

<p>1 Friday, 17 May 2019 2 (10.30 am) 3 THE CHAIR: Good morning, everyone. Welcome to Day 5 of 4 this public hearing. Mr Krishnan? 5 MR KRISHNAN: Good morning, chair. 6 The first witness for today is Mr Kevin Brown of BT. 7 Please may he be sworn? 8 MR KEVIN WILLIAM BROWN (sworn) 9 Examination by MR KRISHNAN 10 MR KRISHNAN: Good morning, Mr Brown. 11 A. Good morning. 12 Q. Could we have your full name for the inquiry please? 13 A. It's Kevin William Brown. 14 Q. You are the managing director of BT Security? 15 A. That's correct. 16 Q. You've been in that role since November 2018? 17 A. Yes, that's correct. 18 Q. Before that, you were vice president in security. In 19 a nutshell, what did that role involve? 20 A. That role was looking after the investigation teams that 21 deal with matters relevant to BT, and also where we have 22 enquiries into BT requiring an investigative response, 23 and also looking after what I'll call our obligations 24 capability, so dealing with requests for information 25 from the law enforcements.</p> <p style="text-align: center;">Page 1</p>	<p>1 Q. You joined BT in 2012; is that correct? 2 A. Yes, that's correct. 3 Q. Before that, you were serving in the police? 4 A. Yes, that's correct. 5 Q. For over 20 years? 6 A. Yes. 7 Q. Did you have any experience dealing with child sexual 8 abuse cases during your time as a police officer? 9 A. Yes, throughout my career, from my early days of taking 10 reports, through to later days of the more complex 11 investigations. 12 Q. Can we start with BT itself. You describe the BT Group 13 as a communications service provider or CSP; is that 14 correct? 15 A. Yes, that's correct. 16 Q. One of the BT Group's key activities in that regard, at 17 least so far as consumers are concerned, is to give 18 people connections to the internet; is that correct? 19 A. Yes, that's correct. 20 Q. And you do this via fixed-line broadband; in other 21 words, people's home internet connections? 22 A. Yes, that's correct. 23 Q. And also by mobile internet connections when one uses 24 one's cellphone? 25 A. Yes, that's correct.</p> <p style="text-align: center;">Page 2</p>
<p>1 Q. And over Wi-Fi as well? 2 A. Yes. 3 Q. The BT Group provides connectivity to the internet via 4 various businesses and brands such as BT Broadband and 5 EE for mobile internet; is that correct? 6 A. Yes, within consumer, there is three distinct 7 brands: there is BT Mobile; there is Plusnet; and then 8 there's EE. 9 Q. Just help the inquiry in terms of the scale of BT's work 10 in this area. 11 You say, I think, that the BT Group is the largest 12 provider of fixed-line and mobile broadband to consumers 13 in the UK; is that correct? 14 A. Yes, that's correct. In fact, at paragraph 14 of my 15 statement, I think there is a slight typo. The fixed 16 broadband we deliver to circa 19 million customers, 17 which equates to just over 30 per cent market share in 18 the UK. 19 Q. Understood. And the market share for mobile internet? 20 A. Again, that's 19 million, at around 26 per cent. 21 Q. Thank you. 22 Can we move on to the topic you address at 23 paragraph 18 onwards of your statement. 24 This is the difference between BT and other internet 25 companies, if we can use that broad term.</p> <p style="text-align: center;">Page 3</p>	<p>1 At paragraph 18, you summarise the position in this 2 way, I think. You say: 3 "BT does not host or facilitate the hosting or 4 sharing of a significant amount of online content, like, 5 say, Facebook does, but does provide access to content 6 produced by others. This is by enabling people to 7 transmit data and information across our networks." 8 Can we look at the table, please, at your 9 paragraph 21, and could we please put that up on the 10 screen at page 8 of Mr Brown's statement. 11 Where does this table come from? 12 A. So that was produced in May 2016 from the Global Systems 13 of Mobile Communications Association, so the GSMA, which 14 set out to explain the value chain of where 15 organisations are effectively categorised. 16 Q. Could you help us just briefly with what this table 17 shows, starting from the "Content Rights" column. In 18 a nutshell, what do businesses in that column do? 19 Perhaps you could use BT Sport as an example. 20 A. Yes. I think BT Sport is a great example of where we do 21 produce and we provide content to our customers. So 22 that is material that, again, it could be a football 23 match, it could be a boxing match, but it's material 24 that becomes available that is, as I say, produced by 25 us -- can be produced by us or by others, but we make</p> <p style="text-align: center;">Page 4</p>

