Title: Age Verification for pornographic material online

IA No: DCMS_020

RPC Reference No: RPC-DCMS-3101(2)
Lead department or agency: DCMS
Other departments or agencies: N/A

Impact Assessment (IA)

Date: 13/06/18

Stage: Enactment

Source of intervention: Domestic

Type of measure: Secondary legislation
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Summary: Intervention and Options

RPC Opinion: Green

Cost of Preferred (or more likely) Option						
Total Net Present Value		Net cost to business per year (EANDCB in 2014 prices)	One-in,	Business Impact Target Status		
£ -45.19m	£-6.89	£0.80m				

What is the problem under consideration? Why is government intervention necessary?

Currently, children and adolescents in the UK can access and consume pornography online very easily. One in ten UK visitors to adult sites in May 2015 were children. Children viewing online pornography can be viewed as a demerit good. Evidence suggests that accessing porn can be detrimental to children's development and children are likely to be not sufficiently informed to make optimal consumption decisions. Therefore, government legislated in the Digital Economy Act to intervene to ensure that those who profit from pornography being made available online do so in a responsible way.

What are the policy objectives and the intended effects?

The policy objective is to prevent the potential harms to children from accessing pornographic content online by ensuring that commercial providers of porn have age verification (AV) controls in place where it is accessed online in the UK. The intended effect of government intervention is to introduce requirements that enable a regulator to notify payment providers and other 'ancillary service providers' of non-compliant sites, with the intention that services are withdrawn, and to direct internet service providers to prevent customers accessing those sites. Thus requiring the online porn providers to introduce age verification as a requirement to access their services will therefore reduce potential harms for children from accessing porn online.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 0 (Do nothing): No action taken by Government. This is not considered a viable option as the primary legislation has already been passed by Parliament.

Option 1 (Preferred option): To implement the Digital Economy Act requirement for commercial providers of pornographic content to users in the UK to have in place robust age verification controls in place. This requires the introduction of secondary legislation to define 'commercial pornography provider' and to secure parliamentary approval for the regulator's guidance (both a requirement of the Digital Economy Act). This will make it illegal to distribute online pornography within the UK without AV

controls; will introduce a new regulatory framework to enforce and monitor compliance; and the regulator will work with the payments industry, other ancillary service providers, and internet service providers to interrupt business models of non-compliant sites and apps or block access to material and thus nudge porn providers to comply and put age verification in place. Option 1 is the prefered option because the evidence base supports a strong case for government intervention in this space and the government has committed through primary legislation to take action and reduce potential harm for children online. The consultation showed that industry supports option 1.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 06/2020

Does implementation go beyond minimum EU requirements?					
Are any of these organisations in scope?	Micro	Small	Med	dium	Large
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)				Non-tr	aded:
I have read the Impact Assessment and I am satisfied that (a) it in the expected costs, benefits and impact of the policy, and (b) the	•				view of

Signed by the responsible: Margot James Minister of State for Dat

Digital and Creative

e:

09/10/18

Industries

Summary: Analysis & Evidence Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base		Time Period	Net Benefit (Present Value (PV)) (£m)				
Year 2016	Year 2016	Years 10	Low: -80.91	High: -10.54	Best Estimate: -45.19		

COSTS (£m)	Total Trans (Constant Price)	Sition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional		1.2	10.5
High	Optional		9.4	80.9
Best Estimate	-		5.3	45.2

Description and scale of key monetised costs by 'main affected groups'

Costs for payment service providers to work with the regulator are estimated to be $\mathfrak{L}0.5$ million; ongoing processing costs in subsequent years are also estimated to be $\mathfrak{L}0.5$ million (both estimates are based on advice from industry). The existing compliance system around payments has been in place since 2002, and is well established. Large ISPs currently estimate to incur costs in the range of $\mathfrak{L}100-\mathfrak{L}500$ k to update their systems and block non compliant sites. Our estimates of the costs for a regulator vary between $\mathfrak{L}1m$ and $\mathfrak{L}7.9m$ with an average of 4.45m.

Other key non-monetised costs by 'main affected groups'

Estimates of losses to payment providers and advertisers depend on the number of non-compliant website providers. These are non-monetised due to a lack of data. Estimates of costs to UK commercial porn providers in revenue loss, compliance costs and fines are not known at present but are likely not to impact UK online pornography providers since they already have age verification in place. Similarly, costs to ISPs are currently not known. [There may also be a cost to third party age verification services which undertake a voluntary certification scheme.]

		<i>y</i>			
BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)		
Low	Optional	Optional	Optional		
High	Optional	Optional	Optional		
Best Estimate	-	-	-		

Description and scale of key monetised benefits by 'main affected groups'

We have not been able to monetise benefits due to a lack of data.

Other key non-monetised benefits by 'main affected groups'

Children are better protected from harms associated with consuming pornographic material.

Commercial providers of porn that comply with the law and payment providers and advertisers taking voluntary action to ensure that commercial providers adopt age verification stand to gain in reputational terms

torno.		
Key assumptions/sensitivities/risks (%)	Discount rate	3.5

Key assumptions: underpinning law will lead providers to implement AV, the law ensures content, including free-to-view, is put behind AV, the payment industry is ready to work with the regulator without great cost and effort. Key risks: non-compliance of online porn providers with law through alternative payments and technical 'work-arounds', potential for online fraud could be raised and adults are deterred from legal content due to privacy/fraud concerns or the inability to prove their age. There is also the risk that both adults and children may be pushed towards ToR where they could be exposed to illegal activities and more extreme material.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:					Score for Business Impact Target (qualifying	
Costs:	8.0	Benefits:	0.0	Net: -0.8 provisions		provisions only) £m:
						4

Evidence Base (for summary sheets)

Problem under consideration

Children and adolescents can access pornographic content (material designed primarily to cause sexual arousal and stimulation) intentionally and unintentionally and are doing so. Commercial porn providers play an important role in how children are exposed to porn online.

In May 2015, 1.4m unique visitors under 18 years old accessed online sites classified as containing pornographic content from their desktop. Approximately half (732,000) were by users aged 6-14 which represents 13% of all children online in this age group. In other words, one in ten (13%) of children aged 6-14 visited a porn site in May 2015. The 2010 EU Kids Online survey asked whether respondents had seen sexual images 'on an adult or X-rated website': 4% of 13-14 year olds said they had seen sexual images via such routes over the past year, and 9% of 15-16 year olds. A study by the former Authority for Television On Demand (ATVOD) offers less detailed figures, but indicates that around 6% of 6-15 year olds viewed pornographic websites within just one month in 2013, potentially suggesting higher viewing figures over the course of a year. The report of the expert panel for DCMS underlines that there are various offline and online ways how children are accessing porn and that it is difficult to measure the amount children are accessing porn. The report also underlined that surveys suggest that the primary route for children to be exposed to sexualised content is still traditional mass media, but pornographic websites and other online access through for example mobile applications "apps" also play an important role in children's access to porn.

