



Online safety: Content filtering by UK Internet Service Providers (ISPs)

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In July 2013, Internet Service Providers (ISPs) agreed to voluntarily offer “default-on” adult content internet filters on all new and existing home network customers. Ofcom has reviewed the implementation of the network filtering which it expects to be completed by the end of 2014. This note summarises the background to these decisions, reviews its implementation and sets out some of the arguments of opposed to the introduction of default on network filters.

In a [July 2013 speech](#), the Prime Minister announced a series of agreements the Government had secured with mobile operators, Internet Service Providers (ISPs) and public wi-fi operators that put adult content filters on mobile phones, public wi-fi networks and home networks. The four main ISPs have begun offering these filters to all new customers and existing customers should also be offered the choice of installing a filter by the end of 2014.

The Government has asked Ofcom – the industry regulator – to assess and review the progress of ISPs implementing the agreed actions. In January 2014, Ofcom published their first report examining internet safety measures, [Strategies of parental protection for children online](#). In July 2014 Ofcom published their second report, [Internet Service Providers: Network level filtering measures](#). This report outlined that the four main ISPs had all introduced family friendly network level filtering to new customers and are now engaged in rolling out the offer of family friendly network level filtering to reach existing customers, with a view to completing this process by the end of 2014. The third report is due out early in 2015.

There is some opposition to the Government’s proposals and ISP activities regarding filtering, in particular from the [Open Rights Group](#), who maintain that the introduction of internet filters, whilst well intentioned, may block many sites that are not harmful to children.

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1 Online Safety

The internet has revolutionised communications and information sharing and is generally regarded as a valuable resource for entertainment, socialising and learning. However, the internet remains a largely unregulated, international service free from direct interference by national governments.

UK Government policy has consistently been such that what is illegal offline is also illegal online, thus allowing for prosecutions for publication and possession of illegal content.¹ Nevertheless, concerns remain over the proliferation and accessibility of child abuse images on the internet and the availability of harmful adult content to children.

On 22 July 2013, the [Prime Minister made a speech about cracking down on online pornography and making the internet safer for children](#), at a meeting hosted by the NSPCC.² In this speech, he expressed his concern over the proliferation and accessibility of child abuse images and the ease with which children are accessing age-inappropriate material:

“... the growth of the internet as an unregulated space has thrown up 2 major challenges when it comes to protecting our children. The first challenge is criminal and that is the proliferation and accessibility of child abuse images on the internet. The second challenge is cultural; the fact that many children are viewing online

¹ [HC Deb 14 Jul 2008](#) | c117W

² Transcript of the Prime Minister’s speech: [“The internet and pornography: Prime Minister calls for action”](#), [Gov.uk](#) (22 July 2013).

pornography and other damaging material at a very early age and that the nature of that pornography is so extreme it is distorting their view of sex and relationships.”³

Efforts to curb access to age-inappropriate material do already exist. For instance, UK mobile phone operators began filtering internet content in 2004 when Ofcom published a UK code of practice for the self-regulation of new forms of content on mobiles.⁴ Currently, all major UK mobile operators have internet filtering schemes and to deactivate the filter you have to prove you’re over 18.⁵ In addition, ‘family friendly’ filters have now been introduced across public Wi-Fi networks (supplied by the six largest public Wi-Fi providers) wherever children are likely to be present.⁶

2 What are internet filters?

Internet (online content) filtering is aimed at preventing children accessing inappropriate material. The filters operate on a system of categories. In this system, websites, or sometimes individual web pages, are categorised by filter companies into different groupings based on their content, such as: “sexually explicit” “hate speech”, “firearms” or “violence”. Filter companies typically use automated methods to classify these web pages.

[Ofcom have described the two main methods of content filters](#): Filtering by Uniform Resource Locator (URL) blocking; and Filtering by Domain Name System (DNS) alteration.⁷

- **Filtering by Uniform Resource Locator (URL) blocking:** the filtering of sites or services based on their web address – either addresses covering whole websites (<http://www.example.com>) or individual sections or pages on those sites (<http://www.example.com/adultpictures>). This involves the ISP checking some or all of the URLs which an opted-in subscriber requests against the list of sites or pages to be blocked. If there is a match, the subscriber request is not fulfilled – typically a page with the message “this site is blocked because it is classified as...” may be delivered instead.
- **Filtering by Domain Name System (DNS) alteration:** the DNS translates domain names (“www.example.com” into IP addresses “192.0.32.10”), to allow a subscriber’s content request to be correctly directed – this is the first stage in requesting a website or service. When used for filtering, the ISP’s DNS server will not provide the IP address for domains on the list; it may instead direct the subscriber request to an information page with “this site is blocked because it is classified as...”.

However, the specific details about these different approaches is limited because of commercial sensitivities and the need to avoid the wider distribution of information which might make it easier for the filtering system to be circumvented.