<p>1 that content available to our subscribers.</p> <p>2 Q. Moving along rightwards to "Online Services", just</p> <p>3 briefly, can you summarise the work of businesses</p> <p>4 falling within that column?</p> <p>5 A. Yes, so the majority there, as described by Skype,</p> <p>6 Facebook, so where the business is intrinsically linked</p> <p>7 by actually being on the internet.</p> <p>8 Q. And the next one "Enabling Technology and Services</p> <p>9 Rights"?</p> <p>10 A. Yes, so it's part of effectively enabling the</p> <p>11 businesses, for example, the online services, to work.</p> <p>12 So it could be the web hosting, and it could be billing</p> <p>13 and online payments as described there.</p> <p>14 Q. Can you help us in a little more detail with the next</p> <p>15 column, which is where BT really sits?</p> <p>16 A. Yes, certainly, and I think, if I can just draw your</p> <p>17 attention to paragraph 20 of my statement, where the</p> <p>18 e-Commerce Directive of 2000, I think -- in fact,</p> <p>19 I think it's 2002, articulates the position and</p> <p>20 categorises three categories and describes</p> <p>21 communications service providers, CSPs, as mere conduits</p> <p>22 in the chain.</p> <p>23 I would probably use the analogy of a postman; so</p> <p>24 the role of a CSP is to deliver something from point A</p> <p>25 to point B.</p> <p style="text-align: center;">Page 5</p>	<p>1 Q. Help us with the distinction between interchange and</p> <p>2 core networks and retail internet access.</p> <p>3 A. In the context of ourselves, I think the important thing</p> <p>4 is we're providing the connectivity, so we're providing</p> <p>5 from point A to point B.</p> <p>6 In relation to the question you just asked, can you</p> <p>7 be a little bit more specific on what point you're ...?</p> <p>8 Q. Sure. So we see we have BT listed under both the</p> <p>9 "Interchange" and "Core Networks" heading --</p> <p>10 A. Yes.</p> <p>11 Q. -- and the "Retail Internet Access" heading?</p> <p>12 A. Yes.</p> <p>13 Q. I think it's the latter we're really concerned about,</p> <p>14 isn't it?</p> <p>15 A. Yes. So, if you're in a retail business, you're still</p> <p>16 going to need connectivity. So whilst we have our</p> <p>17 consumer arm, and we support many of our consumers at</p> <p>18 the same time, we will support, likewise, broadband</p> <p>19 services to enable retail businesses.</p> <p>20 Q. And finally, briefly, the "User Interface" column?</p> <p>21 A. Yes, so that would be, perhaps, the services that are</p> <p>22 provided for an end-user and it could be something</p> <p>23 that's on an endpoint, so, ie, a device, a mobile,</p> <p>24 a laptop, but it's something that is physically going to</p> <p>25 be used to effectively access the internet chain.</p> <p style="text-align: center;">Page 6</p>
<p>1 Q. Is it right that one of the exceptions to BT not being</p> <p>2 directly involved in the hosting or sharing of online</p> <p>3 content is the BT Cloud; is that correct?</p> <p>4 A. Yes, that's correct, we do have what's called the</p> <p>5 BT Cloud, which is used for -- offered to our consumer</p> <p>6 customers for backing up material, and we host around</p> <p>7 720,000 users on that.</p> <p>8 Q. Is one able to use BT Cloud to store images and videos?</p> <p>9 I assume the answer is yes.</p> <p>10 A. Yes.</p> <p>11 Q. Can one use the cloud to share images and videos with</p> <p>12 other people?</p> <p>13 A. No, the facility's around the storage of it, it's not</p> <p>14 a platform to which multiple people can access.</p> <p>15 Q. Can you help me briefly with BT Mail. First of all,</p> <p>16 just a brief description of what BT Mail is?</p> <p>17 A. So, if you're a BT customer, then you could have and</p> <p>18 take use of an @bt.com internet address, and -- and we</p> <p>19 offer that service to across our consumers. Not</p> <p>20 everybody takes it up. And, again, then there's</p> <p>21 a facility to offer the communications between point A</p> <p>22 and point B.</p> <p>23 The way in which it's used, it very much differs</p> <p>24 between consumers' use. Some people will use a service</p> <p>25 like Outlook or use their Apple application to then</p> <p style="text-align: center;">Page 7</p>	<p>1 access that email. Other people may log into the</p> <p>2 internet to access, so through a webmail.</p> <p>3 Q. In operating BT Mail, does that involve BT hosting any</p> <p>4 content itself?</p> <p>5 A. No, it doesn't, it's -- it's hosted by third parties on</p> <p>6 BT's behalf.</p> <p>7 Q. Can we come back later to the implications of BT's role</p> <p>8 as a CSP in terms of what it can and can't do in</p> <p>9 response to child sexual abuse online?</p> <p>10 A. Certainly.</p> <p>11 Q. I just want to take a moment to discuss how BT secures</p> <p>12 and funds its response to this area of offending.</p> <p>13 You manage BT Security, as we've mentioned. You</p> <p>14 describe BT Security as a business unit; is that</p> <p>15 correct?</p> <p>16 A. That's correct.</p> <p>17 Q. Can I ask you to turn to the table under paragraph 23 of</p> <p>18 your statement, which is at page 9 and could we also</p> <p>19 have that table up on the screen?</p> <p>20 At paragraph 23, this table, I think, summarises</p> <p>21 what you describe as the key teams within BT involved in</p> <p>22 online safety work in general.</p> <p>23 And you have, in the two columns on the right,</p> <p>24 a rough estimate of the number of staff involved and the</p> <p>25 percentage of their time spent on online safety work.</p> <p style="text-align: center;">Page 8</p>

<p>1 Just to clarify, we're talking here about online 2 safety in general rather than the response to child 3 sexual abuse online in particular; is that correct? 4 A. Yes, two points. So, first of all, as the table 5 explains, we do not have a single dedicated team that 6 deals with child sexual abuse online, but instead we 7 have a -- quite a broad set of teams that are supporting 8 the ever-increasing cause to improve online safety. 9 The reason why we have the broad set is we draw upon 10 the breadth of BT, because this is not just about 11 technology, it's technology, process, people, and also 12 making sure that we draw upon the legal community as 13 well. So that's where you'll see in the tables that we 14 have quite a wide set of teams engaged. 15 Q. Can I focus on the rows involving BT Security which is 16 the area that you manage. So the first row of 17 BT Security deals with the trust and security centre, so 18 that deals with activities such as fishing and so forth. 19 The second one "BT Obligations", in short, is this 20 a team that responds to requests from law enforcement? 21 A. Yes, it responds to requests from law enforcement, but 22 I will also say it's not just a processing team per se, 23 it's one that also works with law enforcement. It's 24 a team that would also be out educating the single 25 points of contact to make sure, within the police</p> <p style="text-align: center;">Page 9</p>	<p>1 forces, to make sure that we're helping guide the police 2 forces through technology changes. 3 But at the same time, and whilst we don't get 4 visibility of what requests may relate to, if there is 5 a life-at-risk situation or something that's categorised 6 as sort of a priority 1, the team will certainly engage 7 and work through perhaps the problem that the police 8 force are trying to counter and make sure that, 9 actually, the route that they're taking is probably the 10 most effective route. 11 That, at times, that's a 24-by-7 service, and there 12 will be people that deal with those requests in the 13 small hours to make sure that we'll be able to respond 14 immediately to the most serious matters. 15 Q. Understood. 16 This may or may not be possible, but of those 17 30 full-time equivalent staff, how many would you say 18 are involved primarily with reacting to requests from 19 law enforcement and how many are involved in some of the 20 more proactive efforts you've described? 21 A. I think I would say that the team, as a whole, are 22 involved in both. It's difficult to categorise between 23 reactive and proactive, because, certainly, the 24 proactive may well lead to further reactive. 25 But what I will say, it's a team that is actively</p> <p style="text-align: center;">Page 10</p>
<p>1 engaged with law enforcement and requesting agencies. 2 Q. And the final BT Security row concerns Clean Feed, which 3 we'll discuss in a moment. I just wanted to draw the 4 chair and panel's attention to the resource that's 5 applied to that, so one full-time equivalent staff, but 6 5 per cent of that staff member's time? 7 A. Yes, that's correct. 8 Q. That's something we'll come to a bit later. 9 Can you help me with how much BT spends in a given 10 year in its response to online-facilitated child sexual 11 abuse? 12 A. Yes, I can take you through. I think, first of all, 13 there is no sort of one set amount that BT sets aside in 14 its response to online safety. And it's relevant to 15 each of the business units. But I think BT's response 16 here is to look at supporting online safety through 17 a sort of a variety of ways. So if I can just draw your 18 attention to a few of those areas, if I may -- 19 Q. Could we just pause there, I'll certainly discuss those 20 with you, but in terms of the figure, what sort of scale 21 are we talking about here? 22 A. We're talking sort of in excess, it's difficult to put 23 an amount per year, I think you have to look at sort of 24 the totality of what's been invested, so perhaps, when 25 we get to your point, we can go through the areas in</p> <p style="text-align: center;">Page 11</p>	<p>1 which we're investing. 2 Q. Understood. At paragraph 26 of your statement, you say, 3 I think, that you estimate the figures in the millions 4 of pounds. Is that roughly -- 5 A. Yes, absolutely, I would say in excess of the millions. 6 Q. What about where BT responds to a law enforcement 7 request, how is that activity funded? 8 A. So that partly is funded by the Home Office and there 9 are provisions within the relevant pieces of legislation 10 that enables a cost recovery process. 11 Q. On the subject of -- on the subject of funding, it's 12 right, I think, that BT is the largest annual 13 contributor to the IWF -- 14 A. Yes. 15 Q. -- with an annual contribution of £79,500; is that 16 correct? 17 A. Yes, from a monetary term, and then, in addition, the 18 resources that we support as well. 19 Q. And BT contributes to the work of the Marie Collins 20 Foundation about which the chair and panel heard 21 evidence during the first phase of these hearings. 22 Finally, BT has invested significant sums, you say, 23 in educational efforts to promote online safety via the 24 Internet Matters organisation; is that right? 25 A. Yes, I think in relation to Internet Matters, we were</p> <p style="text-align: center;">Page 12</p>

