market – the major constraint on commercial services is simply the extent of audience demand for them. Licences for cable and satellite services are available on demand; there is no requirement for licences for on-demand or internet services; and capacity for digital terrestrial services is already traded openly on the open market (although the supply of spectrum is currently relatively constrained, and frequencies are generally only made available on a nationwide basis).
- 6.14 From a public policy perspective, it can be argued that the right level of activity for supporting local content services is neighbourhood, local authority or regional administrations. Public policy in this area should not be too prescriptive or standardised; we wish to create the conditions for experimentation and innovation, with different solutions tailored to different communities with different requirements. In general, this is most likely to be achieved by local providers working with local agencies and other partners, and, where appropriate, with the input of the community itself.⁵² Many local authorities and Local Strategic Partnerships have already developed online services and are exploring the prospects for services delivered via TV sets, including through partnerships with commercial providers where appropriate. Some central and European funding is available through regeneration initiatives, e-government projects and neighbourhood renewal, but even here the initiative remains with local agencies and service providers, who are closest to the needs of their communities and best placed to derive a return on public investment.
- 6.15 Therefore, given the nascent nature of this market and the number of providers already interested in it, one option is simply to stand back and let the market develop, at least for the next few years. This would avoid the danger of skewing the market for local content by promoting one form of service over another, even inadvertently. It would let the market determine the most attractive and efficient model for the delivery of local content, which under ordinary circumstances would be the most effective way of doing so.
- 6.16 However, there are risks with this approach. This is a rapidly developing area, and we may find that it is too late to intervene effectively if we let a market emerge that does not in practice deliver the kind of public benefits we expect.

⁵² Office of the Deputy Prime Minister, *Citizen Engagement and Public Services: Why Neighbourhoods Matter*, 2005

It seems unlikely that purely market-driven services would deliver the potential public benefits of local content services, **either** because they would not be provided in the communities that are most likely to benefit from them (which are likely to be less well-off communities that are less attractive to advertisers); **or** because they did not provide the right kind of services to deliver those benefits. Many of the potential benefits of local services are social benefits that are unlikely to be taken into account by the market: social cohesion, democratic engagement, better-informed and more active citizens.

- 6.17 By way of illustration, it is difficult to see why commercial providers would invest in services to enable people to take part in local authority consultations, unless the local authority or some other agency paid them to do so. ITV's trials in this area, which offer perhaps the best current model of a purely commercial approach, may provide many benefits to consumers – but they will not deliver many of the potential benefits associated with more cohesive communities and civic renewal, because they are not designed with those ends in mind.
- 6.18 To some extent these problems might be overcome by partnerships between commercial providers and local public agencies, who could fund services and content that would deliver public benefits in their area. However, there is already huge diversity in the provision of local content services across the country at present. Some public agencies (e.g. Yorkshire Forward, Glasgow City Council, One North East) are investing significantly in new services and trialling new approaches. Others are doing relatively little, either because they do not have the resources or they do not attach the same priority to this area. There is similar variation in the quality of the services being provided.
- 6.19 It is likely that leaving public support for local content services entirely to individual local authorities, Local Strategic Partnerships, RDAs or national agencies in Scotland, Wales and Northern Ireland would result in a patchwork of provision across the UK, with no systematic evaluation of alternative approaches and no attempt to fill gaps in provision. We would not expect that every area should have exactly the same service, nor even that every community needs to have a local video content service. But if local services do add public value, social equity might require that there is some attempt to ensure that that value is available across the UK. There may be a case for some kind of central coordinating or funding role so that individual communities and local authorities make decisions about what, if any, services might be appropriate for their area based on equal information and access to resources.
- 6.20 There may therefore be a *prima facie* case for public intervention to support digital local services. Based on the preceding discussion, we suggest that the objectives of any intervention should be to create a framework that facilitates experimentation and innovation in the development of services that are likely to deliver the public purposes of local digital content, and to support the development of those services where the market will not do so and where the public value added by that support reasonably justifies or exceeds its cost.
- 6.21 The next section discusses two possible forms of intervention in the provision of local content: firstly, asking the BBC to deliver services that deliver public purposes, and secondly, seeking to enable independent commercial and

community providers to perform this role. These two options are not mutually exclusive, but it is important to recognise that each is likely to affect the success of the other.

