

# Connecting Communities

The impact of broadband on communities in the UK and its implications for Australia



A White Paper by Dr Tim Williams

February 2011





# Connecting Communities

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## A WORD FROM HUAWEI AUSTRALIA

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There has been no lack of debate regarding broadband in Australia over the past five years. An area which was once the realm of engineers and technologists, telecommunications has now come to the fore as an important and vital part of the nation's fabric, a foundation for both economic and social prosperity. The broadband debate shows no signs of subsiding. It has become abundantly clear that broadband has become the 'new utility' of the 21st century.

This ground breaking White Paper by Dr Tim Williams, *Connecting Communities: The impact and benefits of broadband in the UK and the implications for Australia*, offers compelling real-life evidence of the impact of broadband – on public services, democratic activity, and on communities themselves.

For the past five years Huawei has been working with BT delivering highspeed broadband infrastructure across the United Kingdom. Through our work in the UK we understand that it is one thing to build a network, and it is another to deliver a 'networked nation'. This paper demonstrates the impact of the UK experience, offers real-world examples of the benefits of broadband, and presents ideas and suggestions to deliver a 'networked society'.

At Huawei, our vision is *Enriching Life Through Communications*. It's a neat fit with the findings of this report, independently researched and compiled by Dr Williams. The White Paper was commissioned by Huawei to bring a new body of evidence to Australia's broadband debate, in the hope that Australia is well prepared for a future which is increasingly tied to broadband.

We hope that this White Paper promotes and inspires engagement and discourse between Australian businesses, industry groups, Government and, of course, communities themselves.



**Jeremy Mitchell**  
Director, Government and  
Public Affairs  
Huawei Australia

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Sydney  
Level 5, Tower A  
799 Pacific Highway  
Chatswood NSW  
Australia 2067  
T 02 9928 3888  
F 02 9411 8533

Melbourne  
Level 24, North Tower  
459 Collins Street  
Melbourne VIC  
Australia 3000  
T 03 8610 0600  
F 03 9621 1575  
[www.huawei.com.au](http://www.huawei.com.au)

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([www.ministryofdesign.co.uk](http://www.ministryofdesign.co.uk))

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# Connecting Communities

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## EXECUTIVE SUMMARY

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*'The full value of broadband includes outcomes around an educated citizenship, an informed democracy, cultural understanding, community and inclusion, social capital, resilience and trust.'*

**UK Broadband Stakeholders' Group [Ref. 1]**

*'Talking to a doctor on screen? Just the same as being in room with them. Better, I felt I had more time with the consultant in Aberdeen than if I'd gone there.'*

**Telehealth patient [Ref. 2]**

*'Communities and citizens that lack high speed broadband access are at a deficit in comparison to their peers.'*

**London School of Economics [Ref. 3]**

*'We need to make sure that people aren't left behind as more and more services move online.'*

**David Cameron, UK Prime Minister [Ref. 4]**

## Citizenship in the era of high speed broadband

1. *Connecting Communities* is an independent review of the impact of broadband on communities in Britain and its implications for Australia. Commissioned by Huawei Australia and undertaken by former UK government advisor Dr Tim Williams, the report is for non-techies by a non-techie. Fast broadband and its impact are too significant to be left to geeks and engineers.
2. The report celebrates what people and communities do with broadband but focuses on two key UK agendas with relevance for Australia.
3. One is digital inclusion. The second is how ever-faster broadband is improving public service outcomes and the relationship between citizens and governments. The report shows the advantages and necessity in the modern world of a national broadband network with sufficient bandwidth. It is about citizenship for all in the digital era as it moves to highspeed broadband.
4. The report identifies significant benefits of ever faster broadband for UK communities:
  - *In health:* telehealth is saving lives now in remote communities in Scotland.
  - *In the care of the elderly:* telecare is now enabling 1.7 million to stay in their communities, lead independent and sociable lives, making huge savings – and strengthening family cohesion.
  - *In the environment:* tele-conferencing and related home-working are already reducing emissions and congestion – and supporting greater community involvement.
  - *In education:* results improved by two grades and hard to reach kids got switched on – especially if they



had access to devices at home and school. Education is being transformed.

- *Older, disabled, the isolated*: all report improved well being from tele-care and greater connectivity, speaking to long-lost friends and family on Skype, getting involved in communities online.
- *Public service efficiencies*: the digitisation of X-rays is saving money and lives; in Wales 22 local authorities and all public services are sharing one network, saving millions, improving quality; NHC Choices, a Facebook for health advice got 20 million hits in the severe 2010 winter, saving the NHS £44 million; a whole education service has enabled parents to apply for schoolplaces online, reducing costs, and disagreements.
- *Public servants and politicians*: are having to be more responsive, more immediately because of the instantaneous interactivity of fast broadband – and this is empowering people (and different kinds of people) too busy, too private or too remote to go to face to face meetings.

The report concludes that as bandwidth and speed increase such benefits will also increase.

## UK Political Consensus

5. These benefits bring political consensus in the UK – the most active online population in Europe – in support of ‘superfast broadband’. Communities without it – particularly in remote areas – are vigorously campaigning for it to come faster. They don’t wish to be left behind.
6. The new government wants to complete the UK ‘superfast’ broadband network faster than planned as one of its ‘top priorities’. Previously two thirds of the UK population were to access broadband speeds at home of 50+ Megabits per second (Mbps) by 2014.
7. The government is working with campaigning communities and companies like BT to reach that ‘final third’ quicker. It sees in local campaigns an example of its ‘Big Society’ where communities take more responsibility to solve problems – and it sees superfast broadband as strengthening those communities. It’s not hard to see why.
8. However, ten million Brits are not online. The report highlights efforts to ‘digitally include’ those experiencing

multiple deprivation, lacking skills or confidence to explore new media or living in remote locations.

## Digital divides and future public services

9. This digital divide raises urgent questions about how public services, which in England already provide 90% of services online and which government wants to become ‘**digital by default**’, are able to engage and serve citizens equally. In the end fast broadband isn’t about technology, pipes in the dirt, downloading Spotify or dating online. It’s about citizenship in the networked nation.
10. Too much of the broadband debate has been on costs per metre and lengths of fibre when the real goal must be *use by people*. The report agrees with academics from Queensland University of Technology that ‘*a pre requisite for inclusion is access but the use and exploitation of networks also requires specific skills, literacies, information and knowledge*’. The building of a ‘network’ is essential but the real prize is a networked society. That requires a national commitment to digital inclusion.

## Implications and recommendations for Australia: ensuring a bigger legacy

11. This moment of fast broadband is transformational for Australia, with more far reaching potential for reducing the ‘tyranny of distance’ geographically and socially than the UK. The report suggests that if the investment is significant so is the return, for the nation and not just Treasury, for people not just plumbing. The dangers of a divided society with differential access to modern public services *and* bandwidth needs to be avoided.
12. The great news for Australia? The lesson and warning from Britain is that you cannot build a networked society without a national broadband network of sufficient bandwidth. Australia’s building one.
13. Further good news: the many digital inclusion initiatives underway throughout Australia, and community activity on which to build, remains stronger here than in Britain. But some are facing acute challenges in indigenous communities and others.

The challenge is one of focus and coordination – and enthusing the nation as a whole about the possibilities as well as the necessity of fast broadband.

## Recommendations include:

- **Establish a formal national survey** into current patterns of broadband use by individuals and diverse communities
- **Appointment of a National Digital Champion** by government – a distinguished lay enthusiast drawn from outside politics and the industry to help galvanise enthusiasm
- **A network of local and sector digital champions**
- **Set a target for all to be digitally literate by 2020 and establish the duty to draw up a digital participation plan** by all public service providers
- **Legislate so that the regulator ACMA (the Australian Communications and Media Authority) has a duty to promote digital inclusion**
- **All public agencies to review how new broadband capacity can transform the design and delivery of services** and the process of engagement
- **National and state summits of third sector organisations to share best-practice** and agree on plans of action for digital inclusion
- **A national annual digital participation week** with national awards
- **Online concession passes for over 65s**
- Establish a **national helpline to support those that are having difficulty accessing the internet**
- Facilitate a **volunteering program** so that young people and other volunteers can “buddy-up” with the elderly online
- **Government to commit to open source principles** and sharing data



# Preface

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*'Countries all around the world are currently in the process of rolling out high speed broadband networks to business and households. However, little research has been done into the economic and social impacts of high speed broadband networks.'*

**University of Tasmania [Ref. 5]**

*'The full value of broadband includes outcomes around an educated citizenship, an informed democracy, cultural understanding, community and inclusion, social capital, resilience and trust.'*

**UK Broadband Stakeholders' Group [Ref. 6]**

*'Since being online my life has opened up. Last year we had Christmas over a web camera so I could see my son and grandson in Australia open their presents in front of me. My grandson came and kissed the computer. It stops you feeling alone.'*

**Lucy Berry (80) 'digital champion' [Ref. 7]**

## On the 21st century digital age from a study in Hackney, London...

**14.** In accepting the commission from Huawei Australia to write an independent report into the 'impact of broadband on communities in the UK and the implications for Australia', I came to the task as a rather basic user of what I still thought of as 'new technology'.

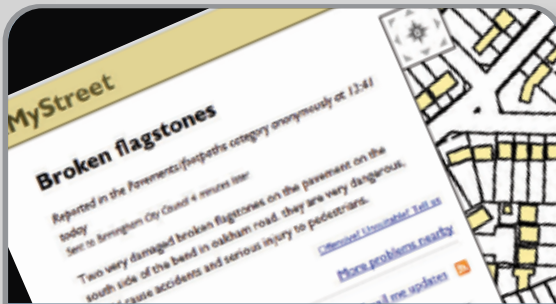
**15.** Although an experienced consultant, a former government advisor, a senior executive with expertise in public policy, urban development and delivering projects in real time and very real places, a commentator on regeneration and more recently blogger, I came to this research as a digital ingénu.

**16.** This is therefore decidedly a report for non-techies by a non-techie but then I now think this is the whole point of broadband: it's too important to be left to geeks, engineers and salesmen.

**So it is as a belated newcomer to the 21st Century that I now share my wonderment at a Britain in which...**



I can, online...



...Complain bitterly about potholes in Birmingham...

[www.fixmystreet.com/reports/Birmingham](http://www.fixmystreet.com/reports/Birmingham)



...Petition, in an act of 'crowd sourcing', national government to change the law...

<http://petitions.number10.gov.uk/steps>



...Watch councillors in Kent make budget-decisions live, whether wisely or not...

[http://www.kent.ukcouncil.net/site/player/pl\\_compact.php?a=41140&t=0&m=w&l=en\\_GB](http://www.kent.ukcouncil.net/site/player/pl_compact.php?a=41140&t=0&m=w&l=en_GB)



...Compare which political party is using twitter the most...

[www.tweetyhall.com](http://www.tweetyhall.com)



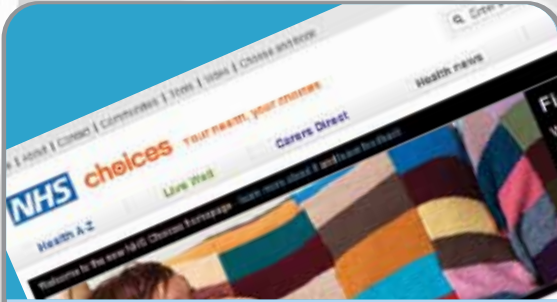
...Campaign against new development anywhere...

[www.oswestry21.com/?page\\_id=31](http://www.oswestry21.com/?page_id=31)



...Participate in the worldwide community of long-suffering Welsh rugby supporters...

[www.gwladrugby.com](http://www.gwladrugby.com)



...Self-diagnose several terminal diseases after dwelling too long on the National Health Service website – along with the 300,000 Brits who also did so on the 13th Dec 2010...

[www.nhs.uk](http://www.nhs.uk)



...Libel fellow professionals and other enemies...

[www.regenwilliams.wordpress.com](http://www.regenwilliams.wordpress.com)



...Organise a street party with people I've never actually talked to before...

[www.streetparty.org.uk](http://www.streetparty.org.uk)



...Conduct an affair with an old school friend via a social networking site...

[www.friendsreunited.co.uk](http://www.friendsreunited.co.uk)



...Check to see if Relate provides live online marriage counselling to fix the damage (which it does)...

[www.relate.org.uk](http://www.relate.org.uk)



...but instead decide to participate in Relate's online poll on New Year's resolutions...

[www.relate.org.uk](http://www.relate.org.uk)

...All before breakfast from my living room in Hackney



...while smugly calculating my personal contribution to reduced road congestion and carbon emissions.

17. I conclude from the How-e-ru? website that I've gone from e-virgin to e-vangelist without having either to break sweat or enrol with Hackney Silver Surfers, which noble organisation I'm delighted to learn exists, though a tad disconcerted to discover I'm old enough to join.

**1. Act on CO<sub>2</sub>**  
**URL: <http://actonco2.direct.gov.uk/home.html>**

The screenshot shows the 'ACT ON CO<sub>2</sub>' website. The main heading is 'Calculate your carbon footprint' with a sub-heading 'CO<sub>2</sub> Calculator'. Below this, there are several sections: 'Climate change: the facts', 'What you can do', 'What Government is doing', and 'What business is doing'. The website has a blue and white color scheme with a navigation bar at the top.

**2. Howeru?**  
**URL: [www.howeru.com/index.php](http://www.howeru.com/index.php)**

The screenshot shows the 'howeru?' website. The main heading is 'howeru?' with a sub-heading 'take the great British e-test'. Below this, there is a 'Take the Test' button and a 'How e-are you? test you?' section. The website has a green and white color scheme with a cartoon character of a woman in a white lab coat.

**3. Hackney Silver Surfers**  
**URL: <http://hss.lawns.org.uk/>**

The screenshot shows the 'Hackney Silver Surfers' website. The main heading is 'Hackney Silver Surfers'. Below this, there is a 'Hello!' message and a 'Our program in 2011' section. The website has a blue and white color scheme with a navigation bar at the top.

18. To their credit, Huawei Australia sought a review which focused on people, their communities and the transformational impact of broadband, rather than on bandwidth, speed and lengths of fibre. Having done that, I was left alone to reach my own conclusions.

19. The dual intention of the report is to seek to identify any key initiatives or challenges from the experience of broadband rollout in the UK and to suggest implications for Australia. I do so understanding the dangers of analogies and the need to have a firm grasp of what both unites and differentiates the two contexts.

20. My final chapter raises questions for an Australian readership about the implications from the UK as I see them, and makes some practical recommendations for all those involved in the process of building a new broadband network for Australia. I hope also that people will find some of the projects, agencies, people, communities and simple energy highlighted here as motivational as I did.

## NB: Broadband, food for thought not brain rot

21. The innovation I came across in this survey and the positive, broadband-enabled future I observed in British public conversation – from Downing Street to Coronation Street – contrasts starkly with a recent, high-profile jeremiad about its impact by New York Times journalist Nicholas Carr.

22. In *'The Shallows: how the internet is changing the way we think, read and remember'*, Carr scari-fies bleakly about the effect of, for example, broadband-enabled video-gaming on our capacity to organise knowledge and think. My blood resolutely refused to be chilled by this techno-phobic pessimism. I much prefer the Carr who also understands the democratisation of learning, communications and cultural production which broadband enables.

That Carr usefully says:

*'The net differs from most of the mass media it replaces in an important way: it's bi-directional. We can send messages through the network as well as receive them... The ability to exchange information online, to upload as well as download, has turned the net into... a personal broadcasting medium as well as a commercial one. Millions of people use it to distribute their own digital creations, in the form of blogs, videos, photos, songs and podcasts, as well as critique, edit or otherwise modify the creations of others... It connects us with one another.'*

**The Shallows [Ref. 8]**

23. It connects us with one another. In other words, this is a uniquely collaborative technology which empowers consumers by making them co-producers – with far-reaching consequences for private and public services, individuals and communities – and in the UK we have only just come through the first broadband decade to reach average speeds of 5Mbps and base-camp Web 2.0, with 50Mbps in our sights. Just imagine what will happen as speeds of 50 and 100 become normal and universal.

24. I am writing this as a cultural optimist inspired by human potential to shape any force or take any tool and bend it to realise ambition, overcome barriers and create community in whatever environment we find ourselves. My review of activity in the UK, where the race is on to make everyone part of a 'networked nation' by the time Australia wins all the swimming gold medals in the London Olympics, has convinced me that broadband is precisely such a tool. I am decidedly with Professor Steven Pinker – who really knows how the brain works – when he says that 'far from making us stupid, these technologies are the only things that will keep us smart' [Ref. 9].

# CHAPTER 1

## OVERVIEW

### 1.1 Broadband: Meet and Match

25. In a report about the ‘impact of broadband on communities’ where else would I derive my working notions of ‘community’ from other than Wikipedia? Noting that by the 1950s sociologists were handling 94 discrete definitions of the term and as of 9:30 this morning had yet to reach agreement, the free dictionary of the net settles for two working definitions of community:

*‘Traditionally a “community” has been defined as a group of interacting people living in a common location. The word is often used to refer to a group that is organised around common values and is attributed with social cohesion within a shared geographical location, generally in social units larger than a household. The word can also refer to the national or global community.’*

26. As a historian with a Ph.D, I’ll go with that. But there’s a second more contemporary kind of community. Since the advent of the Internet,

*‘...the concept of community no longer has geographical limitations, as people can now virtually gather in an online community and share common interests regardless of physical location.’ [Ref. 10]*

27. I like that too. I interpret my brief as to understand how broadband impacts on both kinds of communities which raises some immediate questions.

### Does broadband have consequences for both?

28. Is perhaps the ‘traditional community’ being swept aside by the net-enabled ‘virtual communities’ or ‘communities of interest’?

29. We have seen I’m an optimist. This optimism is grounded in some evidence on civic participation but also from the signs I see on the web and in the street of the stubborn survival of traditional community alongside the very re-invention of the concept online. Most virtual communities actively point you to real ones.





30. Some want you to walk their way...

**4. Ramblers**

**URL: [www.ramblers.org.uk/](http://www.ramblers.org.uk/)**

Ramblers is a charity which promotes 'rambling', protects rights of way, campaigns for access to open country and defends the countryside.

Their website provides information on walks in the UK but also provides an opportunity to meet up with members, volunteer to guide walks, work on the website or other areas of the campaign. And of course you can join their Facebook group or read members blogs.



31. Or even to join their clan, virtually or in the flesh.

**5. The join the Cameron Clan.org**

**URL: [www.clan-cameron.org/faq.html](http://www.clan-cameron.org/faq.html)**

If you are indeed proud to be a Cameron but haven't got the cash or the energy to fly to Scotland you can join the Chartered Electronic Branch of the Cameron Association or simply visit the clan Chief online.



32. So the notion that online community is bought at the expense of community activity outside, in the

neighbourhood or in voluntary groups, is belied by the reality and the research. The research for this document – based on surveys and interviews, online sources and academic papers – suggest broadband actually helps build social capital (see the list at the end of this report).

33. Two thirds of members of online communities say that they have actually initiated involvement in civic causes since they got connected to the internet. Almost half report more involvement with civic activism since becoming active in online communities. In effect they are involved in two kinds of communities, at the same time, which actually act quite similarly. So two thirds of online members report interaction with fellow members every day [Ref. 11]. This explains – and I think justifies – the comment made by a disabled social housing tenant and online gamer in Glasgow when welcoming highspeed fibre-optic broadband capable of 100Mbps to his estate. He said:

*'There is a lot more to playing games online than people realise. You become part of a much wider community who look to see you online and are concerned when you're not, a bit like neighbours looking out for each other.'* [Ref. 12]

34. Although the notion of community being enabled by interactive communications technology is explicit in 'communities online', I suspect there's a whiff of disrepute that still attaches to the idea amongst 'people like us'. But it is precisely 'people like us', who are using social media to do exactly that: to socialise and to do so digitally at first because in the modern era, with its squeezed time, sometimes inhospitable environments and even danger, it's preferable to isolation, time-wasting or having to socialise with the 'people not like us'.

35. I can think of no better way of encapsulating the attractions of the broadband-enabled world as a way not of retreating to a private community but of dealing with the dilemmas of the modern world and overcoming them than in the contemporary rituals of courtship.

36. Can there be anything more fundamental in terms of the community impact of broadband than meeting on an online dating site and marrying? How we meet people and with whom we communicate has



changed in the modern era and digital dating is, as the social scientists at the Oxford Internet Survey say, 'reconfiguring access' [Ref. 13]. And access reconfigured often leads to finding 'love online'.



37. One in five of those who have used dating sites to find their perfect partner have gone on to marry someone they met over the web. And this isn't a minority activity. More than two million Brits are signed up to singles' sites. A study, by consumer group Which?, showed that more than half of the 1,504 people questioned had been on a date with someone they met in cyberspace. 62% agreed that it was easier to meet someone on a dating site than in other ways, such as in a pub or club, or through friends. Online dating is revolutionising the way people meet each other and the impact is lasting. Two years ago a study by Bath University revealed that those who met on dating websites were 94% more likely to see each other after their first meeting than other couples. [Ref. 14].

38. Broadband is reconfiguring relationships and even marriage. And not just in the UK, if you read this report, *Mate Selection in the Network Society: The Role of the Internet in Reconfiguring Marriages in Australia, the United Kingdom and United States* [Ref. 15].