<p>1 one of the four founding members that started 2 Internet Matters and, with the other founding members, 3 we've invested just over £6 million to date, which 4 figure -- and the figure will rise to £10 million as we 5 move forward. 6 Q. Can you give the inquiry an indication of how much of 7 that £6 million and £10 million comes from BT in 8 particular? 9 A. I think it's not a figure that I have to hand, and 10 I would probably need to just seek guidance from the 11 other founders as to whether we were happy to talk about 12 the amounts people put in. 13 Q. Understood. Perhaps that's something the inquiry can 14 liaise with you in the future? 15 A. I'm happy to. 16 If I can go back to the Marie Collins one -- I know 17 you've heard evidence there -- just to highlight, since 18 2014/15, we initially invested £41,000 to help with, 19 effectively, a pilot to seek the benefits. 20 From thereafter, between 2016 and 2018, and with the 21 feedback from the Marie Collins Foundation, we 22 recognised the benefits that it was giving to children 23 and we further invested £74,000 and we're now looking at 24 a further three-year contract. 25 But we also, in addition to the monetary, in that --</p> <p style="text-align: center;">Page 13</p>	<p>1 sort of open up the breadth of what BT can offer, and 2 we'll regularly enable events at the BT Tower and our 3 BT Centre, where we can draw in a vast number of people 4 to help with the overall support as well. 5 And that's where, on the one hand, you focus on the 6 monetary, but it's almost around, how does BT help with 7 sort of the wider campaign as well? 8 Q. Can we now look at Clean Feed, which you address at 9 paragraph 42 onwards of your statement. 10 At paragraph 42, you describe it as a blocking tool 11 by which BT blocks access to CSA images identified by 12 the IWF. 13 You say there's an essentially identical system 14 called WOLF, which operates on the EE network; is that 15 correct? 16 A. Yes, that's correct. 17 Q. It's right, is it, that Clean Feed is automatically 18 applied to all internet traffic that you deliver to your 19 customers? 20 A. Yes, that's correct. 21 Q. In contrast to parental controls, which are optional; is 22 that correct? 23 A. Yes, that's correct. 24 Q. You say, at paragraph 43, that every day Clean Feed 25 downloads the latest IWF URL blacklist.</p> <p style="text-align: center;">Page 14</p>
<p>1 In layman's terms, is it right that a URL is a web 2 page, essentially? 3 A. Yes, it's effectively a destination. 4 Q. The inquiry will be hearing from the IWF about its URL 5 list. But in very short terms, what is the list? 6 A. So this is a list of sites where the IWF -- the Internet 7 Watch Foundation -- have independently verified host 8 child sexual abuse images. We're then provided with 9 those sites and we voluntarily block access to those 10 sites across our network. 11 Q. Roughly speaking, how many URLs are on the list on any 12 one day? 13 A. It varies, it can go anything from sort of 4,000 to 14 8,000. I'm sure the IWF will be able to provide you 15 with the latest statistics. 16 Q. Okay. In practical terms, say that I'm a BT customer, 17 I'm at home using my BT Broadband. And I request a web 18 page that's on the IWF's URL list for that day, what 19 happens next? 20 A. What happens is -- let me sort of take you back to what 21 used to happen and then a step-change. 22 So when Clean Feed -- 23 Q. Could we start with what happens now and I'll take you 24 back? 25 A. Perfect.</p> <p style="text-align: center;">Page 15</p>	<p>1 Q. Could we put on the screen, perhaps, what comes up, 2 which is at the top of page 18. 3 A. So the customers, when they try to access a site that 4 has been deemed by the Internet Watch Foundation to go 5 on a blocking list, will then be presented with the 6 screen as you see. So this is alerting customers to the 7 fact that they have accessed a site that has been deemed 8 as hosting indecent images. 9 Then we go on to explain some of the dangers and 10 some of the consequences. But then we provide, now, 11 information on where people can seek help; in 12 particular, the Lucy Foundation -- Lucy Faithfull 13 Foundation and the Stop It Now Campaign. 14 Q. It's right, is it that this message was first introduced 15 about 5 years ago or so? 16 A. Yes, that's correct. 17 Q. Yes. Prior to this, a customer would've just seen 18 an error message to the effect that the content was not 19 available? 20 A. Yes, that's correct. It would've been -- I'm sure, 21 certainly, many people have experienced it, where you 22 see an "Error 404" flash up on the screen, but actually, 23 what we recognised was whilst error 404 was achieving 24 the aim of blocking it, we were missing the opportunity 25 of interaction with perhaps those intent on accessing</p> <p style="text-align: center;">Page 16</p>

1 **that material to have a form of engagement and use that**
 2 **as almost, in some way, a sort of a reality moment that**
 3 **people are blocking, people -- there are consequences,**
 4 **but also there is -- there is help available through the**
 5 **Lucy Faithfull Foundation.**
 6 **So that was a decision that was made, to provide**
 7 **information and take it away from a simple it would**
 8 **appear that it's an inadvertent error.**
 9 Q. Can I ask you, how did BT settle on the drafting of
 10 this? Was the drafting by BT? Did you work with other
 11 organisations, such as the Lucy Faithfull Foundation?
 12 **A. It would've been in conjunction with the IWF,**
 13 **Lucy Faithfull Foundation and also supported by BT's**
 14 **legal community as well.**
 15 Q. Is BT aware at all about the extent to which this
 16 message has encouraged or driven people to call the
 17 number for the Stop It Now helpline or to email -- email
 18 the campaign?
 19 **A. I haven't -- I don't have any feedback on the impact**
 20 **that this is necessarily having. But I think the**
 21 **Lucy Faithfull Foundation should be able to help with**
 22 **that.**
 23 Q. So I'm sitting at home, I'm a BT customer, I see this
 24 splash page. I do, or do not, do anything about it.
 25 Are there any further consequences? Does BT, for

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1 **A. Yes, that's correct.**
 2 Q. Can you help us with what drove BT to develop
 3 Clean Feed?
 4 **A. Again, it was working with the Internet Watch**
 5 **Foundation. It was being able to, I guess, receive**
 6 **feedback on trends and the escalation of child sexual**
 7 **abuse, and BT recognised that it was in a position where**
 8 **it could act as sort of interventionist with what was**
 9 **passing over BT's network from point A to point B.**
 10 Q. Was BT the first of the UK CSPs to introduce a system
 11 like that?
 12 **A. Yes, that's correct.**
 13 Q. Looking at paragraph 48 onwards of your statement, you
 14 discuss an exercise that BT conducted in 2015 which
 15 tried to quantify the number of times that BT actually
 16 blocked access to CSA content through the system.
 17 Can you explain why BT conducted that exercise?
 18 **A. Again, it was part of -- first of all, it coincided with**
 19 **our release of the Privacy and Free Expression in the UK**
 20 **Report, which outlines sort of BT's response to exactly**
 21 **those headings, but also at the same time looking at**
 22 **what more BT could potentially do with this data.**
 23 **And we did conduct, as highlighted in that**
 24 **paragraph, some analysis of the data; however, when you**
 25 **then try and contextualise it as to why people will**