The role of the BBC

- 6.22 One option is to establish the BBC as the sole intervention in local PSB. This approach would not necessarily be incompatible with the development of commercial or community services, but it would start from the assumption that the involvement of the BBC would be sufficient to deliver the range of public purposes set out in Section 3 of this report. The BBC has indicated its willingness to take on new responsibilities for local content, and its current trial in the West Midlands should provide valuable evidence about the technical possibilities and likely audience impact of local services.
- 6.23 Under the currently proposed governance arrangements for the BBC, any new local content service would be subject to a public value test and market impact assessment. If these tests are met, the BBC intends to roll out services across the UK.
- 6.24 There are clear arguments in favour of the BBC taking an active role in local content: it has an extensive news-gathering infrastructure for cost-effective content generation, and a strong brand and capacity to cross-promote to help maximise reach and impact. In addition, the BBC's investment in local services could support content production outside London, helping to ensure the UK's diversity is reflected on screen and in the production industry.
- 6.25 However, the BBC's stated plans have limitations – they are focused on news, will serve relatively large areas (500,000 – 1 million people) and lack many of the interactive services and communications tools that are central elements in the broadband services under development by public agencies and local authorities. Many commercial and community providers are concerned about the impact of the BBC's plans, fearing that it will crowd them out. In addition there may be concerns about plurality in provision of local PSB, although more analysis would be needed to determine whether ensuring plurality in this particular area was worth the public investment that might be required to achieve it.
- 6.26 For these reasons we believe that in addition to a public value test and market impact assessment there should be further debate about the role of the BBC in this emerging area, and possible alternatives to it, before any decision is taken about its future plans. There are five possibilities that we believe need further consideration:
- **BBC as sole intervention** – this approach would ensure delivery of local news efficiently and to a high standard, but might preclude the development of commercial and community alternatives, and the BBC's plans may lack the flexibility required to deliver all the potential public purposes of digital local content;
 - **Local plurality** – BBC carries out its plans and there is additional public support to ensure delivery of local PSB by other providers. This approach secures plurality, but is highly resource-intensive,

and may result in unnecessary duplication of some elements of services;

- **Limited BBC involvement** – the Government could require that the BBC does not intervene in the local arena at all, or is constrained in the extent of its activities. This would maximise opportunity for the market to develop but might sacrifice the public value that could be generated by the BBC's proposals and could jeopardise the equitable delivery of public purposes;
- **Reallocation** – the BBC has earmarked funds in its licence fee bid for local services. Although it has not broken its bid down in detail, we believe that up to £40-50 million per annum could be intended to help develop its local services. Instead of going to the BBC, this new money could be allocated to other providers, possibly via a PSP-style contestable fund. This would help generate innovative thinking about the best ways of delivering public purposes, although it might sacrifice the benefit of access to the BBC's substantial local news-gathering resources;
- **Partnerships** – ways for the BBC to work with other providers could be explored and written into the new Charter and service licences. The BBC could take an enabling role, for example by syndicating its editorial content, providing a platform and distribution capacity for content commissioned from independent providers, and/or offering technical training to services operated and funded independently. These approaches might not lead to an increase in plurality, since it might be difficult for any other non-partner providers to compete with partnerships between the BBC and other local media. However, a partnership approach would enable the development of a wider range of services than the BBC currently intends, while retaining the benefits of its involvement. Partnerships would need to be carefully structured to ensure that responsibility and authority for the delivery of services lay with local partners, who are likely to be closest to their communities' specific needs.