39. But it's also reconfiguring communities of all kinds and not just virtually. The key challenge is to enable the unique platform for interactivity it provides to all.

40. That platform already allows:

- discussion forums
- user generated content

- blogs
- video streaming
- video chatting
- live feeds: latest news, documents, messages
- knowledge collaboration/document and file sharing
- online polls and petitions
- social media integration: Twitter, Facebook, YouTube
- interactive games

41. Increasingly it enables tele-conferencing, large file sharing and even richer content – and that trend is set to intensify in the next generation of broadband as bandwidth and speeds grow dramatically. As speeds grow so do applications by communities and governments – and with that so does hunger for more bandwidth. High speed broadband is a process not a product.

42. Today's broadband already supports technically impressive interactive communications such as that of Diabetes UK which has been an innovator in branching out into all the main social media websites, 'in an effort to reach people who need us by setting up pages on the sites you use every day'. So of course, you can find Diabetes UK on:



43. Even Local Authorities are at it.

- **Merton Councils Flickr page**
- **Merton Council on Twitter**
- **Merton Council's YouTube channel**



## 1.2 Broadband speeding into the future

44. The early years of broadband in the UK were about 'always-on' broadband's superiority over dial-up. Even at first generation speeds of less than 1Mbps, the latency and bandwidth of broadband made its content richer and more interactive, making it more attractive to use for more people, especially those who weren't techie and preferred surfing to waiting. It's a rule of broadband development in the UK that as bandwidth and speed increased, as it got simpler and more reliable to operate and as it acquired more applications, more and more diverse people accessed and used it. The world of social media and user generated content exploded as speed increased – and the cost decreased – and people found out quite what this thing could do and how immediately it could do it.

45. The world before broadband is another country. They do things differently there. The difference grows exponentially as bandwidth and speed grow. The price of being left out of this new world grows with it because the benefits and wonders of it are obvious. This isn't a matter of just not being able to get to the right parties because you're not on Facebook or download your favourite bands from Spotify. It isn't even about not being able to record and upload your very own cacophony with a digital band you've never met by means of [Ninjam.com](http://Ninjam.com) (see box 6), though the technical feat of that is a modern marvel made possible only through fast broadband and its latency.

46. All these are possible now for faster surfers and not those in the slow lane. I'm not sneering nor should we as even these uses are creative and suggest a world not just of more passive consumers but of more producers, of people and communities finding their own voices, making unexpected connections, helping to shape worlds that matter to them, worlds of personal interests, worlds of community and neighbourhood activity, worlds of global issues. But that only hints at the transformative power of even faster broadband, the benefits for those who have access to it and its implications for the sustainability of communities and the quality and cost of public services. And that's where this plaything becomes of fundamental importance in public policy.

### 6. Jamming online

URL: [www.ninjam.com/](http://www.ninjam.com/)

Musicians have long sought to be able to work together through the internet, but have been foiled by technical difficulties with digital sound, specifically by what is called latency (time delay in the capture, transmission and replay of sound). This does not cause any difficulties with speech but with music it causes havoc. This is of course even worse when multiple musicians are connected, each with a different amount of latency.

Hightspeed broadband makes online musical collaboration possible. Websites such as [Ninjam.com](http://Ninjam.com) provide software to enable musicians from anywhere in the world to play and record music together. This breakthrough will lead to beneficial applications way beyond music.

47. The report celebrates what people and communities do with broadband but focuses on two key agendas in the UK which I believe have importance for Australia. One is the issue of digital inclusion which has been a problem with first generation broadband and which will be a problem with next generation broadband unless addressed. The London School of Economics recently summed this up well; '*Communities and citizens that lack high speed broadband access are at a deficit in comparison to their peers*' [Ref. 16]. The report shows how much imaginative effort there has been in the UK to overcome such digital divides – and although these are two very different societies there are many challenges in common, around social inclusion and ensuring remote communities can share in the benefits of building a networked society.

48. The second theme is the emerging importance of faster and faster broadband in improving public services and outcomes for people and the relationship between citizens and their governments. Already that relationship is being transformed by broadband and already outcomes are being achieved – in health, education, the environment, in community cohesion and indeed involvement in the democratic process – which indicate how much more change there is to come as bandwidths and speeds grow and become accessible universally. The only constant is change.

49. Indeed, the report shows the advantages and indeed necessity of having a national broadband network with sufficient bandwidth in the modern era. The innovations in telehealth in Scotland we encounter in the report are saving lives now and shrinking distances between patients and medical specialists – impossible without fast broadband. How much more can we do when speeds go from 5 or 10Mbps through 50 to over a 100? How soon before telecare on which England leads Europe moves from sensors on bathroom walls to microchips implanted in elderly people enabling them to monitor their own health at home and be connected to professional carers instantly?

## 7. Tele-care in the future

**The Telegraph, Nicole Martin, 7 May 2008, Health-monitor microchips for the elderly**

*'Elderly people could in the future be fitted with microchips so that their doctor can monitor their health from miles away, according to a study by the communications watchdog.'*

...was the headline from an Ofcom report published in 2008. The report described the "granny flat of the future" where the elderly could be implanted with 'in body sensors' to administer drugs, monitor vital signs and pick up dangerous health signs like an irregular heartbeat. The system would operate using either wireless or Wi-Fi technology, already available in many homes.

50. Not long. And how long before you don't have to write to a member of parliament to lobby them but call them up with others if required to visually network with them? Some people can do that already – which also shows the necessity of building a universally networked society.

51. The irony of those who dismiss broadband as a mere entertainment medium is that it's the very capacity which fast broadband has to facilitate user driven content and consumer generated media, its interactivity and responsiveness and its immediacy which is galvanising the way public services interact with the public – or at least some of the latter. We shall see in this report how the decisive shift to a fast broadband platform by the UK public services is leading to greater efficiencies and a new more equal dialogue between public services and people, and that's exciting. Faster broadband is vital to that dialogue and to modern civic engagement, as we shall see.

52. The problem is that some are indeed more equal than others: those with sufficient bandwidth and knowledge of what broadband can do are shaping this dialogue and reaping service benefits. The challenge of inclusion returns and not for the entertainment value. It's about, what the UK is calling 'superfast' broadband as a basis of modern citizenship.

53. In a 2009 report, the Australian government stressed that the emerging National Broadband network 'recognises the importance of world class high speed broadband for Australia's economic growth and social well being' [Ref. 17]. This report echoes that finding in the survey of broadband's impact on UK communities. I add: some of the projects rely on what was emerging broadband technology in a country which started down this road at the Millennium. But they are all imaginative and illustrative and speak to the core issue of how important broadband has been in certain communities in the UK. And all got more imaginative as bandwidths and speeds increased, applications proliferated and users got more sophisticated and demanding. That sophistication is not decreasing and neither is the demand – nor the need to be part of the networked society. And that goes for Australia too. I bring good news. You cannot build a networked society without a national broadband network and Australia's building one. You have to be in it to win it, after all, so that's a great start. The UK experience suggests however that there are more challenges ahead in realising fully 'connected communities'.

54. That's broadband. That's community. What about the impact on the UK and the implications for Australia?

## 1.3 Serious costs/serious benefits

**55.** Building a fibre network has serious costs but there are also serious benefits. In the UK, where broadband is talked of as ‘the 4<sup>th</sup> utility’ [Ref. 18], the impact of the digital era is estimated to account for over 10% of Gross Value Added and over 6% of employment. It’s been calculated that for every £5 billion of investment in the sector in the UK, 280,000 jobs have been created. NESTA calculate ‘superfast’ broadband will bring an £18 billion premium for UK GDP [Ref. 19].

**56.** Big numbers, but the bigger significance has been the impact on people, public services and communities. I’m with Boston Consulting in agreeing that: *‘Only some of the Internet’s impacts on the UK economy are captured in GDP.’ It has ‘social effects... such as sharing user-generated content, using social networking sites and staying connected with faraway friends and family’* [Ref. 20].

**57.** And I concur with those in the UK who see a revolution in the bringing together of digital technologies that allow huge amounts of information to be accessed and used *‘with devices that put instantaneous communication in the hands of all’*. A revolution not just for the economy of the UK but also *‘for social, political and personal relationships’* [Ref. 21].

**58.** The scale of this transformation means that communications infrastructure is as important to a country’s social well-being as transport or energy. It is also vital to a nation’s long-term civic development and engagement, leading to the reinvention and redesign of community activity, public services and the relationship between the two.

**59.** Here we anticipate the first main contention of my review of UK broadband activity: widely available, affordable and increasingly speedy broadband is at the heart of this process of transformation. That process is underway in the UK – in the equally inspiring and frustrating manner of all real-world transformations. No doubt other countries will claim more success. But the implication from the UK is clear for all: the building of a core network must be part of a wider endeavour to build a networked society.

**60.** My second main contention is that broadband can only deliver its greatest benefits for individuals, community and government when citizens universally

have both access and the motivation, opportunities, confidence and skills required to use it. Pipes in the dirt will not deliver their full legacy without digital inclusion. This applies not just in the UK.

**61.** Here’s a hint of what can be achieved – a few headline UK numbers and facts to show this is not mere rhetoric.

### In education

**62.** UK research has shown that pupils with online access at home attained a two-grade hike in their subject at GCSE; some of the best results have been obtained with children and parents previously unengaged in education [Ref. 22].



### In health

**63.** Tens of thousands of UK patients have already received pioneering, remote, tele-medical treatment, and in Scotland alone the pilot telehealth program achieved audited savings of 70,000 bed-days [Ref. 23]. In the winter of 2010, 20 million UK visitors frequented the NHS Choices site to get healthcare information, to use interactive tools to assess personal health and fitness, to take part in online communities with people and their carers going through shared conditions, and to arrange hospital appointments.

### In tele-care

**64.** The UK leads Europe. 1.7 million now lead independent lives, whilst enjoying high-quality social and professional care in their remotely monitored homes, and saving massively on residential care costs [Ref. 24].

### In public services

**65.** Integration and efficiencies are being catalysed by broadband. England’s largest county, Kent, has a



unified Public Services Network (KPSN) for 16 councils, 300 schools, Kent Police and Kent Fire Service, serving 1,100 sites and 250,000 users, faster, better and cheaper. In Wales an equivalent initiative involves all public services, all 22 councils and the Welsh Assembly, serving three million people [Ref. 25].

### 'Silver Surfers'

66. People over 55 are now the fastest growing users of social media. 50% say that contact with friends and families has increased with internet use and isolation reduced – a trend also clear from the experience of the disabled. Community activity online and locally is being strengthened by broadband, not weakened – and involves all age groups [Ref. 26].

### E-democracy and community activism

67. The UK web is alive with local campaigning, civic participation and invigilation of councillors and officials, and that grows stronger with bandwidth. In 2008 one site alone, [Writetothem.com](http://Writetothem.com), forwarded 184,000 messages from users to politicians and reported on their responses and responsiveness. The 2,700 dog-poo incidents, graffiti outrages and potholes fixed *in one month* because visitors to [fixmystreet.com](http://fixmystreet.com) complained about them online – and councils did something – suggest the increasing popular power of this medium can only grow. In the UK, as speed increases, online 'crowd-sourcing' is now changing national and local government policy – and making government more open [Ref. 27].

### In rural and remote communities

68. Broadband take-up is now greater amongst rural inhabitants in the UK than their urban neighbours [Ref. 28], improving access to services and reducing both the sense and reality of remoteness. One of the UK's most peripheral areas, Cornwall, by 2014 will have almost 90% coverage of next-generation broadband, with it viewed as central to the County's continuing population revival and economic recovery [Ref. 29].

### In the environment

69. Tele-conferencing, home-working, web-based car-sharing and public transport innovations are real now: London's congestion charge, only possible

because of interactive broadband, has reduced carbon emissions by 16% [Ref. 30]; on a smaller scale, the National Farmers' Union in Wales found that staff tele-conferencing with head office reduced journeys and carbon emissions by an estimated 41 tonnes per annum – and added significantly to employees' quality of life and community engagement [Ref. 31].

### In reducing isolation and increasing social cohesion

- Half of broadband users say that using the web increases their contact with friends or family who live separately [Ref. 32].
- There are now more organised online communities of interest and more participants in cities like Sunderland than existed pre-digital era [Ref. 33].

70. That's just for openers. But then there's a lot of people who don't know about the impact of broadband in the UK.

## 1.4 The Facts – ten interesting things you didn't know about broadband in the UK

71. Despite a reputation for traditionalism, the UK has in its first digital decade been assessed as '*one of the best performing countries in Europe with most of the benchmarking indicators above EU average*' [Ref. 34] with fully 91% of '*basic public services for citizens available online*' [Ref. 35]. London and New York stand out as the two main users globally of broadband for business services and financial activity, with most other cities by comparison well behind, even in the wake of the global financial crisis.

72. The UK has:

- the largest per capita e-commerce market and second largest online advertising market globally
- a much higher percentage of households with broadband access than EU or OECD averages (71% to 56% and 53%, respectively): in the south-east it's at 80%
- 58% of adults buying goods and services online: the highest in Europe
- 40 million internet users with 30 million using it every day

- 90% of homes able to get a broadband connection at 2Mbps+
- an average broadband speed of 5.2Mbps
- nearly 50% of households able to access 50Mbps now, and 66% able to do so by 2014
- 19 million fixed broadband connections, putting the UK at the top table with Germany, Japan and the US
- over 25 million Facebook accounts: only the US has more
- a high proportion of businesses of 10 or more employees with broadband access (87% against an EU average of 81%) and with own websites (75% against an EU average of 64%) [Ref. 36].

## 1.5 The Challenges in the UK

### The Ying for the Yang: the Digital Divides Which Remain

- 9-10 million adults in the UK have never used the internet
- those in the top decile of earnings are 10 times more likely to use it than those in the bottom decile
- almost half of disabled people are offline
- 90% of 16-24 year-olds are online, but only half of those aged 65-74
- the highest proportions offline are those under 65 in the 'rust belt' areas of the UK and older residents in rural areas
- 6 million people in the UK are deemed to be both socially and digitally excluded, costing the UK an estimated £22 billion in lost productivity
- ethnic minority use of ICT is much lower than the UK average [Ref. 37]

73. Many of the most powerful projects showcased in this report are founded in the effort to 'digitally include' such groups – and indeed in the effort by such groups to 'include' themselves – to ensure that the broad benefits of a truly national network are achieved and, as the UK Prime Minister has put it, that 'in the internet age... people aren't being left behind as more and more services and businesses move online' [Ref. 38].

## 1.6 Broadband: the political consensus

74. Although some of the language might be different between the UK's new Conservative-Liberal Democrat government and the previous Labour one, the importance is recognised of what the present architect of welfare reform in the UK, Cabinet Minister Iain Duncan Smith, calls 'digital literacy'. He sees it as a tool for 'increasing social mobility' and as 'a powerful weapon in the fight against poverty' and 'social isolation.' [Ref. 39]

75. Indeed, it is because of broadband's demonstrated benefits to community vitality, social well-being and public service improvement, that the government has termed completing the UK's superfast broadband network 'one of our top priorities'. Hence the importance attached by David Cameron, when appointing Martha Lane Fox the UK's Digital Champion, to broadband not simply as a tool of economic revival but as a platform for the new government's flagship initiative: promoting community empowerment and local people taking on more activities hitherto monopolised by the state. 'We believe,' he wrote, 'that digital engagement can be a significant contributor to our ambition to build a Big Society where people are more engaged with their local neighbourhoods.'

[Ref. 40]



76. In the government's view broadband is vital to:

- **support rural communities:** 'Effective, reliable and secure communications infrastructure is increasingly essential to life in our rural communities'
- **improve public services:** 'The delivery of public services will be more efficient and cost effective, as well as more inclusive'

- **secure benefits for the environment:** ‘Through greater scope for tele-working and home-working, which reduces pressure on the transport network and lowers carbon emissions’
- **social benefits:** ‘Tele-working can help reduce the barriers to entering the labour force for those groups which may be less mobile (e.g. disabled and parents with childcare responsibilities) and improve work-life balance’
- **and health benefits:** ‘Superfast broadband can also play an important role in improving the quality and delivery of healthcare services’ [Ref. 41]

77. There is thus a real political consensus on broadband in the UK at national, regional and local level, the main difference being that this government says it will drive *even faster towards a broadband future* particularly in those rural areas which on current plans will not have highspeed broadband by 2014.

78. Much of the hard graft to get fast broadband to this ‘final third’ [Ref. 42] of the country relies on initiatives around design, funding and delivery being taken by local communities themselves, in collaboration with partners such as BT and others from the private sector. Some very innovative private-public partnership solutions are the result [Ref. 43]. In the UK, the voluntary and community sectors – people and places – are not just recipients of broadband: they are helping to make it happen. The ‘race to 2012’ – to get everyone online by the Olympics – cannot be won without them.

## 1.7 Connecting Communities: moving from building a network to a networked society

79. The real challenge of broadband in Britain and Australia is not just to enable access. It is to ensure *use* by people and communities of all kinds. It is to see the objective as not just the building of a technical network but the creation of a ‘networked society’ with all the benefits of online participation for all which flow from it. This report echoes the findings of academics from Queensland University of Technology when they write that ‘a pre requisite for inclusion is access but the use and exploitation of networks also requires specific skills, literacies, information and knowledge’ [Ref. 44].

80. This means a determined broad-based campaign and program aimed at reaching out to, involving, up-skilling and releasing the energies and voices of the diverse communities of the networked nation.

81. The experience of the UK is that meeting that challenge of use, inclusion and collaboration is no simple task and that a society and its institutions of government and public services need to be well organised, focused, innovative and above all committed to inclusivity to realise the greatest potential of this significant investment and meet this challenge. Without that broader effort a narrow focus on inputs – the cost of the infrastructure, the miles of fibre required – will produce an equally narrow range of outcomes when a bigger legacy is on offer.

82. ‘Connecting Communities’ is a social objective as much as it is about miles of cable laid. More so, it’s about using the new broadband network to reinforce and modernise community, to strengthen civic society and, yes, to extend citizenship. And, because broadband users are much more likely and able than narrowband users to interact with public authorities and mobilise opinion online [Ref. 45], it is already revitalising public services and, indeed, democracy in the UK.

83. It does more. In the words of Oxford University’s respected Said School of Management, ‘by delivering better access to education, healthcare and in-home services, high-quality broadband’ provides ‘a better quality of life for citizens’ [Ref. 46]. I learned that proposition essentially not from academics but from the people, places and projects I encountered on my virtual journey through Britain. One of them is a social housing tenant from ‘old’ South Wales, speaking eloquently of the human possibilities of this technology and the training she is receiving to use it:

*‘My new computer has given me a new lease of life and allowed me to get in touch with people I have not spoken to for many years. I call it my magic carpet as it allows me to go anywhere in the world.’* [Ref. 47]

84. I’m not sure whether she’d pick Birmingham as her first destination of choice, but I will.



# Chapter 2

## DIGITAL REALITY IN THE UK – SNAPSHOTS OF VISION, PROJECTS AND PEOPLE

### 2.1 Digital success and inclusion – a vision from Birmingham

**85.** Although formally the UK's 'second city', Birmingham, with its large ethnic population, is the first place to go to experience modern Britain in all its cultural diversity and digital ambitions. Leadership of those ambitions is in the hands of the City Council and its partners in the Digital Birmingham Partnership, including BT, the BBC, Microsoft, the universities, the Chamber of Commerce, National Health Service, and Deloitte.

#### 8. Digital Birmingham Mission Statement

URL: [www.digitalbirmingham.co.uk/](http://www.digitalbirmingham.co.uk/)

"Connecting you and your city to the digital future, so that together we can achieve economic success and benefits for the way we live, learn and work."



**86.** Birmingham's vision is to be a successful, inclusive and global city, through hard-wiring, world-class, highspeed digital infrastructure in the fabric of the city, networking its public services and up-skilling and involving its people.

**87.** It has a broad vision: 'we can find jobs, keep in touch with our family, work from home or on the move and find friends and co-workers through online communities' [Ref. 48]. Closing the 'digital divide' in the city is central to the vision so that all can benefit from digital technologies but also so the city can compete globally.

**88.** Reflecting pressure from communities to participate, and keen to make the UK government's Big Society real by devolving more power to citizens locally, the Council has new focus on using social media and open data. It has created the award-winning Birmingham 'Civic Dashboard', a web tool which shares the information held on its contact database with all its online citizens. It provides an online 'heat map' of issues raised by local residents and prompts interactivity between the council and residents on what needs to be done and what was done.

## 9. Digital inclusion in action/Aston

URL: [www.aston-pride.org.uk/index.php?option=com\\_content&view=article&id=225&Itemid=199](http://www.aston-pride.org.uk/index.php?option=com_content&view=article&id=225&Itemid=199)



A cloud now covers Aston, a socially disadvantaged area of the City with a large population with roots in Pakistan: a Wi-Fi cloud enabled by BT. This, plus the award-winning Aston Pride Computers in the Home/Home Access program (aimed at making people 'computer literate, internet capable and connected'), has meant that 6,000 homes are now connected. As a direct result of enabling children to access broadband at home, Key Stage 2 results in English improved by 19% over the last five years compared to a Birmingham average improvement of 6%. Research into the impact of the Pride program has shown that on average each home computer provided was used by over 6 extended family members.