Further, there are many platforms for sharing video content such as YouTube, social media platforms (for example Twitter, Facebook, Reddit, Tumblr and Snapchat) and others such as Instagram (a picture and video sharing app). Although the focus of age verification measures are on commercial providers of online pornography, we recognise the limitations of any one approach and will work closely with social media companies to make sure they are committed to protecting children who use their platforms. Whilst significant progress has been made by many parts of the internet industry in respect of child safety, as noted in the Government's consultation, little or no effort has been made to date by most porn providers to prevent children from accessing their content.

Evidence suggests that pornography tops the list of online concerns for children and appears to influence them in negative ways, particular in creating an unrealistic image about sex. A survey by NSPCC's ChildLine amongst young people service found that around 1 in 5 of those surveyed said they'd seen pornographic images that had shocked or upset them. The survey also showed that nearly one in eight children aged between 12 and 13 have made or been part of a sexually explicit video. Exposure and access occur both online and offline. Even exposure is more prevalent than (ostensibly) deliberate access, access has increasingly moved from offline to online sources. Mobile phones are increasingly reported as one of the main sources of both exposure and access.

There is evidence of harm but the exact nature and long-term effects are uncertain. It is also uncertain whether effects are causal or correlational. The Government is of the view that there is sufficient expert opinion that pornographic content can lead to harm to people under 18, whether or not this relationship is causal or correlational. Longitudinal research has demonstrated. for example, that amongst young people accessing pornographic content '...intentional exposure to violent x-rated material over time predicted an almost 6-fold increase in the odds of self-reported sexually aggressive behaviour'. Further longitudinal studies have also established possible links between the viewing of hard-core/violent pornography by younger people and increased sexually aggressive behaviour later in life. Evidence suggests that there is a relationship between young people who are exposed to internet pornography and an array of sexual beliefs. It is important to note that for many studies which attempt to build an evidence base on children and young people's access and exposure to pornography it was not possible to distinguish between exposure and access, and many use "exposure" as a catch-all term; as such, the term "access" will be used only when studies made it clear that they were asking participants about deliberate access. The lack of consistency in terminology within the literature (unwanted exposure, accidental exposure, unintentional exposure, deliberate exposure, accessing or seeking pornography) highlights the challenge of describing children and young people's behaviour in such dichotomous terms. According to an extensive literature review for the Office of the Children's Commissioner there is inconclusive evidence that pornographic material causes harm to people under 18. This conclusion is arguably the result of the inability to test the harmful effects because of ethical considerations relating to intentionally exposing people under 18 to pornographic material. Nevertheless, it draws into question whether or not pornographic material "may seriously impair" as per current legislation of Video on Demand (VOD).

Currently, none of the most-visited sites in the UK which provide adult content have robust age controls in place. In the offline world, however, DVDs containing explicit pornographic content are subject to age controls, and can only be sold in licensed sex shops. The Government's intention is to provide sufficient, effective and proportionate protections for children in the online world and that commercial providers act responsibly. This was identified as a commitment in the 2015 Conservative manifesto, and subsequently in July 2015, when the then Prime Minister set out the Government's intention to consult, in the autumn, on potential options to implement its commitment to introduce age verification systems for access to all sites containing pornographic material. The consultation showed that respondents had polarised attitudes to a government intervention in this space. Just over half (54%) did not support the introduction of a new law to require age verification, but just under half were supportive (43%), and the majority of these (39%) were strongly supportive.

All UK-based 'video on demand' sites which provide 'material which might seriously impair' the development of minors to UK users (see below) are required to have age verification systems in place. ATVOD was the regulator, designated by the Office of Communications (Ofcom), of TV ondemand services based in the UK from 2010-2015. On 1 January 2016, Ofcom took over from ATVOD as the regulator for this service. However, UK-based sites such as these are few in number (c.100), especially by comparison to the several million EU-based sites (which may or may not have age controls) and non-EU-based sites (a large number of which won't have age controls). The following summary was provided by ATVOD in their 2014, report, 'For adults only? Underage access to online porn.'

UK based providers are already regulated by ATVOD under the Audiovisual Media Services Directive ("the AVMS Directive"). They are required by ATVOD to keep hardcore porn out of reach of children on the grounds that it "might seriously impair" their development. ATVOD's judgement that hardcore porn might seriously impair under 18s is not universally shared and relies on the application of the precautionary principle, as conclusive evidence either way is lacking, for ethical reasons, and is likely to remain so.

EU based providers are regulated under the same AVMS Directive. But some Member States do not consider that hardcore porn "might seriously impair" under 18's, so do not impose restrictions similar to those deployed by ATVOD in the UK. This means that online services based in, for example, The Netherlands, can and do target the UK and provide unrestricted access to hardcore pornography.

Non-EU based providers are often completely unregulated. The need to address the threat to children posed by these unregulated offshore adult services is the most important issue underlined by this research.

As highlighted above by ATVOD, websites based outside the UK are not currently required to comply with the rules governing UK producers, and as such it is very easy to find pornographic content online. The afore-mentioned ATVOD research in March 2014 revealed that the vast majority of sites visited were not UK-based, and as such, '...23 of the top 25 adult websites visited by UK internet users... provide instant, free and unrestricted access to hardcore pornographic videos and still images featuring explicit images of real sex.'

Globally, attitudes to the effect of sexualised content on minors vary considerably but the UK Government is keen to act and explore what more can be delivered to continue to lead the way in child protection online. The Netherlands, for example, takes the view that evidence definitively proving the harmful effect of sexualised content on minors is not available; and in the United States, freedom of expression considerations have largely frustrated legislative attempts to restrict the availability of sexualised content to minors. Other states (including Russia, India) take a firmer view of

the harmful effects of strong sexual content. By way of example, the film 'Fifty Shades of Grey' (2015) has attracted a variety of age ratings:

UK	France	Netherlands	Germany	United States	Russia	India	Malaysia
18	12	Possibly harmful under 16	16+	R (under 17s require accompanying parent or guardian)	18+; banned in Northern Caucuses	Banned	Banned

The majority of pornographic sites are based in the USA, and although a number of attempts have been made to legislate there to restrict the availability of online sexualised content to minors, these have largely failed due to freedom of speech (first amendment) legal issues. Therefore, given that the level of protection and enforcement internationally is varied, the UK Government is keen to explore what more can be delivered on a voluntary and/or regulatory basis in the UK, and to continue to lead the way in child protection online.