The role of other providers

- 6.27 If it were decided that the BBC's plans were not sufficient to meet all the public purposes of local content, the alternative option would be to intervene to secure the development of independent services providing public value, whether provided by commercial and community providers. There are a number of organisations already providing local services, or who would be interested in doing so, and interest is likely to grow as this sector develops and the potential of digital technologies for delivering local content continues to grow.
- 6.28 Support for other providers could have a number of objectives. It could seek to ensure a flow of new ideas and creative thinking about how best to meet local communities' needs in this rapidly changing environment. It could provide competition for the BBC and ensure plurality of voice at local level. And it could be designed to ensure that local services were flexible and responsive to each community's particular needs, in a way that the BBC's approach (which will require a certain level of centralisation to ensure efficiency) might not find easy to deliver.

6.29 A number of policy levers are, or could become, available to seek to achieve these objectives, which are set out in Figure 6.1, along with a short discussion of their advantages and limitations.

Figure 6.1: Possible policy levers to secure the public purposes of local content services

Policy option	Issues to consider
Local funding by local authorities, RDAs or national development bodies	<ul style="list-style-type: none"> • Likely to have significant role to play in funding • Legal constraints on extent to which local authorities can hold broadcasting licences • Most appropriate role could be funding particular kinds of content and ensuring local people are involved in the design of services • Potential concern about political control of local media and impact on plurality
Central facilitation through knowledge-sharing	<ul style="list-style-type: none"> • Central government could have role in disseminating best practice and encouraging sharing of expertise • Mirrors approach taken by some e-government initiatives • But does not in itself provide funding or any other support for local services
Direct funding through a Community Media Fund	<ul style="list-style-type: none"> • Modelled on Community Radio Fund, although would require much greater level of funding • Provisions exist in Communications Act, but only for digital terrestrial services licensed under the terms of an order by the Secretary of State • Broadband services would be excluded
Contestable funding by a Public Service Publisher	<ul style="list-style-type: none"> • Platform-neutral model • Could be used to direct resources at areas of greatest need, or provide seedcorn funding for innovative services • Could also cater for ethnic, linguistic or other minorities
Licence benefits (must-carry provisions on cable or due prominence on electronic programme guides)	<ul style="list-style-type: none"> • May not be worth much – initial analysis suggests c. £100,000 pa to a service delivered to a target audience of around 500,000 people • Indirect form of support – difficult to assess whether benefits really outweigh costs
Planned access to spectrum	<ul style="list-style-type: none"> • Covered in detail below

6.30 It is important to recognise that any form of support additional to the BBC's involvement – whether in the form of direct funding, licence benefits or access to spectrum – could have a significant public cost. As noted above, more

detailed cost-benefit analysis would be required to determine whether any of these forms of intervention were justified, and what the correct mix of BBC investment and other kinds of public support should be. In addition, the potential impact of any intervention on existing markets – particularly local radio, the local and regional press and local websites – and any potential state aid issues would also need to be assessed.

The management of spectrum

- 6.31 Digital terrestrial television offers limited interactivity and on-demand capability. It is therefore constrained in its ability to contribute to the public purposes of local content, many of which – especially delivery of enhanced services, and engagement and participation – rely on the ability of users to interact with services and tailor them to their own needs.
- 6.32 Nonetheless the digital terrestrial platform is currently, and for a while is likely to remain, the only widely taken-up free-to-air broadcast platform. Our economic analysis established that access to the digital terrestrial platform would enhance the viability of local content services in urban and metropolitan areas. To the extent that local content delivers public value, it is important to explore ways of making services available on the widest possible range of platforms; and the digital terrestrial platform is the only platform for which licences would apply if the Government chose to issue a licensing order under Section 244 of the 2003 Communications Act.
- 6.33 However, our conclusion that local content services can make a contribution to public purposes does not automatically make it the best possible use for radio spectrum. Ofcom has a duty to ensure the optimal use of the spectrum, which is and will remain a relatively scarce resource (compared to satellite capacity or bandwidth for broadband services). Digital switchover will release a large amount of spectrum in the ultra high frequency (UHF) band and there are likely to be a wide range of competing uses for this spectrum, including local TV. There are also questions to be resolved about the terms on which spectrum might be made available.
- 6.34 In order to resolve these issues as they relate to local TV, we need to determine more generally how the spectrum released by digital switchover should be awarded. This is a major process which is only just beginning. In November 2005 Ofcom launched its Digital Dividend Review, a major programme of economic, technical and market analysis to examine the full range of options arising from the release of spectrum afforded by the digital switchover programme, which we will carry out over the next year.⁵³ In addition, the outcomes of the Regional Radio Conference (RRC) in 2006 could affect both the amount of released spectrum and its potential uses.
- 6.35 As part of the Digital Dividend Review, we will evaluate three possible approaches to making spectrum available for digital local TV. First, we could make no special provision for local services, allowing this use to compete with all other uses for access to spectrum. Our and Government's view is that generally the best way to achieve the optimal use of spectrum is through the