## 10. Digital Pride

URL: [www.dc10plus.net/](http://www.dc10plus.net/)

### Digital Pride

Linked to Computers in the Home is The Healthy Way to Learn IT. This uses digital inclusion as a way of developing language skills among those for whom English is not their first language and to provide diabetes awareness and control in a community where it is rife.

- 81% of participants have reported that they feel more confident with ICT.
- All would be interested in using similar media to learn about other health topics and recommend this CD to others.
- 94% now feel more confident about speaking or reading English.
- 100% would like to continue with further English language learning.
- 91% of participants have passed on what they have learned about diabetes to others.
- 59% have reported a more healthy diet, 35% have had a diabetes check with a GP and 82% have exercised more.
- As a result of the project, a further 63 learners have started pre-entry level English courses at Saathi House and 20 people have joined exercise sessions.

89. And if Birmingham's digital reality isn't interesting enough, have a look at Birmingham Island in virtual world environment Second Life [Ref. 49] where a unique mapping tool developed in the city suggests the digital future isn't far away. It's upon us, and not just in Birmingham. The question is, however, how we include all our communities in that digital future.

## 2.2 From Birmingham to UK – how we include all our Communities

### 11. DigiBridge – aka the geeks who care

URL: [www.DigiBridge.co.uk](http://www.DigiBridge.co.uk)



Diye of DigiBridge says:

‘There is a feeling out there that everyone has a computer and knows them inside out but there are big sections of the community that don’t. A Bangladeshi woman on the training course recently who had three children by the time she was 23 had never had the chance to learn about using the net and when she finished the course she said:

*“Thank you for believing in me and making me realise there’s more to me than being a mother. I have found me within myself again after a long time.”*

90. According to the official definition used by most of the organisations at work in the field, digital inclusion is:

*‘The best use of digital technology, either directly or indirectly, to improve the lives and life chances of all citizens, particularly the most disadvantaged, and the places in which they live.’*

Lord Carter [Ref. 50]

91. The reference to the disadvantaged speaks to the relationship between ‘digital exclusion’ and ‘social exclusion’. It was in the 1980s that ‘social exclusion’ became the conventional term for multiple deprivation – and the exclusion from the labour market, learning and broader society which can result. It remains a dominant concept in social theory and public policy. That’s because it’s real.

92. As evidence increased about the benefits of access to and use of ICT, and as more opportunities and services depended upon online communication, it became clearer that the concept of social inclusion needed to include or overlapped ‘digital exclusion’. Indeed, if ‘digital exclusion’ were not addressed, existing divisions and disadvantages would be exacerbated because the incidence of digital exclusion is highest among the same groups who are at risk of social exclusion: the elderly, low-income, low-qualified, ethnic minorities or those living alone. As the Local Government Association in Wales puts it: *‘The inequality in access, use and application of digital technologies is a new driver of social exclusion which risks accelerating existing social divides and creating new ones.’* [Ref. 51]

93. You only have to list the benefits of what the previous UK government started calling ‘Digital Participation’ [Ref. 52] to see the problem of the digitally excluded starkly:

- financial savings and greater consumer choice;
- more opportunities to stay in touch and form part of online communities;
- improved access to health and well-being information;
- more support for independent living;
- more involvement in civic and democratic activity;
- more opportunities for learning and developing social capital; and
- greater employment opportunities [Ref. 53].

94. UK Online Centres’ research put a value on the uplift from ‘digital inclusion’ for individuals of up to 10% in terms of salary and a 25% increase in grade achieved per subject studies at 16 [Ref. 54].

95. So the answer is getting hold of PCs and broadband access, right? The correct answer is ‘Yes and No’. Having no physical access to a network, perhaps because of the lack of kit or geographical remoteness, is a serious form of exclusion. But, a recent

study on the link between social housing and digital exclusion noted, *'While the provision of technology is a necessary condition for tackling digital exclusion, it is not sufficient on its own... Digital exclusion is a multifaceted phenomenon.'* [Ref. 55]

96. The issue is thus not just differential access to kit or connections, it is also about familiarity and use. As the evaluation of a major government-backed, digital inclusion program in Wales put it, while 'entry costs' to hardware and internet access costs have reduced, they are 'still not negligible for those on low or fixed incomes'.

97. And, more importantly, *'the gap between the "knowledge rich" and the "knowledge poor" can mean that even where there is access to the ICT infrastructure, it is used in a far more constrained way by excluded groups and communities. This has led to the development of the concept of "digital inclusion" – a process which seeks to ensure greater equality of access to the potential benefits of ICT for those groups which might otherwise be excluded for economic, social, spatial or cultural reasons and to go further by using ICT as a way of empowering people to transform their lives.'* [Ref. 56]

98. This is the concept of digital inclusion relied on in this report, its conclusion being, as all studies in the UK (and note Australia) show, 'access alone does not equal digital inclusion' [Ref. 57]. It's the take-up and use of technology which matters. This requires access *plus motivation, skills and confidence* to be promoted amongst those potential users and communities who are least likely to get online without intervention, support and encouragement.

99. This point was made forcefully in an interview for this study with Alun Burge who led the innovative and big Communities@one digital inclusion program in Wales. And he had a warning for Australia from his experience of successfully engaging over 30,000 disadvantaged people from the former mining district of the South Wales valleys with broadband technology:

*'In deprived communities the issue is not access to kit only – it's reinforcing and supporting use and breaking down the barriers to getting 'bums on seats' to take up the opportunities. Our successful projects have focussed on doing that, on getting the*

*over 40s, the unemployed, those in social housing or disabled, to use the technology. It's a democracy issue at the end of the day. This is the question for Australia. In Wales there is kit everywhere. We have computer suites on council estates. The issue is less access than use by certain groups. Australia needs a focus on that critical aspect too.'*

**Alun Burge, Welsh Assembly Government** [Ref. 58]

100. The 'certain groups' Alun Burge refers to are those aged 55+, socio-economic groups C2DE, (lower income) ethnic minorities and remote communities.

101. Informing the focus in the UK has been an intense information-gathering exercise on use, underpinned by statutory requirements on the Office for National Statistics and the Regulator, Ofcom, to collate the data. In the case of Ofcom it has a statutory duty to promote 'digital literacy' [Ref. 59] in such groups. At the same time, the private sector has played its part in sponsoring the authoritative annual Oxford Internet Survey which reveals how well or badly the UK is doing in achieving inclusion within such groups.

102. Finally, the brief of Martha Lane Fox, founder of [lastminute.com](http://lastminute.com), and now the UK's unique National Digital Champion is to use and enthuse voluntary, private and government forces to digitally include these groups. Many key projects highlighted here have this focus at their heart – and the collective effort, if flawed, has impressive successes behind it.

103. I submit this should be a critical focus for Australia too and that broader initiatives – to support, engage and up-skill – should be pursued actively to ensure these 'certain groups' are online and not left behind. This is not up to national or local government alone. All key players in the public, private and voluntary sectors are going to have to make an effort too in order that a new technological network leads to a networked society with all its benefits. As we shall see, many of these benefits accrue not just to society but to government itself and public services – and most decisively when membership of the networked nation is indeed universal.



## 2.3 From social housing to digital inclusion

**104.** In the UK some of the more exciting and necessary projects have been with disadvantaged communities in social housing where a combination of centrally-funded programs, action by social enterprises or voluntary groups, and communities themselves, have delivered access and inclusion: local networked societies.

**105.** One in eight British people live in municipally-owned or not-for-profit, housing-association-owned 'social housing'. Because the supply is constrained and rationed to the most 'needy', the profile of tenants is increasingly that of the socially-excluded: the unemployed; people with learning difficulties; low-income households; mentally ill; and ex-offenders.

**106.** Given that broadband take-up in social housing and sheltered housing for older people has been estimated as the lowest of any groups in the country [Ref. 60], housing associations, aware of the dangers of their tenants being left behind and increasingly aware of how digital literacy can increase confidence, skills and mobility and improve services to tenants, see broadband as essential infrastructure for their tenants.

**107.** Many of the UK's 1,000 plus housing associations – some as small as a hundred homes, others with more than 50,000 – have used their own funding, accessed government grants, and worked with experts from the voluntary and social enterprise sectors to try to digitally include their tenants and use the process to improve services.



**108.** Have a look at the programs of Melin Homes, West Whitlawburn Housing Cooperative and Solihull Community Housing.

### 12. West Whitlawburn Housing Cooperative, Glasgow

URL: [www.wwhc.org.uk](http://www.wwhc.org.uk)

Tenants in the Cooperative's 650 homes already had access to a computer suite and training. Now the first hundred homes have been connected to fibre optic cables allowing access to the internet at speeds of up to 100Mbps. Aiming to 'reduce digital exclusion that compounds social exclusion', a community-owned communications cooperative has been established to provide TV, phone and internet services at reduced costs. A 'community portal' is being implemented which provides a platform to access voluntary and statutory services in tenants' own homes [www.wwhc.org.uk](http://www.wwhc.org.uk).

### 13. Solihull Community Housing

URL: [www.solihullcommunityhousing.org.uk/](http://www.solihullcommunityhousing.org.uk/)

...has installed wireless broadband in many of their tower blocks. They offer free or subsidised access and training to those who need it most, such as residents who are long-term unemployed, low-paid workers, single-parent families with young children or residents with a disability. Residents who don't already own a computer can also get a free recycled one from a local charity.

Chris Deery, head of ICT at SCH says:

*'The agenda is about increasing life chances, fostering social mobility and improving the quality of life. Digital inclusion is a means to an end, not an end in itself, so it is important that it is not seen as simply another IT project.'*

## 14. Melin Homes 'Getting Connected' project

URL: [www.melinhomes.co.uk/node/82](http://www.melinhomes.co.uk/node/82)

Melin is a registered social landlord managing 3,000 properties in Wales. They consider Broadband as the '4<sup>th</sup> utility' in their homes.

The award-winning, Getting Connected project aims to help people bridge the digital divide and introduce those with little or no previous internet experience to a world of financial savings, job and learning opportunities and social networking that can be found on the web. The project, which has been running for less than a year, has already provided more than 500 homes with PCs and broadband connectivity.

Two graduate interns help to train residents in how to get the maximum benefit from the new technology on offer. Vans providing mobile access to the internet also travel into estates for tenants to use. Melin have developed 'Melin online' to enable tenants to pay rent, report a repair, track progress on repairs, seek advice from an online 'money mentor' and access information about public services.



**Ann Davies, a Melin Homes tenant, with what she calls her 'magic carpet'.**

## 2.4 Digital inclusion – a national effort

**109.** There are a myriad of local programs in the UK, such as those mentioned in the previous section, reinforced by central government commitment and funding, a statutory requirement on the regulator that it promotes 'digital literacy amongst vulnerable communities', the enthusiastic support of national charities dedicated to digital inclusion, and some extraordinary local authorities embracing the broadband era for all its worth.

**110.** The most direct central government investment has been in UK Online Centres, initiated in 2000 and now funded by the Business and Education ministries. It has an explicit mission to exploit ICT to 'help improve individual lives, strengthen communities and achieve social inclusion'. The audited statistics are impressive.

### UK Online Centres – facts

- 3,500 partner centres all over the UK
- UK Online Centres in 84% of deprived wards
- 2 million customers use UK Online Centres every year
- One third of customers have no formal qualifications
- 74% are socially excluded
- Over 50% receive some state benefit
- More than half earn less than £10,000 a year
- 50% of users don't own their own home
- 25% are responsible for children
- One third of users consider themselves to have a disability or mental health issues
- 74% aren't in paid employment
- One quarter of centre users are from non-British ethnic backgrounds
- 93% of visitors access online government services in a UK Online Centre
- 64% of customers progress to take up further education, information, advice and guidance opportunities, volunteering placements or employment
- 98% of people who use the centres rate the service as good to excellent [Ref. 61]

**111.** UK Online Centres are part of a new initiative to be launched with Martha Lane Fox in late January 2011 called:



The 'GoON – get more out of life online' campaign takes place between 17 January and 14 February, and aims to inspire people to make going online their New Year's resolution!



*'We want to give people a chance find out how the internet could help them in everyday life – from getting on at work to keeping in touch with family and friends, exploring interests to saving time and money.'*

**Martha Lane Fox, National Digital Champion,  
Co-founder of [Lastminute.com](http://Lastminute.com)**

**112.** Such major national government backed initiatives have been reinforced by an equally impressive contribution by charities and communities of interest. Those aimed at getting the over 50s online have been particularly active and successful.



# CHAPTER 3

## 'SILVER SURFERS': EMPOWERING OLDER PEOPLE THROUGH BROADBAND

### 3.1 From vulnerable communities to 'silver surfers'

**113.** 2010 proved to be quite a year in the world of digital technology and for Digital Unite: the Queen launched her [Facebook page](#), the gerontocratic radio soap character [Peggy Archer](#) learnt to surf the web and, at 103 years of age, Lillian Lowe became the world's oldest Facebook user to help keep tabs on her seven grandchildren and 13 great-grandchildren' [Ref. 62].

**114.** Get Digital funds and provides broadband access and training projects in sheltered accommodation and encourages older people in this type of supported housing to become internet users and enjoy the wider social and economic benefits of the digital world. As of January 2010 **Get Digital** is working in 195 sheltered housing schemes nationwide, including 81 schemes in rural areas, providing around 7,800 residents with internet access. It has a further 300 schemes in the pipeline involving a further 20,000 residents [Ref. 63].



Below are highlighted some of Digital Unite's initiatives.

#### 15. Get Digital

URL: <http://getdigital.org.uk/>



Get Digital is part of the Digital Unite organisation whose partners include BT, Virgin, Ofcom and Age UK, the main charity for the elderly. DU is an extraordinary resource and digital champion for people over 50. It trains people, provides online learning, links them to communities of interest and services, and sponsors Be Grand, a dedicated website for frankly funky grandparents, and Silver Surfers' Day. In DU's core offer it brings digital literacy to Britain's older population by:

- running noisy **national campaigns** to get new users online and put digital inclusion on the agenda;
- providing **IT teaching and training** focused on the over-50s, designed for new and nervous users;
- encouraging **online learning** and digital communities, made by older people for older people;
- sharing **expertise** with others; and
- working on **innovative projects** to reach new audiences.

## 16. Be Grand

URL: <http://begrand.net/>

This online community provides specialist information and advice for grandparents. 'Get the facts, share highs and lows, make friends, get expert advice, find local activities, events and places to go. 'The site includes real-life online advisors, advice on making the most of IT, what's on locally, places to go and making friends and – my favourite – recent articles include 'How To Text like a Teenager'...



## 17. Digital Ages

URL: [www.ageuk.org.uk/search/?q=digital+ages](http://www.ageuk.org.uk/search/?q=digital+ages)

Program is promoted by Age Concern (now called AgeUK), UKOnline and the NHS. Young people mentor older people in the use of technology, offering courses in care homes and older person's homes.

The approach has been to introduce older people gently to computing through applications which have meaning to their lives, such as photo sharing and connecting with distant relatives. These skills then allow them to go on and develop skills which can assist in improving their quality of life and possibly their care.

**115.** Get Digital and Age UK support **MyFriends online** which encourages older people to make use of broadband – and hundreds of thousands have as a result.

## And then there's...

## 18. Silver Surfers' Day – gearing up for 2011

URL: [www.silversurfers.net/sport-various.html](http://www.silversurfers.net/sport-various.html)

'Silver Surfers' Day is the biggest national campaign to promote use of digital technologies by older people. It is run by Digital Unite and was started in 2002. On Silver Surfers' Day each year we support people and organisations all over the UK to open their doors and give local older people a taste of what the digital world has to offer them at a Silver Surfers' Day Event'.

'Over the last nine years, we estimate that over one hundred thousand older people have engaged with digital technologies in this way. Amazing! Their stories, and those of the creative and enthusiastic people who run the events, are an inspiration to us all'.

Silver Surfers' Day Events involve digital skills and digital technology and older people in some way, but exactly how is *up to you*. We have loads of suggestions and learning materials for you to use, but you can decide whether you explore the web, do some digital photography, set up blogs, Tweet for a day, use Wii or gaming to entice people in.'

## 3.2 The benefits of the new for the old and the not-so-old

**116.** Three million people over 65 in the UK go longer than a week without seeing a friend and for 1.8 million that gap is a month [Ref. 64]. In an ageing population where family size has shrunk and many more people are now living on their own, the problem of social isolation is set to grow and with it problems around mental and physical health. This is leading to increased demands on public services, on already massive residential and social care budgets, and on the National Health Service.

## 19. Itea & Biscuits

URL: <http://www.ageuk.org.uk/itea-and-biscuits>

Timebank (a volunteering network), Digital London and Age UK have developed a scheme that brings together young (18-25) volunteers recruited through Universities to act as mentor to older people (typically 60+) and share their knowledge of digital technology and identify ways in which it can improve their lives.

‘A friend of mine who has adopted London as her new home told me recently that the happiness of her parents who live in New Zealand has increased tenfold since they have learned how to use Skype and can see and speak to their grandchildren on a regular basis’

**117.** At the same time, although 6 million over the age of 65 – 70% [Ref. 65] – say they have never used the internet – the fastest rising group of users in the UK is actually in the 50-65 year range [Ref. 66]. Two million British people over 50 years old are now active users of Facebook and 12 million regularly go online.

**118.** There is quite a ferment in the UK of content for and by ‘silver surfers’ and the elderly, and some of the most interesting uses of this new technology are being pioneered by and for these older users. The prize is not just improved and personalised health and social care by enabling more to live independent lives at home in their communities reduces care costs while raising quality [Ref. 67]. The prize is the palpable reduction in that sense of social isolation which costs lives and burdens public spending. This is partly why Ofcom, the UK regulator, has been so enthusiastic about the impact of fast broadband on the care of and participation in the community by older people.

**119.** Ofcom identified key projects showing what broadband can do for older people and how emerging broadband-related products and services could improve the delivery of healthcare, and provide better social participation and entertainment services [Ref. 68].

**120.** Ofcom pointed to the benefits now already being experienced by the elderly and others from the maturing tele-care sector, and pointed to trends showing how even faster broadband would lead to even more imaginative applications.

**121.** The UK leads Europe in tele-care. Currently 1.7 million citizens can live more independent lives at home without going into hospital or sheltered residential

accommodation because of broadband-enabled tele-care: devices to record medical conditions at home with the information transmitted to professional carers and medical staff remotely; sensors enabling carers offsite to know that clients are safe and well. Ofcom stresses also that for older and disabled people, often confined at home, having higher-quality entertainment services which broadband offers – and which can only get more accessible and better as bandwidth increases and television screens become interchangeable with PC monitors – enriches experience, improves well-being and reduces costs to society.

**122.** A formal evaluation by the Scottish government in 2009 concluded that combined tele-care and telehealth initiatives helped to prevent hospital admissions, facilitate earlier discharge, reduce the number of check-up appointments and admissions to care homes, and overall improved the quality of life and patient satisfaction. Behind these large statements are equally large and impressive numbers.

**123.** In one year in Scotland, tele-care services saved:

- 5,668 hospital bed days through speedier discharges
- 13,870 by reduced number of unplanned hospital admissions
- 61,990 care-home bed days
- overall 81,000 bed days
- and 95% users said they felt safer, 66% more independent and 87% reassured because appropriate help was not far away [Ref. 69].

## 20. Webcat – linking with family

URL: [www.webcat.co.uk](http://www.webcat.co.uk)

Webcat has linked a family with their mother/grandmother who is bed bound with partially locked-in syndrome using a Skype enabled computer at the end of her bed. She is in a nursing home some distance from the family, which lives in a remote community. Her family continues to visit her. They are now able to communicate with her every day.

124. Ofcom also drew attention to the ‘wider societal benefits’ of such broadband-enabled initiatives. In particular they:

*‘help people who are often at the periphery of our society – such as disabled or older people – to play a more active role in the economy and in their local communities and... in helping people remain independent, living in their own home, for longer.’ [Ref. 70]*

### 3.3 Increasing older people’s role in Society

*‘This is more than about providing access to highspeed broadband. It is about giving people the skills and support to use and enjoy everything the internet has to offer. Whether it’s about Skyping grandchildren who live overseas, or doing an online shop, digital media has the ability to enhance people’s lives. With the Government committed to getting people online, it is more important than ever that older people – currently at risk of being left in the slipstream of the digital revolution – can be offered the opportunity to participate in this exciting and ever more essential new world.’*

**Mervyn Kohler Age UK [Ref. 71]**

125. So on top of all the benefits for older people there are the benefits society gets from older people using social media to renew their engagement with the community ensuring that their experience and contribution are not lost.

126. The consequences are evident both in the growth of online social networking and communities of interest but also in terms of more social involvement locally in the community in which the elderly live when not surfing. Whilst trawling through pretentious academic texts proving that broadband connectivity reduced alienation and *anomie*, I found simple and rather uplifting evidence for this on my own doorstep.

