Your response

Questions for all stakeholders	Your response
Question 19: What examples are there of effective use and implementation of any of the measures listed in article 28(b)(3) the AVMSD 2018? **The measures are terms and conditions, flagging and reporting mechanisms, age verification systems, rating systems, parental control systems, easy-to-access complaints functions, and the provision of media literacy measures and tools. Please provide evidence and specific examples to support your answer.**	Yoti owns and operates a free digital identity app and wider online identity platform that allows organisations to verify their age online and in person, amongst other things. Yoti has been live since November 2017 and has already surpassed 8 million installs globally. There have also been over 360 million age checks using the Yoti age estimation algorithm since February 2019. Yoti provides age verification services to social media platforms, adult content websites, online gaming sites, e-commerce sites and physical retailers. Yoti has also bid to create a pan-European interoperable infrastructure for age verification and parental consent, as part of an EU 2020 Horizon project. Further, Yoti has entered a submission to the ICO sandbox in line with the Age Appropriate Design Code, including age verification of under 13s, partnering with GoBubble and the British eSports Association. Yoti was the first organisation certified to the BBFC's Age Verification Certificate scheme, which was put in place to regulate the provision of age verification services under the Digital Economy Act 2017, part 3. This required Yoti's age verification services to adhere to very high standards for privacy and data security. Yoti has also been awarded the seal of approval from the German Association for Voluntary Self-Regulation of Digital Media Service Providers (FSM) to provide age verification services in Germany. Users can perform age verification using the Yoti Digital ID app, which allows individuals to share verified information about themselves on a granular basis or it could be using Yoti's 'embedded' services which allow organisations to add a fully integrated identity verification flow into their website or app. It could also be using Yoti's authentication algorithms such as age estimation. These three verification options can be integrated as standalone solutions, or via a single age verification portal offering more

	choice to the end users and configuration options to organisations. In all three verification scenarios, Yoti calculates if the user meets the minimum age requirement to access the website. If the Yoti Digital ID app is used, an individual will scan a Yoti QR code with the Yoti app to share their age attribute. Then Yoti generates a hashed age token, which tells the website that the user is over the required age. The token and Yoti's record of the individual's age, or characteristic as over an age threshold, only last for the browsing session and do not identify the individual personally. Further, no personal information is shared with the adult site beyond the age attribute, making this a private and secure solution. The user's interaction with the website itself remains entirely anonymous. Yoti generates a share receipt that only shows a date, timestamp, and that an age attribute was shared. Yoti stores this receipt securely in Yoti's data centre and the individual can view it in the Activity tab of the Yoti Digital ID app. These receipts can be archived by a user. Yoti cannot undertake tracking of user through the receipting mechanism. If Yoti's fully integrated identity verification solution is used, the end user scans or uploads their ID document straight from their web browser or mobile app. An age is computed from the date of birth included in their ID document, and used to establish whether the person is old enough to pass the age verification test. If the user uses Yoti's age estimation algorithm, users simply look into their phone's camera or their computer's webcam, and Yoti Age Scan will estimate their age. The image is captured and securely transmitted to Yoti's server using 256-bit encryption. Then, Yoti's algorithm gives a result in approximately 1.5 seconds. The image is immediately deleted from Yoti's servers and no record of the user is retained. The only output is an anonymous, hashed age

	token, used to determine if they are old enough to access the age-restricted content material Yoti Age Scan does have a margin of error. For initial rollout, after consultation with the nominated UK regulator, the BBFC, Yoti agreed to implement a three to five year safety buffer in its off-the-shelf solution. The accuracy continues to improve and now some organisations are looking at lowering this buffer, depending on their risk profile. The safety buffer can be configured accordingly in the Yoti solution. More on Yoti's approach to privacy, ethical oversight and accuracy can be found in Yoti's white paper on age estimation. Yoti has developed a method of detecting masks and images presented to a camera in an attempt to fool Yoti's age estimation solution. Yoti also relies on third party anti-spoofing methods. Yoti has an ongoing programme of R&D reviewing spoofing techniques and challenges, such as make-up, masks, facial hair pieces. Yoti is alive to the fact that young people may try to 'game the system'. As a result Yoti has established a threshold for image quality, and an uncertainty value for the age estimation prediction. These two thresholds enable Yoti to create a bar of what is an acceptable image.
Question 20: What examples are there of measures which have fallen short of expectations regarding users' protection and why? **Please provide evidence to support your answer wherever possible.**	No answer.
Question 21: What indicators of potential harm should Ofcom be aware of as part of its ongoing monitoring and compliance activities on VSP services? **Please provide evidence to support your answer wherever possible.**	No answer.
Question 22: The AVMSD 2018 requires VSPs to take appropriate measures to protect	No answer.

minors from content which 'may impair their physical, mental or moral development'. Which types of content do you consider relevant under this? Which measures do you consider most appropriate to protect minors? **Please provide evidence to support your answer wherever possible, including any age-related considerations.**	
Question 23: What challenges might VSP providers face in the practical and proportionate adoption of measures that Ofcom should be aware of? **We would be particularly interested in your reasoning of the factors relevant to the assessment of practicality and proportionality.**	In Yoti's opinion, there are limited challenges as regards age verification. As demonstrated by Yoti's certification to the BBFC's Age Verification Certificate scheme, there has already been established a framework for the provision of proportionate age verification systems in the UK. Further, some of these systems can be shown to be simple to implement. It takes approximately half a day for a VSP provider, or other digital platform, to integrate with Yoti's backend system. This is a short amount of time.
Question 24: How should VSPs balance their users' rights to freedom of expression, and what metrics should they use to monitor this? What role do you see for a regulator?	No answer.
Question 25: How should VSPs provide for an out of court redress mechanism for the impartial settlement of disputes between users and VSP providers? (see paragraph 2.32 and article 28(b)(7) in annex 5). **Please provide evidence or analysis to support your answer wherever possible, including consideration on how this requirement could be met in an effective and proportionate way.**	No answer.

Question 26: How might Ofcom best support VSPs to continue to innovate to keep users safe?	Yoti suggests that a mechanism akin to the ICO's regulatory sandbox could allow VSPs to trial innovative ways of adhering to their obligations under the AVMSD.
Question 27: How can Ofcom best support businesses to comply with the new requirements?	No answer.
Question 28: Do you have any views on the set of principles set out in paragraph 2.49 (protection and assurance, freedom of expression, adaptability over time, transparency, robust enforcement, independence and proportionality), and balancing the tensions that may sometimes occur between them?	Yoti recommends that accessibility should be recognised expressly in the principles.

Please complete this form in full and return to VSPRegulation@ofcom.org.uk.