

Intellect response to:

**The Department for Culture, Media
and Sport Open Letter on;**

**“A Communications Review for the
Digital Age”**

June 2011

About Intellect

Intellect is the trade association for the UK technology industry. Intellect members represent around 8% of UK GDP, £92bn of Gross Added Value and employ 1.2m people.

Intellect provides a collective voice for its members and drives connections with government and business to create a commercial environment in which they can thrive. Intellect represents over 750 companies ranging from SMEs to multinationals. As the hub for this community, Intellect is able to draw upon a wealth of experience and expertise to ensure that its members are best placed to tackle challenges now and in the future.

Our members' products and services enable hundreds of millions of phone calls and emails every day, allow the 60 million people in the UK to watch television and listen to the radio, power London's world leading financial services industry, save thousands of lives through accurate blood matching and screening technology, enabled the Oyster system, which Londoners use to make 28 million journeys every week, and are pushing Formula One drivers closer to their World Championship goal.

In the past 12 months 14,500 people have visited Intellect's offices to participate in over 550 meetings and 3,900 delegates have attended the external conferences and events we organise.

SUMMARY OF INTELLECT RESPONSE:

Intellect welcomes the opportunity to contribute to the Government's Communications Review. The UK communications sector is a global leader in terms of levels of innovation, investment, competition and customer take up. The communications sector is not only an important UK industrial sector, but is a crucial catalyst in driving growth across the whole economy. However communications technology and market are evolving fast and the impact of international developments on us is ever increasing. We cannot take our current position for granted. Government and industry must work hard to ensure that the UK communications industry reinforces its areas of strength, addresses areas of weakness and maximises the benefits to the economy and social wellbeing. The communications review is an ideal juncture to ensure that the future legislative and regulatory framework is fit to fulfil its role in this, at a time when the agenda for European-wide telecommunications objectives is developing momentum.

On Ofcom's remit, we consider that its current duties and priorities are broadly appropriate, within the national context.

An independent and strong communications regulator is important for the future health of the industry. We believe however that Ofcom should have a stronger priority to stimulate innovation.

Also given an increasing role of the communications sector as a key lever for stimulating productivity improvements and growth across the whole economy, Ofcom's top level duties should include the alignment of its regulatory approach with the promotion of growth.

Intellect urges the Government to ensure that Ofcom is properly resourced to fulfil its pivotal role.

Intellect considers that Ofcom's remit with regard to representation of the UK internationally places the UK industry at a disadvantage compared to our competitors abroad and consequently should be revised.

Spectrum is an important tool for innovation and competition in the communications sector. Tardy and insufficient supply of spectrum will undermine the full achievement of the growth potential. Ofcom is understandably keen to promote competition in spectrum holdings. However the availability of spectrum does not always match its ambitions on competition. We believe that a more strategic approach is required with a return to a more proactive role in international spectrum negotiations.

We urge the Government to consider the following proposals:

- create a medium and long term roadmap on UK spectrum developments to enable Government and Ofcom-managed spectrum to be better coordinated in terms of its preparation and release for new uses
- develop a more proactive approach to influence international spectrum decisions, with a change of remit to support UK industry
- to reduce the likelihood of legal challenges and delays on spectrum releases, Government and Ofcom should engage with industry to develop a national consensus on the high level principles relating to the optimum combination of spectrum availability, competition via spectrum holdings and network access

Intellect's responses to the specific consultation questions are provided below. However, Intellect wishes to suggest the following set of questions as a framework for identifying what changes need to be made to the communications regulation:

- What has worked well with the current competition regime, relating to the competition market, and what didn't work well?
- How is the market evolving?
- What shortfalls and inefficiencies need to be fixed? What lessons can we learn from within Europe and outside of Europe?
- What competition and regulatory regime would enable the UK vision and how would that position Europe better within the global environment?

Intellect is well placed and stands ready to partner Government in facilitating a dialogue involving Government, regulatory, industrial and user stakeholders in developing a national consensus on these questions.

DETAILED RESPONSE:

Growth, innovation and deregulation

Q1. What could a healthier communications market look like? How can the right balance be achieved between investment, competition and services in a changing technological environment?