127. As the website for the Agewell Computer Club of my home borough Hackney puts so well:

*‘We have a constantly varying program, usually centred on the Internet – though we are also very interested in... anything else which has ‘digital’ in its name. More than anything else, we like to find ways to use the internet to enhance our real-world lives – social activities in the community where absolute beginners can fit in as easily as the more experienced computer users.’*

**acc.lawns.org.uk**

128. A slightly more strident version of the potential of broadband to enhance the community and civic engagement of older people was set out in the persuasive Digital Manifesto for Older People launched by FACT, a Liverpool Arts project late last year. In consciously linking the power of broadband as a platform for community involvement with senior citizens’ active citizenship role, the Manifesto’s authors and sponsors encapsulated what a positive civic force broadband has become – and how older people both benefit and contribute. David Cameron take note:

*‘This is primarily a matter of social justice and should be at the centre of the ‘Big Society’ agenda that promotes localism and active citizenship. At a time when people are disenfranchised from the traditional structures of the political system, FACT and Age UK are calling for better access to **the digital world where community participation increasingly lives.**’*

**Mike Stubbs, FACT [Ref. 72]**

*‘Online is where the Big Society is going to happen. Democratic debate and participation is thriving on the internet. Once older people are engaged in the online world, they are among the most active members of the community with a huge amount to contribute.’*

**Age UK, sponsors of FACT [Ref. 73]**

# Chapter 4

## RURAL, REMOTE BUT SWITCHED ON

### 4.1 Renewing Engagement with Community and public services

**129.** Online is 'where the Big Society is going to happen' and it promotes not just individual connectivity or economic activity but active citizenship and community engagement – not just online but in reality. A vignette from a remote part of East Kent develops our theme.

So broadband promotes community activism – not just to complain about government or the condition of young people today, but also to take responsibility in finding, in co-producing solutions. In so doing it is transforming public services and the relationship with governance. What becomes clearer is not just the cost of connecting communities, but the cost to the community of not enabling universal access to and use of high-quality broadband. With inclusion, you have to be 'in it to win it'. And the communities which are showing the way to this superfast future most in the UK are not the ones best networked or closest to the seats of power.

#### 21. Using Facebook to bring a community together

URL: [www.facebook.co.uk](http://www.facebook.co.uk)



East Folkestone is a rundown area which Shepway District Council has been trying to improve, until recently unsuccessfully, through mobilising the local community into action. The council and local residents formed the East Folkestone Change Together Group. The communication between the Council and Group and residents takes place largely through Facebook.

Using this medium, a group of over forty residents of all ages and backgrounds took part in "clean-up day", which not only left the area looking much refreshed, but brought together a group of people many of whom did not know each other before, and all of whom enjoyed a rewarding and fun day. Other similar clean-up and bulb planting events have taken place since.

Much of the success is down to the suitability of Facebook to promote such events amongst people who do not any longer go to face to face civic meetings or attend council debates. What worked was marketing community activity as a social event via a social media channel, checked by people looking for something fun to do. And because people now also access Facebook via smartphones reminders can be sent out right up to the hour before events for anyone with a phone on to pick it up. Broadband supporting community – that's why some communities are agitating to get their hands on more of it, faster.



## 4.2 Broadband meets localism: rural, remote but switched on

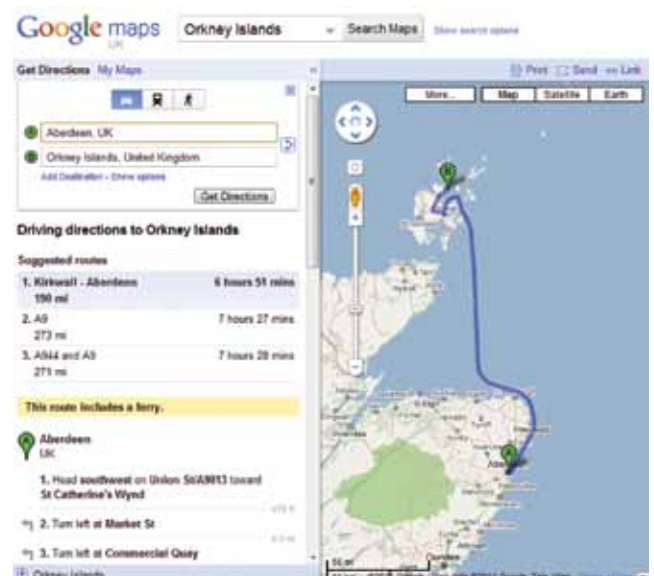
**130.** The fastest-growing online communities in the UK [Ref. 74] live in some of the more remote areas, typically receiving lower than average public and private services at higher than average cost. Fast broadband has real traction in such communities. You only have to consider some of the perceived health benefits to understand why broadband matters in such places.

**131.** In a health debate in the Scottish Parliament in October, Orkney MSP, Liam McArthur, outlined the benefits telehealth projects have brought to Orkney.

*'Until recently, patients in Orkney who were suspected of having suffered a stroke would have been referred to Aberdeen for a consultation with a stroke physician. That would have involved cost, inconvenience, discomfort and time – the thing that suspected stroke patients can least afford. The first 24 hours are critical and appropriate secondary prevention treatment ought to start immediately. For logistical reasons, that has simply not been possible for Orkney patients in the past. However, since July 2008, the technology for video consultations giving access to specialists is now in place in GP practices across the islands linking them to the remote consulting site at Aberdeen Royal Infirmary. The results have been hugely impressive – with the team picking up the Scottish health innovation and improvement award.'* [Ref. 75]



**132.** Telehealth projects offer remote consultation for patients in rural areas far from specialist centres or provide state-of-the-art connections and telemetry for self-monitoring and, where appropriate, self-medication of health conditions at home, and external monitoring by healthcare professionals. Within the UK, Scotland has led on telehealth projects to serve its dispersed population and is seeking to become the first 'tele-care nation'. Given that Orkney is a 14-hour round trip from Aberdeen, this is not surprising.



**133.** Key Scottish telehealth projects include:

- The Tele-TIA clinic linking Orkney to the stroke unit at Aberdeen Royal Infirmary, which helps NHS Orkney meet the national target of enabling patients experiencing symptoms to be seen by a specialist, within 24 hours of presentation, via a video link;
- The Scottish Tele-stroke Network – managing the development of an overarching program, assisting in the start-up of local teams, liaising with NHS 24 and co-ordinating lessons learned from individual areas;
- ENT tele-endoscopy in the North of Scotland, where specialist services are under pressure, and the travelling distances required, for both patients and consultants, are considerable;
- The Aberdeen A&E pilot video booth – ‘Health Presence’ – which enables patients to receive a remote tele-consultation and use various medical devices, which upload directly into an electronic medical record;
- Piloting a video-conferencing service for patients living in remote parts of the Highlands with epilepsy [Ref. 76].

**134.** Although these telehealth projects have not yet been formally evaluated, the Scottish Parliament has heard evidence of big savings in costs around avoiding hospital stays [Ref. 77]. The consensus expressed in the Scottish Parliament is that *‘the benefits for staff and patients are obvious and significant’* – none of them realisable without highspeed broadband connectivity networking patients with professionals.

**135.** Such communities may be rural and remote but they are also increasingly switched on and campaigning for more because of what one rural broadband advocacy site calls ‘the amazing benefits of superfast broadband’. Yes, among those benefits is the ability to watch films or television online but, given that other types of entertainment, such as live music, theatre and cinema are not as accessible or available, this is neither surprising nor to be sneered at. But the campaign for broadband in rural areas in the UK is a lot more about the vitality of communities than the desire to download videos.

**136.** As the Commission for Rural Communities stressed:

- rural areas have seen enormous benefits from broadband access
- businesses owners have relocated... from urban areas... to enjoy a better quality of life
- home-working and online services have slowed down out-migration and attracted in-migration
- businesses can now tap into worldwide markets
- all supporting local shops and schools and the retention of rural services [Ref. 78]

– and see the next generation network as a lifeline.

**137.** This is certainly the view in Cornwall, whose economy and communities are being strengthened by investment in infrastructure and training, and explains the really energized activity around broadband that is going on in Cumbria, in the area alongside the beautiful but remote Lake District which has been championed by the community.

### 4.3 An e-postcard from the edge: How Cornwall is overcoming the tyranny of distance



**138.** In late 2010 news came from Britain’s Celtic periphery of a major broadband investment involving BT, the EU and Cornwall Council, a largely rural, unitary local authority with a dispersed population of 500,000.



**139.** Using £78.5 million from BT and £53.5 million from the European Regional Development Fund, the project will ensure up to 90% of Cornwall's homes and businesses access to high speed next-generation broadband by 2014. 'World-class communications will attract new business investment into Cornwall, creating thousands of jobs,' says the Council leader.

**140.** *'This project is very exciting,'* noted Ed Vaizey, the UK government's Communications Minister. *'Households and businesses in this largely rural area can now look forward to having one of the best broadband connections in the world thanks to Cornwall Council's vision, European funding and BT's investment and expertise.'* A spokesperson for the Cornwall Development Company added that, now *'high-growth dynamic businesses won't be hampered by their peripheral location'*. The investment would also help change the county's market profile, reinforcing Cornwall's *'low-carbon "green peninsula" aspirations'*, leading to a drop in commuting to work in denser, more connected areas [Ref. 79].

**141.** The investment has been received as a boost to Cornwall on its journey from an economy and society, dependent on agriculture, seasonal tourism and rust-belt industries, to a fast-growing focus of a new economy and a renewed community. On the periphery geographically but, increasingly not commercially or in terms of electronic connectivity. It may still take over five hours to get from London to Cornwall by car but broadband reduces the communications gap effectively to zero. The 'edge' just got closer to the centre.

**142.** Reducing both the perception and reality of remoteness, the broadband revolution in Cornwall is intended to play its part in the revitalisation of Cornish communities by reducing the need for the ambitious and skilled to emigrate from an otherwise idyllic part of the world and by attracting entrepreneurial migrants from outside.

**143.** Cornwall, which had been at the heart of the industrial revolution and was well connected by sea when maritime links were the super-highways of their era, had suffered mass emigration for over a hundred and fifty years – to Burra Burra and beyond with Cornish migrants playing a formative role in the mining industry in Australia [Ref. 80]. They left behind emptying villages with socially-excluded enclaves as severe as anything in the cities of the UK. This is why Cornwall

was allocated massive European structural funding from which the broadband roll-out is supported.

**144.** Whilst no one would say the turnaround in fortunes is anything like complete, the revival is under way. The EU points to the regeneration of Cornwall and the role in it played by broadband as exemplary, with the *actnow* program being seen as a model [Ref. 81]. Its population has increased by 6.5% since 2001, faster than the UK average. At the same time, the socio-economic mix in Cornish communities is becoming more diverse, sustainable and balanced as not just retirees but wealth creators return to the county seeking a sea-change and an outstanding quality of life for themselves and their families – and to make a buck.

**145.** Broadband roll-out, prioritised under successive European programs in Cornwall since 2000 and investment in a Combined University in Cornwall, only possible because of investment in broadband, is seen by political, community and business leaders as a vital part of this process of economic *and social* recovery. It raises GDP – with Cornwall demonstrably beginning to close the gap on the rest of the UK [Ref. 82] – *and* social capital at the same time. There is a growing self-confidence in Cornwall and a re-assertion of its cultural identity. In reducing the tyranny of distance and the productivity gap with the rest of the UK, broadband contributes to the strengthening of community vitality and local identity, as well as the economy. In Cornwall, broadband is seen to offer this double whammy.

## 22. actnow

URL: [www.actnowcornwall.co.uk/home.asp](http://www.actnowcornwall.co.uk/home.asp)



Cornwall's actnow project was one of the most successful EU-backed regeneration initiatives ever undertaken, helping well over 10,000 businesses, farms and voluntary organisations between April 2002 and December 2008. Operating as a not-for-profit social enterprise, actnow was dedicated to accelerating economic growth and social inclusion through the use of broadband.

The roll-out of broadband across Cornwall enabled increased flexible working among businesses, which actnow actively promoted through the actnow flex project. This research showed the positive impact of broadband on company productivity and employee flexibility – and in the marketing of Cornwall.

*'Before the research, we couldn't effectively 'sell' the benefits of broadband to businesses thinking of coming to Cornwall. Now, we can confidently say that small businesses will be able to operate while enjoying the quality of life that Cornwall has to offer.'* Julian Cowans (Program Manager, Superfast Cornwall) [Ref. 83]

Increased productivity is partly due to increased employee motivation and improved work/life balance, which helps in attracting and retaining staff. There are also significant productivity benefits as a result of employees being able to work flexibly from home avoiding the stress and wasted time of unnecessary travel to the office.

## 4.4 Another e-postcard: Cybermoor – communities doing it for themselves



**146.** One of the most active communities is Alston Moor, 'England's last wilderness', in Cumbria, which has its own community broadband cooperative, called Cybermoor. Cybermoor is currently upgrading its broadband network to give customers a faster, more reliable service through new wireless technology and fibre-optic cable to 'keep Alston Moor in the internet fast lane!'

**147.** Alston Moor in Cumbria was originally part of the government's Wired-Up Communities (WUC) Project to connect around 12,000 homes in seven disadvantaged communities to the internet. It was the most remote of the communities chosen – people living in Alston have to travel vast distances over narrow roads and high descents to access basic public services.

**148.** PCs were provided to 88% of the residential population of Alston Moor. PC internet access was initially made available using a mix of dial-up connections, satellite and radio wireless from the local school. Broadband was provided to 32% of homes and adaptive equipment given to those with disabilities. Public access computers were made available in various public locations around Alston Moor for those without home internet access. In 2007 Cybermoor Ltd had the highest internet penetration of any rural area in England.

### 23. Cybermoor Ltd

URL: [www.cybermoor.org/index.php?option=com\\_content&view=frontpage&Itemid=1](http://www.cybermoor.org/index.php?option=com_content&view=frontpage&Itemid=1)

Cybermoor Ltd promotes social inclusion and interactivity through ICT locally and in other communities. To complement investment in infrastructure and hardware, residents are trained up and many take part in the online discussions. The website is used to deliver innovative services including text message alerts when roads are blocked by snow, and a car-sharing service. In 2007, the Cybermoor site was one of the most actively used community sites in the UK, with the portal actively visited by 263 people each day, which is 12% of the local population.

The Cybermoor website has shown that there is a huge appetite to discuss the delivery of local services in a local forum, be they delivered by the public, voluntary or private sector. It gives the chance for those providing services and implementing policy to inform and listen to residents and improve delivery. Rather than being controlled centrally, feedback is qualitative and structured by the community.

In a two-month period, there were 19,053 visitors and 871 contributors to community discussions about the delivery of local services, planning issues and refuse collection in Alston, which dwarfed the representation at public meetings to discuss the same issues.

**149.** This echoes a theme: in remote areas in particular, broadband – and the faster the better – enables civic participation and engagement with service providers by those who previously may not have been able to engage because of distance, cost and competing pressures for time.

### The Eden Declaration: ask not what government can do for us but what we can do for government

**150.** Cumbria is leading England in the campaign to extend and widen fast broadband coverage. With the recent election of a coalition government with strong support in rural areas, that campaign has already influenced national government. This is not, however, just a begging-bowl campaign.

**151.** This campaign links the key new government localism agenda of the Big Society, where communities increasingly take responsibilities and find solutions themselves, with the broadband agenda. Rural, remote or otherwise less-connected communities are seeking to be partners with government and the private sector in broadband delivery with many innovative private-public partnerships or community enterprises being created in the process [Ref. 84].

**152.** The interesting stress of the Cumbrian campaign is on the benefits to government of these communities being networked, and not just the other way around. And in this process there is evidence that a by-product of the campaign to secure fast broadband for communities is the broader coming together of those communities spurred on by such campaigns.

**153.** As *Digital Scotland* puts it in regard to the island of Tiree: 'Having created an impressive digital system through their own efforts, confidence has grown in the community capacity for creative social enterprise, which can enrich it both socially and economically' [Ref. 85]. That sense of community confidence is striking in the impressive Cumbrian-based Eden Declaration. Note the clarion call for the 'best superfast broadband' connectivity to serve and sustain their community.

## 24. Eden Declaration

### Summary

We, the parishes of rural Cumbria hereby declare that isolation is the greatest threat to the sustainability of rural communities; and that better communication is vital to our society, to government services and to our economy.

We are, therefore, determined to overcome the barriers of distance by installing the best superfast broadband.

- We will ensure that no one is left behind. While not everybody will share 100Mbps connections, every last dwelling in rural Cumbria will have access to 2Mbps by 2012 and 30Mbps by 2015.

We recognise that we, the parishes of rural Cumbria, must play a leading role in this process.

Each parish will appoint a **broadband champion** responsible for driving our campaign.

- We will aim to bring everyone in our parish online.

We will, where necessary, contribute our own labour and time, from digging trenches to negotiating concessions on wayleaves, to deliver superfast broadband more quickly and cheaply.

- We will work with suppliers to reduce their costs.
- We will build our own networks where necessary.

### Articles

1. Social and political life is based on communication. Isolation and lack of communication undermine the lives of communities and the efficiency of government.

2. Communication increasingly depends on excellent data transport and access to the public internet and all other interconnected networks. This we call 'connectivity'.

5. Connectivity exists for the general good. Citizens cannot fully explore their potential if they are isolated from one another, or isolated from information, education, and communication services. Everyone must have access to adequate connectivity.

### We, the communities of rural Cumbria, expect

18. Central government to invest in communications infrastructure in rural areas in order to transform public service delivery in areas such as healthcare, social care, education, community capacity building, and economic development.

### In return, we, the communities of rural Cumbria, will

27. Partake in publicity events to promote the benefits of a fully connected community.

28. Work with central and local government to transform public service delivery in areas such as healthcare, social care, education, community capacity building, and economic development **[Ref. 86]**.

**154.** The explicit commitment to working with government to transform public service delivery speaks to the essential nature of high speed broadband as a tool of co-production. As e-government matures in the UK, as speeds increase and applications proliferate, it is beginning to come under pressure from the forces unleashed by broadband for which the rather formal term e-democracy has been coined. It's a bit less well behaved than that and all the better for it, as we shall see.



# Chapter 5

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## E-DEMOCRACY: THE REVOLUTION WILL BE WEBCAST, TWEETED AND YOUTUBED

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### 5.1 24/7 – New style democracy

**155.** In what might be considered a rather ironic event, a recent offline – that is, actual – meeting of ‘hundreds of bloggers, tweeters and online activists’ was held recently in London to ‘fight the Government’s cuts in public spending’. The key point of the meeting was that online campaigning had become an essential part of ‘winning public support for change’ [Ref. 87].

**156.** While I was wondering why they couldn’t have ‘crowd-sourced’ this online and did they actually have to travel to London from all over the UK for this, I realised that the power of broadband in the Web 2.0 era is not to replace direct community or public engagement, but to supplement it.

**157.** It can prompt face-to-face contact as well as virtual, and strengthen engagement with the neighbourhood outside the door as much as communities online. E-democracy is where the two come together, from where some very creative and powerful challenges to politicians and public servants are coming, not just to respond but to involve, and not just nine-to-five. Democracy in the UK is ceasing to be an exercise undertaken in the ballot box once every five years and is going 24/7.

#### The Wisdom of Crowds – a new style of consultation

**158.** The best politicians and public services are going with this and are incorporating ‘the wisdom of crowds’ in what they do, even when setting government or department budgets. There is now an e-service dedicated to helping governments undertake such online public consultation (delib: [www.delib.co.uk](http://www.delib.co.uk)).

**159.** Delib software was used by central government to ask for proposals from the public on public spending cuts in 2010 – and over 40,000 people responded in detail. The results of the consultation were reported back immediately on the Treasury site which included a link to a television interview with the Chancellor. I note that in immediately accepting a really practical suggestion (an online auction site for surplus and second-hand government equipment, with the money made reinvested in public services) – the government shows the origins of this new world in GumTree or eBay culture. None the worse for that.

### 5.2 Government as a ‘Participative Platform’

**160.** That shift in democratic dialogue and practice, towards what its supporters call ‘government as a participative platform’ [www.citizenspace.com/demo/about\\_citizen\\_space](http://www.citizenspace.com/demo/about_citizen_space) – is based on three new approaches in the UK:

1. technological – finding affordable tools, platforms and channels to support decision-making processes;
2. public-facing – engaging people and getting wide, useful participation;
3. political – actually doing something with input/ feedback and integrating it into the processes of government.

Ever faster broadband technology and the co-production culture it sponsors are at the heart of this.

**161.** The concept of government as a working dialogue with individuals and communities enabled by broadband is also leading the UK government to

a pretty radical position on 'open source' working, which many see as the natural partner of 'crowd-sourcing'. The transparency visible in [data.gov.uk](http://data.gov.uk), which brings together cross-government datasets (including information on commercial contract details) on a single, easily searchable, interactive website, free to use and respond to by anyone including the private sector is both commendable and transformational. However, it not only raises the bar for public services and their dealings with the community. It raises again the question of how can one crowd-source and thus influence government, if one is not part of the crowd? 'Connecting Communities' is a matter of good governance and citizenship in the modern era. And the governance that follows has to be as responsive and as speedy as fast broadband enabled technology allows. [www.data.gov.uk](http://www.data.gov.uk).

### 5.3 Online Campaigning – the immediate response loop and a new kind of community

#### A Fairytale, England: Mayor's Question Time

**162.** The Mayor is addressing Council Members at his weekly Mayor's Question Time. It is being webcast live.

**163.** In his familiar amused manner when answering a question he mentions as an aside that Pink is 'indeed a very fetching colour for girls and their dolls'.