³ Transcript of the Prime Minister’s speech: [“The internet and pornography: Prime Minister calls for action”](#), *Gov.uk* (22 July 2013).

⁴ Ofcom, [“UK code of practice for the self-regulation of new forms of content on mobiles”](#) (August 2008).

⁵ Kayahan Cantekin, [“How does mobile Internet filtering work?”](#), *OpenRightsGroup.org* (19 December 2011). Accessed online: 20 November 2014.

⁶ Transcript of the Prime Minister’s speech: [“The internet and pornography: Prime Minister calls for action”](#), *Gov.uk* (22 July 2013).

⁷ Ofcom, (2014), [“Internet safety measures - Internet Service Providers: Network level filtering measures”](#). Accessed online: 16 October 2014.

3 ISPs agree to offer ‘family friendly’ home network filters

The Government, stakeholders and ISPs have been in talks for some time regarding internet content filters. In February 2012, the [Government hosted a roundtable](#) involving ISPs to discuss giving parents more choice in how the internet in their home is filtered.⁸ In addition, later in 2012, the government ran a [public consultation from 28 June to 6 September](#), which sought views on a range of options that would enable filters and blocks to be installed on internet services or internet-enabled devices.⁹

Throughout these discussions, ISPs expressed their opposition to the imposition of “default on” filters. Rather, their preference had been for an “Active Choice+” system that would make new customers choose what level of filtering they wanted at the account activation stage.¹⁰

In July 2013, the [Prime Minister announced](#) that the big four ISPs in the UK – BT, Sky, TalkTalk and Virgin Media – had agreed to provide their customers with free parental controls which can be activated at any time. The ISPs agreed:

- to apply filters to all new customers accounts by default;
- for the filter to be applied at a network-level, meaning once filters are installed they will cover any device connected to that home internet account; and
- to contact all their existing customers by the end of 2014 to ask whether or not they wanted to install family friendly content filters.¹¹

Together the big four ISPs provide internet services to approximately 90 per cent of all home internet users.

4 Ofcom monitoring

The Government asked Ofcom to assess report on progress made by ISPs towards the implementation of internet filters and online safety.

4.1 Ofcom Report I: *Strategies of parental protection for children online*

The [first report](#) published by Ofcom in January 2014, looked at parental strategies for protection of children online, reviewing Ofcom’s Media Literacy research from 2012 and 2013.¹²

This report highlighted that around one in eight parents that do not have family friendly internet controls did not know they existed or did not know how to install them. The research also showed that 85 per cent of parents take action to protect their children online by regularly talking to their children about staying safe online, using technical tools such as filters, or taking responsibility for supervising online access.¹³

Commenting on the reports publication, [Culture Secretary, Maria Miller said](#):

⁸ DCMS, [“Government hosts talks on parental internet controls”](#) (23 February 2012).

⁹ Department for Education, [“Parental Internet Controls – Consultation document”](#) (28 June 2012).

¹⁰ BBC, [“Q&A: UK filters on legal pornography”](#) (22 July 2013).

¹¹ Transcript of the Prime Minister’s speech: [“The internet and pornography: Prime Minister calls for action”](#), *Gov.uk* (22 July 2013).

¹² Ofcom, (2014) [“Internet safety measures - Strategies of parental protection for children online”](#). Accessed online: 16 October 2014.

¹³ *Ibid.*

“Britain is leading the way when it comes to protecting our children online but technology moves so fast and it is vital that we continue to stay ahead.

“It is encouraging that ISPs are making it far easier and simpler to introduce family filters to home internet connections. Filters will help limit access to inappropriate and harmful content but we all need to remember that they are not a silver bullet. Parents have a central role to play in protecting their children, including by talking to them about how to stay safe online.”¹⁴

4.2 Ofcom Report II: *Internet Service Providers: Network level filtering measures*

The [second of the three reports](#), published in July 2014, examined the measures put in place by the UK's four largest fixed line ISPs – BT, Sky, TalkTalk and Virgin Media – to introduce a family-friendly network level filtering service.¹⁵

The report found BT, Sky, and TalkTalk all met the Government target of offering a network level family-friendly filtering service to all new customers by December 2013. Virgin Media did not launch its network level filter until February 2014.¹⁶

Ofcom reported that all of the ISPs have commissioned third parties to perform the categorisation of internet content and services. In addition all the ISPs have provided options for customers and site owners to report potential mis-categorisation of sites. The [report concluded that](#):

“The ISPs have all introduced family friendly network level filtering to new customers, although Virgin Media failed to do so by the date agreed with Government and continues to encounter issues both with coverage of all new customers and with the email verification of the set-up and settings changes.

“This is the initial phase of rolling out family friendly filtering. The take up figures in this report reflect the customer’s choice only after the first engagement at the point at which a new customer joins the ISP’s broadband service. The ISPs are now engaged in rolling out the offer of family friendly network level filtering to reach existing customers, with a view to completing this process by the end of this year.”¹⁷

The final report is due to be published early in 2015 and will review Ofcom’s Media Literacy research from 2014 on parental strategies for protection of children online.