⁵³ See www.ofcom.org.uk/media/news/2005/11/nr_20051117

use of market mechanisms, which we believe are most likely to identify the highest value uses of the spectrum.⁵⁴ Public agencies could subsidise bids for spectrum where they determine that doing so is an effective use of public resources.

- 6.36 However we recognise the need to consider how the social gain offered by different uses of spectrum is captured within the assessment of their economic value, and Ofcom has indicated its intention to take into account any relevant public policy issues in making decisions about spectrum allocation.
- 6.37 A second approach would be to decide to allocate spectrum to digital local services and ask local operators to bid for this capacity on a competitive basis in each area, with licences awarded to the highest bidder. The licences could include some basic content requirements to ensure that services help to deliver at least some of the public purposes of local content.
- 6.38 Finally, we could decide to allocate spectrum only to digital local services in receipt of other forms of public support, such as public funding, or to services provided by the BBC, a PSP or an alternative public service provider. This approach would have the advantage of ensuring that our policy was working in the same direction as, and not contrary to, that of other public bodies. However it might prevent commercial operators from entering the market, with potentially negative impacts on competition and innovation.
- 6.39 We will assess any potential basis for intervention in the allocation of spectrum as part of the work to be carried out under the auspices of the Digital Dividend Review. If we were to implement either of the second two alternatives it would be necessary to provide evidence to support the conclusion that digital local TV is an efficient use of this spectrum. This requires a more comprehensive assessment of the costs and benefits of intervention, taking into account the social gain and economic value offered by alternative uses of spectrum. If spectrum were to be reserved for local services, a dedicated licensing regime would probably be required, with the Secretary of State for Culture Media and Sport issuing an order under section 244 of the Communications Act 2003.
- 6.40 It is important to note that whatever policy Ofcom adopts on the release of spectrum after switchover, we would expect the value of any spectrum awarded to be made explicit and realised, although it is difficult to predict at this stage what that value is likely to be. Spectrum is a valuable public resource, and it must be used efficiently. This is most likely to be achieved by pricing access to it, either through market mechanisms or by reference to the estimated value of the spectrum for other uses, so that users have the right incentives when deciding whether and how much to use it.
- 6.41 In the case of local TV there are several particular reasons for not making spectrum freely available:

⁵⁴ Ofcom, *Spectrum Framework Review*, 2004; speech by the Secretary of State for Culture Media and Sport, Royal Television Society, 2005

- Free access to spectrum distorts incentives to providers, by not reflecting the true costs of DTT distribution and making it unduly attractive compared to other forms of provision;
- Free spectrum is an inefficient, opaque form of public support which lacks accountability because it is difficult to monitor whether the value of that spectrum is proportionate to the public benefits derived from its use;
- Public investment in the form of free spectrum is more difficult to realise and reallocate if more effective uses of public resources become apparent. For example, suppose the public value of local content merited a public investment of £5 million per annum in local services. If that investment were entirely in the form of free spectrum, it would be difficult to redeploy that investment if – for example – the creation of a local broadband network turned out subsequently to be a more effective use of public resources.

Technical alternatives

6.42 Although it is too soon to come to a final view on the various options which may provide access to spectrum for local services on DTT, we can evaluate some of the technical alternatives, which will help to determine the nature and amount of spectrum that would be required for local TV.