**164.** Watching the performance working mother Emma Moore, founder of Pinkstinks, (see below), tweets 'The Mayor just said he likes Pink for girls' to her thousands of like-minded, agitated working mothers. Emails pour into the Mayor's Blackberry (now audible on the webcast as it is on vibrate) immediately demanding a retraction and the blogosphere is rampant. Emma downloads all the research proving the long-term damaging effects on female equality of our society's obsession with pink for girls. She sends it with a short video made by a Pinkstinks supporter in Sweden from her website and all the killer debating points to the hand-held device of a councillor. The councillor then gets up on a point of order to rebut the Mayor's 'damaging views on Pink'. The ever-charming Mayor, not missing a beat or a trick, replies, 'Pink? Pink? Did I say Pink? I meant Blue' and blogs disarmingly on his true views on Pink on his own website and indeed that of Pinkstinks. He's no fool.

**165.** Of course this fictitious Mayor never opined on Pink in the first place. I made that bit up. Everything else is happening in the interface between politicians, community campaigning and broadband-enabled technology now. Webcast, blogs, Twitter and Facebook all seem to be attracting new types of people and communities – with women strongly present – to participate in a way they didn't before.

**25. Pink Stinks – reaching a community online**

**URL: [www.pinkstinks.co.uk/](http://www.pinkstinks.co.uk/)**



**Pinkstinks** is a campaign and social enterprise that challenges the **culture of pink** which invades every aspect of girls' lives.

This site is for parents and non-parents alike, and aims to gather support, promote discussion and ultimately to mobilise that support to influence marketers and the media about the importance of promoting positive gender roles to girls.

'TELL YOUR FRIENDS AND SPREAD THE WORD – WORD OF MOUTH IS EVERYTHING! The website proclaims.

The website is full of interactive opportunities:

- up-to-date tracking of the media
- uploaded videos created by supporters
- she sells merchandise and receives donations online
- she directs people to their Facebook group and Twitter
- provides forums for online discussion, and links to other blogs.

**26. OS21 – Using broadband to campaign locally to save the character of a market town and create a new community focus**

URL: [http://oswestry21.com/?page\\_id=31](http://oswestry21.com/?page_id=31)



OS21 was set up as a result of a proposed out-of-town supermarket development, now given permission. Saffron Rainey talks of how they have used social media, Facebook and a blog, to campaign and attract attention to their cause which has widened now to the future and sustainability of the town.

*'Without doubt one of our perceived strengths has been the group's use of internet based media. The use of a blog was seen as innovative and quickly became a place where traditional media would look to take news stories. Relationships have been built with the press who now actively seek the opinions from members of the group on many issues that effect the town.'*

**Saffron Rainey, OS21**

166. The mother of all online community campaigners is of course

**27. Mumsnet**

URL: [www.mumsnet.com/](http://www.mumsnet.com/)



A web-based network set up 10 years ago, the network provides news, local advice on places to go, education, childcare, and community and employment issues. It aims to bring mothers and parents together to improve their social networks and combat isolation often associated with parenthood.

It has become a powerful campaigner on behalf of parents, conducting surveys and hosting discussion fora on hot topics which assist with formulating agendas and influencing decision makers. After online interviews between Gordon Brown and Mumsnet members, political commentators started speculating on the role Mumsnet would play in determining the 2010 election or the Mumsnet Election as it became known. [www.mumsnet.com/media/mumsnet-election](http://www.mumsnet.com/media/mumsnet-election).

The site has grown rapidly with more than 1.2 million unique visitors each month, (Google Analytics Oct 2010). **Mumsnet Talk**, discussion boards attract around 25,000 posts every day and Mumsnet activists are not slow to Twitter but then that's now true of the politicians themselves.

**167.** So efficient has the online e-democracy world in the UK become that now there are sites which provide a kind of community-activist cloud-service by taking information from you of whom you wish contact, about what – and form the technical interface with the relevant politician or public service for you. Have a look at [WritetoThem.com](http://WritetoThem.com) and [fixmystreet.com](http://fixmystreet.com) – **and just imagine where even faster broadband will take such services.**

### 28. WriteToThem.com

**URL:** [www.writetothem.com/](http://www.writetothem.com/)

The site provides information about campaigning – and enables users simply to contact local councillors and Members of Parliament. The site sent 183,493 messages to elected representatives in 2008. It also kept ‘tabs’ on MPs’ responsiveness in the form of a league table.

The site also connects users to their politicians by linking them to blogs, messaging or relevant websites. The website is run by a charitable organisation MySociety. It is funded by donations of money and people time to build the website.

### 29. FixMyStreet

**URL:** [www.fixmystreet.com](http://www.fixmystreet.com)

FixMyStreet is an extraordinary and simple tool of broadband-enabled people power. It allows people to report, view or discuss local problems like graffiti, fly tipping, broken paving slabs or street lighting online. Users locate the site either by postcode or street name and then pinpoint the problem on a map along with a description of the problem. FixMyStreet then forward the details of the problem to the relevant council and provide updates on responses.

On 12 January 2011:

- 1,568 reports had been made in the last week
- 1,735 problems fixed in the last month
- 116,739 updates provided on reports since starting the site

The following page is the entry for my own street in London. [www.fixmystreet.com/?pc=winston+road+hackney](http://www.fixmystreet.com/?pc=winston+road+hackney)

**168.** Some go online to defend their streets, others to promote the interest of their communities with special needs.

### 30. Changing Places Consortium

**URL:** <http://changing-places.org/>

Changing Places Consortium is an online campaign on behalf of those people who cannot use standard accessible toilets. This includes people with profound and multiple learning disabilities and their carers, as well as many other disabled people. There is an interactive site which includes videos, a forum and interactive maps identifying facilities.



**169.** Others go online to build a global community of interest and support, even from their kitchen.

**170.** Orchid is a campaign to raise awareness, gain support and end Female Genital Mutilation by 2025. It was set up by Julia Lalla-Maharajh in London after returning from time in Ethiopia with VSO, then a unique online opportunity arose...



### 31. YouTube – a global community

URL: [www.youtube.com/davos](http://www.youtube.com/davos)



Julia Lalla-Maharajh started Orchid which campaigns against female genital mutilation after returning from voluntary work in Ethiopia. The campaign, run from her North London home, took off when it went viral. It all started when a friend told Julia about a worldwide competition run by YouTube which involved making and posting a three-minute video on their site about 'why she should have the opportunity to go to Davos to present to world leaders'. The video with the most votes on the YouTube would be sent to Davos with its creator.

She made the video, roped in a few online volunteers and, via email, tweets and blogs, directed a large number of visitors to the site to vote. 'To my great surprise, I won the competition, was flown to Davos, networked with many world leaders, button-holed Bill Clinton and raised the campaign profile hugely'. How a community online can help a vulnerable global community – from a London kitchen. The power of broadband.

Julia Lalla-Maharajh, founder Orchid Project [Ref. 88].

<http://orchidproject.org/>

### The Power of Twitter – TweetyHall

**171.** TweetyHall is a dedicated site created by the Local Government Association to promote and follow local councillors' tweets. This style of communications between councillors and voters is more relaxed and allows open and transparent discussions.

**172.** It keeps track of which councillors are using Twitter the most. The distinction of being the councillor with the most tweets belongs to Simon Cooke of Bradford City Council who as of writing had clocked up 25,822 mini-Socratic dialogues with the good citizens of Bradford.

### 32. E-democracy

URL: [www.tweetyhall.com](http://www.tweetyhall.com)

The following are some snippets from an email exchange with Councillor Simon Crooke:

When asked why he is so keen on Twitter:

*'enjoyment tops the list... We get involved in politics... (because) we have an opinion... blogging, twitter and the like proves a place where that voice can be projected... not only is opinion encouraged but where you will find that opinion challenged... there is what might be (probably by more pompous folk) 'interactivity' – this is about being responsive rather than merely active. Some of what we do seeks to stimulate reaction – you might term that 'proactive' engagement... All of this engagement is open and public – indeed part of the point is to influence and contribute to the wider debate not just to interact with a given person... What social media provides is a new way for people to connect to politicians – it acts (for some at least) to remove the barrier we built separating us from the electorate by allowing direct interaction.'*



## 5.4 Tweets, webcasts and the instant response loop...

**173.** There is now a culture in the UK of local authorities posting live webcasts of debates which people – without leaving home – can watch, respond to and participate in by tweeting, texting or emailing members sitting in the chamber in real time.

**174.** Watch councillors in Kent make budget-decisions live, whether wisely or not... [www.kent.ukcouncil.net/site/player/pl\\_compact.php?a=41140&t=0&m=wm&l=en\\_GB](http://www.kent.ukcouncil.net/site/player/pl_compact.php?a=41140&t=0&m=wm&l=en_GB)

## 5.5 E-petitions

**175.** For those worrying that e-petitions are so last century – as most local councils now host e-petition facilities, and digital advocates such as Digital Unite **[Ref. 89]** provide standard e-forms and easy-to-use guides – I bring news of a radical departure in the 21<sup>st</sup> century: a government actually committing to changing something when it receives a large enough e-petition. Under pressure from the UK's Digital Champion, Martha Lane Fox, from March 2011 all e-petitions to government will be channelled through a single government interface (the DirectGov site). More importantly, the government has now agreed that any e-petition that receives 100,000 signatures will be eligible for debate in Parliament. I said it was radical.

### 33. Number 10

**URL:** <http://petitions.number10.gov.uk/>

Visitors to the site can view petitions by subject, by size, by date and the responses to the government's responses to the petition. There is also a step-by-step guide to preparing a petition using the site. To date e-petitions with over 500 signatures receive a response which is published on the site.



## 5.6 'We asked; you said; we did': the Bristol consultation hub

**176.** Bristol has a consultation hub where users can access any consultations past or present – and take part in policy making.

**177.** Staff responsible for projects establish and manage a project blog with regular posts to attract debate and opinion. <http://askbristol.wordpress.com/> In addition papers and/or surveys are posted on the site for people to comment on by posting comments which then in turn generate more views.

**178.** The 'You asked; we said; we did' page makes it very easy to track a consultation and ensure that the council is listening:



**179.** And of course they do e-petitions. For those interested, the petition on 'Bristol wants a new stadium not a village green' has received 27,734 signatories in support so far.

**180.** These are snapshots of very large changes under way in public services because of broadband – and how they serve the community and how they organise themselves.

# Chapter 6

## A HEALTHY PUBLIC INTEREST?: PUBLIC SERVICES

How the 'connected community' loses weight, educates Rita and gets the networked nation to integrate, save public money and improve services.

### 6.1 Healthy, wealthy and wise

**181.** The increasing scale of the digital interface between UK public services and UK people is best grasped by logging on to NHS Choices. 300,000 citizens did so on one day in December 2010 so you won't be on your own. In the winter of 2010 it received 20 million visits ([www.nhs.gov.uk](http://www.nhs.gov.uk)).

#### 34. NHS Choices

URL: [www.nhs.uk/Pages/HomePage.aspx](http://www.nhs.uk/Pages/HomePage.aspx)

NHS Choices is website and online interface with the National Health Service developed to help individuals make choices about personal health, from lifestyle decisions including smoking, drinking and exercise, through to the practical aspects of finding and using NHS services. It allows people to explore health issues from home on their computers. It includes basic information but also interactive services, blogs and forums to share experiences and advice. It can also be personalised to suit individual needs.

In addition to providing information on common conditions and signposting access to services, it:

- Allows people to book and change appointments with hospitals
- Provides accessible educational videos on key health issues e.g. heart by-passes, toilet training, winter health, prostate cancer, Bollywood exercise videos, breast feeding
- Provides interactive tools to help manage stop smoking programs, access your fitness and weight. There is even a program to get from the couch to running 5km [www.nhs.uk/livewell/Pages/Livewellhub.aspx](http://www.nhs.uk/livewell/Pages/Livewellhub.aspx)
- Enables online communities including blogs and forums where people come to talk about how they manage their medical condition or help someone else to cope <http://talk.nhs.uk/>
- Provides Opportunity for users to give feedback on the NHS services.

Today's NHS also of course uses YouTube, Twitter and Facebook. This service is award winning and estimated to have saved the NHS already £44 million. (Imperial College).



182. The theme of public benefit and public service and efficiency being enabled by fast broadband is reinforced by the impact of the NHS's Image Exchange Portal.

### 35. NHS's Image Exchange Portal

URL: [www.image-exchange.co.uk/index.php](http://www.image-exchange.co.uk/index.php)

A web based application, it has in the one year of its existence been used to transfer over 100,000 patient studies and over 19 million X-ray and other images between NHS hospitals and also independent health care providers [Ref. 90] throughout the country. Expensive CDs previously needed for recording scans, to be mailed or taxed, are no longer required and radiology reporting has speeded up significantly meaning quicker interventions for patients. Increasingly consultations will take place with such patients remotely online, freeing up more consultant time and enabling patients to access the best treatment without the burdens of travel.

183. As we saw with telehealth pilots in Scotland, that moment has arrived. Highspeed, broadband connectivity is saving time, money and lives.

184. It's also ripping up education as we know it and making a compulsory experience for our kids fun and successful – and helping to better link schools into their communities.

## 6.2 Broadband and education: mind-expanding, mind blowing: and that's just the kids

*'When I came to the school 5 years ago, the closure of the local coal mine had resulted in a downward spiral in the community. Standards were very low at the school, and many parents had no real interest in what was happening with their children's education. I managed to find the money to give every child in the school a simple laptop computer that they took home. We re-wrote the curriculum to enable each child to progress at a rate suitable for their ability, and the results*

*went through the roof. An external adviser said it was a year's progress in less than a term! What was really exceptional, however, was the effect this had on the community. Parents suddenly wanted to know how they could use the computer. We did a deal with the local college of further education, and many parents – mums and dads – were soon regulars at school studying online alongside their children. The school is now an exciting and lively place to be, and the ICT investment is paying back many times over with raised standards, self esteem and community pride.'*

Head teacher [www.anthonymbek.com](http://www.anthonymbek.com)  
Derbyshire [Ref. 91]

*'If every student leaving school was able to picture their lives with seamlessly integrated technology – end user devices, integrated services from the private and public sector, life-long personalised learning applications and so on – and understand how their choices around behaviour, purchasing and usage of technology would directly affect their wellbeing and productivity, then that's the real opportunity. That some may leave able to hack the Pentagon is neither here nor there.'*

Chris Stark, Navigant Consulting [Ref. 92]

185. As a trained teacher who ran away from the classroom in terror of children I was prepared to be underwhelmed by activities in the 'classroom of the future'. I was knocked out.

Whether it's:

- the whole-school assembly in Aberdeenshire where they all sit down over Nintendo DS's and do Brain Training and compete against each other and teachers in a school league table in an ICT enabled climate which has radically changed the power hierarchy and reduced bullying;



- or the 'virtual school' where 80% of the curriculum is delivered online with pupils, parents and teachers all working together 24/7 whether physically based at home, at school or waiting for a bus;
- or the school where with help from the e-learning Foundation all 240 pupils in a challenging environment received 'netbooks' to use at school and at home; (St Peter's netbook project);
- or the school where low attaining pupils become high attaining pupils because it replaced pen and paper with Web 2.0 infrastructure;
- or the school who opens its doors and welcome its communities in to make use of their facilities and even allow community ICT into schools – with kids and parents bringing their own devices in to access schools data and content;
- or the website Beatbullying which attracts children to its website by providing things such as video clips, music downloads and smart phone apps. From there, any kids with problems of being bullied can access help, such as via the Cybermentor scheme.

### 36. Cybermentor

URL: [www.cybermentors.org.uk](http://www.cybermentors.org.uk)

The Cybermentor scheme provides online trained volunteers so that children who are being bullied can chat with online – either via phone apps, SMS, or computer. None of this interactivity is possible without broadband. Of course Beatbullying also makes extensive use of viral marketing using YouTube video for its campaigns...[Ref. 93]



... I am now persuaded. Learning and the educational experience in the digital age are transforming and the innovation shown is exciting. If you don't believe me, have a look at the BECTA award winners over the last few years and see the good stuff for yourself. (<http://awards.becta.org.uk/display.cfm?page=1744>) Also have a look at [www.ted.com](http://www.ted.com) and never come back.

### 37. Ted

URL: [www.ted.com](http://www.ted.com)

Ted is a library of inspirational online lectures from around the world that can be downloaded whenever you want to learn something new. It brings world class educational content into the kitchen, the classroom or wherever technology can take it.



**186.** The lasting implications are pretty clear. The era upon us is one where students want to and will be more able to self-direct their learning, where their engagement in coursework and the effort required to move through the education system can be more channelled in a manner that suits their individual needs and where they can, if they choose, share and learn with many – at home, with kids in other countries – rather than a randomly selected 29 others in a cohort.

**187.** Structured curricula are creaking, the integration of homes of home-school-life-work spheres becoming more apparent and the concept of the school day is getting seriously bent. The best teachers can now be available online in very unconventional and remote locations and some of those teachers are kids themselves or their families.

**188.** It was because the 'best teachers and schools don't exist where they're needed most' that Professor Sugat Mitra instigated the digital 'hole in the wall' educational experiment for street kids which eventually prompted the film Slum Dog Millionaire. His series of

real-life broadband enabled experiments from New Delhi to South Africa to Gateshead in England are revolutionising how we think about teaching [Ref. 94].



**189.** The creative use of ICT can bring gains in self esteem, aspiration, motivation and self awareness within the whole community though perhaps particularly amongst some groups. Most significantly, it has been shown that disaffected and alienated students can be engaged. (See action research from University of East Anglia at [www.uea.ac.uk/care/nasc/Pedagogy\\_Culture\\_Society/Disaffection\\_ICT\\_Motivator.pdf](http://www.uea.ac.uk/care/nasc/Pedagogy_Culture_Society/Disaffection_ICT_Motivator.pdf)).

**190.** Lest you worry this is the usual educational progressivism let's ground the gains in conventional terms. Academic research in the UK shows that young people learn more effectively when full use is made of ICT and modern technological devices. The respected Institute for Fiscal Studies did a compelling longitudinal survey showing that being connected to the net at home improved test scores by a full two grades at GCSE (16) [Ref. 95].

**191.** That's serious, as is the indication that a performance gap is opening up between those who have access to and can use a PC at home and the 2 million children who cannot. Many projects have been geared to bridging that specific gap. 55% of teachers in the UK say that children without internet access at home were at a serious educational disadvantage: 'if we are serious about improving the life chances of the most disadvantaged we have to tackle the digital divide, otherwise the poorest children will be left even further behind' [Ref. 96].

**192.** Amongst the best evidence for the creative impact of broadband in schools in not just what the authorities are doing or even what teachers are doing – it's what

kids are doing. For the last seven years, an annual event has allowed young people – from 5 upwards – to show how they are using modern technologies to facilitate learning and how these empower them.

**193.** The event is called 'Be Very Afraid' and though it is the invention of Stephen Heppell, a real pioneer of innovative technology in the classroom and how young people are liberated by it, re-inventing schooling along the way, he would no doubt stress that the stars of the show are young people themselves. Over the years, the sophistication of the children at the event has grown exponentially as they demonstrate their capacity to access and use information and indeed to invent new applications to help learning. Last year, the event happened in both the United Kingdom and in Australia for the first time. More details, and video clips from the *Be Very Afraid* conferences can be found at [www.heppell.net/bva/bva6/default.htm](http://www.heppell.net/bva/bva6/default.htm). The event that took place in Victoria is BVA 7. Impressive.

**194.** Three areas in particular can be seen to benefit from embracing broadband enabled technologies – teaching and learning, professional development and community links.

**195. Teaching and Learning.** ICT allows teachers to deliver greater flexibility and tailor teaching techniques to suit individuals.

## Snapshots

*A whole school project was organised by a primary school to reinforce the importance of e-safety and every pupil was engaged in both online developments and role play.*

[www.Gearies-inf.edbridge.sch.uk](http://www.Gearies-inf.edbridge.sch.uk)

*A teacher working with a low ability Year 7 class used animations and comic strip presentations to deliver key facts in a visual manner. Pupil's understanding and engagement in the topic was greatly enhanced over other delivery methods.*

[www.teachers.tv/videos/secondary-science-using-ict](http://www.teachers.tv/videos/secondary-science-using-ict)

*A Year 11 group used school based wiki pages to help with a study of poetry for GCSE. The predicted grades went up from C to A as a result.*

[www.teachers.tv/videos/secondary-english-using-ict](http://www.teachers.tv/videos/secondary-english-using-ict)

**196. Professional Development** Developments such as Teachers' TV (now only available through the internet) and the many professional chatrooms have allowed the sharing of material and resources on a massive scale. This is helpful to all teachers, but especially those working in small schools or isolated communities.

### Snapshots:

*A primary school gained more time for teaching and learning by using technology to lighten their planning workload. Staff found they were able to adapt and reuse documents and use ICT tools within their classrooms.*

[www.easingtoncolliery.durham.sch.uk](http://www.easingtoncolliery.durham.sch.uk)

*By regularly sharing their practice and skills online, staff at a college in Liverpool have enabled students to reach higher standards of achievement than ever before.*

<http://schools.becta.org.uk>

*Staff in a comprehensive school have improved their A\* – C science results from 30% to 98% by sharing assessment data with students. The feedback enables students to address their learning needs and therefore a greater awareness of how they can improve.*

[www.becta.org.uk/exmplex1.php?statement=4.2.b](http://www.becta.org.uk/exmplex1.php?statement=4.2.b)

**197. Community Links** Attitudes to learning within a community and the value an individual family places on a good education are critical success factors in ensuring that young people achieve to their full potential. ICT

can help the school communicate with parents to keep them informed of progress and let them know how they can support their child's learning at home. It can also encourage parents to become interested in their own personal development, and online learning through sites such as the BBC and the Open University is increasingly popular.

