Attachment to Call for Evidence response on Future of TV Distribution: Netgem UK Limited

Who we are

Netgem TV is the TV service run in the UK by Netgem, a French headquartered company, with a significant presence in the UK, Netgem UK Limited, Company Number 04719079. Netgem has a strong track record in innovation and engineering excellence, with first Hybrid TV solutions launched in the UK over 20 years ago with BT (BT iPlayer). Over the last 25 years, Netgem has developed a unique expertise in bringing innovating Internet-connected solutions for Telecom operators, as one of the pioneers of IPTV, having launched a Hybrid IPTV product in France in 2003 ramping up to 4 million TV customers with Operator SFR, Telstra in 2009, and rolled out advanced TV solutions in over 10 Million homes across 30+ operators, mostly in Europe. Netgem's IPTV technology platform is today available in 15 countries, with a particular focus and investment in the UK market for over 20 years.

Netgem UK provides a comprehensive yet simple multiscreen TV experience at an affordable price: any household with a superfast broadband connection can sign up for our TV and streaming service. The Netgem TV service in the UK was named the "Most advanced TV service 2019' and built on the "The best 2020 Freeview Play set-top-box" in the UK. In November this year, Netgem won the Video Tech UK 'Advanced TV Innovation of the Year', for the first Immersive Entertainment service with Cloud Gaming.

Data points: Netgem TV is a virtual TV platform operating a TV service in the UK, on a Freeview Play certified 4K Set Top Box device with the following:

- One EPG across Freeview and extra IP channels
- A universal search across Channels and Apps
- Personalised recommendations across channels and Streaming content
- 125+ Extra IP only channels, available to any of our households who connect their STB to internet
- 30+ Games
- Access to more than 40 Free apps (including Youtube 4K, TikTok) and Premium SVOD Apps (including Netflix, Amazon, Sky Now, RakutenTV, BT Sport, Britbox).
- Access when connected to an aerial to all linear PSBs and their associated On-demand/Catch up services.

Netgem TV is currently marketed via 16 UK ISPs (including Talk Talk) and the total reach is circa 7 million households. This reach is a combination of the TalkTalk total Broadband customer base and the 'Altnet ISPs'. Netgem TV offer serves some of the most price sensitive households in the UK. We believe that fast broadband and a choice of content should not be limited to those households who can afford a high-priced pay TV service, and that is why Netgem TV is built and constantly evolved on the core principles of 'Choice, Simplicity, and Value'. Netgem TV consumer branding is 'Stream Big, spend small.'

Answers to the questions posed by Ofcom

1. How are audience demands and expectations evolving, and how does that vary for users of different TV platforms and different demographics?

- Many homes in the UK now utilise second TV sets and multiple devices with no expectation or ability to connect to an aerial. There are a few reasons for this and can include poor or no DTT reception in the area where that household is located or no aerial socket in the room where the second set is located. As at November 2023, 27% of Netgem TV's active devices in the UK were not connected to an aerial.
- Netgem serves a market segment that includes households with vulnerable characteristics, as defined in the Call for Evidence.
- Different distribution approaches are required for different segments of households. Without acknowledging and designing a distribution strategy for these households there is a risk that there will be no universality of access in the UK with all that means for society.
- We expect fragmentation to continue as set out in Call for Evidence.

2. 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?

- The continuing cost of living crisis and households with vulnerable characteristics, as defined in the Call for Evidence, means that some households struggle to afford to watch television, particularly the most popular Free-to-Air channels if only available via a Pay TV service. This risk increases if a wide range of distribution platforms, with different price points and offers, are unable to continue to do business in the UK market. We believe that PSB channels should be available on all UK platforms – regardless of whether the aerial is connected.
- Netgem TV supports the concept of 'Freely' the app 'home' for PSBs being managed by Everyone TV. We understand that Freely is due to launch next year. Having Freely on Netgem UK is important for the Netgem TV offer for households and to the viability of the Netgem platform in the UK – after 20+ years of investment in the market. We consider that Netgem offer is one that serves what would otherwise be an underserved segment of households. Without access to Freely, Netgem TV's offer would be compromised.
- Netgem TV has had a successful distribution relationship with the BBC since 2018. During this time Netgem has complied with and assisted with multiple technical and developmental upgrades to ensure the BBC content is distributed on Netgem's service in the best possible way to Netgem households, including for example the most recent support of the CLM technology, allowing HD prominence and Regional HD channels access.
- Over the course of the last 2 years, Netgem has been involved with conversations with the BBC about the possibility of distributing the BBC channels over IP. The BBC maintain that they expect Netgem to access their Channels over IP with the launch of Freely or as a short-term alternative via a deeplink to channels within the BBC iPlayer App. Unfortunately, we do not believe that deeplinking the channels provides a positive user experience for our households: Deeplinking creates a significant timelag from selection of the channel to launch which is a poor user experience for our households and we believe this second rate experience is negative for the BBC too (minimum 7 seconds for deep-links after technical optimisation vs. 2 seconds on DTT and 1 second on Full IP).

- We note the recent launch announcement of EE TV which will be utilising an IP-only STB (Apple 4K) without an aerial port. The announcement declared that all PSB channels are now available on this service on an IP basis and has been recently introduced in the market despite Freely being the default solution promoted by the BBC.

- We are in active technical discussion with Everyone TV for the launch of Freely on our active devices in 2024 and these discussions are progressing well. We anticipate that the testing will go well and with Everyone TV look forward to launching Freely in 2024.

3. How do broadband networks and supporting infrastructure need to evolve to support resilient delivery of TV over the internet in the future?

