Call for Evidence response form

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FutureofTVDistributionCallforEvidence@ofcom.org.uk

Title	Call for evidence: Future of TV Distribution
Full name	✂
Contact phone number	✂
Representing (delete as appropriate)	Organisation
Organisation name	National Broadband Ltd
Email address	✂

Confidentiality

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Your details: We will keep your contact number and email address confidential. Is there anything else you want to keep confidential? Delete as appropriate.	Nothing
Your response: Please indicate how much of your response you want to keep confidential. Delete as appropriate.	None
For confidential responses, can Ofcom publish a reference to the contents of your response?	Yes

Your response

Question	Your response
Q1. How are audience demands and expectations evolving, and how does that vary for users of different TV platforms and	Not directly within our remit of experience

different demographics?	
Q2. What do audience trends mean for the financial prospects and sustainability of TV distribution platforms, and what are the key decision points over the next ten years?	Not directly within our remit of experience
Q3. How do broadband networks and supporting infrastructure need to evolve to support resilient delivery of TV over the internet in the future?	The short answer? A major increase in available bandwidth is needed across a variety of technologies. The average UK household's monthly data usage is now running at over 500GB per month, with this ever-rising number being almost entirely driven by the consumption of IP-based video, whether that be on-demand streaming or catch-up. The further roll-out of full fibre connectivity is of course the ideal answer, given both the speeds and the bandwidth that this communications technology provides. However, only 85% of the UK's homes and businesses are set to get access to full fibre by the close of 2025, with the remaining 15% being seriously cost- and logistics-problematic in terms of provisioning with improved connectivity via traditional terrestrial means, given that they will inevitably be located in more remote areas of limited population density. The obvious (and rapidly implementable and highly cost-effective) solution is to use alternative broadband delivery technologies to provide a step change in improved connectivity to those remaining 4.5 million properties. However, current Government strategy (as enshrined in Project Gigabit) is solely focussed on full fibre to the exclusion of all else, and this is an error, in that it leaves those most most in need (i.e. those with the current worst broadband speeds) behind. The singular failure of the Universal Service Obligation to address the issue of poor broadband is easily seen. BT's own figures reveal that within the six month period from Oct 22 to Mar 23, only 1,038 requests for service under the USO were made. Of these, over 92% were rejected, leaving just 79 as valid – and of those 79, only 49 resulted in a broadband-starved premises placing an order under the auspices of the USO. It is thus abundantly clear that the USO is absolutely not providing the meaningful connectivity 'safety net' that was intended for the digitally deprived. What is desperately needed from central Government is a hybrid multi-technology approach to delivering universally improved connectivity. By all means continue with the further roll-out of full fibre wherever practical from

	a time and/or cost point of view. However, hand in hand with this already existing policy, Government should **simultaneously** be funding the 'per property' provision of significantly improved broadband via alternative technologies, be they 4G, mid- or more likely low-band 5G or in the most extreme cases, satellite. A case in point. Ofcom itself states that there are currently 420,000+ UK homes and businesses that cannot even get what it calls a 'decent' broadband service of > 10Mbps down a landline. (As a side note, that is a very surprisingly low bar… 10Mbps is not going to allow the seamless usage of IPTV). For every single one of those 420k premises to be provisioned with equipment allowing a much enhanced broadband connection (c. 25-30Mbps) delivered over 4G would be achievable within a short time frame and crucially at a total cost to the public purse of c £125 million... and that represents just 2.5% of Project Gigabit's £5 billion budget. Moreover, this would be addressing the digital deprivation of those in the greatest need. If true universal improved connectivity were achieved, allowing every UK property to take advantage of today's ever-growing IP TV, this would then free up the current DTT spectrum for redeployment, thus enabling even further improvements in connectivity to be made (see our answer on low-band 5G to Q5) PLEASE ALSO DOWNLOAD RELEVANT DOCUMENT AS LINKED TO BELOW UNIVERSAL CONNECTIVITY – ALTERNATIVE BROADBAND DELIVERY SOLUTIONS.DOCX DOWNLOAD LINK: https://nationalbroadbandcouk-my.sharepoint.com/:w:/g/personal/dale_bone_national-broadband_co_uk/EQA0G8VDpBNNqv6kL2UqHtABkn0qHOh4YiKmOOzgp2YR-A?rtime=KP7kDgr720g
Q4. In what ways might different types of 'hybrid' terrestrial and internet services deliver benefits for audiences and what risks may arise?	Not directly within our remit of experience
Q5. Given the sharing of infrastructure, what would the implications for other sectors be	This entirely depends upon what changes are envisioned. If DTT as a whole is going to be reduced in terms of overall bandwidth, that would then free up badly needed spectrum for usage by other communications delivery technologies.

if there was a change to the use of digital terrestrial television (DTT)?	DTT currently uses frequencies within the 470-790MHz spectrum. Given the obvious potential for low-band 5G to provide the next evolutionary step in robust and fast single premises connectivity to those millions of UK homes and businesses with no realistic prospect of having access to a full fibre connection any time soon, repurposing at least the upper portions (600+MHz) of the current DTT spectrum for use by low-band 5G would seem well worthy of consideration. For information, 4G is currently seen as the ideal alternative solution to deliver a fit-for-purpose main broadband connection to the 420,000+ UK properties that still have no access to a traditional landline-based broadband service running at 10Mbps or more. However, although entirely capable of providing speeds easily in excess of what Ofcom itself has defined as a 'decent' broadband speed, when measured across the UK as a whole, the average performance delivered by a 4G broadband connection is 25 to 30Mbps. This is clearly below the average UK property broadband speed of c. 70Mbps. As is already being demonstrated by operators like T-Mobile in geographical markets such as the USA, low-band (sub 1GHz) 5G has the capability of being used to provide a primary broadband connection to individual properties with performance in the region of 50 to 70Mbps. Since it is transmitted at significantly lower frequencies than current mid-band (or metropolitan) 5G (itself using the 3.6GHz band in the UK), low-band 5G offers the major advantages of far greater usable range and far better penetration ability – which in turn means that far fewer masts are required to provide coverage of any given area, when compared to its mid-band counterpart. Were more of the existing DTT spectrum to be allocated to low-band 5G, this would allow a more robust and capable roll-out of sub 1GHz 5G due to the increase in bandwidth, thereby allowing a much easier, quicker and more cost-effective means of digitally levelling up any UK property that is not going to get access to a full fibre connection by the end of 2025. As we know, current Government objectives are to ensure that 85% of the 30 million or so UK properties have access to a full fibre broadband service by end 2025. That leaves 4.5 million premises – almost all more rurally located – behind. Low-band 5G is the obvious answer to provide the next step change in connectivity for such properties. PLEASE ALSO SEE ATTACHED DOCUMENT THE POTENTIAL OF LOW-BAND 5G BROADBAND.DOCX
Q6. What coordination and planning across the value chain might be necessary to secure good outcomes for	Not directly within our remit of experience

audiences and key providers over the long term?	

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