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1 example, make a report to the police that a particular
 2 customer has attempted to access CSA content?
 3 **A. No, no, we don't. And to sort of explain some of the**
 4 **reasons why.**
 5 **So first of all, we can't make a presumption that**
 6 **everybody trying to access that site is intent on**
 7 **committing a crime. There will be occasions where**
 8 **people are inadvertently clicking on a link, not**
 9 **knowing, perhaps, that it's leading to a site.**
 10 **Likewise, with malware, and the infestation of**
 11 **malware that we've seen over recent years, there are**
 12 **malware that would sit on people's computers that would,**
 13 **sadly, take them to sites that host this material.**
 14 **So from BT's perspective, it has to remain open**
 15 **minded in why people would be accessing these sites.**
 16 **In relation to the follow-up, based upon us not**
 17 **knowing the motivations for people accessing, it's**
 18 **difficult to try and then quantify how much weight you**
 19 **place on those that are accessing it.**
 20 **We did have, back in 2016, 2017 --**
 21 Q. Just hold off on that for a moment. I'll talk you
 22 through that.
 23 **A. Okay.**
 24 Q. The development of Clean Feed began in 2003, I think,
 25 and was deployed by BT in 2004?

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1 **access, and also some of the duplication, we took a view**
 2 **that there was no meaningful data that could be drawn**
 3 **from that, at that stage.**
 4 Q. In terms of the headline result that was reached, you
 5 say, I think, that between January and November 2015,
 6 the average number of attempts to retrieve the CSA image
 7 was 36,738 every 24 hours.
 8 Was the size of that figure a surprise to BT?
 9 **A. It's difficult for me to comment on that, because**
 10 **I wasn't part of seeing those results at the time.**
 11 **However, the pure fact of hits to a site sometimes**
 12 **cannot be that surprising, particularly when you don't**
 13 **know why people are going to that site or whether**
 14 **there's been, as I say, sort of malware that has**
 15 **repeatedly led people to a site or taken a computer to**
 16 **a site without their knowledge.**
 17 Q. Are there any technical means at your disposal in BT to
 18 make a distinction between inadvertent attempts to
 19 access a website on the URL list -- for example, through
 20 the operation of malware -- and someone deliberately
 21 attempting to access a website?
 22 **A. No, because, from BT's perspective, it will be**
 23 **a communication request that would come from an end-user**
 24 **into -- asking to go to another site. So we don't have**
 25 **the attribution as to who the end-user effectively is,**

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<p>1 or their intent.</p> <p>2 Q. So you say in your statement, given some of the caveats</p> <p>3 that you've explained, that there are no plans to repeat</p> <p>4 this exercise of arriving at a number like this.</p> <p>5 Is BT able, though, to give any indication as to</p> <p>6 whether the number might have risen or fallen since</p> <p>7 2015?</p> <p>8 A. It's difficult, I would suspect the number has risen.</p> <p>9 Along with sort of the increased use of the internet,</p> <p>10 I think it would be consistent with the amount of</p> <p>11 internet usage that takes place.</p> <p>12 Q. At paragraph 43, you say, I think, that, from the</p> <p>13 outset, BT has offered to share the technology behind</p> <p>14 Clean Feed with suitable parties and has done so on</p> <p>15 a number of occasions.</p> <p>16 Can you help us with what the take-up has been of</p> <p>17 that offer?</p> <p>18 A. Yes, I can't say exactly how many people or how many</p> <p>19 countries have implemented it, but what I will say is</p> <p>20 we've had a number of visits from ISPs, CSPs,</p> <p>21 governments from around the world who have come to BT to</p> <p>22 understand how we have built the technology, our</p> <p>23 thinking around it, but also how we then apply the</p> <p>24 process and how we engage with law enforcements.</p> <p>25 So we are always transparent in sharing what we do</p> <p style="text-align: center;">Page 21</p>	<p>1 and how we've approached it, how we've tackled some of</p> <p>2 the legal challenges, so that we can offer that thought</p> <p>3 leadership to other countries to try and adopt a similar</p> <p>4 approach.</p> <p>5 Q. Have any of the other UK CSPs approached BT or has BT</p> <p>6 approached the other UK-based CSPs in order to use this</p> <p>7 Clean Feed technology?</p> <p>8 A. We have regular engagement with other CSPs in the UK and</p> <p>9 I'm aware other organisations have capabilities that</p> <p>10 run. To the extent they're sort of matching our</p> <p>11 capability, it's difficult for me to comment on.</p> <p>12 Q. Can we discuss the capability of Clean Feed.</p> <p>13 You say at paragraph 43, I think, that Clean Feed</p> <p>14 was only ever deployed to assist in customers avoiding</p> <p>15 inadvertent access to CSA images. Can you help us with</p> <p>16 why that was the focus?</p> <p>17 A. So at that stage, I think it was acknowledged that those</p> <p>18 who were deliberately seeking access would perhaps not</p> <p>19 go through conventional means. So, therefore, how could</p> <p>20 we have a system that would stop the inadvertent access?</p> <p>21 That's where Clean Feed was first started.</p> <p>22 Q. So one might ask, if that is the intention, why the</p> <p>23 splash page that we saw directs people to the</p> <p>24 Lucy Faithfull Foundation, if BT expects that most</p> <p>25 people, perhaps, accessing these lists, will be doing so</p> <p style="text-align: center;">Page 22</p>
<p>1 inadvertently?</p> <p>2 A. I think if you reflect on the timing, when this first</p> <p>3 started in 2003/2004, if you try and reflect that, what</p> <p>4 the use of the internet would be, it would be far less</p> <p>5 at that stage, sort of fast forward to five years ago.</p> <p>6 We also recognised -- and this is where we work with law</p> <p>7 enforcements and other agencies, and indeed other</p> <p>8 institutions fighting CSA -- that the -- perhaps the</p> <p>9 modus operandi of those seeking access was continually</p> <p>10 evolving and, therefore, we had to cater for people who</p> <p>11 may be deliberately accessing, or trying to access,</p> <p>12 those sites, hence the sort of step-change as well.</p> <p>13 Q. You acknowledged, I think, also, on behalf of BT, that</p> <p>14 those who seek to deliberately access CSA images are</p> <p>15 able to circumvent Clean Feed without undue difficulty?</p> <p>16 A. Yes, that's correct.</p> <p>17 Q. Is it right that, as a general proposition, Clean Feed</p> <p>18 can't operate on what we can call, for simplicity's</p> <p>19 sake, encrypted websites?</p> <p>20 A. Yes, that's correct.</p> <p>21 Q. Just to clarify, we're talking here about encrypted</p> <p>22 websites on the open internet, meaning the internet that</p> <p>23 you and I can access through a normal web browser as</p> <p>24 opposed to the dark web; is that correct?</p> <p>25 A. Yes, that's correct.</p> <p style="text-align: center;">Page 23</p>	<p>1 Q. Is it right that, according to a recent transparency</p> <p>2 report by Google, the number of these encrypted websites</p> <p>3 that we're talking about has increased substantially</p> <p>4 over the last few years?</p> <p>5 A. Yes, again, that's correct.</p> <p>6 Q. And this increase is such that, according to Google,</p> <p>7 desktop users spend two-thirds of their time on -- on</p> <p>8 these encrypted websites?</p> <p>9 A. According to Google, yes, that's correct.</p> <p>10 Q. So far as accessing the internet on a mobile phone is</p> <p>11 concerned, there's an increasing trend towards the use</p> <p>12 of these sort of websites?</p> <p>13 A. Yes.</p> <p>14 Q. Looking at your paragraph 55, you say there, though,</p> <p>15 that BT's view is still that Clean Feed will continue to</p> <p>16 play an important role in the future.</p> <p>17 Can you help us with why BT takes that view, in</p> <p>18 light of the problem of encrypted websites?</p> <p>19 A. Yes, I think, whilst there is a rise, and a significant</p> <p>20 rise, in encrypted websites, I think there will continue</p> <p>21 to be transactions/transmissions that take place in,</p> <p>22 we'll say, the open. So as long as there is an open</p> <p>23 network in the clear, I would suggest that Clean Feed</p> <p>24 still has a role to play.</p> <p>25 Q. You suggest that there might be a way to mitigate, at</p> <p style="text-align: center;">Page 24</p>