The Government's position is that whilst the family friendly filters provided on a voluntary basis by the main four ISPs in the UK, and also by the main Mobile Network Operators (MNOs) (see box 1 below), are a vital tool in protecting children online, they are only part of the solution.

As set out in box 1, since 2004 the main mobile network operators in the UK have had in place a series of undertakings to address the sorts of content young people might access online.

Box 1: Mobile Network Operators (MNOs)

- "The UK code of practice for the self-regulation of new forms of content on mobiles" was published in January 2004 by the Mobile Broadband group (MBG) and the third version was released in 2013 on behalf of all MNOs
- It provides a series of undertakings regarding young people's access to, and the classification of, mobile commercial content.
- The Code was formally published in January 2004 and the resulting Classification Framework ("the Framework") was published in February 2005.
- All major UK mobile phone operators subscribe to and support the Code and the Framework which act as self-regulatory instruments.
- The main mobile network operators are EE, O2, Vodafone and Three. Between them they cover around 85% of the UK's mobile connections and they all filter by default.
- In 2008 Ofcom reviewed the Code and adjudged it to be an example of effective self-regulation.
- The MNOs have robust processes in place for verifying the age of those seeking to remove the filters. Children are not able to remove the filters because customers have to be age verified before doing so; for example, by showing proof of age in-store before filters are removed.
- The MBG appointed the BBFC to provide an independent framework used to filter internet content available via mobile networks. They define content that is unsuitable for customers under the age of 18 based on the BBFC's Classification Guidelines for film and video.
- The BBFC also provides an appeals complaints procedure for website owners, content providers
 or anyone else who is dissatisfied with the application of the Framework to a specific piece of
 content. A quarterly report detailing the appeals that have been made is published on the BBFC
 website.

In 2013, an agreement was reached with the four major ISPs in the UK - TalkTalk, Virgin Media, Sky and BT - to ensure that all new customers would be offered an unavoidable choice on whether to install network-level family friendly filters by the end of December 2013, and this would be rolled out to existing customers by the end of December 2014. These filters apply to all devices in the home which use that internet connection - including desktop computers, laptops, tablets, smartphones, smart/connected TVs, and games consoles. However, to effectively protect children from exposure and access of pornographic material parents have to take an active role, to engage and set the filters up. As shown in Ofcom's last report on internet safety measures, uptake of the free family friendly filters provided by the main four ISPs is increasing but remains low. Amongst the new customers who

were offered them in 2014, 6% of BT customers adopted network-level filters, 6% of Talk Talk customers (combined figure for new and existing customers who had KidsSafe active at the end of June 2015 was 14%), and 12.4% of new and existing customers had chosen to switch on parental controls of Virgin Media customers.

Sky took the decision in January 2015 to turn their 'Broadband Shield' filtering system on by default for existing customers. All customers who had not made an active choice either to disable or to switch on the filters were emailed and encouraged to do so. When trying to access a website deemed unsuitable for under-13 year olds during the day, customers were taken to a page presenting them with the choice of activating/disabling their filters, or changing their settings. Sky reported that 62% of the customers to whom they had rolled out 'Broadband Shield' had opted to keep it, with the majority keeping parental controls in place (in addition to phishing/malware protection, which it also provides). This degree of take-up contrasts with the 5% who had previously engaged with the filters when they were emailed by the company.

In the European Union, video on-demand services have to meet certain minimum content standards and ensure that under-18s are not able to access material that could be harmful to them, or 'might seriously impair' their development. This is enforced by the Audiovisual Media Services directive (AVMSd) that requires Member States to ensure that video on-demand services within their jurisdiction meet those standards and requirements. These standards also include a prohibition on incitement to hatred on grounds of race, sex, religion or nationality.

In the UK, and specifically in terms of pornographic content, such potentially harmful material is interpreted as being that which would which would receive a BBFC classification of R18 - in short, that which is legal, has the primary purpose of sexual stimulation, and which involves '…explicit works of consenting sex or strong fetish material involving adults'. The current regulatory system in the UK, requiring age verification for access to such content, does not cover sites based outside the UK.

Interpretations within the EU itself of what constitutes potentially harmful content are not consistent. In several EU member states, hard-core pornographic services are not considered within the scope of this definition. In these countries these services are not required to make provision that under-18s cannot normally see or hear them. The below table 1 sets out the different ways in which content which 'might seriously impair' is interpreted across member states of the EU:

Table 1: Examples of content that "might seriously impair" the development of minors across the EU:

Austria	Pornography/gratuitous violence
Belgium (Fr)	Pornographic scenes/unnecessary violence
Czech Republic	Pornography, gross gratuitous violence
Denmark	Pornography/unnecessary violence
Estonia	Pornography, promotion of violence or cruelty
France	Criminally unlawful material (attempt to interfere with human dignity: violence, sexual perversion, degradation of the human person; child pornography; hard-core violence)
Germany	Illegal material/pornography, certain listed content and content which seriously impairs minors (e.g. violence, sexual scenes)
Hungary	Pornography, extreme and/or unnecessary scenes of violence
Italy	Pornographic scenes/gratuitous, insistent or brutal violence
Lithuania	Physical or psychological violence or vandalism

Luxembourg	Pornography, gratuitous violence
Malta	Gratuitous violence, pornography
Poland	Very strong and explicit violence, racist comments, bad language, erotic scenes
Slovenia	Pornography, gratuitous violence; includes "paedophilic and necrophilic material, pornography with scenes of sodomy, sadomasochistic pornography and all other forms of pornography which include scenes of immediately recognised abusive sexual activity"
Spain	Pornography, gender violence, mistreatment
Sweden	Includes "child pornography and the illegal portrayal of violence"
UK	Illegal content, extremely violent pornography, R18+, hard-core porn R18, material likely to incite hatred based on race, sex, religion or nationality

Further, UK-based sites represent a small proportion of the total number of services being accessed from the UK. ATVOD research published in March 2014 revealed that the vast majority of sites visited were not UK-based, and as such, '...23 of the top 25 adult websites visited by UK internet users... provide instant, free and unrestricted access to hard-core pornographic videos and still images featuring explicit images of real sex'.