### 38. Granny cloud – linking communities locally and globally

**URL:** <http://financial.tmcnet.com/news/2010/10/20/5080372.htm>

If there is only one video you watch from this report this is it.

<http://www.youtube.com/watch?v=IXxYgpQhsrU>



Following the Hole in the Wall experiment, Sugata Mitra made an appeal in an Education Guardian article to British grandparents to give an hour of their time to talk, using Skype, to children in the slums and villages of India. Within days, 200 volunteers, of all ages, many of them retired teachers, had come forward.

In the following months, 40 of these "eMediators" had over 200 hours of contact with children in India. They read them stories, played games with them, and chatted about their two countries.

The same experiment was repeated in the UK working with three schools in the north-east. In Gateshead, 10-year-olds working in groups were able to answer GCSE questions they would normally encounter six years later.

This approach to mentoring is most effective with highspeed broadband.



## Snapshots

Parents are better informed about their child's progress and school activities in a small rural primary school in Shropshire. In addition to the school's website, web technology such as blogging and podcasting keep parents aware of school events.

[www.microsoft.com/showcase/en/gb/details/d4f57ed7-334b-421e-8e5a-e2bb94ffc8a4](http://www.microsoft.com/showcase/en/gb/details/d4f57ed7-334b-421e-8e5a-e2bb94ffc8a4)

A secondary school communicates with parents through the schools learning platform. In addition to information about all aspects of school life, the school also hosted ICT training for parents to support family learning which has improved pupil outcomes considerably.

[www.rm.com/Secondary/CaseStudies/Article.asp?cref=MCASE1218662](http://www.rm.com/Secondary/CaseStudies/Article.asp?cref=MCASE1218662)

A rural local authority in the north of England has used the government funded highspeed internet connection to allow community access to fast broadband. The rural schools involved are now learning hubs for the whole community, and everyone benefits.

[www.guardian.co.uk/commentisfree/2011/jan/02/rory-stewart-lakeland-broadband-revolution](http://www.guardian.co.uk/commentisfree/2011/jan/02/rory-stewart-lakeland-broadband-revolution)

## 39. The Connected Primary School

URL: [www.barryislandprimary.com](http://www.barryislandprimary.com)

### Barry Island Primary School, Wales

This school serves a relatively disadvantaged community in south Wales. The area suffers from higher than average unemployment and community expectations are generally low.

The learning at the school is cross curricular and ICT is used to help to facilitate this. The vision successfully extends outwards to cover the needs of parents, families and lifelong learners in the wider community.

*'We want to lift the ceiling in terms of what we can offer children. They are very creative in presenting their ideas and are used to putting together films and podcasts. Technology is a real vehicle to engage children in learning – and it's the world that we live in. We are committed to using technology to ensure our pupils' progress and achieve their full potential.'*

**Mrs Hayward, Headmistress**

All classrooms have interactive whiteboards, and laptops, tablet computers and handheld devices are much in evidence. The school is proactive in testing and trialing to allow the children to experiment and find out how resources such as iPads and iPod Touch's can support their learning. The school's 21<sup>st</sup> century curriculum embraces technology as a routine part of learning content, process and presentation.

Young children actively create their own web space, take photographs, make videos and upload their work to share with friends and family at home. They are always encouraged to make informed and independent choices about where and when to use ICT.

The school has created a video as part of the school prospectus. Students have uploaded it to YouTube with a link to the school website.

[www.youtube.com/watch?v=mq9elpbLeZE](http://www.youtube.com/watch?v=mq9elpbLeZE)

- The school also hosts the regional training centre for Apple Mac.
- The school has been assessed as excellent by the inspectorate.



#### 40. Not just science

URL: [www.notjustscience.co.uk](http://www.notjustscience.co.uk)



This project started as a collaboration between Frome Community College, Camborne Science and Community College and Suited and Booted Studios CIC in Cornwall, to look at how science and maths in school can be more interesting, more interactive, more cross-curricular, more creative and more fun. Students work together to produce short science and maths films and load them onto a website they created, with a view to inspiring and educating their class mates.

After involvement in this project Frome CC saw science results increase by 20% and maths by 5%.

#### 41. The Special School

URL: [www.parkside.suffolk.sch.uk](http://www.parkside.suffolk.sch.uk)

##### Parkside Pupil Referral Unit, Suffolk

Parkside PRU has an outstanding record of using technology to enhance the independence and life skills of its pupils, who have a wide range of mental health issues. It caters for young people from all areas of Suffolk, many of whom had previously refused to go to school. This has been transformed at Parkside with attendance levels reaching 92%.

This emphasis on personalised and independent learning is achieved through a flexible curriculum which is continually evolving and designed to meet all young people's needs. The students are actively consulted on the detail of their ICT use to a greater extent than in mainstream educational settings.

The strategic leadership team encourages, promotes and supports the innovative use of ICT in ways that will help the young people in their care. For example, the school uses technology to enable the pupils to find their way to school if they get lost or are reluctant to ask for directions.

### 6.3 One nation, one network – Public services integration and efficiencies

**198.** From connecting kids to connecting systems: Connected Communities means the public services get connected up too.

**199.** The shared public services agenda is the most important one in UK public administration. It matters to save money, to increase the bang from the public buck, and to improve both services to the public and the user or customer experience of the public. Broadband is at the heart of this agenda and increasingly so as bandwidth, speed and interactivity increase, as big projects in Kent and Wales show.

**200.** **Kent Connects** is founded on this proposition and its best in class Public Services Network (PSN) shows how leading edge technology is helping Kent tackle the barriers to the joining up and sharing of public services.

**201.** Kent is a large County with a dispersed settlement pattern that now has a single ICT infrastructure for 1.5 million people, 16 Local authorities, Kent Police, Kent Fire and Rescue. Serving 1,100 sites and 250,000 users,

KPSN extends broadband connectivity to 595 schools, 103 libraries, 276 council sites, 17 social services offices and 100 children's centres. The next phase will encompass the health and voluntary sectors.

**202.** 'We're now seeing serious gains and a huge number of opportunities' (Head of IT, KCC). Partners have saved £9 million in operating costs alone in just over a year. Also anticipated are a large number of benefits to partners and residents alike including:

- Moving to on-net calls reducing connection costs and charges
- 20% productivity gains where flexible working is introduced
- 15% premises reduction where remote-working is introduced
- Negating the need for residents in remote areas to bear the cost of improving Internet connection

[Ref. 97]

**203.** An even greater prize comes with the breaking down of silos, the sharing of information and the taking of concerted action, between agencies. With children and young people's services for example, one problem family may have a dozen agencies 'on their case' usually working separately, often unbeknown to one another. KPSN is breaking down the silos, reducing costs and helping to improve outcomes for Kent citizens. KPSN is now working with the Cabinet Office to help develop models and standards for PSNs across the country.

**204.** And because the Kent Connects network is committed to open source principles and data sharing the network benefits accrue to punters as well as bureaucrats. Hence Pick and Mix – <http://picandmix.org.uk/>. This is explicitly aimed at 'empowering communities through the web' by increasing public access to Kent-related datasets including those generated by public agencies. The Council has brought together samples of key public information in a format that allows it to be 'mashed' and customised. One simple application of this when looking for a care homes for an elderly relative is that you can mix this information with GP locations and bus routes. By plotting this information on a map you will be able to see which care homes are close to a GP surgery, and the bus routes. Not big, very clever. (Kent Public Service Network – <http://kpsn.net/>)

## One nation, one network

**205.** Determined to break down silos between services and technologies Wales is on track to create a single broadband enabled communications and information transport platform for its 300,000 public sector employees working in health, education and government and its 3 million people.

**206.** Public Sector Broadband Aggregation (PSBA) is a Welsh Assembly Government initiative to deliver a single, all-Wales, public service telecommunications network by aggregation of the demand for broadband across large parts of the public service. This includes even more public agencies than KPSN, including local government, schools, hospitals, GPs, Universities and Colleges as well as emergency services on now 2,000 sites but likely to be 6,000 sites within two years.

**207.** By aggregating demand for highspeed connectivity on a single physical infrastructure using virtual communications technologies, PSBA is creating cost efficiencies coupled with significant collaborations across the public sector. As applications get more media rich greater bandwidth is needed and PSBA enables the public sector to collectively access this cost-effectively and to a high quality.

**208.** One small organisation, the Countryside Council for Wales with a dozen small offices in remote areas, saved, in the first 12 months of being connected to PSBA, over £100,000 and significantly reduced its carbon footprint [Ref. 98].

# Chapter 7

## TOWARDS A HIGHSPEED BANDWIDTH WITH A LOW CARBON FUTURE

**209.** We have talked about the benefits to people, communities and public services but what about the impact on the environment? The availability of highspeed broadband is allowing businesses and individuals to make choices that were not available previously. Teleconferencing, Skype, opensource information, the ability to share and download large files are changing the way we work, choose how we travel, interface with services, shop and virtually 'visit' family and friends. Its substitution effects on transport are already significant and set to grow.

**210.** Many of the projects mentioned earlier in the report such as the telecare and health services have environmental benefits as well as the social and economic benefits described previously. Reducing the time spent travelling for professionals and patients reduces cost, frees up patients and staff time but also reduces congestion, air pollution and carbon emissions.

**211.** The National Farmers Union in Wales has introduced a video conferencing system across its offices in mid Wales and its regional HQ. The reduced commuting time for 4 staff over a year has been measured as a total of 880 hours of productive time. This equates to an extra staffing resource of £8,800. They also reduced their CO2 emission by 41.6 tonnes per annum [Ref. 99].

**212.** Access to travel information sites can affect the way people choose to travel. Cities and local authorities are providing interactive travel information on sites including real time information, provided from the vehicles to a central point by both GPS and broadband.

### 7.1 Liftshare

**213.** Liftshare is a national website that facilitates carsharing across the UK. The organisation uses inventive ways to ensure that users of the site feel like they are part of a community of carsharers.

#### 42. Liftshare

URL: [www.liftshare.com/uk/](http://www.liftshare.com/uk/)

Using the site is free and assists with finding people to share regular car trips such as the daily commute to work or university, taking the children to school, one-off trips like going to a festival, event or show, or weekend trips. You can also search for a 'BUDI' to share your bike, walking or taxi journey.

Visitors to the site can also calculate how much they will save. You can also download the "The Joy of Car-share", the winning entry in the liftshare competition for videos made by members, check what people are saying in their blogs about carsharing or suggest tracks for the ultimate carsharing CD. All these activities are designed to build an online community around carsharing.

In 2010, over 55,000 invitations to share a journey were sent between members. Their membership is increasing by 50% a year. Almost 65% of member journeys are being made daily, which means that liftshare members in 2010 took 16,000 + cars off the road. Broadband is green too.

*'[Car-sharing] is a great success for me, saving us all money, improving boring car journeys and we are doing our bit to reduce traffic on the roads and trying to help our environment a little.'*

**Nigel, Liftshare member**

## 7.2 Carclubs

**214.** Carclubs have taken off in the UK as an alternative to owning a car or possibly a second car. There are 3 commercial providers of the service, not just in London but in other cities across the country. Users of the service, join on line, search and book available cars on line and pay on line. Members share views on the site with Tweets and comments on blogs.

**215.** Carclub London is a site to compare car clubs in London and across the UK. It allows you to find the nearest club and compare prices.

**216.** Fewer cars parked on streets and in our gardens means more room for other uses such as green space.  
[www.carclublondon.co.uk](http://www.carclublondon.co.uk)



## 7.3 And if you want to know when the next bus is...

### 43. Dash Bus Service: Intelligent Transport Systems

**URL:** [www.acis.uk.com/News/ACIS-House-Display-supports-new-sustainable-develo.aspx](http://www.acis.uk.com/News/ACIS-House-Display-supports-new-sustainable-develo.aspx)

ACIS (Advanced Communication and Information Systems) is a provider of Intelligent Transport Systems (ITS). In April 2010, the new Dash Direct bus service was officially launched to provide an attractive public transport alternative to the car for residents of new and existing housing areas developed in South Leighton Buzzard.

At home, the resident has access to a system showing the bus route number followed by the destination and the expected departure time of the next bus. Additionally, the next three departures are shown enabling the user to plan their journey according to their personal timetable. The live information is gathered from GPS tracking equipment on the buses and is updated every 30 seconds. A voice alert can be enabled advising when the next bus is approaching the stop nearest their home. As well as public transport services, information on other travel options, such as walking and cycling routes, is available on screen together with community information, weather forecasts and current news.

## 7.4 And if you'd prefer not to travel...

**217.** ...try homeshoring. This is the term used for extending an existing call centre into the home or local community spaces and using home based staff. Voice over internet protocol (VoIP) together with broadband allows everyone working for an organization no matter where they are located to be part of the same virtual switchboard. Calls between the virtual extensions are free. It is this technology which has made home working, particularly for call centre staff, possible.

**218.** Research has shown by providing call centre staff with the option of working from home you improve staff retention and are able to attract a higher skilled workforce. It is also enables those who are less able to travel or have other responsibilities to access employment.



#### 44. Homeworking – The Co-OP Travel Group

URL: <http://www.solihullcommunityhousing.org.uk/Default.aspx?slID=48&IID=0>



The Co-Op Travel Group's Future Travel subsidiary is the largest virtual contact centre in the UK with 630 ABTA-certified home based staff. Besides a host of improvements in operating costs and quality of service, there has been a reduction in energy requirements (because there are no central offices to heat and light), and staff travel is minimal.

#### 45. Homeshoring – Nottingham Pilot

URL: [http://productcatalogue.esd.org.uk/flexible\\_working\\_and\\_worklessness/homeshoring/](http://productcatalogue.esd.org.uk/flexible_working_and_worklessness/homeshoring/)

The Nottingham homeworking pilot project was focused on promoting flexible working and tackling worklessness. Partners included: Nottingham City Council, BT, Boots the Chemist and UK Virtual Call Centre (UKVCC). Partners agreed to allow current employees to work flexibly at homes – with equipment supplied – and to recruit from amongst target groups including

- Over 50s
- Women returners
- Disabled and incapacitated people
- Rural communities

The success of Homeshoring in these cases is dependent on using VoIP and having access to broadband.

## 7.5 Faster, better: public virtues of highspeed.

**219.** I should say something about speed. The higher the speed, the more applications, the bigger the transformation. This is true of the UK and true of Australia. The background to what we've seen in the UK is movement from voice calls (0.5Mbps) through audio streaming (1.5) to web browsing (4) as increasingly general experiences. In more recent times and in more commercial or professional contexts, we have seen movements from virtual worlds (6) through video conferencing, IP TV and video on demand (over 7) to online games (7) and HD TV (8Mbps).

**220.** The UK's National Endowment for Science, Technology and the Arts has summed up this moment in time well. NESTA says, a decade after the first generation of broadband arrived on the terrain that, 'Next-generation, superfast broadband will be a vital part of the emerging digital economy's infrastructure, enabling dramatic improvements in connectivity and offering new possibilities for businesses, public services and local communities'. NESTA adds 'In order to harness these benefits, it is however necessary to improve data transmission speeds through an upgrade of the existing network infrastructure. This requires fibre-optic.' [Ref. 100] As we move to reflect on the UK experience and the implications for Australia those 'new possibilities for public services and local communities' will guide the discussion and I believe should guide policy.

# Afterword on Britain

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## REFLECTIONS AND KEY ISSUES

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### Why broadband, not just how or how much: tangible benefits

**221.** Although ‘how’ and ‘how much’ are critical questions when building a national broadband network, ‘why?’ (and indeed ‘wow’) must not get lost in the plumbing. If the UK experience highlighted in this report does nothing other than remind us of the exciting applications and transformational impact of fast broadband – why we are doing this and what can be achieved – it will have met its purpose. We have to remind ourselves of the social purpose and broad benefits of this investment.

**222.** And those legacy benefits are not ‘intangible’. When all user groups or citizens are digitally included, and all can access valuable information and services currently available to the few, real network benefits accrue – the reduced costs and improved services are demonstrable and bankable as the UK experience shows.

**223.** The benefits can also be valued in outcomes as well as outputs; lives saved and enriched, health and other services improved, children educated, social inclusion increased, communities strengthened and made more self-reliant, emissions reduced and distances – geographical and social – reduced. This is the social return on public investment. In the UK there has been consensus about this return, and enthusiasm to realise the benefits of even faster broadband.

### The biggest bang for the public buck

**224.** The implications of this study are not romantic. They are about broadening our understanding of the implications of this public investment so that we ensure the biggest bang for the public buck. The report also reminds us that whatever the political heat about

broadband, people on the ground are embracing and exploiting it not just passively in some darkened room at home but interactively exploring the digital world where ‘community participation increasingly lives’ (Mike Stubbs FACT) *and* the real streets around them.

### Rollout is not enough

**225.** My own lesson from my encounter with this world is that money and lengths of fibre are necessary but not sufficient factors to deliver the broader transformation augured by technology. Broadband is as broadband does. ‘Rollout’ is necessary but not sufficient without ‘roll up’! ‘Rollout’ suggests that success in implementing a ‘national broadband network’ is a purely technical matter, with access achieved when inputs are committed. ‘Roll up’ speaks to the need to understand that success is achieved when the passive notion of ‘enabling access’ is replaced by an active reaching out to people to actually use this new tool – with a myriad of unforeseen consequences for well-being, as much as increases in GDP. And doing this requires imagination as well as organisation and a passion for involving people – in all their differences and complexity – in the process of delivery and change.

### The good news: inclusion works and we know how

**226.** The good news from the best practice evidenced in the UK? This can be done. The projects highlighted here at their best point the way towards success and even at their least help inform the avoidance of failure by others seeking to do better. They also point to the need for – and the desire of – communities and individuals to be involved in the process of design and delivery so that access leads to intelligent, creative use and benefit maximisation. The experience from

the UK is that the best results accrue from such an inclusive approach. Public service transformation is another fundamental consequence. Organised properly, broadband has reach and depth, as well as width.

## The UK no paragon but even the European Commission thinks it's exemplary...

**227.** I stress now for the avoidance of doubt: over the last decade the UK has not been a paragon either of good governance or of digital implementation, and the connectedness of communities – whether geographically or socially – remains in some cases an aspiration. Indeed, part of what makes the UK experience interesting is the massive effort there has been and continues to be to bridge the various 'digital divides' so as to secure digital inclusion and the benefits of broadband for all, no matter what socio-economic status, culture, gender, age or location.

**228.** If even the European Commission – not always the greatest fan of the UK – has concluded: *'As demonstrated by previous studies, the UK is quite exemplary in the way it tackles eInclusion at the highest policy level'* [Ref. 101], it's probably true.

## Need for third sector and 'digital champions'?

**229.** The high-level commitment of the UK government on the inclusion agenda took many forms over more than a decade. The EC has pointed to the significance of having a senior politician in government focused solely on digital inclusion, significant funding of digital inclusion projects by many departments – now under pressure because of the cuts in public services – and a cross-government 'National Plan for Digital Inclusion'. I would add that having a regulator with a formal duty to promote digital literacy has been a significant influence.

**230.** However, this significant government effort and EC warmth should not lead us to downgrade the contribution to the inclusion effort by the third/voluntary sector, local government and, well, people.

**231.** The report has highlighted that effort which continues and takes ever more innovative forms. The third sector is a major 'digital champion' in the

UK and will surely become more important as direct government funding for inclusion projects declines.

## A National Digital Champion

**232.** The UK also has someone who was appointed as 'National Digital Inclusion Champion' and reappointed by David Cameron as his 'National Digital Champion'. This is Martha Lane Fox who also leads Raceonline 2012, an umbrella body seeking to get everyone in the UK online by the 2012 Olympics. Her role remains to drive enthusiasm and initiatives to ensure as many of the digitally excluded are in the fold as it were by 2012, but also to help efforts to secure the digitisation of public services. Cameron wants accessing public services online to be the norm by 2012: 'digital by default'. Lane Fox's team is funded by a mixture of grant and private investment and it is working at the moment with over 900 voluntary organisations and private companies to promote the digital inclusion agenda.

## And local champions

**233.** So successful 'digital inclusion' needs action at various levels – high-level central and local governmental and political commitment, third sector buy-in, national and local community champions pushing the agenda and private sector support. Sunderland, England's most online city, shows what can be achieved when all these factors are coordinated by a passionate local champion with vision, capacity, imagination and targeted funding, putting its assets of various kinds into a unified strategy for a digital community. It's impressive and I believe exemplary.

### Sunderland communities of interest



## Bringing it all together in Sunderland digital community

An Ofcom report in 2008 found that Sunderland was England's most digitally connected city, with 66% of homes having access to broadband internet. And, more people log on to Facebook, the social networking site, than anywhere else in the UK. This is an extraordinary fact in what is one of the poorest areas of the UK, Sunderland coming 33 out of 354 local authorities in the national index of multiple deprivation.