6.43 Currently, three technical alternatives have been identified for the delivery of local TV on DTT:

- use of one or more cleared channels in the released spectrum;
- use of interleaved spectrum; and
- capacity on existing multiplexes.

6.44 **Cleared channels:** it is proposed that 14 UHF channels⁵⁵ (eight in the middle and six at the top of the UHF band) will be cleared for re-use by new services as part of the switchover process. These cleared channels are likely to have a high value, with a range of service providers expected to express interest in spectrum in this area. To the extent that local content providers have the resources to bid for the cleared spectrum (whether public or private investment) it is possible for them to prepare and bid for this spectrum in a market-based process.

6.45 **Interleaved spectrum:** the remaining 32 UHF channels will be retained for use by the digital terrestrial broadcasters to transmit the six digital terrestrial multiplexes. Whilst it is believed that there is only sufficient spectrum available within these 32 channels for six national multiplexes, this assignment will also result in some 'interleaved' capacity being available at the majority of transmitter sites around the UK – that is, unused spectrum in which a frequency used by a transmitter in one part of the country is

⁵⁵ The UHF band is divided up into 48 channels. Two of these (channels 36 & 38) are not used for broadcasting. The remaining 46 channels are assigned to the analogue and digital broadcasters using an interleaved assignment pattern. The remaining interleaved capacity is currently used for Programme Making and Special Events

effectively unoccupied outside the range of that transmitter in other parts of the country. There are likely to be fewer competing uses for this interleaved spectrum than for the cleared channels due to the patchwork availability of capacity across the UK and the need to ensure that any usage does not affect the overall coverage of the main DTT services.

- 6.46 Our technical assessment of the potential for local TV in the interleaved spectrum – available on Ofcom’s website as Annex C to this report – suggests that a single multiplex for local services in the interleaved spectrum could deliver at least one service, usually with an in-group frequency, to around 65% of the UK. This would include most of the UK’s major towns and cities.
- 6.47 However the interleaved spectrum is also currently licensed to a range of uses under the general category of Programme Making and Special Events (PMSE), mainly consisting of radio microphones and talk-back systems. One task that we will take forward shortly is to assess whether the use of the interleaved spectrum for additional DTT services is compatible with the requirements of PMSE users. In addition to the continued use of the interleaved spectrum by PMSE users any spare spectrum could also be of interest to commercial DTT broadcasters for a limited capacity multiplex in a number of regions.
- 6.48 Further work is therefore required to establish whether local TV could co-exist with other users in the interleaved spectrum, the relative value of alternative uses (including their respective public benefits), and how rights to the interleaved spectrum should be allocated and awarded. This will be carried out as part of Ofcom’s Digital Dividend Review over the next year.
- 6.49 **Capacity on existing multiplexes:** further capacity on the existing six multiplexes is likely to become available at switchover due to the likely adoption by four multiplexes – BBC Multiplexes 1 & B and National Grid Wireless (NGW) Multiplexes C & D – of a higher capacity transmission mode at switchover. Further capacity may also become available as compression technologies improve. NGW has recently auctioned several new channel slots which became available over the course of 2005 due to the upgrading of NGW’s coding equipment.
- 6.50 Local service providers – whether public or private – are already able to bid for capacity as it becomes available, if they have the resources to do so. Similarly, they would be able to bid for any further capacity that becomes available at switchover. There may be practical challenges for independent local operators to coordinate a bid for a nationwide channel, but these challenges should not be insurmountable.
- 6.51 If operators were able to secure such a channel for local TV services we believe that it would be technically possible to develop a system that allows different local operators to deliver a service via a single UK-wide channel (the ‘add/drop’ proposal, in which local operators ‘drop out’ of the national network channel to ‘add in’ their own local service). This approach does have some technical difficulties, however, related to the provision of Service Information for the local ‘add in’ channels. Overcoming these challenges would add

significantly to local TV operators' costs, and may render this approach uneconomic.