The expert panel for DCMS identified age verification as a clear opportunity for government and industry to work together. Using the example of the licensed online gambling industry, the panel highlighted that it is straightforward to determine whether someone is aged 18 or over. The panel also stated that "Although it is clearly impossible to provide perfect verification, particularly if a child uses a parent's credit card or ID, at a minimum, UK companies providing pornographic content should be adopting the same stringent procedures albeit with a recognition that preservation of personal privacy will be essential if this is to be trusted by users".

Age verification technologies/solutions are developing rapidly - we expect there to be a wide range of ways for adults to securely verify that they are over 18. These solutions are rightly based on verification rather than identification of individuals. Providers of age solutions controls will be subject to data protection laws. [The Data Protection Act 2018 ensures that our data protection laws are fit for the digital age – assumes Royal Assent by June]

Rationale for intervention

The Government is clear in its rationale for intervention - to ensure protections around pornographic content in the online world in particular with regard to commercial porn websites and apps. Although it is important to acknowledge that causal links between the viewing of pornography by young people and criminal offense and/or other negative social impacts later in life are not certainly proven, existing research demonstrates that pornography, and its proliferation on the internet, are a concern amongst young people, and also their parents and carers. Longitudinal studies have also established possible links between the viewing of hard-core/violent pornography by younger people and increased sexually aggressive behaviour later in life.

Children viewing online pornography can be viewed as a demerit good, stemming from the fact that they are not sufficiently informed to make optimal consumption decisions and that it is socially undesirable for children to consume porn due to the perceived negative effects on the child consumers themselves. Demerit goods have negative consumption effects either on the consumer or on others, and hence restriction of their consumption creates a net benefit to society, even where there may be consumer demand. Other examples of demerit goods include R18 material, prostitution and hard drugs, which are similarly banned by legislation. Without intervention, access to hard-core pornographic material (from non-UK sites and apps) will continue to be easily available for under 18 year olds on the internet (i.e. without robust age verification systems in place). In the case of online pornography a difference in legislation between children and adults should be made since children and adults are likely to respond differently to interventions. For adults, the most appropriate intervention

(to correct the information failure) is to provide the information. Children might be unable to digest this information and thus a different intervention is required. In addition, the harm from watching pornography online is most likely to be greater for children.

Currently, none of the most-visited sites in the UK which provide pornographic content have robust age controls in place - as they are not UK-based and therefore not subject to the regulatory regime in place for sites which are based in the UK. In the offline world, however, DVDs containing explicit pornographic content are subject to age controls, and can only be sold in licensed sex shops. Further, Peter Wanless, Chief Executive of the NSPCC, said: "We don't want children to learn about sex and relationships through the warped lens of adult pornography – there are good reasons for restricting pornographic magazines and DVDs to adults which the NSPCC has long argued should apply equally online. The easy availability to children of online pornography, much of it extreme, violent and profoundly degrading, is of deepening concern. It can leave them feeling frightened, confused, depressed or upset".

Therefore, considering the demerit good aspects aligned with the arguments for protection of children from exposure to and access of pornographic materials which they would most likely not be able to access legally in the offline world, there is a rationale for government intervention. The Government committed in its manifesto (spring 2015) to introduce age verification for access to all sites containing pornographic material and has been supported in views by the evidence from the consultation.

Policy objective

The Government's principal objective is to ensure that the internet is a safer place for children. Government is committed to protect children from potentially harmful content online and ensuring that children, particularly younger, more vulnerable children, cannot easily access sexual content online which will distress them or harm their development. Therefore, the policy objective is to ensure all commercial providers of online pornography adopt robust age verification controls to stop under 18s from accessing online pornographic content. Our aim is to ensure that pornography is not accessible to children online, as is already the case offline. It is only right that those benfiting from pornography do so in a responsible manner.

More broadly, the Government's objectives are to:

- o prevent inadvertent and/or deliberate access to pornography by children
- o protect the most vulnerable from potentially harmful pornographic content
- engage parents and carers, and increase their awareness of online safety issues and steps to take to reduce risks for children
- o for those profiting from providing online pornography to do so responsibly and play its part in keeping children and young people safe online
- o we want the UK to be the safest place in the world to be online, especially for children

Commercial providers of porn, should have age verification ('AV') controls in place where it is accessed online in the UK. That requirement will be regulated and underpinned by civil sanctions. The aim in introducing these requirements is to enable the regulator to take enforcement action against non-compliant sites. That should ensure compliance by the main sites by pushing them to act responsibly and to have AV controls in place to avoid the risk that the legal regime causes disruption of their income streams by way of notifications by the Regulator to payment providers and consequential withdrawal of services by payment providers. In other words, the legal regime should be enforceable, but the primary aim is to change behaviour by non-compliant businesses by disrupting their income streams.

The introduction of ISP blocking of non-compliant sites adds an extra layer of enforcement in order to help protect children and young people from potentially harmful pornographic content. This means that if sites refuse to comply with the rules, the AV regulator will have the power to direct ISPs to block access to these sites.

Additionally, the regulator will also be able to direct ISPs to block access to sites containing extreme pornography, regardless of whether or not age verification control is in place. This adds a further layer of

protection. Section 61 of the Criminal Justice and Immigration Act 2008 defines extreme pornography as material that depicts a variety of acts in an explicit and realistic way, that is grossly offensive, disgusting or otherwise of an obscene character. This also includes non-consensual penetration.

<u>Description of options considered (including status-quo)</u>

Option 0 (Do nothing)

'Do Nothing' is not considered here as a viable or preferable option, given the case for intervention as set out above. The primary legislation has already been passed by Parliament.

Option 1: New legal requirement, and new regulatory framework (preferred option)

Implement the Digital Economy Act requirement for commercial providers of pornographic content to users in the UK to have in place robust age verification controls in place.

Implement a new regulatory framework, underpinned by civil sanctions. The new regulatory framework and civil regime will:

- Involve giving the AV regulator or regulators powers to enforce the new law, supported by a sufficiently flexible enforcement regime;
- Monitor compliance with the new law by commercial pornography providers;
- Identify sites which are in breach and notify them of this, giving them a period of time within which to become compliant;
- Enable those that support the business model of pornographic content providers (such as payment providers and advertisers) to withdraw services from commercial providers in breach of the law:
- Notify providers of payment services of sites in breach, enabling them to withdraw services from such sites, interrupting commercial providers income streams and thus nudge porn website providers to comply with the law;
- Impose requisite sanctions where breaches have been identified and providers remain noncompliant;
- Enable the AV regulator to direct internet service providers to block access to sites which fail to comply with appropriate age verification requirements or those which host extreme material.
- Require the AV regulator to inform the Secretary of State before its issues a ISP blocking order to
 ensure that the action does not have any unintended consequences for the work of law
 enforcement, security and the intelligence agencies in combating serious crime and protect
 national security.
- Ensure a proportionate and prioritised regulatory approach to monitoring and enforcement.
- Give the regulator the authority to set and monitor robust standards for age verification controls.
- Bring parity to the scope of coverage for the regulation for on-demand programme services based in the United Kingdom and those based in other countries.