At Netgem, we have been managing TV boxes across over 30 operators delivering OTT live streams to millions of households in different markets for over 20 years. The Technology available in 2023 is well suited to deliver live TV over the Internet in most cases.

The Broadband networks across the rest of Europe currently supports and have been supporting the transmission of the most popular local Broadcasters' Linear TV over the Internet, in some cases for over 20 years like in France or Luxembourg. Whilst the support of Multicast technology was critical at the beginning of the conversion of Broadcast TV to IP (DVB-T/C/S to DVB over Internet, i.e. Multicast), the technology landscape has significantly evolved to support OTT stream even for the main Broadcast channels, and particularly around 5 areas as follows.

(1) ***General bandwidth and improved latency available***: The average speed for each average household connect in the UK has increased drastically from ADSL, to VDSL (FTTC), to FTTH. The average in the UK is ca. 70Mbps and this is increasing rapidly with the rollout of 'Full Fibre' now available to ca. 50% of UK households.

(2) ***Compression***: Whilst image resolution has increased, Codec technologies have improved faster than the resolution, and transporting an average HD stream typically takes between less than 5Mbps- QoS across all devices.

(3) ***CDNs***: All Streaming platforms have made extensive use of CDNs for distribution of their content in the networks of the Operator, and most broadcasters have head-ends in place that support a direct connection to those CDNs too.

(4) ***More caching for On-demand frees up access to live***: Most Network operators [Mobile or Fixed Telecom operators in the UK such as TalkTalk, EE…] have agreements in place to host cache servers for On-demand streaming services, which partly frees up bandwidth available for live broadcast channels.

(5) ***QoS management on streaming devices***: We have implemented optimisation of the Video players in our TV boxes, as well as running a QoS agent that monitors quality issues to manage user expectations.

Our experience and expertise comes from supporting large deployments in France of up to 4 million TV boxes using live TV over IPTV managed networks since 2003.

We are confident that with the right cooperation model with UK PSB Broadcasters, our technology can deliver the expected quality of service for live TV as OTT across our Platform and TV devices.

4. In what ways might different types of 'hybrid' terrestrial and internet services deliver benefits for audiences and what risks may arise?

Across the UK there are households with older TV sets and slow and patchy broadband. Maintaining a terrestrial service with a wide range of content will be important to support those households. As set out above, many households have issues with accessing television for a variety of reasons, therefore, a range of options for access is important. The range needs to include a number of elements: the delivery means, the price point and way that a household can choose to access the content (or ways in terms of second sets).

5. Given the sharing of infrastructure, what would the implications for other sectors be if there was a change to the use of digital terrestrial television (DTT)?

As set out above, Technology for delivering Live TV over OTT has significantly improved and the only remaining challenge is large live events. In this instance, there is mitigation in place, and further improvements are expected to be implemented over the coming years as follows.

(1) ***Flexible CDN infrastructure***: Dynamic CDN routes combined with Cloud CDN offload gives flexibility to absorb unusual peak times.

(2) ***Hosted CDNs in Core Broadband networks*** will continue to be implemented. End-to-End Quality management is likely to be implemented by large Streaming platforms (with dedicated Video players similar to the one implemented by Amazon Video to support live Sport events).

(3) ***Unicast delivered as Multicast assisted delivery of Unicast*** *or other similar technologies (eg. Nano-CDNs) may provide alternatives to handle large live events*

What will be critical is for the 'TV Service provider' to monitor the end-to-end Quality of service, and as such, it is key for the Broadcasters to operate on an open platform principle, with clear requirements in terms of latency and QoS. This is what Netgem implemented in France with TF1, France Television, M6, and a number of Media Groups including Mediawan, Paramount. In France we operate the Head-end for our TV service distributed by Operators and we can guarantee the Quality of service from the source to the end-user, thanks to our QoS management services.

We believe that the UK PSB Broadcasters should adopt a similar principle as in France, Germany, and other European markets, with an open set of technical and quality/functional requirements as opposed to imposing a single solution in the market. However, we are happy to implement a central solution provided by the Broadcasters, as long as this solution ('Freely') is made available to us transparently and with clear timelines that will allow to remain competitive in the market and meet consumer expectations that 'live TV is now available via the Internet' (as already 'sold' by BT/EE, VirginMedia, and Sky), i.e. no later than H2'2024.

6. What coordination and planning across the value chain might be necessary to secure good outcomes for audiences and key providers over the long term?

- There needs to be an approach with Freely that provides an opportunity for all players in the market to ensure that the PSBs are available on a universal basis in a timely way and to all segments of householders in the UK, including those who are defined as vulnerable in Call for Evidence. This means that there should be no discrimination to offer access to PSB content over IP (linear and non-linear) based on the Platform reach, that tends to offer access to 'Free-to-Air' services over IP to the 'Pay TV' platforms only as a priority (today's case).
- There needs to be: (a) transparency with respect to the planning process for Freely (and any successors to and other versions of Freely in the future); and (b) fair and equitable access to the PBS offers in the UK market for all players in the UK market at the same time -unlike today's situation where Pay-TV platforms have an unfair competitive advantage over other more affordable options such as Netgem TV (whether they are content platforms, device manufacturers or vertically integrated operators).
- We consider that the PSBs are and will be a key part of any compelling and commercial television offer provided by the UK. Freely should be accessible to all platforms that want to launch it.
- With cost-of-living crisis, we expect that the number of vulnerable households will increase. As set out in Call for Evidence, it is important for vulnerable households to have access to television, in whatever way or the multiple ways that a household wants to consume it, from a societal perspective.
- We consider that innovation in technology, UI and in the content offers to households needs to be prioritised and encouraged in order that all household segments can be served with a variety of price points and content offers.