- 6.52 One related option is to dedicate capacity for local TV services on one or more of the BBC's PSB multiplexes. Add/drop technology could allow individual local services to be colocated with PSB services on the UK's main transmitters and relays, ensuring that viewers in almost all parts of the UK would be able to receive their own local service.
- 6.53 From a local TV operator's perspective, this approach is most attractive, as it would allow access to DTT capacity without the need or expense of bidding for capacity on the open market. It would provide near-universal coverage, in-group frequencies and no need for viewers to re-align or buy new aerials to receive the service.
- 6.54 However it also would come at a significant cost, including the engineering cost of the required upgrades to the transmission infrastructure, the cost of distribution on the main transmitters and relays, and the opportunity cost represented by the loss of capacity for other UK-wide services. In many cases, single transmitters serve very large areas (such as Winter Hill in the north west of England or Crystal Palace in London), meaning that any service carried on these (and their dependent relays) would cover a population of up to 8 million viewers. Capacity on several or all of the PSB multiplexes would therefore be required to deliver different services to different sub-sets of the full transmission area. This would, of course, increase the opportunity costs substantially.
- 6.55 Ultimately it is for Government, Ofcom and the BBC to determine whether this would be an effective use of capacity on the BBC's multiplexes, but it seems unlikely that local services – at least in the foreseeable future – would develop sufficient coverage, reach and impact to justify this level of public investment.
- 6.56 In summary, it seems that the interleaved spectrum may offer the most effective form of access to spectrum for local services, but local operators or networks of operators may also wish to consider bidding for nationwide capacity using the add/drop approach.
- 6.57 We recognise that there may be challenges for local TV operators in coordinating a bid for spectrum, resulting from the fragmentation of the local TV market. There is a risk that even if independent local operators could make the best use of the spectrum and could afford to make the highest bid for it, it might prove difficult for such operators (including operators who may not yet exist) to mount such an aggregated bid. We will therefore seek to ensure that at least some of the spectrum available after switchover will be auctioned in a way that does not unduly prevent or disadvantage participation in that auction by independent local TV operators. Commercial operators could then bid for spectrum if they have the resources to do so, as they can bid for multiplex capacity at the moment. It would also be open to central, regional or local government agencies to subsidise spectrum bids to support local services that provide public value, if that were deemed to be the most effective use of public resources.

Interim arrangements for RSL operators

- 6.58 Existing Restricted Service Licences (RSLs) for local TV services broadcasting in analogue expire in June 2007, ahead of digital switchover between 2008 and 2012. There is no implied continuation from the RSL regime to any potential digital alternative.
- 6.59 Nonetheless existing operators are going concerns with operations in place and services on air. Understandably, they are keen to understand the implications of any future digital licensing regime and of the options for digital terrestrial transmission, to help them plan effectively and invest for the future. Unfortunately, for reasons described above, it is impossible to provide certainty on whether any spectrum can be reserved for local services for at least another year.
- 6.60 From our perspective, if digital spectrum is ultimately available for local services, the expiry of the RSLs represents an undesirable break in services that might be able to secure licences in any future digital local regime.
- 6.61 Therefore we will offer the existing RSL operators the option to extend their licences until the start of the switchover period in their region, notwithstanding Ofcom's ability to terminate the licences at any time with six months' notice. The frequencies currently used by the RSLs will not be required for any other purpose until switchover and the additional extension to their licences will enable them to stay on air hopefully until they have more clarity about what options will be open to them in a digital environment.
- 6.62 However, we do not propose to offer existing operators preferential rights to digital licences, even if spectrum is available and the Government decides to make provision for a digital licensing regime. Incumbent operators, whose licences have already been extended significantly beyond their original duration, should not have automatic entitlements over other providers who may wish to compete to run digital terrestrial services in particular areas.
- 6.63 Similarly, we are currently of the view that it is not appropriate to provide free frequencies to RSLs to allow them to simulcast in digital in the run-up to switchover. It would be wrong to create an expectation of automatic digital licences for incumbents – whether amongst existing operators or potential new entrants.
- 6.64 It is important to note that digital switchover is not a prerequisite for local operators to be able develop digital services. As noted above, if local TV operators are in a position to bid for capacity on the existing multiplexes as and when it becomes available, there is nothing to prevent them doing so if that represents a cost-effective route to audiences for them. A single provider (or a coalition of operators) could bid for a channel on one of the existing commercial multiplexes, and then rent out space to different providers using add/drop technology. Local operators are also free to develop satellite, cable and broadband services and several have already gone down this route to give themselves both an analogue and a digital presence.