There is much to be proud of in the UK's communications market. We have an innovative and competitive industry with a sophisticated regulatory regime. Public and business adoption of e-commerce and online services is high. Contributing over £100 Bn (7.2 % of GDP) to the economy, the UK is the largest per capita e-commerce market in the world¹. It has one of the highest proportions of adoption in fixed and mobile broadband, digital TV, DVRs and digital radio. Smartphone ownership is growing faster in the UK than in other countries, and penetration is higher than in most comparator countries. On regulation, the UK has a competitive landscape in telecoms: the UK's 85 % coverage of local loop unbundled service availability is one of the highest. This, and the resultant competition and innovation in services, gives the UK greater and better quality of choice than most other markets in the EU. Significant private (BT, Virgin and others) and public sector investment is being made to establish superfast broadband infrastructure across the country which will be a crucial facility to enable world class communications services for the coming years.

However, communications technology and services are evolving fast. The UK must work hard to ensure that its industry and regulation keeps pace. A healthier communications market will have a number of characteristics:

- **Recognition:** Government and wider industry must recognise the crucial importance of the sector, not only in its own right as a high value sector generating valuable high technology careers, but also as a key lever for innovation, productivity and growth across the whole UK and European economy.
- **Competition:** Increased competition is good. The significant degree of innovation and competition in service provision, wholesale and network access, and spectrum utilisation, coupled with an open and innovative public can help develop a healthy market and deliver significant benefits across the whole economy. In the case of spectrum-related applications however, the regulator's drive for competition must be matched with an adequate, timely and suitable supply of spectrum.
- **Strong independent and confident regulator:** On the whole, Intellect believes that Ofcom has proved to be an effective economic regulator. We consider that its current set of duties and objectives are appropriate. In addition however, Ofcom should be given a stronger priority to promote innovation and a new duty to align its regulatory policies for economic growth alongside its duties towards the citizen and consumer.
- **Incentives:** Government needs to seriously consider creating incentives for organisations to adopt innovative business models through the use of communications technology and lift the level of productivity across the economy, particularly SMEs and low productivity sectors.
- **Stimulate demand through on-line public services:** Central and Local Government must provide strong and active leadership and co-ordination to establish

¹ The Connected Kingdom – Boston Consulting Group (2010)

a concerted campaign to rapidly move the maximum amount of public services by default using the internet as the main channel for delivery.

- **Adequate, suitable and responsive supply of spectrum:** Spectrum is a crucial transmission medium for enabling innovative communications services. See also answer to Q6, Q7 and Q8
- **The UK, is the most switched-on digital place in Europe:** We need to ensure that the UK is home to the best communications technologists, service developers and business innovators

Q2. What action can be taken to facilitate greater innovation and growth across the wider competition regime, and how can deregulation help achieve this?

A recent World Bank econometrics analysis² of 120 developing and developed countries concluded that every 10-percentage-point increase in the 'penetration' or take up of broadband services added around 1.3 percentage points to the GDP growth, while a US study concluded that for every one percentage point increase in broadband penetration, employment is projected to increase by 0.2 to 0.3 percent per year.³

It is vital that Government recognises the role of the communications sector as a strategic sector. As stated above, we believe that Ofcom, in addition to its current set of duties and priorities, should have an additional duty to promote growth, through its regulation or de-regulation.

Intellect supports the Government's general aims to reduce regulation where possible and emphasises the need to resist introducing regulation where there is no clear need to do so. As an example, Intellect would highlight the danger of seeking to regulate the internet where there is no compelling need, since this is likely to stifle innovation.

Alongside the release of spectrum for licensed use, the Government and regulator should identify opportunities for providing spectrum for licence exempt application.

Q3. Is regulatory convergence across different platforms desirable and, if so, what are the potential issues to implementation?

Yes. Technology and the market are changing rapidly. Internet protocol is increasingly being used for voice, video and data applications. Customers access similar or substitute (communications) services via a variety of platforms and markets (eg. fixed and mobile services, digital terrestrial TV, satellite communications and broadcasting). They have also

² Information and Communication for Development 2009: Extending Reach and Increasing Impact; World Bank (2009)

³ The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data; Robert Crandall, William Lehr and Robert Litan (The Brookings Institution, July 2007)

become accustomed to dealing with their communications services in bundles. Yet the regulation and regulator tend to operate in terms of discrete markets. The update of the communications regulation is an opportune time to address this.

Q4. What barriers can be removed to facilitate greater exports and inward investment and make the UK more globally competitive in digital communications?