<p>1 least, the problem caused by encrypted websites, you 2 discuss, I think, BT supporting the IWF's call to 3 develop a hash list that would enable CSA content to be 4 identified when it is in the clear, in your words. 5 Can you explain what you mean by "in the clear"?" 6 A. So that's unencrypted. 7 Q. How would a hash list like this work in identifying CSA 8 content? 9 A. So a hash list -- so first of all, coming from the IWF 10 would be independently verified, it's an image that then 11 is effectively sort of taken down into a set of hashes 12 and algorithms, which then searches across images in the 13 clear across hosted data to then identify actual images. 14 So this is not -- not a point A to point B sort of 15 discussion, it's more around stuff that is actually 16 hosted and searching across that material. 17 Q. Understood. 18 So BT is contemplating using such technology in its 19 capacity as a host of content through the BT Cloud, 20 rather than as a CSP; is that correct? 21 A. Yes, that's correct. And I would go further than 22 contemplating it; it's one that we are in the process of 23 now starting to implement. We don't have a go-live date 24 at the moment, but it is one that we're now actively 25 taking through deployment.</p> <p style="text-align: center;">Page 25</p>	<p>1 Q. Can you help us with the motivations of using this sort 2 of technology on the BT Cloud? 3 A. Yes. So first of all, we recognise that the BT Cloud is 4 relatively small in size, 720,000 users. Whilst 5 we've -- we haven't had, historically, any intelligence 6 or information from law enforcements or the National 7 Crime Agency to suggest that the BT Cloud is being 8 hosted, BT feels that it certainly is the right thing to 9 do to make sure that BT is not part of hosting illegal 10 material. 11 Q. One last question on Clean Feed. 12 You'll remember we saw from the table there in your 13 statement that Clean Feed requires just 5 per cent of 14 one staff member's time. 15 In light of some of the headwinds, as it were, 16 facing Clean Feed, do you think that's enough? 17 A. I think I'd broach the question slightly differently. 18 So Clean Feed, as itself, only requires 5 per cent 19 because of the investment that's been made over the 20 number of years to automate all the processes. 21 There's a separate part to say, "Is it enough?", and 22 I think that's where we can talk about the other 23 initiatives BT is looking at, in terms of how we use 24 technology or how technology could play a role in trying 25 to prevent and detect and deter online child sexual</p> <p style="text-align: center;">Page 26</p>
<p>1 abuse. 2 Q. Can we move on -- 3 A. Yes, I would keep that separate from Clean Feed itself. 4 Q. Understood. So the resources that BT would devote to 5 those activities are outside of the sort of Clean Feed 6 pot, as it were? 7 A. Yes, I would put resources, generally, in the bracket of 8 trying to always improve BT's position in relation to 9 online safety and, in particular, and as I'm sure we're 10 going to get to, tackling online child sexual abuse. 11 Q. So we've seen that Clean Feed deals with the problem of 12 access to illegal images. 13 Can we move to BT's response to live streaming. 14 I think it's correct that in the summer of 2018, 15 BT invested in the region of £100,000 to fund research 16 as to how machine learning can be used to combat live 17 streaming; is that correct? 18 A. Yes, that's correct. 19 And I think what triggered that was a meeting with 20 the National Crime Agency between -- and I was part of 21 that with my chief executive at the time 22 Gavin Patterson, along with the National Crime Agency 23 leads and Lynne Owens -- where, actually, we were 24 provided with some insight as to the trends that they 25 were seeing, and, really, how could we help from</p> <p style="text-align: center;">Page 27</p>	<p>1 a technology perspective? 2 The trend, as I'm sure we'll become aware of, sadly, 3 is the live streaming. So I -- and with the 4 chief executive's support we invested £100,000 over the 5 summer of last year to look at whether or not, through 6 our technology, we could help with that. 7 Q. Understood. 8 Who is actually doing the research? 9 A. So that will be part of BT's response, so it will be 10 people from within BT Security. It will be people from 11 within the legal community, people from our consumers. 12 So, again, it's the breadth of BT. 13 Q. Can you help me with what the subject of the research 14 was? I understand it was to identify when someone was 15 using, or was suspected to be using, live streaming for 16 these sorts of means that the inquiry is interested in; 17 is that correct? 18 A. Absolutely. So first of all, it was working with the 19 National Crime Agency and, indeed, the 20 Intelligence Services to understand the characteristics 21 and the behaviours that we're seeing from live 22 streaming. 23 From there, we looked at sort of analysing and 24 producing some synthetic data to try and replicate what 25 it would look like for someone that wanted to</p> <p style="text-align: center;">Page 28</p>