- 6.65 However, if spectrum is to be reserved for digital local services after switchover, it may be possible to enable one or two trials of digital services in selected areas to test the capabilities and technical challenges of digital transmission. This may provide both Ofcom and operators with useful information about signal strength, effectiveness, interactive capability and so on. Suitable frequencies may be available in several areas, but we believe this possibility should not be explored further until it is clear that spectrum will be available for local TV after switchover. We would expect operators in the chosen area to share the costs of any trial.

A timeline for the next two years

- 6.66 There are a number of parallel developments which will help inform Government's thinking and our planning over the next few years. The BBC's pilot will take place over the next nine months, which will provide useful insight into audience reactions and preferences for local content. In 2006 we will carry out the Digital Dividend Review, which will explore the options for the spectrum released by digital switchover and consider the case for intervening in the allocation of that spectrum. The Secretary of State may wish to consider using the provisions in the Communications Act to create a new licence category of local television services, taking into account the findings of this project, the Digital Dividend Review, the BBC's pilot, and the associated public value test and market impact assessment.
- 6.67 We believe it would be useful to set out a timetable for future work on local content services, to help inform current and potential local operators' planning. Although several of these decisions are a matter for the Secretary of State, one possible plan for the next two years would be as follows:
- Ofcom offers opportunity to extend licences to current holders of local RSLs: early 2006
 - Ofcom carries out further research into audience perceptions and use of existing local content services: Jan-Jun 2006
 - BBC carries out West Midlands pilot: Dec 2005 – Aug 2006
 - Public value test and market impact assessment of BBC proposals: Aug-Oct 2006
 - Ofcom carries out Digital Dividend Review and advises on availability of spectrum for local services: Jan-Dec 2006
 - Government assesses policy options and considers whether and how to support local services on all digital platforms: Jan-Dec 2006
- There are a number of possible platform solutions to local services. One of those might be for the government to establish a local TV licensing regime for DTT. If this is its preferred solution, then a number of further steps would be required. We suggest one possible timetable could be as follows:
 - If required, Government consults on order for local TV licensing regime for digital terrestrial services: early 2007

- If required, Ofcom develops licensing regime according to terms of Government order and consults on spectrum allocation process for local digital terrestrial services: first half 2007
- If required and where appropriate, first DTT local licences advertised and awarded in selected areas: second half 2007

6.68 We believe that this schedule would strike the right balance between making decisions in time to derive full benefit from the opportunities of any digital regime, and ensuring that those decisions are based on solid evidence and with full understanding of their costs and benefits.

6.69 Of course, outside the specific contexts of BBC activity and licences on DTT, we anticipate that development of local content services will continue strongly throughout this period and beyond. We look forward to further innovation and experimentation and intend to contribute fully to the ongoing debate about how best the public purposes of local content should be secured in a digital environment.

Annex A

Overview of current Restricted Service Licence holders

A.1 The following table provides a short summary of the status and content offerings of existing Restricted Service Licence (RSL) holders operating local TV services.

