Call for Evidence response form

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FutureofTVDistributionCallforEvidence@ofcom.org.uk

Title	Call for evidence: Future of TV Distribution
Full name	✂
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Representing (delete as appropriate)	Self
Organisation name	
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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.	Your name, contact details
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 different demographics?	Confidential? – No Older/those with poor broadband will continue to watch linear television, while younger/connected people will watch content via smart devices. While the recent rise of FAST services has brought about a return to advertising funded 'linear' services, over-the-air broadcast will continue to decline.
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?	Confidential? – No The DTT network should be re-architected to reflect the decline in usage. This will both make the network simpler and ensure that in-life equipment can be purchased as needed. It should be: • Fully DVB-T2 & HD capable • Smaller (only 3-4 multiplexes) • Use Single Frequency Networking (for all but 1 multiplex) • Local TV multiplex should be decommissioned • No provision should be made for UHD over DTT **DVB-T2 Migration** All multiplexes should become DVB-T2 (from the existing mix of DVB-T0 and DVB-T2). many/most devices are Freeview HD compatible, and many services are originated in HD or even UHD. Simulcasting SD and HD is inefficient, and not fit for purpose. SD services may remain: but services should only be emitted once, encoded in H264. Removing simulcast would save the cost/energy spent broadcasting duplicate content. **Reduction in the number of Multiplexes** Reflecting declining usage patterns, the total number of multiplexes should reduce to 3 or 4. (from the current 7). Fewer live channels are needed. **Almost entirely Single Frequency Networked**

	For spectral efficiency: All but one of the remaining multiplexes should be national Single Frequency Networks (like COM7/COM8 were prior to decommissioning). A remaining regionalised multiplex, looking like the existing BBC-B multiplex, would remain. These actions would free up spectrum for other uses. **Other Multiplexes** • The local TV multiplex should be terminated, the content is rarely local, and does not justify the spectrum usage • NIMux should continue, (potentially) upgraded to DVB-T2 **UHD** DTT will never emit UHD, and this should not be considered – while significant from a distribution perspective, that traffic has moved to online and the consumers who view it will not justify the implementation on broadcast.
Q3. How do broadband networks and supporting infrastructure need to evolve to support resilient delivery of TV over the internet in the future?	Confidential? – No While it's unlikely that widescale multicast usage will ever be adopted, at times of major national interest, multicast does offer advantages to distribution of major 'event' TV or sporting events. Some ISPs/Distributors are already using Multicast ABR within ISPs for high profile streams. Alongside this, embedding elements of Content Distribution Caching further within the Openreach/BT Wholesale/ISP networks could provide better resilience/scalability.
Q4. In what ways might different types of 'hybrid' terrestrial and internet services deliver benefits for audiences and what risks may arise?	Confidential? – No Younger audiences do not tolerate scheduled TV except in major event situations, and so future platforms will be designed with this in mind. For those watching broadcast TV, or major events, the use of Hybrid Television platforms could provide customised content or advertising. Audience fragmentation could reduce the opportunities to take big creative risks. Fragmentation may also reduce consumption of PSB content, which could make "worthy" investigative content less viable to produce, reducing access to informative content, and access to locally produced material over imports.
Q5. Given the sharing of infrastructure, what would the implications for other sectors be if there	Confidential? – No A reduced DTT platform would free up spectrum for other licensed/unlicensed uses, while still supporting the remaining users.

was a change to the use of digital terrestrial television (DTT)?	More licensed spectrum will allow for the migration of content to mobile or fixed-wireless networks. Provision of additional unlicensed spectrum could provide opportunities for innovation in IoT or other activities. The continuing presence of some multiplexes could justify the presence of those masts alongside data services
Q6. What coordination and planning across the value chain might be necessary to secure good outcomes for audiences and key providers over the long term?	Confidential? – No eme, and potentially further expansion schemes to roll this out to less profitable areas. If there was to be a migration to DVB-T2, a switchover coordination scheme and access to subsidised T2 boxes would be needed. Hopefully of a smaller scale than prior ones, in line with the DSat HD switchoff. If that platform freed up spectrum, local & international coordination (e.g. WRC) would be needed to identify the licensed/unlicensed allocations that would make the most of this. Telecom companies want to control the distribution chains more deeply, while distributors want to retain control. Arbitration of that could be required to balance these competing desires? If there was to be more widescale use of network embedded TV distribution, e.g. multicast on fixed line, or 5G multicast services – some coordination over who gets Fair, Reasonable and Non-Discriminatory (FRND) access to "multicast" distribution could be required. Some smaller services may not justify the fixed overheads of being multicast enabled to telecom companies, but equally telecom companies shouldn't be able to unfairly gatekeep those services for financial or content reasons. Could a modified Ofcom "broadcast" license form part of that process, showing that a service justifies access to efficient distribution tiers at FRND rates?

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