The competition to attract inward investment is rising significantly. The UK cannot take its position as an attractive place, to locate such investment, for granted. Other national and local Governments, in competing locations devote significant resources, priority and focus to prospective investment opportunities. The UK Government, supported by a well resourced UK Trade and Investment, needs to match this, if we are to retain our international corporate research and technology centres and attract new ones.

A communications infrastructure that provides the foundations for growth

Q5. What further market and regulatory developments would lead to widespread take-up of superfast broadband? What regulatory action would government need to take to make superfast broadband more readily available in a) urban areas; and, b) rural areas?

The UK can be very proud of the level of private sector investment which should enable coverage to two thirds of the population. The regulatory framework needs to continue to encourage commercial roll-out of superfast broadband, with public funding provided to address areas where there is demonstrable market failure as currently being managed by BDUK. Where state aid funding is used it is important that this is targeted in the most effective and efficient way and that wholesale access is available to other providers when it is technologically feasible. Government and regulators must remain actively technology neutral and enable the most appropriate technology (eg. fibre, wireless and / or satellite) to be used in any given scenario by focusing on users' real needs.

Development of new services and applications and regulatory action to ensure that premium TV content is available on a wholesale basis will all help drive consumer take-up of superfast broadband. Government should also support solutions made available by commercial operators (e.g. hybrid solutions) which reduce the need for bandwidth by using existing broadcast infrastructures for instance to make premium TV content available on different networks.

Mobile connectivity to superfast broadband is important for consumers (e.g. to connect laptops, Smart phones and other mobile computing or gaming devices to the internet), and in this context licence-exempt wifi has a crucial role to play. In future this and other small cell technologies (e.g. femtocells) will be increasingly important in this context.

Wireless and satellite will also have an important role in more rural areas to deliver basic broadband connectivity. Availability of suitable spectrum is crucial for this. Spectrum is

also essential for the establishment and enhancement of mobile broadband and satellite broadband networks.

Q6. What are the competing demands for spectrum, how is the market changing and how can a regulatory framework best accommodate any rapidly changing demands on spectrum and market development?

There are currently a number of (sometimes competing) demands for spectrum:

Mobile broadband:

With the exponential rise in mobile data traffic, there is now significant awareness of the need for spectrum for mobile broadband. There is evidence that providing the capacity to accommodate this rising demand for data volumes is an increasingly difficult challenge for operators. Thus if timely access to adequate and suitable spectrum is not forthcoming, much of the economic benefits of broadband could be jeopardised. In broad terms the necessary spectrum can be considered in 2 categories: spectrum above and below 1 GHz.

Spectrum below 1 GHz is much sought after because of the better buildings penetration (enabling indoor coverage) and propagation characteristics (enabling larger cell sizes and thus less base stations) at lower frequencies. In contrast, with higher frequencies (e.g. above 1 GHz) the signals have the advantage of accommodating greater volumes of traffic (due to greater bandwidths) but suffer weaker building penetration and require larger numbers of base stations. Thus as Europe begins roll-out of wireless broadband networks, spectrum below 1 GHz appears more valuable than above. However, this could change in time as the focus of operators switch from achieving coverage to accommodating the rapid rise in data volumes.

- **Digital Terrestrial Television (DTT)**

The UK Government and Ofcom have played a significant role alongside the Broadcasters, Consumer Electronics Industry and Transmission providers in creating the circumstances that have allowed Digital Terrestrial Television to become the success that it is today. To date platform developments have largely been associated with the roll-out of digital services in combination with the expansion of content choice through network technology enhancements. These events have allowed the platform to evolve and expand to service consumer demand as multi-channel television has been embraced by the consumer. However, as the digital switchover process approaches its conclusion, the platform's ability to service future consumer trends and changes in demand, such as the anticipated widespread adoption of High Definition services may become difficult. This is exacerbated by the limited degree of flexibility afforded the platform by the regulatory regime and also uncertainty regarding the availability of more spectrum. By the nature of DTT, this additional spectrum needs to be found below 1 GHz.

- **Space activities and Satellite Communications**

Space activities are increasing in importance. They have been at the heart of the major strides in our understanding of the Earth's complex systems (including climate change),

the solar system and beyond. Satellite communications are also a major component in the provision of telecommunications and broadcasting services.