<p>1 effectively see online child sexual exploitation, so it 2 would be -- 3 Q. Could I just pause you there for a moment? If you could 4 try to explain, as much as it's possible, in lay 5 person's language. So the use of synthetic data, you 6 were saying? 7 A. Yes, so it was constructing data not with the end 8 product, as I say, but it was, what would, perhaps, 9 one-way traffic look like if someone was using a Skype 10 facility to watch child sexual abuse online? 11 So it was the behaviours, the characteristics, then 12 using some machine learning with the algorithms to try 13 and then identify that across a far broader set of data. 14 Where we've got to is we have proven that the 15 methodology does work and we're continuing to work with 16 the National Crime Agency as to how that could be used. 17 Q. Could you help the inquiry, just in general terms, how 18 you've been able to arrive at the conclusion that the 19 technology works? 20 A. Because if you're -- if, for example, the modus operandi 21 was for someone to view live or on demand child sexual 22 abuse, they would be using a video facility, so say, for 23 example, Skype. They would join a video to the end 24 destination where the abuse was actually taking place 25 and, therefore, you focus in on the traffic behaviour,</p> <p style="text-align: center;">Page 29</p>	<p>1 which for this case was -- for the majority, it would be 2 one way traffic, so it wouldn't be consistent with 3 a normal conversation as if myself and you were over 4 a Skype conversation, you'd see patterns associated with 5 that, the characteristics would be significantly 6 different. 7 Q. Has this technology been tested against actual instances 8 of live streaming of child sexual abuse to be able to 9 verify whether it's actually picking them up? 10 A. So it hasn't been tested against live data. We've had 11 it running with synthetic data, at this stage. 12 Q. Can you help the inquiry with next steps for this 13 technology? 14 A. Yes. Absolutely. So the next step is my team are 15 involved in a round table on the 21st of this month with 16 the Home Secretary to discuss issues of live streaming 17 but also, this is an opportune moment for, I guess, the 18 country -- so that's the industry and the government -- 19 to really take stock of the technologies that may be 20 available, because whilst I may have something on behalf 21 of BT that could play a role, I think it's really 22 important that we look, as a country, to say what is the 23 technologies available, let's make sure that we're not 24 duplicating efforts, that there is true collaboration in 25 making sure that, at this moment in time, we use the</p> <p style="text-align: center;">Page 30</p>
<p>1 best technology that will take the country forward in 2 this fight. 3 Q. Can you help me with two questions on that point. 4 First of all, why is it that this type of 5 collaboration hasn't happened already? 6 A. I think there has been elements of collaboration. But 7 I think we're at a stage where historic ways of working 8 have led to just significant volumes of reports and 9 referrals that go into the law enforcement agencies. 10 I think we're at a stage now, and certainly from 11 BT's perspective, where there does need to be perhaps 12 a refocus on how this is taken forward. 13 Q. My second question on this point: can you suggest any 14 practical, institutional mechanisms by which this 15 collaboration might happen in a way that's more 16 effective than it's been in the past? 17 A. There's a number of ways. I think first of all 18 recognising that there is no one silver bullet that will 19 answer this question. So it's more around having 20 a clear focus as you -- as we've discussed already. 21 BT supports a whole host of organisations in relation to 22 online harms and child sexual abuse. 23 So I think it's being far clearer on the 24 co-ordination, but, at the same time, having a clear 25 legal framework that will support activities.</p> <p style="text-align: center;">Page 31</p>	<p>1 Q. Who should take the lead in encouraging this sort of 2 collaboration to occur? 3 A. So clearly, it's going to be government that has the 4 lead, that has the end-to-end visibility of the 5 challenge that the country faces. But, actually, this 6 is not -- I don't think this is something that is going 7 to be started from scratch in the first time. I think 8 there's a great opportunity to reflect upon recent 9 learnings of how the UK has responded to the cyber crime 10 epidemic. 11 If you go back a few years before the creation of 12 the NCSC, many people were trying to deal with the cyber 13 crime in their own way and actually the NCSC has 14 provided that coordination focus to a point where the 15 UK, I would suggest, is out there as a world leader now. 16 So I think there's a great opportunity to share some 17 of those learnings of perhaps how industry government 18 have really worked together to move the dial 19 significantly, and I think there's a great opportunity 20 now to do likewise with child sexual abuse. 21 Q. The inquiry has heard evidence of research being carried 22 out by various industry members into live streaming and 23 other activities. 24 In your view, on behalf of BT, do you regard other 25 industry members, such as the US tech companies, as</p> <p style="text-align: center;">Page 32</p>

<p>1 being open enough to share some of their technology so 2 that industry, as a whole, can work with one voice in 3 this field? 4 A. I think it's fair to say there's very limited sharing. 5 There is interaction that takes place through 6 organisations such as techUK. 7 But I think the important thing here is, first of 8 all, as industry speaking, having an end-to-end 9 visibility of perhaps what the challenges are that is 10 seen from a government law enforcement perspective and 11 then being clear on how industry can work together, 12 complement one another -- not duplicate; complement -- 13 to add sort of the best foot forward in this fight. 14 Q. Can you help the inquiry with why there might be very 15 limited sharing so far? 16 A. It's difficult to sort of point to it, perhaps there -- 17 it's -- I think probably a lack of situations where 18 industry are all in the same room or are given the same 19 sort of purpose and, let's be clear, effective 20 collaboration is when you have a clear purpose and 21 a clear ask. 22 So I think that may be the opportunity that we have, 23 but having people being sort of tasked to work far 24 closer together but with a clear requirement. 25 Q. Can we move on to the topic of the legal constraints</p> <p style="text-align: center;">Page 33</p>	<p>1 that BT regards itself as working within and some of the 2 next steps as to what more BT can do within those 3 constraints. 4 Could we start with Clean Feed as a concrete 5 example? At paragraph 35, you say: 6 "Under an EU Directive of 2002, CSPs must maintain 7 the confidentiality of communications and are only able 8 to intercept content in very limited circumstances." 9 Is it right that the implications of this is that BT 10 can't generally monitor the actual content of its 11 customers' communications? 12 A. Yes, that's correct. 13 Q. At paragraph 35, you say, I think, that when BT 14 implemented Clean Feed two years later, so this was 15 2003/2004, it did so voluntarily, as you put it, without 16 a specific legal mandate? 17 A. Yes, that's correct, and I think BT's approach to this 18 is, where we will find a way in legislation, we will 19 search for that way. As you will have seen, the 20 legislation is not particularly clear. The legislation, 21 on one hand, asks for and supports our many consumers in 22 the rights to privacy, but doesn't then provide a clear 23 mandate to perhaps deal and respond to all matters of 24 crime. 25 But where there are areas of grey, BT will always</p> <p style="text-align: center;">Page 34</p>
<p>1 try to push as far as possible, leveraging specialist 2 external counsel to make sure that we can operate in as 3 sort of far-reaching ways as possible. 4 This was exactly the same when Clean Feed was first 5 put in place; there was no clear legal mechanism. But 6 after a number of months of work, BT took the decision 7 that it would take an element of risk, because it was 8 for the right cause and it could be justified as being 9 proportionate. 10 Q. Is it correct that BT now believes there's a firmer 11 legal basis for Clean Feed; is that correct? 12 A. It's becoming clearer, but I think the law is still 13 fairly hazy when it comes to a clear, firm, legal 14 mandate, and there is no clear directive in relation to 15 the majority of blocking or examination of content. 16 Q. Can you help us, insofar as you are able, with any 17 engagement that BT has had with the government on the 18 specific issue of the lack of an absolutely clear 19 mandate for activities like Clean Feed? 20 A. Yes. I think it's fair to say that it's ongoing 21 dialogue and, whenever there's a response or a request 22 for industry in relation to any White Papers that are 23 put out there -- for example, the Online Harms Paper at 24 the moment -- BT will use that opportunity to reinforce 25 the fact that there does need to be a clear, legal</p> <p style="text-align: center;">Page 35</p>	<p>1 mandate that doesn't come out and, once again, present 2 some grey areas; it's perfectly clear. And that's 3 dialogue that continues to this very day. 4 Q. I think perhaps that's an issue the inquiry can pick up 5 with the government in due course, when we hear their 6 evidence. 7 Can I turn to paragraph 37 of your statement where 8 you discuss the implications of GDPR. Can I summarise 9 the point you make there? Is it that, in the absence of 10 a business rationale, it's not open to BT to generate 11 data about suspicious activities by its customers, and 12 disclose it to law enforcement, even though law 13 enforcement might be very interested in what the data 14 shows? 15 A. Yes, that's correct, that would be an additional form of 16 processing which the GDPR is centred around. 17 Q. Looking at your paragraph 41, you suggest that there are 18 some possible legal avenues that might give BT some more 19 freedom of movement. 20 The first concerns are GDPR, you suggest there, 21 I think, that certain processing of data may fall under 22 a national interest exception for GDPR. 23 Can you help us with what sort of measures we're 24 talking about here? 25 A. Again, I think that would be a good question when you do</p> <p style="text-align: center;">Page 36</p>