5 Parliamentary comment

5.1 Online Safety Bill

There have been unsuccessful attempts at legislating for online safety in the past. Baroness Howe of Idlicote has on two previous occasions attempted to introduce legislation (through a Private Members’ Bill) to make provisions about the promotion of online safety.¹⁸

On 11 June 2014, Baroness Howe of Idlicote again introduced an [Online Safety Bill \[HL\] 2014-15](#), which would require internet service providers (ISPs) and mobile phone operators

¹⁴ DCMS, “[Parents unaware of internet filters, says report](#)” (15 January 2014).

¹⁵ Ofcom, (2014), “[Internet safety measures - Internet Service Providers: Network level filtering measures](#)”. Accessed online: 16 October 2014.

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ See the Bill pages for the [Online Safety Bill \[HL\] 2012-13](#) and the [Online Safety Bill \[HL\] 2013-14](#). Neither Bill progressed past first reading.

to provide an internet service that excludes adult content and electronic device manufacturers to provide a means of filtering internet content.¹⁹

5.2 Culture Media Select Committee Report – Online Safety

On 19 March 2014, the Culture, Media and Sport Committee published its [Sixth Report of Session 2013-14, Online safety](#). This inquiry saw MPs take evidence on issues such as content filtering, cyber bullying and social media.²⁰

The Committee report recommended that a robust age verification process should be put in place for legal adult sites. In addition, the Committee recommended introducing measures that would make it easier for filters to operate and for search engines not to return the material when operating in a safe search mode. The Committee also welcomed the introduction of ISP home filtering options, stating:

“Filters may not be failsafe, but they continue to improve and are an important way of protecting children from harmful content. We very much welcome the introduction of whole home filtering solutions that prompt account holders with a choice to apply them. The main internet service providers should have contacted all their customers by the end of the year to offer this valuable service. We want to see all other ISPs following suit.”²¹

Both the government and Ofcom have responded to the Committee’s findings. The Government response welcomed the Committee’s endorsement of the introduction of family-friendly network-level parental control tools and acknowledged the efforts of the four largest ISPs in implementing them. The government also agreed with the Committee that other ISPs with domestic customers should consider offering parental control tools.²²

Meanwhile, Ofcom’s response summarised its role in examining parents’ approaches to children’s online safety, their awareness of and confidence in parental controls of all kinds, and the four largest ISPs implementation of network-level filters in the UK.²³

6 Opposition to internet content filtering

6.1 Open Rights Group – censorship concerns

The [Open Rights Group](#) is a non-profit company which campaigns against “disproportionate, unaccountable surveillance and censorship”. It is opposed to any kind of filtering as they maintain that, whilst well intentioned, filters block many sites that are not harmful to children. According to a [Guardian report on research carried out by the Open Rights group](#), nearly one in five of the most popular websites are being blocked by ISP adult content filters.²⁴

The Open Rights Group have launched a campaign against filtering called [Blocked](#), which aims:

- to hold ISPs and the government to account;
- keep a record of the extent of censorship caused by web filters;

¹⁹ [Online Safety Bill \[HL\] 2014-15](#)

²⁰ Culture, Media and Sport Committee, [“Sixth Report: Online safety”](#) (13 March 2014).

²¹ Culture, Media and Sport Committee, [“Sixth Report: Online safety”](#) (13 March 2014).

²² Culture, Media and Sport Committee, [“Online safety – Government response”](#) (July 2014).

²³ Culture, Media and Sport Committee, [“Online safety – Ofcom’s response”](#) (July 2014).

²⁴ Juliette Garside, “Internet filters blocking one in five most-popular websites” [Guardian](#) (2 July 2014).

- help people to learn about the real effects of filters;
- help people report problems with blocked sites;
- release our code and data under permissive licenses for others to reuse or extend

As part of the campaign, the Group has developed a tool which allows people to find out whether their websites are being blocked by filters in the UK.

6.2 ISPs opposed to filters

Several organisations have expressed concern at the introduction of internet content filters. ISPs say they should not be seen as moral arbiters and that it is up to parents to police and oversee the web browsing habits of their children. The imposition of filters could create a degree of complacency, making parents less likely to scrutinise their children's browsing habits.²⁵

One small ISP – [Andrews and Arnold Ltd](#) – has published an article stating its opposition to internet filtering, which they summarise as follows:

“Filtering rarely, if ever, achieves the stated goals - blocking web sites does not stop people communicating, and rarely even stops the actual web sites themselves. Most filtering creates a false sense of security, adds technical complexity, and causes problems with over blocking. In many cases it is not true that "something is better than nothing".”²⁶

²⁵ BBC, “Q&A: UK filters on legal pornography” (22 July 2013).

²⁶ Andrews and Arnold Ltd, “[Knowledge base Real internet connection](#)”. Accessed online: 21 November 2014.