Satellite operators must assess the availability of spectrum across the entire “footprint” of the spacecrafts. Unlike terrestrial mobile phone operators who can choose from a variety of spectrum allocations within any single country, satellite operators must rely on a limited set of internationally coordinated spectrum bands. If a single country within the footprint decides to make spectrum available in ways inconsistent with its neighbours, it can either create unacceptable interference for satellite operations or impede the economic viability of the business case for the satellite services, or both. Because of the multinational footprints, and the inherent susceptibility to interference, of satellite systems, international agreements and harmonisation is vital. National allocations and auctions are not appropriate for satellite applications. The UK Government and regulator need to be proactive in international arenas to align negotiations therein with UK interests.

- **Public service applications**

The methodology for releasing spectrum for non commercial applications (e.g military, emergency, public safety etc.) also requires specific consideration. In these cases the end users are often public sector organisations who may not be in a position to bid for spectrum. The potential suppliers will not be able to seek spectrum without certainty of customer contracts. Where these services cannot be provided by existing commercial networks an alternative could be for the Government to set aside spectrum for such public service applications or to enable spectrum sharing between public service and commercial applications. While there obviously needs to be spectrum for such societal applications we believe that more innovative ways to share spectrum should be considered before allocating spectrum to a particular use. On the other hand, the growth in network enabled services (GSM-R, Tetra etc) in public service applications will also result in scope for releasing spectrum being used by such applications.

Intellect sees a continuing need for licensed and licence-exempt spectrum with increased sharing and more sophisticated techniques needed to maximise the use that can be made of spectrum, for example greater sharing between civil and military uses, cognitive access to spectrum (e.g. TV white spaces).

Greater and closer working between Government and Ofcom is needed to ensure that international work is progressed in a way that maximises opportunities for the UK, for example harmonisation of spectrum that UK may free up for new uses), and to ensure that Government and non-Government spectrum is awarded in a more coherent and coordinated manner.

In the international arena, European initiatives on spectrum policy are likely to play an increasing role. For example the draft EU Radio Spectrum Policy Programme is expected to be influential with respect to spectrum policies and priorities. It is important that the UK takes a pro-active stance so that such developments provide a clear, balanced and coherent framework that serves both end-user and industry interests.

We encourage Ofcom's continued involvement in this forum to ensure that the interests of the UK citizens and industry are fully addressed. We particularly encourage active involvement in matters within the RSPP of concern to national security and stability, such as the harmonisation of further spectrum for Public Protection and Disaster Relief across Europe.

The Government and regulator need to develop a long term strategic approach on UK spectrum requirements, with a roadmap to facilitate the necessary spectrum releases and transitions that need to be effected. They need to regain the previous proactive leadership role played by the UK in European and global spectrum regulatory fora to stimulate and align international regulatory developments with those UK priorities.

Q7. How should spectrum be managed to deliver our growth objectives whilst also meeting our policy objectives of furthering the interests of citizens and consumers in relation to communications matters?

Increased sharing and release of new spectrum in a timely manner will help support growth. The planned spectrum auctions, releases of Government spectrum and additional licence-exempt spectrum, including cognitive access to TV White spaces) will all have a role to play.

Q8. How should the UK engage on an EU/International level in relation to spectrum?

There is a need to improve the way that the UK engages on spectrum matters in the international fora. These fora are principally the ITU, the CEPT and the European Union.

The ITU is responsible for the international regulations regarding the efficient use of, both, spectrum and satellite orbital resources. Changes to the Radio Regulations can be made at regular World Radiocommunication Conferences, the next of which will take place in early 2012. An important function of the Radio Regulations is to harmonise bands internationally for certain uses or services. This role of the ITU is vital for many sectors of the UK communications industry. For example, the mobile communications industry, the aviation industry, the broadcasting industry, the satellite communications industry and the space science industry all rely on internationally harmonised frequency arrangements in the Radio Regulations. The footprints of most communications satellites cover multiple countries and hence the use of frequencies must be controlled so as to avoid interference to and from a satellite or to avoid interference between neighbouring countries. For some other industry sectors too, such as the terrestrial mobile industry and the domestic terrestrial broadcasting industry, internationally harmonised frequency arrangements are highly beneficial. Such arrangements mitigate cross-border interference issues and facilitate international roaming and global markets. Changes to the Regulations can, and often do, have a positive or negative impact on these industry sectors.

The CEPT and increasingly the EU also have significant roles to play in developing common European positions to be taken to the ITU, and in developing regulations harmonised on a Europe-wide basis.

