Discussion Paper – Citizens, Communications and Convergence

The discussion document raises a number of interesting and complex issues that need to be fully debated and understood by all. Below we have addressed some of these issues. However this is not a complete list and we consider that further significant work is required to achieve an optimum solution.

Public Service Broadcasting (PSB)

There is an assumption that PSB must be delivered over the air but we consider that this type of service could be more appropriately delivered over the Internet. If this mode of delivery was accepted it would change many factors in the current PSB debate and remove some of the concerns regarding content and funding. If PSB was delivered via the Internet it would cause significant changes to the existing broadcasting infrastructure and this aspect needs to be considered further. However a number of the existing broadcasters are now beginning to provide audio visual content via the Internet. This includes broadcasters such as the BBC, ITV, Channel 4 and Sky and this is a popular offering with a growing demand. Using this new mode of distribution would give the ability to distribute a much wider range of PSB content than is currently the case with lower than current distribution costs. Additionally other content of benefit to citizens could be distributed by this means such as guidance to citizens on steps they can take to reduce their carbon footprint. This information would be combined with other PSB material and possibly other more commercial material making it more accessible to citizens. Thus when considering citizens and communications there are a number of important issues related to PSB to be considered.

Internet

The Internet is the ideal means for delivering PSB and using the Internet would permit a greater plurality of content than is currently available with the over the air system. The Internet provides a means for the citizen to access a wide range of information sources and this access should be available to all citizens. Additionally an increasing range of public services will be provided via the Internet and again all citizens will need to have access to these services. In fact the internet will become an essential digital utility so that access to the Internet will become essential like the utilities now. As an increased number of functions become dependent on the Internet, and the Internet of Things evolves, this importance will increase.

Additionally with the increased usage of the Internet particularly for audio visual content this raises concerns on the capacity of the Internet. These concerns need to be addressed. The future Universal Service Obligation (USO) should ensure people have a means for accessing the Internet rather than the current requirement for basic connectivity. The issue of USO is considered in more detail below.

Mobile versus fixed broadband

The paper is apparently written on the basis that the only option is fixed line provision of broadband though we consider that mobile broadband will have a significant role to play. On the demand for mobile broadband an Analysys report states that mobile broadband

David Hall Systems Ltd Registered Office 182 Rochester Drive Bexleyheath Kent DA5 1QG Registered in England No 3604589 accounts for nearly 20% of broadband subscribers in some European markets and Ofcom documentation indicates that there is high growth rate in UK subscriber numbers. Thus mobile broadband will have an important role to play. If so parts of paragraph 2.32 may be inappropriate. The business model for mobile broadband is different to that of fixed broadband making the deployment more flexible so that mobile broadband is likely to be accessible to more of the population than fixed line broadband. This issue requires further investigation and the implications need to be considered. This increasing use of mobile broadband will also flow through into increasing the demand for spectrum. Additionally the consequential impact on the fixed network needs to be taken into account.

There may be a requirement to produce something comparing the costs and benefits for fixed and mobile broadband. For the analysis there is a need to consider if the costs and benefits are the key items or are there other factors to take into account. For the costs of fixed broadband there are various reports providing cost estimates. Examples include the BSG Report on 'The costs of deploying fibre-based next-generation broadband infrastructure' and the Caio Review. However it is more difficult to determine the deployment costs for mobile broadband as this is more evolutionary making it more difficult to identify the investment costs. Additionally spectrum costs are much more variable and difficult to determine than the infrastructure costs for fixed broadband.

Spectrum

The increased use of mobile connectivity is likely to significantly increase the demand for spectrum and there is a need to consider if this demand can be met. This highlights the following issues

- Currently there is little flexibility in the spectrum management system and it can
 take a significant time for spectrum to be made available for new applications. It
 is considered that the spectrum management system should evolve so that
 spectrum can be made available much more quickly though it is recognized that
 progress is being made in this area.
- Another difficulty with the current system is that the spectrum used for similar purposes can have a wide range of values and a more consistent approach to the pricing of spectrum is required.

It appears that licence-exempt spectrum is capable of supporting many more users than licensed spectrum. This is most likely to be a result of the applications that are used in each category of spectrum. However this does raise the question of should more licence-exempt spectrum be provided and how effective would this be in meeting the demand for additional spectrum. This is an area where further investigation is required.

Universal Service Obligation (USO)

If the current model of basic connectivity is maintained then there is a need to consider how this will apply in future. It is likely that separate companies will be involved in providing the infrastructure to those providing the services and content. It may be that the USO will only be applied to infrastructure providers though will there be any requirement to apply it to services and content. There is a requirement for further consideration of this issue.

David Hall Systems Ltd Registered Office 182 Rochester Drive Bexleyheath Kent DA5 1QG Registered in England No 3604589 Alternatively as considered above a new form of USO could be required that is more concerned with the provision of access rather than connectivity as is the current case. By provision of access we mean the availability of a device for accessing the Internet. Such an approach to the provision of USO is likely to require new funding arrangements and this includes both the source of funding and the way the funds are used. One possible option is that if there is no PSB over the air could the money realized by the release of spectrum be used as a source of this funding. Similarly could the Internet be used instead of the mail system for message distribution and would this provide any funding sources for this new type of USO?

Citizens and consumers

There are clearly differences between citizens and consumers and both groups should be treated equally even though they have different rights and obligations. Consumers have the power of the market to protect their interests but it is difficult to identify the power of the citizen. When we consider the needs of citizens we need to consider factors such as security, emergency services, online government and others. Therefore the concepts considered in paragraph 2.31 may be inappropriate and it is considered that the citizens' interests should be protected by ensuring full access to the digital society and the provision of a specified minimum level of functionality in this digital society.

Recommendations for Future Work

It is considered that this discussion paper is just the start of the journey and some of the urgent action points are

- Investigation of the use of the Internet for delivery of PSB content
- Society will become much more dependent on the use of the Internet and the policy and regulatory implications of this needs to be fully understood
- The increasing transition to mobile access and what does this mean for the fixed network
- How can additional spectrum be provided within the timescale to meet the increased demand
- A new form of USO will need to be developed
- The interests and power of citizens and their rights and obligations needs to be clearly defined
- The relationship between citizens interests and consumer interests needs to be fully understood

This will be a complex and difficult journey though it is essential that the correct destination is reached to ensure that the UK economy prospers and recovers from the current difficulties.