But the Council, keen to transform the situation, has as an award winning record of developing the use and raising the awareness of digital technologies across the many different communities of Sunderland. I think it's exemplar of an emerging digital society, providing access and training to all, real community engagement, and ownership of ICT provision. Its ICT agenda is also changing the way public services are shaped and delivered to and with the community. The ICT agenda also embraces the voluntary sector and the Communities of Interest whose online activities are supported by the Council's ICT team. With its vision and its actions it has secured partners such as Microsoft, who have given £10 million worth of sponsorship and kit.

The vision is for a networked society: *'Through innovative facilitation and support, we develop networks of individualised ICT provision in the hearts of our communities – whether the community is one formed through geography, theme, circumstance or common interests'* (Council Leader).

### Sunderland has more than a vision. It has:

- Created a network of Community ICT Facilities – Electronic Village Halls (EVH's) in both traditional and non-traditional; settings including: Adult Learning Centres, Village Halls, Youth Clubs, Community Associations, Schools and Nurseries, Faith Groups, Voluntary Groups, Health Centres; GP Surgeries, Libraries, Sport Centres, Public Houses, Street Kiosks, and peoples' own homes
- Developed a Community e-Champions Network of 200, ensuring they represent a range of communities, in order to target and engage the hardest to reach groups

- Created the Community of Interest (CoI) Websites initiative, to provide a dedicated service for communities to build, own and maintain their own quality web presence
- Provided a crucial equipment loan & support scheme for Community Organisations
- Provided unique online community health checkpoints in places like pubs to enable people to check their health stats as and when they wish.

### The Communities of Interest Service – broadband supporting real community activity

The CoI Service facilitates the development of online communities by working with groups, communities or individuals who are linked by similar circumstances, locations, themes or interests. The provision of these unique community web sites allows those involved to deliver content tailored towards the needs of their own interest group, which in turn supports the development of that community, strengthening its networks and providing a forum for peer-support.

The Service uniquely offers design, technical advice, marketing guidance and ongoing support within the Sunderland area. This support removes the technical skills required for a successful web site, allowing communities to focus on developing strong content and promote their community. The Service also provides training and builds community capacity.



An electronic village hall



## Citizens are doing it for themselves

**234.** But this report also speaks to another dimension, of the moment of broadband. Lord Carter, the telecommunications minister in the last Labour government, once defined 'digital inclusion' as 'the best use of digital technology, either directly or indirectly to improve the lives and life chances of all citizens, particularly the most disadvantaged, and the places in which they live'. Fair enough, but what I've learned is that the exciting thing about the broadband world is not just that it enables the professional elites to 'improve the lives of citizens', welcome though that is (and there are powerful examples of its benefits presented here). The really exciting thing is how 'citizens are doing it for themselves' in a challenge to traditional top-down elite model of governance and welfare provision.

### 46. Help us improve kings

URL: [www.helpusimprovekings.org](http://www.helpusimprovekings.org)



Citizens are doing it for themselves – in real time – and changing how patients and staff interact. This online crowdsourcing and online dialogue space for Kings Hospital was developed by the founder of Delib whilst on a stay in hospital. Whilst stuck in bed he discovered that the hospital had Wi-Fi for patients and employees. He developed the forum through which proactive patients and employees can in real time, share ideas and suggest ways to improve the service provided. It has been trialled and is now used by other hospitals.

*'Ideas gathered from the coal-face are undoubtedly useful for organisations. The trick is how best to implement these once gathered.'*

Broadband, particularly in its emerging form is enabling democratic contestation by communities online and on the ground and the co-producing of solutions with government. Broadband is a two-way street in the UK and we're all going to have to get used to it. Commendably the best in local government get this and a lead is being made by the new Westminster government which is best in class on using broadband technologies to enable a dynamic conversation between citizens and their state and to do so guided by open source principles. Very interesting.

## Two-speed Britain/one-speed Australia?

**235.** The fact that this is happening in what remains in effect a 'two-speed broadband Britain' makes the challenge for public services acute. In 'two-speed Britain' the debate has focused on developing strategies to help citizens and communities, who lack the ability, facility or motivation, to get connected. In 'two-way-street Britain' the possibility of a very different kind of digital divide presents itself – where public services and certain communities are left behind by their digitally literate citizens, seeking participation, contention and co-production in virtual town halls and virtual Westminsters. The Big Society online. Top down, bottom up: Go figure.

**236.** I add: if Australia creates a comprehensive national network, with sufficient bandwidth linked to an inclusive approach to getting all communities online, to educating the desire, raising the confidence and up-skilling the capacity to use it – if – then Australia will have a unique opportunity to be a unified 'one-speed nation', and a very fast one at that. However, politicians and public servants in Australia should be prepared: with a still lively set of communities likely to be further animated by this new engine of social and political participation, the imagination is seized – and teased – by how much traffic will be generated on broadband's two-way-street in this particular networked nation.

**237.** There is a further dimension. We learn from the UK that the full benefits of digitisation – for community empowerment and public service cost-savings and efficiency – come from universal access and acquisition of relevant skills. The digitally 'one speed nation' leaves no community behind: the costs-benefits of this outweigh the attractions of the alternative. In my view a modern view of citizenship requires nothing other.

# Implications for Australia

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*'Simply focusing on projects which ensure economic growth may leave un-served areas without sufficient connectivity and lead to social inequality. Successful public investing needs to consider and address all elements.'*

**OECD 2009 [Ref. 102]**

*'The government argues for a 'channel shift' which will increasingly see public services provided digitally 'by default' and note that: "The shift towards online services also has the power to transform the relationship between Government and the individuals."*

**Angus Maude, Cabinet Office Minister [Ref. 103]**

*'Essentially everyone needs to be comfortable with technologies and how they work. The concept of literacy is in need of significant reworking as to be able to only read books or newspapers or only write with a pen, now sounds absurdly Victorian. If anything the pace is going to quicken.'*

**Chris Stark [Ref. 104]**

*'Highspeed broadband is necessary for new health, education, energy and civic engagement applications.'*

**Brooking's Institution [Ref. 105]**

**238.** I believe that the increasingly evident public virtues of highspeed broadband which apply in Britain also apply in Australia. It sometimes takes an outsider to state the obvious, and indeed to distinguish between the wood and the trees. Here goes.

**239.** This is a transformational moment for Australia with more potential for reducing the tyranny of distance geographically and socially than the UK and for harnessing the creative powers of broadband, and through it, of people. Civil society remains arguably stronger in Australia as this potent new tool of community engagement goes national. That's really exciting, as are the prospects of exploiting – and renewing – this community strength in the process of building the networked nation. It's not about pipes in the dirt or plumbing. It's about a bigger legacy which can arise out of the dirt, if...

1. If the effort to build the National Broadband Network is seen first and foremost as about connecting and empowering communities and inclusivity. No one should be left behind. An updated version of a fair go for all. As trenches are dug and cables connected, sights and ambitions must be raised, above building the network to building the networked society. The report suggests that if the investment is significant, so is the return, for the nation and not just the Treasury, for people not just plumbing. **The biggest returns come from enrolling all in a genuinely national highspeed network. People will then shape change and not be shaped by it.**
2. This requires a **creative mindset geared to identifying, promoting and realising the wider benefits of highspeed broadband**, the bigger legacy sought by this investment – and a passion for inclusivity. This mindset is not romantic or over-ambitious. It merely embodies what the very practical OECD had to say about the four goals of government policymakers when considering investment in the telecommunications sector: 'improving connectivity; increasing competition; stimulating innovation/growth; and increasing social benefit' **[Ref. 106]**.
3. In the Australian context, it will require governments everywhere to **understand what**

**they want from the network and indeed the 'networked society'** – and what they are offering. What approach will they use to engage and involve those who are socially excluded and either are now or are in danger of being digitally excluded? Though public discourse is perhaps more comfortable with the former than the latter, the assumption shouldn't be made that in Australian society social exclusion, if it exists, is a minor or perhaps temporary problem, spatially confined, rather than structural – and one which a socially mobile, economically dynamic Australia with a strong civil society will overcome.

4. **Social exclusion doesn't just happen in Britain.**

There are plenty of people in Australia trapped on low incomes, with low educational attainment and skills, or secluded in failing locations with few economic prospects, or trapped at home because of disability or illness, the frailties of age or fears of anti-social behaviour. There are indigenous populations suffering multiple deprivation and thus social exclusion and migrants experiencing dislocation in the new society. There are those isolated and vulnerable as families break down or members and friends move away. The Smith Family says that 600,000 Australian children live in disadvantaged circumstances and I have no reason to doubt this [Ref. 107].

5. In the UK **amongst the most important communities to engage in the broadband future are recent migrants who have English as a second language.**

Although there is evidence that Australia attracts migrants with higher qualifications than the UK, there is no room for complacency on the digital inclusion of migrants as a contribution to community cohesion and citizenship.

6. **The issues of cultural difference and social exclusion have special significance in Australia with an indigenous community facing various kinds of exclusion,** including often a spatial one to add to the more familiar elements amounting to multiple deprivation. The dangers of the digital divide in this context are obvious and the need for championing digital inclusion equally so.

7. I believe there is a real, continuing tradition of community volunteering and civic activity but there

are also places and communities where social capital, whether 'bonding' or 'bridging' [Ref. 108], has been depleted. Australia is exceptional but no exception. For these to be left further behind because of digital exclusion is probable – and **a sense of urgency and commitment is vital** to not just avoid this fate but to use this moment to combat the social and spatial exclusion which exist and to re-build social capital. And broadband technologies can actually reach the parts of the community where other approaches – 'Victorian' literacy, rote learning – cannot. The official mindset must include this sense of urgency and commitment.

8. There is also the mirror image **issue of responding to the challenge from the increasingly digitally savvy online community** of community activists, concerned citizens and Joe Blog(s). Australia has been innovative in the past on ensuring democratic participation and needs to reflect again on how to harness the online energies of its communities. Ever speedier broadband technologies as we have seen are helping to bring pressures to bear on traditional models of governance. They also enable government to invite citizens in more easily and more quickly to share responsibility for policy setting. In the UK central government itself is amongst the leaders in developing transparent and interactive government online, combining crowdsourcing with open source principles. Australia will no doubt wish to take this much further.

9. In my view as this process develops and as the demand for information and engagement grows wider so too will the acceptance of the cost of laying pipes in the dirt and the hunger for more bandwidth. And yes, part of the demand is driven by the desire to get the best entertainment service wherever one lives. In a remote area this has implications for the sustainability of a community and the attractions of country life, so no sneering required. But there is more. **As technology develops and television and PCs become interchangeable the same device will enable consumption of entertainment, reception of telehealthcare, engagement with public services and encounters with communities online and locally,** all because of broadband's width and, if you like, breadth.

10. There are some challenges which are peculiar to Australia – not just the enormity of the country or the dispersed nature of settlement. The problem of tiered and sometimes conflicting governance structure is arguably greater than in the UK. Although the UK has moved away from its traditional unitary structure – with devolved governments in Scotland, Wales and Northern Ireland adding to the complexity – within England the sovereignty of Parliament is unconstrained by either regional structures or strong local government. Although departmentalism is rife, Westminster has to contest with fewer, competing, alternative sources of authority than does Canberra. This makes **coordination of policy and implementation more complex** in Australia – a real challenge to that sense of collective endeavour advocated here as essential to building a ‘networked society’.

11. The challenge of working through the incredible applications and implications of digital technology is not of course a monopoly of government. **It’s about all of us using what we know** and passing it on as digital champions, in local community groups, in clubs, in voluntary activity, in the RSLs as neighbours. In the land of Nippers this will be a forte. Digital Nippers, anyone? This means **Action by politicians** to raise and project a vision of what can be achieved by the networked nation; to hold public agencies to account for turning this vision into reality; to use the internet not just to ‘send messages’ but to symbolise a different politics and to share in the ‘wisdom of crowds’.

12. **Action by government at all levels, central, state and local and all their agencies** – planning, coordinating, collaborating, integrating, imaginative, listening, communicating, enabling not monopolising, sharing services and information, reaching out in a targeted way, looking to engage citizens not just in ‘how much, how long and where?’, but also in the improvement in public services’ design and delivery which faster broadband makes possible. Such action should look also to enabling social mobility and autonomy and reducing dependency, and thus costs, in the process of digital inclusion. Also, and crucially, it should ensure that as much as possible digital participation and use are mainstreamed

in departmental work and that departments collaborate across silos by sharing information, services and capacity. Big asks; big moment. I add: I recognise that there are many examples in Australia [Ref. 109] of innovative and energetic activity on the digital inclusion front. Melbourne’s Institute for a Broadband Enabled Society are focused on this. The issue is for this to be a systematic thorough-going national endeavour.

13. **Action by partners in the private and voluntary sectors** where already there is much ferment around reaching out to their members or clients to up-skill and familiarise themselves with broadband and its potential uses and services: a firm basis for a renewed effort by social enterprises and the third sector to enthuse, engage and enable those not yet included; and an opportunity to renew their own mission in the digital era.

14. **Action by people themselves.** This is after all not just about broadband helping people – though it does that. It’s also about people helping themselves and others, shaping local solutions, co-producing, challenging and creating. The ask of them? Simple. Be demanding, be imaginative, be noisy, get skilled up and find out/invent what broadband enables you to do – and help others to do the same.

## Cost Implications for Australia

**240.** Whilst this report has not focused on the issue of the relative cost of developing broadband infrastructure and effective digital inclusion initiatives in the UK and Australia, as a context to inform the debate an examination of the comparison between the current and future conditions of the UK and Australian economies would clearly favour the latter.

**241.** The UK is attempting technical rollout of next generation broadband and digital inclusion with an economy in travail – with the prospect of further relative decline of the UK’s competitive position – and with the public sector constrained by fiscal retrenchment. Australia’s fate starkly and positively contrasts with this – with the implication that any debate on the costs of broadband and digital inclusion needs to factor in the relative and growing wealth of Australia and its capacity to afford necessary infrastructure and investment in human capital. Its



public spending is also currently low by international standards. I add: though many of the interventions examined herein had a public budget, many did not. As important is the commitment to use what resources are already in the system more efficiently in support of the 'networked society'. And the latter over time will save public money anyway. And being resourceful is as important as having resources.

**242.** In the past decade alone Australian GDP has grown in real terms by almost 38%, more than twice the OECD average. At the same time, public spending is now only around 35% of GDP compared with an OECD average of 45% (and the UK's just over 50%). A combination of effective economic governance, the massive volume of mineral wealth and the influx of enterprising migrants has placed Australia in a benign economic position with even better prospects ahead. CEBR, an influential UK based economic consultancy sees Australia as set for further growth at close to 4% for the foreseeable future. In the last decade Australian GDP went from just over a quarter of that of the UK to just over a half. On current trends, it is likely that Australian GDP will overtake UK GDP in the next 20 years, possibly earlier, with a population which at its peak in 2050 will still only be half that of the UK. Australia is by any standards a rich country getting richer [Ref. 110].

**243.** The debate on infrastructure must embrace this fact – perhaps more obvious to an outsider than a native – and its corollary: that growth will fund increased infrastructure spending and indeed that without it growth may be constrained or unsustainable. The issue then becomes the relative weight accorded to investing in the infrastructure priority that I believe broadband and related digital inclusion initiatives to be over or alongside other priorities. And I use the word 'alongside' advisedly as a richer economy in reality has to make fewer 'either/or' choices between priorities having a greater capacity to fund what is required overall to secure national economic and community well-being.

**244.** There is an irony of course in that the relative clarity emerging in Australia around the importance of and commitment to broadband infrastructure must be placed in the context of the absence of a strategic infrastructure plan of what is 'required overall' for the country. In that sense the implementation of a national broadband network is both exemplary for and

a challenge for other strategic infrastructure planning and delivery. The UK has not covered itself in glory in delivering overall strategic infrastructure even in its recent economically dynamic period between the early 90s and mid noughties.

**245.** The charge has been leveled that the last UK government did not 'fix the roof when the sun was shining' before the rains fell so heavily. Australia can do better and should use the moment of broadband as an inspiration for – and as part of – wider infrastructure planning so as to maximize the benefits of this large investment.

**246.** And remember, a proper cost-benefit analysis would also recognize the positive externalities which will result from such an investment: one credible analysis has estimated that cost savings from digitizing health, education, energy and transport alone exceed the costs of new broadband infrastructure per se [Ref. 111]. The evidence collated here suggests the benefits from these externalities in the UK and the need to factor them in when evaluating the up-front costs of national broadband investment. We have also seen that a consensus exists in the UK that embraces this balanced score-card approach to the cost-benefits of next generation broadband with the proviso that broader policy interventions are in place across the public services and partners in the community or voluntary sectors to help realise the benefits throughout society and bridge the key digital divides. The capital outlay of highspeed broadband in Australia is clearly significant though the returns – and the externalities we have seen – are also significant.

**247.** It seems to me, from the UK experience and the even more impressive performance of the even better-in-class countries, that the dangers lie more in failing to invest than investing. I note that all the leading nations above Australia in the recent PISA education performance league tables are next generation broadband leaders with near universal access [Ref. 112]. A friendly observer adds: Australia hasn't stopped being the Lucky Country. This century is set to be the Australian century. Back yourselves.

# Recommendations

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## FOR AUSTRALIA

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- **Establish a formal national annual survey** into the current patterns of broadband use by individuals and diverse communities throughout Australia, on the lines of the Oxford Internet Survey to inform strategy and help target in communities in most need. Funded by government and the industry – to be repeated annually to monitor activity and use.
- **Appointment of a National Digital Champion** by the Minister or Prime Minister – a distinguished lay enthusiast drawn from outside politics and the industry to help galvanise civil society and promote digital participation activities by any and all stakeholders, and by the private sector.
- **The appointee should work with a team of nominated ‘digital champions’ from key sectors** – the elderly, disabled, young people, indigenous communities, migrant communities, educators, health specialists, e-democracy, rural communities, and private sectors – to advise on and promote activity within their specialist domains. The private sector should consider sponsoring digital champions and see it as part of their corporate social responsibility program.
- **Establish a National Digital Action plan** which includes targets for everyone to be digitally literate by 2021 – as it is amazing how a deadline focuses minds.
- **Establish the duty to draw up a digital participation plan** by all public service providers and each central, state or local government department, for targeted outreach with their clients and users.
- **Legislate so that the regulator ACMA has a duty to promote digital inclusion** in the same way as Section 11 of the UK’s Telecommunications Act 2003 requires Ofcom to do the same.
- **Each tier of government should identify state or local champions** to help enthuse, communicate and involve local communities in developing digital inclusion.
- **All public agencies to review how new broadband capacity can transform the design and delivery of services** and the process of engagement and involvement with clients, consumers, service users and partners: federal government to establish a challenge fund to incentivise this.
- **National and state summits of third sector organisations to share best-practice** on digital inclusion and up-skilling and agree a program or plan of action in their organisation and area of operation.
- **A national annual digital participation week** throughout the country backed at the highest level.
- **National awards** for individuals and organisations showcasing the most imaginative uses of broadband, most successful inclusion activities and the biggest impact on community life – and those who designed or delivered them, in schools, hospitals, housing providers, local authorities, third sector bodies, communities of interest or the neighbourhood.
- **Online Concession Passes for over 65s and/or pensioners** – The Internet is now the primary source for public service information. From collecting pensions to legal advice, everything is going digital. To ensure pensioners can make the most of the opportunities available, the government and Internet Service Providers should provide over-65s with subsidised internet access, and make access to super-fast broadband for the most vulnerable a priority.

- As part of the drive to eliminating digital illiteracy by 2021, establish a **national helpline to support those that are having difficulty accessing the internet.**
- Facilitate a **volunteering program** so that young people and other volunteers can “buddy-up” with the elderly online. It is social networking across the ages – conversations between the generations are fundamental to a well-functioning, happy society – and the Internet is the perfect place for those conversations to take place.
- **Commit to open source principles** and establish an all Australian version of [www.data.gov](http://www.data.gov) which all states should participate in.
- **Baseline research to be undertaken** from the outset to assess the outcomes enabled or otherwise by broadband investment.
- **Ensure Treasury appraisal methods for broadband related project approval incorporate a ‘balanced scorecard’** approach which properly estimates the full value of broadband in terms of social, educational, health, ‘well-being’, environmental and community outcomes and other positive externalities and savings to other departments created by the investment in fibre infrastructure.