Under this option, the Government will implement a new requirement, under the Digital Economy Act, making it an offence to distribute online pornography on a commercial basis in the UK without age verification controls. The government will place a clear expectation on all parts of the online pornography industry that they are responsible for ensuring that pornographic content is not made available without age verification controls in place. Payment providers and ancillary service providers work together with the regulator to withdraw their services to non-compliant sites and give them an incentive to comply with the law in the UK.

An important theme raised in consultation responses centred on the varied ways in which people, particularly children and young people, are accessing content online. As well as websites, the use of apps - rather than websites - is increasingly an important, if not central part of people's online activity. For this reason, and due to these views having been raised by numerous respondents through the consultation process, the Government does not want to draw the focus too narrowly.

The Government's aim is to guarantee that the law, and the framework which underpins it, are neutral in respect of the ways in which this content is accessed online. This will ensure that the system is future-proofed, and also that apps which are specifically aimed at the provision of pornographic content to

users are within scope of the new legislation. The introduction of ISP blocking is part of a multi-layered approach to enforcement and increases the effectiveness of the AV measures.

Monetised and non-monetised costs and benefits of each option (including administrative burden)

Summary of costs and benefits

In summary, we have identified the following costs and benefits of the preferred option:

Costs:

- Costs to Payment Providers from increased monitoring activity. [Monetised direct cost to business]
- Possible reduced profits to payment providers and advertisers from withdrawing services from non-compliant porn websites. [Non-monetised possible indirect cost to business]
- Cost of setting-up and running a new regulator. [Monetised public sector cost]
- Possible costs to UK online porn providers from having to comply with the new regulations. [Non-monetised direct cost to business]
- Costs incurred by ISPs for updating their systems and blocking access to non-complying pornographic sites. [Monetised direct cost to business]
- Cost to the user of having to pay for age verification process (although we understand that many AV services will be offered free of charge)

Benefits:

- Direct benefits to children (and indirect benefits to parents and society) as a result of reduced harm as a result of decreased access to pornography. [Unquantified benefit]
- Reputation benefit to online porn providers who will now adopt AV processes in place, and ancillary services which withdraw from non-compliant sites. [Unquantified benefit]
- Benefit to AV software providers as a result of increased demand for their services [Unquantified benefit].
- The introduction of ISP blocking is part of a multi-layered approach to enforcement and increases the effectiveness of the AV measures. [Unquantified benefit].
- Benefit to parents by adding an extra layer of protection for parents who may not have family friendly filters. [Unquantified benefit].

More detailed descriptions of these costs and benefits, including estimates where applicable, are provided below.

Monetised costs

Payment providers

We estimate costs for payment providers, including (but not limited to) credit card providers and digital payment providers (e.g. PayPal) will be low. Such payment providers are currently required by law to ensure that they only offer their services to firms operating within the law. There are existing legal compliance processes, which we expect to continue but to also specifically include providers of online porn, following notification from the AV regulator.

Engagement by Government with payment services providers including MasterCard and Visa, and the UK Cards association, has indicated that payment providers have existing terms and conditions in place that require merchants (i.e. websites) using their payments services to comply with both the law of the country in which the provider is based, as well as the country they are providing services to. This policy option enables payment providers to use existing enforcement processes, which they will do willingly.

In order to generate an estimate, we mainly consider the costs for the three main payment providers (Visa, MasterCard and PayPal). Working with the regulator and processing the requests will be estimated to cost around £0.5 million per year. These estimates are based on discussions with industry which indicate that the costs are low and below £1 million per year - we therefore take the mid-point between £0 and £1m as our central estimate. These costs are assessed as being low since the existing compliance systems around payments have been in place since 2002, and are well established. Most

companies are international corporations who have in place existing monitoring and compliance processes to ensure that merchants comply with the laws. Further, in the response to the government consultation Visa for example stated that "the payments industry has already contributed constructively to discussions, and we have a well-established compliance programme that, we believe, sits well alongside the proposals in this consultation."

Sensitivity Analysis

Industry have advised that the indirect costs to be below £1 million in every year. Thus we estimate the upper bound to be £1 million. To determine a lower bound, we have made the assumption that the major payments firms (Visa, MasterCard, PayPal) would have no need to update their systems in the first year but employ one extra full-time equivalent (FTE) that works together with the regulator. Assuming that this would cost industry an estimated amount of £123,984 (assuming that each firm need to recruit extra staff, three times the £41,328 for the mean FTE annual wage of an individual involved in data processing, hosting and related activities¹). Following our calculations, we are assuming the lower bound to be £123,984. These assumptions are dependent only the scale of new activity resulting from the new law (and notification of infringing sites to payments companies by the regulator). The proportionate approach preferred by the Government will mean that a limited number of sites are likely to be the key focus of regulatory activity, and therefore that the number of infringing sites notified to payments providers (and therefore additional activity for them) will be small.

Internet Service Providers

ISPs argue that it is difficult to provide cost estimates since the costs greatly depend on the AV regulator's requirements. The Secretary of State's guidance to the regulator recommends Domain Name System (DNS) level approach to blocking – which is the cheapest option. On the assumption that the numbers of sites to be blocked would be in the range from 1 to up to 50 per year and that blocking would be on DNS level; a substantial amount of the large ISPs were able to provide estimates for costs. The estimated costs were in the range of £100-£500k for a system update. Some ISPs have also indicated that, on the above assumptions, they may be able to absorb on-going operational costs. To make a conservative estimate and account for uncertainty we estimate those costs to be ongoing.

Regulator

The establishment of a regulator, or the extension of powers to an existing regulator represents a cost to Government. In the following we will consider the Gambling Commission, which regulates the provision of gambling services to UK consumers, as an example of a regulator for internet content and services. This includes online gambling services not based in the UK, which are required (in the terms of their licence to operate in the UK) to provide that robust age verification systems are in place. The comparison requires many caveats - most especially that a licensing regime is not proposed in respect of online pornography over the lifetime of this proposal - but gives an outline idea of the cost impacts of establishing, or expanding the remit of, a regulator.