It is therefore vital that the UK communications industry, which often relies on well managed radio spectrum, is well represented and engaged in the international fora. This however, is an area of concern to the industry.

Representation of the UK at the ITU and other international fora is managed by Ofcom. In the case of UK preparations for a World Radiocommunication Conference, the formal responsibility for the UK preparations rests with the UK Government through the Spectrum Strategy Committee, but the IFPG, chaired by Ofcom, has delegated responsibility. Ofcom holds meetings and consultations in its preparations with stakeholders, including those from the UK communications industry. Industry stakeholders also assist and support Ofcom in meeting the UK objectives at the international meetings.

Ofcom also represents the UK satellite operators on matters of coordination between satellite networks filed by the UK and those filed by other countries.

However, Ofcom's responsibilities towards UK industry are limited by the 2003 Communications Act. Ofcom's general duties are to further the interests of citizens in relation to communications matters and consumers in relevant markets⁴. However, for many international matters, the benefits to UK consumers and citizens are typically rather indirect whereas the benefits and risks to UK industry may be direct and significant. On some matters, particularly in development of the UK position for international meetings, Ofcom currently refuses to explicitly take into account the industry perspective when developing the UK position, citing their responsibilities as defined in the Communications Act.

It is apparent that many other countries determine their national positions for the WRC and other international meetings giving strong weight to the requirements of their national industry. There are recent examples where other European regulators have given strong support to changes in the Radio Regulations in support of projects of benefit to their domestic satellite industry. Those regulators had the interests of their national industries at the centre of their strategy for engagement in negotiations. Decisions taken at such meetings typically require horse trading and compromise and it is vital that Ofcom is both able and enabled to properly represent the UK position. The current situation places UK industry at a disadvantage compared to other countries.

The situation was satisfactory before the establishment of Ofcom. The predecessor of Ofcom on such matters was the Radiocommunications Agency, which was an executive agency of the DTI and was therefore fully entitled to take account of the impact of its decisions on UK industry.

Two different approaches can be foreseen to address the situation. In the first approach, Ofcom's duties with regard to representation of the UK at the international regulatory fora could be brought back into government – e.g. DCMS – where the impact on UK business can be fully taken into consideration, alongside the impact on UK citizens and consumers. In the second approach, responsibility could remain with Ofcom but with an effective change in its duties so that Ofcom is legally required to give consideration to the impact on UK industry, in addition to the impact on UK citizens and consumers, in its preparations and representations to the international fora. Recognising the experience and expertise already in place at Ofcom for representation of the UK in the international fora, our preference would be for this second approach. There are two ways in which this second approach might be implemented – either a modification to section 3 of the Communications Act (“General duties of Ofcom”), or a new directive from the Secretary of State under section 22 of the Act (“Representation on international and other bodies”) so as to require the impact on UK industry to be considered.

Intellect requests that the Government considers this proposal as part of its review of the regulatory regime for the UK communications sector.

⁴ See section 3(1) of the Communications Act 2003.

Q9. Is the current mix of regulation, competition and Government intervention right to stimulate investment in communications networks?

There is significant scope for improving the quality and efficiency in a range of public services through the adoption of online delivery channels. In the current economic climate, this must be an urgent priority. All Government Departments need to systematically consider the scope for doing this in their areas of responsibility and develop a plan of action. With the increasing use of communication systems as tools for their policy objectives, the Government should also consider opportunities among Departments for better co-ordination and aggregation of investments in networks.

Creating the right environment for the content industry to thrive

Q10. Are there disproportionate regulatory barriers to investment in content? If so, what are they and how can increased investment in UK content production be encouraged?

The consumer electronics industry is the platform upon which content can be monetised and the related IP exploited. This goes for both existing business models such as broadcast and for new and yet to emerge business models. Whether on a vertical, horizontal or hybrid platform, technology is the vital bridge for content into consumers' home and for revenue to flow out securely to content makers. It's the base of the ecosystem for the creative industries.

Innovation from technology manufacturers has driven demand and enabled new business models and revenue streams. IP and hybrid-based service platforms offer the opportunity to monetise existing forms of UK content in new ways, so supporting investment in platforms that can show wholly new forms of content, such as local TV.