Owner/Licensee	Area	Notes
Capital TV	Cardiff	Commercial model, but with limited output so far. Simulcast on internet. News is provided on rolling text captions, together with “what’s on” guide. About an hour or so of original programming per week – usually coverage of local events (e.g. visit of HMS Cardiff, local music festivals etc.) or films by media students. The rest of the schedule is given to QVC, Sky News, acquired programming (including documentaries, The Lucy Show, Bonanza), plus 2-3 classic movies a day.
Channel M	Manchester	Commercial, and arguably the most ambitious RSL. Backed by Guardian Media Group and linked to CHUM TV (owners of City TV Toronto). Local output is based around a 30-minute nightly news programme transmitted at 5pm and repeated at 5.30pm, 6pm and 6.30pm. This is supplemented by network-standard acquisitions (Euro News; Fashion TV; entertainment programmes etc), much sourced from CHUM. A big expansion of local news, sport and entertainment output is planned. Channel M is also broadcast on ntl’s cable platform, and is planning to go on satellite. Guardian Group has said it is committed to supporting the channel for the long term.
City Broadcasting	Carlisle	Not currently on air, but comes and goes. Commercial low-cost model, broadcasting on odd days or odd weeks – depending on calendar events, such as new academic year (with links to Cumbria Institute for the Arts). Hoping to foster links to local authority before expanding transmission further.

Owner/Licensee	Area	Notes
City Broadcasting	Teesside	Commercial model. Began test transmissions in August 2005. Frequency is out of group, but provides coverage of Middlesbrough. Very much a trial service at this stage. Transmission will be “occasional days,” with further tests in 2006.
Middlesex Broadcasting (MATV)	Leicester	Commercial. Also on ntl cable. Channel is targeted at Leicester’s Asian community, and runs news, current affairs and discussion programmes. Half hour news is not Asian-specific and is well received. Overall, transmits an 8 hours-a-day schedule, repeated on a loop. 40% locally produced – includes news and discussion programmes (in English, Hindi, Gujarati); arts; quiz shows; entertainment; cookery and a situation comedy. Other 60% is acquired programming from South Asia.
North West TV (Channel 9)	Coleraine, Derry, Limavady	Commercial. The company runs a single service across three contiguous channels in Northern Ireland. It is an out of group frequency for Ulster – but is in -group for nearby RTE transmitter (Republic of Ireland). The ability to share programme output among all three channels makes the group self-supporting. Output is based on news, current affairs and discussion programmes. Also do local pop entertainment with texting. 3.5 to 4 hours of original programming a day.
Northern Visions	Belfast	Operates as a co-operative business, with a community ethos and provides training, resources and services for volunteers. Attracts public funding and grant aid. Runs a charitable trust to encourage a “voice for the marginalised” through open access programming. Output is dominated by repeated programming from the (now extensive) archive, but with new programmes inserted from 5pm each day as available (aim for 1-2 hours a day).
Six TV (Milestone)	Oxford	Commercial model. Up to three hours of new factual programming a week (inc. news headlines and a weekly magazine) plus “advertisement features”. Remaining daily output is re-transmitted library material; pop videos; and three hours of Sky News. Employs 3 full-time editorial staff across both outlets (Oxford and Southampton) plus freelance staff. Milestone also holds licences for Portsmouth and Reading (although these are not on air).
Six TV (Milestone)	Southampton	As Oxford.

Owner/Licensee	Area	Notes
Solent TV	Isle of Wight	Community, not-for-profit. Planning to go on Sky satellite platform. Also on-demand via web. Entirely funded by local interest groups, educational establishments, community charities and so on. Provides hourly news bulletins, two half hour news programmes a day, discussion programmes, open access programmes, and sport (especially speedway). Remaining air time is community pin-board (text – 2 hours daily), acquired generic documentaries and Sky News (3 hours per day).
Thistle Broadcasting	Lanarkshire	Recently folded, citing high contract charges for ntl access. Commercial model.
TV York	York	Commercial model showing inexpensive local programming, when on air – the service is not transmitting at the time of writing. Content includes live sports programming; studio-based children’s programmes; a teenage programme, news and current affairs. Two hours per day of original programming. Uses student and volunteer workforce. Also runs QVC and Sky News.

Annex B

Findings of economic analysis

- B.1 Independent report by Spectrum Strategy Consultants, published separately on Ofcom's website.

Annex C

Technical options in the interleaved spectrum

- C.1 Independent report by Crown Castle, published separately on Ofcom's website.