The Gambling Commission's total expenditure on operational costs including depreciation was £15.8 million in 2014/15 and it is funded by application and licence fees set by the Secretary of State, approved by Parliament, and paid by the gambling industry. Employee costs for the year were £12.28 million, with a total of 262 staff members. The Gambling Commission has a compliance team of ca. 40 full time equivalent staff devoted to monitoring and compliance activity, and the regulator's annual report and accounts set out that compliance and enforcement activity are its highest work stream cost (24% of total), and licensing the third highest (12%). Gambling licences (of which there are c.300 in the UK) range in cost, dependent on the size of the operator in question, and their revenues - licences range in cost from ca. £1600 to ca. £150,000. However, these numbers can only give an estimated indication of possible costs related to setting up a new regulator and are likely to differ significantly, for a regulator that enforces age verification in online pornography - particularly a regulator operating in a proportionate way as envisaged by the Government's consultation proposal.

The age verification regulator would focus on regulating online porn and not require costly on-site visits, and would have substantially lower costs for compliance and enforcement. Further, 12% of the annual

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Annual Survey of Hours and Earnings: 2015 Provisional Results, http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/industry4digitsic2007ashetable16

work stream costs of the Gambling commission are spent on the licensing regime, a model which the age verification regulator will not copy, and will be financed from grant in aid. We thus estimate the costs for the new regulator to be significantly lower than the costs of the Gambling Commission. We thus estimate the costs for the new regulator to be half of the costs of the Gambling Commission which would amount to £7.9 million as an upper bound for our calculations.

Following submission of the last version of the impact assessment, Parliament has formally approved the designation of the British Board of Film Classification (BBFC) as the age verification regulator. The BBFC after an initial assessment has estimated the costs for the set up of the regulatory function to be approximately $\mathfrak L1$ million. We are thus introducing a lower bound of $\mathfrak L1$ million to our cost calculations. The average costs of a regulator would therefore be $\mathfrak L4.45$ million.

Non-monetised costs

Commercial Porn Providers

The policy aim is for age verification requirements to apply to sites providing pornography on a commercial basis. The circumstances in which pornographic material is to be regarded as made available on a commercial basis are set out in the Draft Online Pornography (Commercial Basis) Regulations 2018. These regulations set two conditions: firstly, that the person making available the pornographic material receives a commercial benefit; and secondly that it is reasonable to assume that the intention of the website or app is to make pornographic material available (either from the way that it is marketed or from the proportion of content on the website that is pornographic).

These conditions will bring into scope pornographic websites, but will exclude popular social media pllatforms on which the overwhelming majority of content is non-pornographic. The costs will therefore fall on commercial pornographic websites.

As noted above, it is not essential for the providers to make a profit directly from provision of the material. Rather, if they charge a fee, by whatever means and for whatever duration for access to the material, sell advertising directed at users of the material or otherwise receive a commercial benefit (for example, through the usage of user data), even if that commercial benefit is not significant or is offset by losses whether from that business or associated businesses, we want them in principle to be caught by the provision. We are conscious that providers may distribute porn by way of complicated corporate structures.

As described in the Government's consultation, the business models underpinning online pornography can be complex, as can the revenue streams. Given the complexities of the various potential business models, the potential for these to adapt quickly, and the likely emergence of new and unforeseen models online, the regime needs to be flexible.

Although there will be compliance costs to commercial pornography providers, the major providers are generally not UK-based. Estimates of compliance costs to UK commercial online porn providers are estimated to be zero since they are already subject to legislation requiring AV controls.

Payment Providers, Advertisers

Payment providers and advertisers might be subject to indirect costs: Estimates of losses in particular the loss of profit of payment providers and advertisers depend on the amount of non-compliant website and app providers. Any cost with regard to the loss of profit are assumed to be indirect because the impact on payment providers relies on porn sites breaking the new law. These costs are non-monetised due to a lack of data. Card companies for example don't have a specific merchant category code for porn, as it is captured within 'leisure', a far broader group of transactions. This is one reason why it is difficult to estimate the profit and possible loss of profit from online porn providers. Further, our main assumption is that that porn sites comply with the new law in which case there will be no effect on payment providers. There also has been no hard evidence submitted in response to the consultation of how much advertisers would have to invest in processes to effectively work with the regulator but due to other compliance processes in place these costs are estimated to be low.

Monetised benefits

Due to a lack of data and research with regard to causal relationships and measurement we have not been able to monetise the benefits.

Non-monetised benefits

Children are better protected from harms associated with consuming pornographic material. Parents and carers can be assured that there are better protections for children in place online due to age verification with regard to intentional and unintentional porn access. Commercial providers of porn that comply with the law and payment providers and advertisers taking voluntary action to ensure that commercial providers adopt age verification stand to gain in reputational terms. Age verification providers might be impacted positively from a greater demand of their software and/or services.

Rationale and evidence that justify the level of analysis used in the IA (proportionality approach) A proportionate approach has been taken to the level of analysis presented in this impact assessment since the estimated impact on UK business is below £1m and involves many indirect costs on businesses. Many impacts on businesses of any regulation are likely to fall chiefly on those businesses providing pornographic content which are located outside the UK (and therefore not in scope of this IA). As noted in the 'rationale' section, UK based providers of pornographic content are already required to have robust age-verification systems in place to prevent access by under-18s, therefore even if new regulations were to be brought in, these would require changes to be made by non-UK sites, apps and services.

Risks and assumptions

Assumptions have been made with regard to:

- ISP blocking greatly increase the effectiveness of the AV regime
- Withdrawing payment processes is effective in leading sites and apps hosted overseas to implement AV controls in order to comply with UK domestic law;
- The threat of withdrawing payments being a sufficiently strong lever to incentivise website and app providers which also provide free content alongside paid-for content to implement AV;
- Underpinning law and regulatory framework will lead sites to implement AV.

The policy option set out above also gives rise to the following risks:

- Deterring adults from consuming content as a result of privacy/ fraud concerns linked to inputting
 ID data into sites and apps, also some adults may not be able to prove their age online;
- Opportunities for online fraud could emerge, as criminals adapt approaches in order to make use
 of false AV systems to harvest user data;
- Development of alternative payment systems and technological work-arounds could mean porn
 providers do not comply with new law, and enforcement is impossible as they are based
 overseas, so the policy goal would not be achieved;
- The assumption that ISPs will comply with the direction of the regulator;
- Reputational risks including Government censorship, over-regulation, freedom of speech and freedom of expression.
- The potential ability of children, particularly older children, to bypass age verification controls is a risk. However, whilst no system will be perfect, and alternative routes such as virtual private networks and peer-to-peer sharing of content may enable some under-18s to see this content, Ofcom research indicates that the numbers of children bypassing network level filters, for example, is very low (ca. 1%).
- Adults (and some children) may be pushed towards using Tor (dark web) and related systems to avoid AV where they could be exposed to illegal and extreme material that they otherwise would never have come into contact with.