To enable this, there are some principles that the government should keep in mind:

- the UK must avoid artificially fragmenting European and global markets by mandating UK only standards and specifications to enable both technological innovations and content to be used as widely as possible
- freedom to innovate and differentiate around the consumer interface and experience; for example, innovation in this area was what allowed the creation of the iTunes environment, so securing massive revenues for music content. Tying down the Electronic Programme Guide of a TV, too closely to broadcast standards on the other hand could chill new innovation.
- UK content providers need to invest in international formats, such as 3D to remain competitive.
- we need to pay heed to the necessary economies of scale that support the creation of UK content in film and television. Blockbusters and period dramas, for example, aren't going to spring out of SMEs alone without some investment and distribution stability.

Intellect has welcomed the Hargreaves' report and the recognition of the links between Intellectual Property and Growth. We agree that although the IP regime has generally served us well, some changes particularly around copyright are needed especially in the digital context and we await the government response to the recommendations. We welcome the recognition in the open letter that any reference to intellectual property issues by the Communications Review must be in line with agreed government policy. It is not the role of Ofcom to create intellectual property-related policy.

Notwithstanding the above we should like to reiterate a few of the comments made in response to the Hargreaves' recommendations

- Any changes need to be considered alongside EU and international initiatives and would like to see the UK playing a more prominent, leading role in Europe and on the world stage.
- We fully support the extension of the private copying/format shifting exception to legitimise normal consumer behaviour. We urge that the government now accept and implements this recommendation. The law should recognise that the benefit of private copying is factored into the purchase price in line with Hargreaves' recommendation and specifically state that this extension will not give rise to further compensation to rights holders. Importantly, it must be possible for a licence to cover excepted acts of private copying so that commercial licences can legitimately cover all uses permitted by end users. Full-scope licensing is critical.
- Digital Copyright Exchange. We welcome the move to improve access to content and simplify licensing and will be pleased to work with other stakeholders to more fully develop this proposal. We support voluntary participation without penalties for not joining. We caution its suitability for all types of content and possibly it should not cover software and games. It is also unlikely to be suitable for user-generated content. It remains unclear if this is planned to be a registry or a transactional market place. If the latter, care has to be taken to maintain a competitive environment and avoid creating a "super-monopoly" or endorsing a fixed single pricing structure. It will also have to work for both the consumer and intermediaries i.e. those that aggregate content to deliver a service to a third party. In short, it will be important that the design and implementation of a Digital Copyright Exchange balances the interest of buyers and sellers on a willing licensor – willing licensee basis. Compatibility and interoperability with other European and international initiatives is also an issue.

Q11. Should the core focus of public service broadcasting be on original UK content?

There are two functions of public service provision of media. One is the creation and commissioning of high quality UK content that serves a social need. Another is the spreading of this content as widely as possible. In the broadcast only era, these two functions sat in a clear linear relationship.

In the converged media landscape the picture is not quite so simple. Public service content needs to be disseminated across several platforms in as neutral a fashion as possible. A

vibrant media market in the home will depend upon seamless intra-platform operability as much as inter-platform competition.

Key principles include:

- public service broadcasters should provide content, whether broadcast, over IP, or otherwise, in a consistent, clear, road-mapped fashion, with as few UK-only technical factors as possible; this allows technology companies to invest and innovate in the UK market with confidence, and to keep prices and platform stability attractive to UK customers.
- the broadcast and content creation sections of PSBs will need to maintain a balance in their relationship, between working together and partnering with other platform providers.

Q12. What barriers are there to innovation in new digital media sectors, including video games, telemedicine, local television and education?

The connected home potentially brings together telemedicine, education, energy management and other public services. The promise for the consumer is huge. The social promise is saving carbon, government efficiencies and a platform for new business models.

To thrive, the connected home needs to provide roadmaps for investment and certainty around standards. For example, if an international manufacturer is to invest in developing appliances that network smartly into the smart meter, to save energy across the household as a system, it would need a sufficient horizon of regulatory and technical certainty to have confidence. Innovation cannot flourish otherwise, chilling markets such as telehealth and others.

Q13. Where has self- and co-regulation worked successfully, and what can be learnt from specific approaches? Where specific approaches haven't worked, how can the framework of content regulation be made sufficiently coherent and not create barriers to growth, but at the same time protect citizens and enable consumer confidence?

Examples include:

- Digital Tick: The DTG s, DTG Testing and the DTG Working Groups are examples of stakeholders successfully working together to everyone's' benefit.
- Digital Switch Over: The operability achieved within the DSO programme is another example.

It is important that we avoid over regulation, which will inhibit innovation.

- *end of Intellect submission* -