<p>1 speak to the government around that area, but I think,</p> <p>2 from our perspective, national interest really needs to</p> <p>3 be very clear that the investigation of child sexual</p> <p>4 abuse should fall under a national interest.</p> <p>5 Q. Is this something that BT has specifically raised with</p> <p>6 government?</p> <p>7 A. Yes, we continue to raise the need for a very clear</p> <p>8 legal framework in relation to this topic.</p> <p>9 Q. The second avenue that you raise, you say that there are</p> <p>10 significant powers under the Investigatory Powers Act in</p> <p>11 order to compel CSPs like BT to disclose communications</p> <p>12 data.</p> <p>13 Just so we are clear, is the suggestion there that</p> <p>14 the relevant authority should get on and compel BT to</p> <p>15 provide data that BT isn't able voluntarily to offer to</p> <p>16 law enforcement?</p> <p>17 A. Yes, I think, where you have clear compulsion, it</p> <p>18 doesn't provide any sort of grey areas in relation to</p> <p>19 the balance between respecting an individual's right to</p> <p>20 privacy, versus sort of the investigation of crime.</p> <p>21 There are a number of areas which have clear legal</p> <p>22 mandates but this is an area, particularly around</p> <p>23 blocking and the examination of content, that doesn't</p> <p>24 have that clear legal mandate.</p> <p>25 Q. Is BT's view that the authorities aren't making as full</p> <p style="text-align: center;">Page 37</p>	<p>1 use of their compulsory powers as they might, or should,</p> <p>2 in this area?</p> <p>3 A. I think BT's view is one of making sure that this is</p> <p>4 seen as an opportunity to reflect upon legislation that</p> <p>5 has been written, to ensure that it is able to support</p> <p>6 the investigation of child sexual exploitations in clear</p> <p>7 terms.</p> <p>8 Q. And just the same question as before, is this something</p> <p>9 that BT has raised with the government specifically?</p> <p>10 A. Yes, we continue to help with the dialogue.</p> <p>11 Q. You mention at paragraph 41 on the subject of dialogue,</p> <p>12 a meeting planned for early 2019 with the NCA and the</p> <p>13 Home Office to explore the art of the possible. Is this</p> <p>14 the meeting on 21 May?</p> <p>15 A. Yes, and there have been other meetings as well. It's</p> <p>16 fair to say our engagement with the National Crime</p> <p>17 Agency is a continual one, that's the relationship that</p> <p>18 BT has with both the National Crime Agency and law</p> <p>19 enforcements.</p> <p>20 Q. Looking at things from law enforcement's perspective,</p> <p>21 you'll be aware that in a number of fora the NCA have</p> <p>22 articulated three asks, as it were, of industry, these</p> <p>23 are set out in the document behind your tab B3.</p> <p>24 Can I take you through each of the asks in turn and</p> <p>25 ask you for BT's response, if any.</p> <p style="text-align: center;">Page 38</p>
<p>1 The first ask relates to the prefiltering of known</p> <p>2 and first-generation imagery. Can you tell me what BT's</p> <p>3 response to that ask is?</p> <p>4 A. I think in relation to the -- to that response, we've</p> <p>5 covered some of the live streaming, but also reflecting</p> <p>6 on the fact that, save for our small amount of users on</p> <p>7 BT Cloud, BT does not host significant content, but</p> <p>8 nonetheless, we are still investing in technology to try</p> <p>9 and support this area.</p> <p>10 Q. The second ask is that industry platforms with the</p> <p>11 appropriate safeguards in place are granted a kitemark.</p> <p>12 What's BT's response to that?</p> <p>13 A. Again, we would support regulation of standards, and</p> <p>14 it's one that we would welcome the opportunity of seeing</p> <p>15 further detail on.</p> <p>16 Q. In terms of CSPs in the UK -- so CSPs that offer these</p> <p>17 services to UK customers -- does BT have any position as</p> <p>18 to whether all of them perform up to the mark in terms</p> <p>19 of what CSPs can do in response to online-facilitated</p> <p>20 child sexual abuse? I appreciate that may not be</p> <p>21 a question you're able to answer.</p> <p>22 A. No, without visibility of everybody's individual</p> <p>23 contributions -- and, quite rightly, I shouldn't have</p> <p>24 visibility -- I think that's more one for the National</p> <p>25 Crime Agency or the government.</p> <p style="text-align: center;">Page 39</p>	<p>1 Q. In BT's view, do you think that increased visibility or</p> <p>2 transparency of what at least UK-based CSPs are doing in</p> <p>3 this area would be something that would be beneficial?</p> <p>4 A. I think that there could be elements of that.</p> <p>5 I think that the bit that would really help would</p> <p>6 be, I guess, greater transparency and greater visibility</p> <p>7 of the government's objectives and the government's asks</p> <p>8 of industry.</p> <p>9 Q. We'll go on to talk about the White Paper in just</p> <p>10 a second, but can I just finish this off with the third</p> <p>11 of the asks from the NCA, which is that industry members</p> <p>12 ring-fence a portion of their R&D budgets to develop and</p> <p>13 design safeguards into their projects.</p> <p>14 Can you help us with BT's response to that?</p> <p>15 A. Yes, and we welcome the opportunity to support sort of</p> <p>16 greater security by design, but also recognise that this</p> <p>17 is not just about the technology as well, and nor -- nor</p> <p>18 a monetary investment, and we welcome the opportunity of</p> <p>19 bringing to bear BT's sort of breadth to help with this.</p> <p>20 And what do I mean by that? It's things -- for</p> <p>21 example, providing the right facilities to host events;</p> <p>22 providing the expertise that people have in marketing</p> <p>23 and campaigns to support the right level of campaigns.</p> <p>24 So I think the ask on organisations perhaps needs to</p> <p>25 be quite broad and look to leverage what's needed in the</p> <p style="text-align: center;">Page 40</p>