Small and Micro-Businesses Assessment (SaMBA)

We have considered the impact of this regime in the context of small businesses (those with 50 employees or fewer) and the requirement to avoid over regulation of them under better regulation principles. It is our view that there should be no exemption in this case. Firstly, the overriding aim – child protection – requires an approach that captures all potential offenders whether large or small.

Secondly, and as has been highlighted by several responses to the Government's consultation, in the context of the internet, a workforce of 50 employees is a considerable size - it is therefore our assumption that many porn providers could qualify for such an exemption and if they were not they could soon adjust their structures to become small if there were an exception. It is anyway the nature of the internet that very small businesses can still have significant reach and popularity. These factors all play into wide application of the regime with the ability to focus being left to the regulator. Further, UK-based pornographic material providers and online homepage providers are already regulated by the existing framework and thus are already required to have age verification in place. Therefore, it would not be necessary to exempt UK-based small and micro-businesses providing online pornographic content from the scope of the policy.

Similarly the requirement to block non-compliant sites could have a negative impact on smaller ISPs with a much smaller workforce and we will need to carefully consider the impact on them.

Wider impacts

Domestic

UK based pornography providers are likely to experience little, if any, negative impact from the proposal outlined above. All UK-based services are required to have age verification systems in place, thus are already compliant with and delivering the desired policy objective. There are potentially positive competition aspects for UK online pornographic providers. If all national and international providers are required to have AV systems in place, UK businesses could catch-up and increase their market share. However, it is not possible to quantify these possible upsides.

<u>International</u>

Non-UK pornography providers will be affected more by the policy proposal than their UK counterparts. As set out above, it is the intention of the policy to provide that the robust age-verification protections already in place on UK websites are replicated by non-UK sites.

Summary and preferred option with description of implementation plan

Government's intention is to implement the new regulatory framework, and to introduce new regulatory powers where required, in order to:

- Enforce the new law, supported by a sufficiently flexible enforcement regime;
- Monitor compliance with the new law by commercial pornography providers;
- Identify porn providers which are in breach and notify them of this, giving them a period of time within which to become compliant;
- Enable those that support the business model of pornographic content providers (such as payments and advertisers) to withdraw services from commercial providers in breach of the law;
- Notify providers of payment services of sites and apps in breach, enabling them to withdraw services from such sites;
- Impose requisite sanctions where breaches have been identified and providers remain noncompliant;
- Direct ISPs to block access to sites containing pornographic material, if they fail to implement appropriate age verification controls.
- Direct ISPs to block access to sites containing extreme pornographic material regardless of whether or not age verification controls are in place.
- Direct the regulator to notify the Secretary of State before directing an ISP to block access to non
 compliant sites to avoid any unintended consequences for the work of law enforcement, security
 and intelligence agencies to combat serious crime and protect national security.
- Ensure a proportionate and prioritised regulatory approach to monitoring and enforcement;
- Give the regulator discretion to set and monitor standards for age verification controls.

The Government will work with payment service firms (e.g. debit and credit card schemes, banks, other providers of online payment systems) to help ensure that all sites and apps providing pornographic content to consumers in the UK without robust age verification systems in place become compliant. Should the merchant operating the website or app not become compliant, major payment service firms such as Visa and MasterCard would be able to withdraw payment services form the site under their existing terms and conditions, which already require merchants to comply with national laws. For this reason, we would not expect this measure to create significant additional costs for payment service firms, as they would be able to use existing processes in place to initiate the withdrawal of payment services from non-compliant merchants.

Payment Service providers are firms that process payments to porn sites and apps, such as credit card suppliers and processors of digital payments such as PayPal, Nochex and others. They can be based in the UK or abroad and we consider that their location should have no effect on the policy. Engagement by Government with payment services providers including MasterCard and Visa, and the UK Cards association, has indicated that existing terms and conditions require that merchants (i.e. websites) using their payments services require that they comply with the laws both of the countries in which the provider is located, and also in the country he serves.

It will be important to enable the regulator to work with existing and emerging payments providers to ensure that the policy aims - here, ensuring that the cash-flows of pay sites and apps consistently in breach of the new law can be disrupted - are delivered. Again it will be important to remain technology-neutral, given the speed with which new payments systems are being developed. For this reason, we intend to maintain sufficient flexibility should emerging payment systems or providers come to the fore in respect of online pornography, such that it would be appropriate and proportionate for the regulator to monitor and work with such organisations.

In instances where porn sites fail to implement age verification measures, the AV regulator will be able to exercise its power to direct a UK internet service provider to prevent access to such sites. This is to protect children and young people from exposure to material that is inappropriate for them. Government does not take this decision lightly and takes due consideration of UK position on a free and open internet. But this policy is not about the Government monitoring the online habits of adults nor censoring the internet, the aim is to ensure that adequate protections are in place for children and young people.

The Regulator

The Government's preferred approach is for the regulator to take a proportionate approach to regulation, and to have discretion as to which providers it takes enforcement action against. For example, the regulator should be able to focus on the most popular sites and apps or those known to be most frequently accessed by children and young people or, less likely, the size or the profitability of the provider. The Government will fund the regulator through a grant agreement.

Implementation Plan

The Government introduced Clauses on Age Verification as part of the Digital Economy Bill in July 2016 and it received Royal Assent on 27 April 2017. In February 2018, Parliament formally approved the designation of the British Board of Film Classification (BBFC) as the age verification regulator. The Government has been working closely with the BBFC, to ensure the industry and key stakeholders are fully engaged, and are aware and making arrangements to comply with the requirement for age verification.

There are two remaining items of secondary legislation which must be approved before age verification powers can come into force:

- BBFC guidance: The BBFC is required to produce guidance on the age verification arrangements that it will treat as complaint and the approach that it will take to ancillary service providers.
- Draft Online Pornography (Commercial Basis) Regulations: We are required to issue regulations which define what it means to make available pornography on a "commercial basis" (essentially defining who is in scope of the requirement).