# References

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- 1 UK Broadband Stakeholders Group. A framework for evaluating the value of next generation broadband. 2008, p.7.
- 2 Scottish Centre for Telehealth and NHS 24. Scottish Telehealth Programme. [www.sct.scot.nhs.uk/stroke.html](http://www.sct.scot.nhs.uk/stroke.html)
- 3 London School of Economics/ITF. The UK's digital road to recovery. 2009, p.9.
- 4 David Cameron, [www.techradar.com/news/internet/pm-launches-manifesto-for-a-networked-nation--702273](http://www.techradar.com/news/internet/pm-launches-manifesto-for-a-networked-nation--702273) for a Networked Nation launch.
- 5 University of Tasmania [www.cis.utas.edu.au/cisview/research/NBN/benefit.jsp?mode=internal](http://www.cis.utas.edu.au/cisview/research/NBN/benefit.jsp?mode=internal)
- 6 U.K. Broadband Stakeholders Group. op.cit.
- 7 Lucy Berry quoted in Race Online 2012. Manifesto for a networked nation. 2010.
- 8 Carr, Nicholas. The shallows: how the Internet is changing the way we think, read and remember. Atlantic, 2010, p.85.
- 9 Pinker, Steven. Mind over mass media. Op-Ed, New York Times, June 10, 2010.
- 10 Community. Wikipedia [en.wikipedia.org/wiki/Community](http://en.wikipedia.org/wiki/Community)
- 11 Calvin, A. Understanding the impact of online communities on civic engagement. 2006. [www.pbs.org](http://www.pbs.org); also <http://curiouscatherine.wordpress.com/facts-glorious-facts/> citing Hansard Study.
- 12 Appleford, Michael. Press release: West Whitlamburn Housing Co-operative Limited: UK's First 'Next Generation' Community. 17th November 2008 [www.wwhc.org.uk/](http://www.wwhc.org.uk/)
- 13 Oxford Internet Institute. Me, my spouse and the Internet: meeting and dating and marriage in the digital age. Jan. 2008. [www.oii.ox.ac.uk/research/projects/?id=47](http://www.oii.ox.ac.uk/research/projects/?id=47)).
- 14 Poulter, Sean. Online dating CAN help you find your perfect partner, research shows. Femail. Mail Online, 19 Jan 2011. [www.dailymail.co.uk/femail/article-1144129/Online-dating-CAN-help-perfect-partner-research-shows.html](http://www.dailymail.co.uk/femail/article-1144129/Online-dating-CAN-help-perfect-partner-research-shows.html)
- 15 [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1275810](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1275810)
- 16 London School of Economics/ITF. The UK's digital road to recovery. 2009, p.9.
- 17 King, Stephen. Australian Government Department of Broadband, Communications and the Digital Economy. Australia's digital economy: future directions. 2009, p.11.
- 18 Welsh Local Government Association. 'Broadband must become Wales' fourth utility says Welsh local government'. Press release, 30th January 2009.
- 19 U.K. Department for Business, Innovation and Skills and Department for Culture, Media and Sports. Britain's superfast broadband future. Dec. 2010, p.11 (citing UK's digital road to recovery, by Liebenau, J, Atkinson, R, Kärrberg, P, Castro, D and Ezell, S. London School of Economics, 2009); National Endowment for Science, Technology and the Arts, [www.nesta.org.uk/library/documents/Getting-up-to-speedv5.pdf](http://www.nesta.org.uk/library/documents/Getting-up-to-speedv5.pdf)
- 20 Boston Consulting Group. The connected kingdom: how the Internet is transforming the UK economy. 2010, p.9.
- 21 Royal Society of Edinburgh. Digital Scotland. October 2010.
- 22 [www.homeaccess.org.uk](http://www.homeaccess.org.uk). This research also suggested that learners using a computer at home for schoolwork are more likely to gain over five GCSEs and one A-level and improve the grades attained.
- 23 Ofcom's Advisory Committee on Older and Disabled People. Next generation services for older and disabled people. September 2010, p.12, (citing report of Scottish Government's Joint Improvement Team).
- 24 Anderson, Kevin. How integrated Telehealthcare services could contribute to improved quality of life and financial performance in the North East Region. Tunstall Healthcare (UK) Ltd, 2008. Good overview from commercial operator; Also note Cooney, Mike. Telecare: supporting independence – promoting efficiency. Scotland Department of Health. 2010.
- 25 Kent Public Service. Network-shared services /Public Technology, 3/8/09 <http://kpsn.net/> Wales, [psba@wales.gsi.gov.uk](mailto:psba@wales.gsi.gov.uk)
- 26 Race Online 2012. Manifesto for a Networked Nation. Jul. 2010, citing PwC Research. The economic case for digital inclusion. 2009; Daily Telegraph 30/610.
- 27 [www.nma.co.uk/news/government-launches-online-crowdsourcing-initiative/3015330.article](http://www.nma.co.uk/news/government-launches-online-crowdsourcing-initiative/3015330.article); [data.gov.uk/opening-up-government](http://data.gov.uk/opening-up-government).
- 28 Commission for Rural Communities. Mind the gap: Digital England – a rural perspective. p.5. It has had over 70% access since 2005.
- 29 <http://convergencecornwall.com/what-is-convergence/media-releases.php?id=1430&year=2010&quarter=4>; and BT announcement September 30.
- 30 [www.thepep.org/ClearingHouse/docfiles/congestion%20charge%20london.pdf](http://www.thepep.org/ClearingHouse/docfiles/congestion%20charge%20london.pdf)
- 31 Welsh Local Government Association. Broadband in rural Wales. Nov. 2009, p.37.
- 32 Race Online 2012, op.cit.
- 33 And they're intelligent! [www.northengland.com/news-events/release/87/Sunderland-Ranked-Among-Top-Global-Intelligent-Communities.php](http://www.northengland.com/news-events/release/87/Sunderland-Ranked-Among-Top-Global-Intelligent-Communities.php)
- 34 European Commission Staff Working Document. Europe's Digital Competitiveness, Aug. 2009, p. 60.
- 35 Ibid.
- 36 Boston Consulting Group, op.cit. June 2009, p.6; Ofcom. International Communications Market Report 2010; OECD ICT Outlook 2010; Race online 2012, op.cit.; U.K. Dept for Culture, Media and Sports. Britain's superfast broadband future. 2010, p.4; online [www.paymentscouncil.org.uk/media\\_centre/press\\_releases/-/page/1063/](http://www.paymentscouncil.org.uk/media_centre/press_releases/-/page/1063/)



- 37 [www.peskypeople.co.uk/2010/03/disabled-people-not-included-building-britains-digital-future/PwC](http://www.peskypeople.co.uk/2010/03/disabled-people-not-included-building-britains-digital-future/PwC). The Economic Case for Digital Inclusion, October 2009; <http://ummahdesignblog.com/2009/01/14/ethnic-minorities-lack-online-www.telegraph.co.uk/technology/internet/7968703/Nine-million-British-adults-have-never-been-online-ONS-says.html>
- 38 [www.techradar.com/news/internet/pm-launches-manifesto-for-a-networked-nation--702273](http://www.techradar.com/news/internet/pm-launches-manifesto-for-a-networked-nation--702273)
- 39 Race Online 2012, op.cit.
- 40 [www.cabinetoffice.gov.uk/news/martha-lane-fox-appointed-uk-digital-champion](http://www.cabinetoffice.gov.uk/news/martha-lane-fox-appointed-uk-digital-champion)
- 41 Dept. for Culture, Media and Sports. Britain's superfast broadband future, edited from pp. 1-10 passim; UK government believes broadband benefits justify public intervention.
- 42 [www.convergenceconversation.com/posts/lindsey.annison/new-national-broadband-campaign-the-final-third-first-is-launched-today-thursday-4-march](http://www.convergenceconversation.com/posts/lindsey.annison/new-national-broadband-campaign-the-final-third-first-is-launched-today-thursday-4-march)
- 43 See Communications Consumer Panel. Local initiatives on next generation success in the UK. Jan. 2009.
- 44 Notley, Tanya and Foth, Marcus. Extending Australia's digital divide policy; an examination of the value of social inclusion and social capital policy frameworks. Queensland University of Technology, Jul. 2008.
- 45 Eurostat regional year book 2008, cited in OECD. Working Party on Communications Infrastructure and Services Policy: the role of communications investment in economic recovery.
- 46 [http://newsroom.cisco.com/dlls/2010/prod\\_101710.html](http://newsroom.cisco.com/dlls/2010/prod_101710.html)
- 47 Ann Davies, Melin Homes [www.melinhomes.co.uk/node/82](http://www.melinhomes.co.uk/node/82)
- 48 [www.digitalbirmingham.co.uk/about](http://www.digitalbirmingham.co.uk/about)
- 49 <http://slurl.com/secondlife/Birmingham%20Island/128/128/0>.
- 50 Lord Carter, the former Communications Minister made it the 'official definition'; see also <http://digital.org.uk>
- 51 WLGA.
- 52 U.K. Department for Business, Innovation and Skills. National Plan for Digital Participation. 2010; see p. 8 and introduction by Stephen Timms, then Minister, also consulted for this study.
- 53 Ibid.
- 54 [www.ukonlinecentres.com/corporate-pages/research/centres-research.html](http://www.ukonlinecentres.com/corporate-pages/research/centres-research.html) On economic benefits of inclusion.
- 55 National Housing Federation. Digital exclusion and social housing. 2009.
- 56 Evaluation of Communities@one program. <http://wales.gov.uk/docs/dsjlg/research/090209communitiesfinale.pdf>
- 57 *ibid*; see also Notley, Tanya and Foth, Marcus, op.cit. and work of Institute for a Broadband Enabled Society.
- 58 Alun Burge, Communities@one, interviewed for this study.
- 59 [www.legislation.gov.uk/ukpga/2003/21/notes/division/2](http://www.legislation.gov.uk/ukpga/2003/21/notes/division/2)
- 60 Social Housing Providers and Digital Inclusion Strategy Group. 2010 Action Plan, 26 Feb. 2010, p.5.
- 61 [www.ukonlinecentres.com/](http://www.ukonlinecentres.com/).
- 62 Helping Older People Unleash their Digital Talents! Dec. 2010 [www.digitalunited.com](http://www.digitalunited.com)
- 63 [www.getdigital.org](http://www.getdigital.org)
- 64 Race Online, op.cit; also useful statistics at <http://curiouscatherine.wordpress.com/facts-glorious-facts/>
- 65 [www.statistics.gov.uk/pdfdir/iahi0809.pdf](http://www.statistics.gov.uk/pdfdir/iahi0809.pdf)
- 66 Telegraph June 30, 2010, citing Nielsen Company research.
- 67 Cooney, op.cit.
- 68 Ofcom. op.cit.
- 69 *ibid.*, citing Scottish Government survey.
- 70 *ibid.*
- 71 [www.fact.co.uk/news/press/press-release-digital-manifesto-for-older-people](http://www.fact.co.uk/news/press/press-release-digital-manifesto-for-older-people)
- 72 FACT, op.cit.
- 73 *ibid.*
- 74 Commission for Rural Communities. op.cit.
- 75 Kennedy, Liam, MP, [www.liammcarthurmsp.org.uk/press-releases.php?detail=y&id=717](http://www.liammcarthurmsp.org.uk/press-releases.php?detail=y&id=717).
- 76 NHS 24. Scottish Centre for Telehealth Strategic Framework. p.2010, 2010.
- 77 [www.scottish.parliament.uk/business/officialReports/meetingsParliament/or-10/sor092202.htm](http://www.scottish.parliament.uk/business/officialReports/meetingsParliament/or-10/sor092202.htm)ingsParliament/or-10/sor0922-02.htm
- 78 Commission for Rural Communities. op.cit.
- 79 <http://convergencecornwall.com/what-is-convergence/media-releases.php?id=1430&year=2010&quarter=4>
- 80 Davies, Mel. Cornish miners and class relations in early colonial South Australia: The Burra Burra strikes of 1848-49. *Australian Historical Studies*, Volume 26, Issue 105, Oct. 1995.
- 81 Johannes Hahn, European Commissioner for Regional Policy: 'this will serve as inspiration for other regions.' *Convergence*, *Ibid*.
- 82 [http://db.cornwall.gov.uk/Itp/feb2008/section\\_410.html](http://db.cornwall.gov.uk/Itp/feb2008/section_410.html); EUR(3)-07-09: Paper 2: 12 May 2009 The Future of Cohesion Policy – Evidence from Cornwall Council.
- 83 Julian Cowans, Program Manager, Superfast Cornwall, interview.
- 84 Communications Consumer Panel, op.cit.
- 85 Royal Society of Edinburgh. op.cit. 2010, p. 30.
- 86 Eden Declaration. <http://broadbandcumbria.com/186-2/>; also a campaign tweet, <http://bit.ly/hY8itn>
- 87 [www.belfasttelegraph.co.uk/news/local-national/uk/online-anticuts-campaign-set-up-15048989.html](http://www.belfasttelegraph.co.uk/news/local-national/uk/online-anticuts-campaign-set-up-15048989.html)
- 88 Interview with Julia Lalla-Maharajh.
- 89 Digital Unite. [http://learning.digitalunite.com/files/2010/05/LG031\\_Getting\\_Things\\_Done.pdf](http://learning.digitalunite.com/files/2010/05/LG031_Getting_Things_Done.pdf)
- 90 [www.image-exchange.co.uk](http://www.image-exchange.co.uk)
- 91 Headteacher is Matthew Freeston.
- 92 Chris Stark, Navigant Consulting Director, ICT and Education Projects. Interview.
- 93 [www.youtube.com/watch?v=3DWD\\_4LEo7o&feature=channel](http://www.youtube.com/watch?v=3DWD_4LEo7o&feature=channel)
- 94 [www.youtube.com/watch?v=xRb7\\_ffl2D0](http://www.youtube.com/watch?v=xRb7_ffl2D0)
- 95 BECTA. Evidence on the impact of technology on learning and educational outcomes, 2009; Chowdry et al. Drivers and Barriers to Educational Success – Evidence from the Longitudinal Study of Young People in England. Institute of Fiscal Studies, DCSF, 2009; also [www.homeaccess.org.uk](http://www.homeaccess.org.uk). This research also suggested that learners using a computer at home for schoolwork are more likely to gain over five GCSEs and one A-level and improve the grades attained.
- 96 [www.e-learningfoundation.com/autumn-2010-newsletter/](http://www.e-learningfoundation.com/autumn-2010-newsletter/)
- 97 Kent Public Service Network-shared services /Public Technology, 3/8/09; and <http://kpsn.net/>
- 98 Public Sector Broadband Aggregation, Wales [psba@wales.gsi.gov.uk](mailto:psba@wales.gsi.gov.uk); or visit [www.psba.org.uk](http://www.psba.org.uk)

- 99 Wales Local Government Association, op.cit.
- 100 Getting up to speed: making super-fast broadband a reality, NESTA, 2009. [www.nesta.org.uk/publications/policy/assets/features/getting\\_up\\_to\\_speed](http://www.nesta.org.uk/publications/policy/assets/features/getting_up_to_speed)
- 101 European Commission. Report: eInclusion public policies in Europe. 2009, p.18.
- 102 OECD, 2009, op.cit.
- 103 Maude, Angus. Minister for Cabinet Office. News release, Cabinet Office 22 Nov, 2010. [www.cabinetoffice.gov.uk/news/topic/1](http://www.cabinetoffice.gov.uk/news/topic/1)
- 104 Stark, Chris. op.cit.
- 105 West, Darrell. An international look at highspeed broadband. Governance Studies at Brookings, February 2010.
- 106 OECD. op.cit.
- 107 Australian Bureau of Statistics. Labour force, Australia: Labour force status and other characteristics of families, Jun. 2009 <https://www.thesmithfamily.com.au/site/page.cfm?u=197>; also working on digital inclusion programs.
- 108 Putnam, Robert. Bowling Alone: the collapse and revival of American Community, 2000; broadband helps some communities with bridging capital in my view.
- 109 The Smith Family is exemplary for example. There are many other initiatives by national, state and local government. See IBES work on inclusion [www.broadband.unimelb.edu.au/](http://www.broadband.unimelb.edu.au/)
- 110 Analysis based on Centre for Economics and Business Research Ltd. Ashes Special. The Australian economy is likely to overtake the UK's in the next 10-20 years – the good news for Aussie economy is bad news for its cricket, January 3 2010. [dmcwilliams@cebr.com](mailto:dmcwilliams@cebr.com)
- 111 International Telecommunications Union. [www.itu.int/bbcommission/media/commission-backgrounder.pdf](http://www.itu.int/bbcommission/media/commission-backgrounder.pdf).
- 112 [www.pisa.oecd.org/pages/0,2987,en\\_32252351\\_3223573\\_1\\_1\\_1\\_1\\_1\\_1,00.html](http://www.pisa.oecd.org/pages/0,2987,en_32252351_3223573_1_1_1_1_1_1,00.html). Third annual study from Saïd Business School, Oxford University, looks at broadband quality in 72 countries and 239 cities, 2010; South Korea, Hong Kong-China, Singapore and Japan, top both lists with Finland closing in.

## People and organisations who we have had discussions with for Connecting Communities

Contact has included formal interviews, telephone conversations, email dialogue and Skype whilst both in the UK and Australia

David Jubb, Battersea Art Centre  
 Steve Greenwood, Benchill Community Centre  
 Kim Wood, Blackpool, Wyre and Fylde Council for Volunteers  
 Cllr Simon Crooke, Bradford City Council  
 Roisin Sharkey, Broadband Advisor, DEFRA  
 Joyce at CTT, Charity Technology Trust  
 Soulla Stylianou, Client Director, Daden Ltd  
 Paul Clark, Artistic director, Clod Ensemble  
 Brian Condon, Community Broadband Network  
 Carleen Keleman, Cornwall Convergence  
 A geek who cares, Digibridge  
 Paul Woodcock, Director of Planning and Regeneration – Rotherham  
 Sureyya Cansoy, Director, Public Policy – Intellect UK  
 David Illsley, East Folkstone Change Together  
 Leighton Andrews, Education Minister Welsh Assembly  
 Philip Coligan, Exec. Director – The Public Services Lab NESTA  
 Alun Burge, Former Director, Committees at One  
 Chris Starke, Head of ICT and Education, Navigant Consulting  
 Bryan Taylor, Head of IT Infrastructure – Kent County Council  
 Pat Lewis, Head of Strategic Regeneration Welsh Ass. Govt.  
 Nicola Mckenzie, Iwade Village Broadband Committee Chair  
 William Perrin, [Kingscrossenvironment.com](http://Kingscrossenvironment.com)  
 Alison Ewbank, Maple Road Farmers Market  
 Simon Klein, Marketing Manager, SignVideo  
 Fiona Auty, National Physics Laboratory  
 Tris Lumley, New Philanthropy  
 Swati Shah, Open Age, Kensington  
 Julia Lalla-Maharajh, Orchid Project  
 Saffron Rainey, OS21  
 Karen Toon, Peterborough Women's Centre  
 Emma Moore, Pink Stinks  
 Julian Cowans, Programme Manager, Superfast Cornwall

Roger Abbott, South Tyneside Council Web Manager  
 William Perrin, Talk About Local  
 Helen Milner and Emma Smedley, Uk Centres Online  
 Roger Abbott, Web Manager, South Tyneside Council  
 Charles Paxton, Webcat

A bibliography and list of useful websites are available at [www.huawei.com.au/](http://www.huawei.com.au/)

# Biography

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**Dr Tim Williams, Director of consultancy company Publicani, is currently working on projects in both the UK and Australia.**

Prior to this, Tim was Managing Director for Navigant Consulting Public Services in London where he built a team of 25 working on

housing, regeneration, local government and education projects. He is acknowledged as one of the UK's leading housing and regeneration specialists. In 2003 Tim was named as the UK's Regeneration Personality of the year.

Tim was special advisor to the Rt Hon David Miliband when he was a Cabinet Minister for the Department for Communities and Local Government. Uniquely, he then advised all subsequent housing and regeneration ministers until June 2010. Having also been an advisor on regeneration in Wales, Tim remains the only person ever to have been a special advisor for ministers in both England and Wales. He is currently advising the Welsh education minister on the reform of the education system in the Principality. Tim has also advised the current London Mayor on the new design guide for London, the Chief Executive of the Homes and Communities Agency on the start-up process for the organisation with its £5 billion budget and the CEO of Lend Lease Europe on the Olympic legacy.

Tim was a founding associate member of the UK Prime Minister's Delivery Unit headed up by Sir Michael Barber. He has also been involved in a ministerial review of public services in Wales.

In 2007 Tim chaired an inquiry for the UK's Housing Corporation into the design of affordable housing in Thames Gateway which was published as 'The Williams Report'. In 2008 he chaired a Ministerial Task and Finish group which led to the creation of the Centre for Regeneration Excellence Wales. Tim is soon to be appointed a visiting professor at the University

of Cardiff in recognition of his contribution to urban regeneration.

Tim was Chief Executive of the Thames Gateway London Partnership between 1998 and 2003, when the Gateway, Europe's biggest urban regeneration program, became a national priority.

Tim has had a weekly column in Regeneration and Renewal for ten years and is now a regular blogger. <http://regenwilliams.wordpress.com/>. He is a regular public speaker in the UK and has been a key note speaker for the Australasian Housing Institute. For three years to 2001 he had a weekly column in The Scotsman and has been a regular broadcaster in English and Welsh.

Tim was born in South Wales and was educated at Peterhouse Cambridge, University of Cardiff, Merton Oxford and the Inns of Court School of Law. He has a doctorate in history, a teaching certificate in English and has been called to the Bar from the Inner Temple. Coming from a mining village in 'old' South Wales and having worked in regeneration in Cornwall and east London, Tim is passionate that public policy ensures a level playing field for all.

Married to Michelle, who comes from New South Wales, Tim is also a father to Elinor aged 5. They have homes in Manly and Hackney, East London.



**Sydney**

Level 5, Tower A  
799 Pacific Highway  
Chatswood NSW  
Australia 2067

T 02 9928 3888  
F 02 9411 8533

**Melbourne**

Level 24, North Tower  
459 Collins Street  
Melbourne VIC  
Australia 3000

T 03 8610 0600  
F 03 9621 1575

[www.huawei.com.au](http://www.huawei.com.au)