Both of these instruments will be subject to the affirmative Parliamentary procedure and we intend to lay in summer 2018. Following conclusion of the parliamentary proceedings, we will ensure that there is a sufficient period for the public and the industry to prepare for and comply with the new rules. It is anticipated that age verification will be enforceable by the end of 2018.

There are various methods for verifying whether someone is 18 or over (and it is expected that new age-verification technologies will develop over time). As such, the regulator is not expected to set out a closed list of age-verification arrangements and instead the regulator will publish guidance (as required under s25 of the Digital Economy Act) which specifies the criteria by which the regulator will assess, in any given case, that a commercial pornography providers has ensured that pornographic material is not accessible by under-18s. Commercial pornography providers will be responsible for ensuring that they have put in place age verification arrangements that meet these criteria. The age verification arrangements may be provided by the commercial pornography provider themselves, but our understanding is that in most cases the commercial pornography provider will procure a third-party age verification service. We understand that in most cases the costs for procuring age verification service and undertaking an age verification check will be met by the pornographic website, although in some business models the cost of the check is met by the consumer. The regulator will be responsible for enforcing the age verification requirement by assessing whether a commercial pornography provider's age verification arrangements meet the criteria set out in the regulator's guidance.

[The regulator will also administer an independent, voluntary accreditation scheme for age verification services. This scheme will test age verification services against data protection and privacy standards beyond those required by law and will certify the services that meet these standards. This approach will give consumers clarity about which AV services are the most privacy-protecting. It is anticipated that the cost for this certification scheme will be met by the participating AV services.]

The Government aim is to make the UK the safest place in the world to be online, especially for children. Pornography should not be accessible to children online, as is already the case offline. The BBFC as the age verification regulator have been given extensive powers to take action against any pornography providers that do not comply - even to block their website if necessary. ISP blocking powers greatly increase the chance of effectiveness of the regime. We agree there is a small cost for industry and potentially the consumer as a result of this policy but it is only fair that those benefiting commercially from providing online pornography do so in a responsible manner. We have been working closely with the ISPs with regards to blocking measures and they are broadly supportive.

References

The Audio Visual Media Services directive (2010), Article 12: http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32010L0013

ATVOD (2014), "For Adults Only?'- a research report by the Authority for Television on Demand": http://www.atvod.co.uk/uploads/files/For Adults Only FINAL.pdf

ATVOD Ruling, 16 Jan 2013: http://www.atvod.co.uk/news-consultations/news-consultationsnews/playboy-tv-fined-100-000-for-breaches-of-atvod-rules

British Board of Film Classification guidelines: http://www.bbfc.co.uk/what-classification/guidelines

ChildLine and One Poll (2015), Survey: https://www.nspcc.org.uk/fighting-for-childhood/news-opinion/online-porn-evidence-impact-young-people/

Consult Hyperion for Payments UK (2015), "The Future of Payments - How Payments in the UK will evolve in the coming years":

 $\underline{http://www.paymentsuk.org.uk/sites/default/files/The\%20Future\%20of\%20Payments\%20Aug\%2015\underline{0.p}\underline{df}$

Department for Culture, Media and Sport (2016), Consultation Child Safety Online: Age Verification for Pornography: https://www.gov.uk/government/consultations/child-safety-online-age-verification-for-pornography

Department for Culture, Media and Sport Comscore Data Analysis (2015), comScore Media Metrix, May 2015, U.K.

European Audiovisual Observatory (2015), "The protection of minors in a converged media environment":

 $\frac{http://www.obs.coe.int/documents/205595/8261963/The+protection+of+minors+in+a+converged+media+environment.pdf/7b590454-a03f-40e8-b460-e2b5e6b0bc28}{$

Gambling Commission (2015), "Gambling Commission's Licence conditions and code of practice": http://www.gamblingcommission.gov.uk/pdf/Latest-LCCP-and-Extracts/Licence-conditions-and-codes-of-practice.pdf

Gambling Commission Annual Report and Accounts, 2014/2015: http://www.gamblingcommission.gov.uk/pdf/Annual-report-and-accounts-2014-15.pdf

Horvath, M. and Alys, L. and Massey, K. and Pina, A. and Scally, M. and Adler, J. (2013), "Basically...porn is everywhere", A Rapid Evidence Assessment on the Effects that Access and Exposure to Pornography has on Children and Young People, Office of the Children's Commissioner: http://www.obs.coe.int/documents/205595/3179930/qqqThe+protection+of+minors+in+a+converged+media+environment.pdf/7b590454-a03f-40e8-b460-e2b5e6b0bc2

Livingstone, S. and Kirwil, L. and Ponte, C. and Staksrud, E. (2013), "In their own words: what bothers children online? with the EU Kids Online Network". EU Kids Online, London School of Economics & Political Science, London, UK:

 $\underline{\text{http://www.lse.ac.uk/media@lse/research/EUKidsOnline/EU%20Kids\%20III/Reports/Intheirownwords020}\underline{213.pdf}$

Mobile Broadband Group (2013), UK Code of practice for the self-regulation of content on mobiles, Version 3: http://www.mobilebroadbandgroup.com/documents/UKCodeofpractice mobile 010713.pdf

Nash, V. and Adler, J. and Horvath, M. and Livingstone, S and Marston, C. and Gareth, O., Wright, J., (2015) "Identifying the Routes by which Children View Pornography Online: Implications for Future

Policy-makers Seeking to Limit Viewing", Report of Expert Panel for DCMS:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/500701/Report_of_DCMS

Expert Panel Autumn 2015 FINAL .pdf

Ofcom (2015), "Ofcom report on internet safety measures - Strategies of parental protection for children online": http://stakeholders.ofcom.org.uk/binaries/internet/fourth_internet_safety_report.pdf

Owens, E. and Behun, R. and Manning, J. and Reid, R. (2012), "The Impact of Internet Pornography on Adolescents: A Review of the Research":

http://psych.utoronto.ca/users/tafarodi/psy427/articles/Owens%20et%20al.%20(2012).pdf

The Telegraph (2015), Article written by Steven Swinford, "Porn websites will be blocked unless they introduce age controls, Tories say", 4 Apri 2015: http://www.telegraph.co.uk/news/uknews/crime/child-protection/11514914/Porn-websites-will-be-blocked-unless-they-introduce-age-controls-Tories-say.html

Ybarra, Mitchell, Hamburger and Diener-West (2010), "X-rated material and perpetration of sexually aggressive behavior among children and adolescents: is there a link?": http://www.ncbi.nlm.nih.gov/pubmed/21046607