<p>1 fight against child sexual exploitation.</p> <p>2 Q. On the specific suggestion that industry members should</p> <p>3 ring-fence some of their budgets, do you have any</p> <p>4 comment on that?</p> <p>5 A. Again, it's really to try and answer that, it's really</p> <p>6 to try and understand the question or the challenge that</p> <p>7 that's trying to solve. If there's a clear technology</p> <p>8 request that's going to help with some of this, then</p> <p>9 clearly, I'm sure most organisations would support it,</p> <p>10 but I think it should be looking at the totality of what</p> <p>11 organisations can support.</p> <p>12 Q. Can we turn to the Online Harms White Paper.</p> <p>13 The inquiry recognises that the consultation process</p> <p>14 still ongoing, but insofar as BT is able to, can you</p> <p>15 please help us with BT's reaction to the proposals</p> <p>16 there?</p> <p>17 A. So first of all, we've welcomed the opportunity of the</p> <p>18 early engagement and, as you're quite right, the</p> <p>19 consultation process continues, which closes on 1 July.</p> <p>20 In summary, without – and probably you understand</p> <p>21 it's a difficult time in terms of talking too much about</p> <p>22 it without our commitment – we welcome yet again the</p> <p>23 opportunity of the UK's response of improving online</p> <p>24 safety, and I think I want to be absolutely clear on</p> <p>25 that: BT takes online safety of its customers and UK</p> <p style="text-align: center;">Page 41</p>	<p>1 citizens, global citizens, very seriously, so we welcome</p> <p>2 the opportunity of contributing to it.</p> <p>3 I think the overriding factor is one of making sure,</p> <p>4 however, we recognise that there are clear legal</p> <p>5 frameworks that will enable us to enact perhaps further</p> <p>6 blocking or further content examination, and that will</p> <p>7 be a core theme of our response in relation to it.</p> <p>8 Q. Thank you, Mr Brown. Those are my questions for you.</p> <p>9 Before I turn you over to the chair and panel for any</p> <p>10 questions they may have, do you have anything further to</p> <p>11 add in terms of BT's response to this area of offending?</p> <p>12 A. Yes, if I may, with the panel's discretion, just say</p> <p>13 a few words.</p> <p>14 So BT recognises the serious challenge that online</p> <p>15 CSA content represents. We have a long-standing</p> <p>16 commitment to supporting the fight against this content</p> <p>17 and, as I've already explained, in 1996, we and other</p> <p>18 industry members came together to create the Internet</p> <p>19 Watch Foundation.</p> <p>20 We've worked with the IWF to develop Clean Feed</p> <p>21 which was the world's first system to prevent and block</p> <p>22 online CSA content.</p> <p>23 BT was the first ISP to launch the deterrent splash</p> <p>24 page in place of the generic error messaging so</p> <p>25 individuals could better understand the consequences and</p> <p style="text-align: center;">Page 42</p>
<p>1 actions and how to access counselling, which I've</p> <p>2 explained, through the Lucy Faithfull Foundation.</p> <p>3 We have invested millions of pounds to provide the</p> <p>4 free parental controls for fixed broadband and mobile</p> <p>5 users, and we'll shortly begin to block customers'</p> <p>6 access to pornographic websites as part of the Digital</p> <p>7 Economy Act, which goes live for ourselves on 15 July.</p> <p>8 But we also recognise that technology alone cannot</p> <p>9 ensure the protection of children online, so we've</p> <p>10 worked with others to provide the education, the advice</p> <p>11 to children, to their parents, so that they can make the</p> <p>12 right decisions when they are online.</p> <p>13 Lastly on this section, we liaise closely, and will</p> <p>14 continue to liaise closely, with law enforcement</p> <p>15 agencies, particularly around how to navigate the legal</p> <p>16 framework for communication service to ensure we</p> <p>17 minimise any difficulty in disclosing communications</p> <p>18 data on request of receipts.</p> <p>19 That legal framework does impose legal restrictions,</p> <p>20 as we've discussed, on what BT, as a communications</p> <p>21 service provider, can do. Specifically, BT is obliged</p> <p>22 to protect the confidentiality of its customers'</p> <p>23 communications. We are a network provider whose role is</p> <p>24 to deliver our customers' content from A to B. As I've</p> <p>25 explained, whilst the legal term is a mere conduit</p> <p style="text-align: center;">Page 43</p>	<p>1 I refer to it as a postman, in effect.</p> <p>2 So we are different from social media platforms,</p> <p>3 such as Facebook and YouTube, who can see their</p> <p>4 customers' content. In fact, being able to see the</p> <p>5 content is an intrinsic part of their business models.</p> <p>6 What we know about material that passes over a network</p> <p>7 and what we can do about it is, sadly, limited.</p> <p>8 We have no legal right to see the content. As to</p> <p>9 the access to the content, it would be deemed as</p> <p>10 unlawful interception.</p> <p>11 So it's a bit like a postman opening your letters,</p> <p>12 in effect.</p> <p>13 Our general approach to blocking is we're only</p> <p>14 willing to do so where there has been an independent,</p> <p>15 preferably legal, due process to determine what should</p> <p>16 be blocked and how. And there is no law forcing</p> <p>17 communication service providers to block the child</p> <p>18 sexual abuse images identified by the Internet Watch</p> <p>19 Foundation. We did it voluntarily and we continue to do</p> <p>20 it voluntarily. We were willing to do this because of</p> <p>21 the severity of the harm caused by the creation and</p> <p>22 dissemination of these images, the clear-cut nature of</p> <p>23 the content involved and because the independent body is</p> <p>24 establishing that the images should be blocked.</p> <p>25 BT remains committed to the fight to combat online</p> <p style="text-align: center;">Page 44</p>

1 **CSA content for the long-term, with resource and experts**
2 **from different parts of BT's business including**
3 **security, technology, legal and policy all working**
4 **together.**
5 **BT is exploring and now deploying the IWF hash list**
6 **into our protections and potential machine learning, but**
7 **as I've said, it's unlikely that there is a single**
8 **silver bullet that will eliminate this harm; however, BT**
9 **believes that technology can, and should, still have**
10 **a role to play.**
11 **BT continues to work with the Home Office and law**
12 **enforcement to discuss what role BT can play in its**
13 **wider partnership led by the National Crime Agency to**
14 **combat online CSA content and there is an increasing**
15 **need for the internet industry to identify those**
16 **individuals who are responsible for creating and**
17 **distributing this content. But more work is needed to**
18 **determine how and what this role is.**
19 **At the moment, BT's role is predominantly about**
20 **preventing our network from being used to distribute**
21 **online content.**
22 **BT will work, and continue to work, with the**
23 **government to take forward its Online Harms White Paper**
24 **and with the Home Office and new regulator on the**
25 **proposed code of practice.**

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1 **welcome any impetus from the inquiry to foster greater**
2 **focus and more collaboration.**
3 **Thank you.**
4 MR KRISHNAN: Thank you Mr Brown. Chair, panel, any
5 questions?
6 THE CHAIR: Ms Sharpling?
7 Questions by THE PANEL
8 MS SHARPLING: Thank you, Mr Brown. Just one question from
9 me.
10 Does BT have a view on the regulation proposed by
11 the White Paper? In particular, your provision of
12 cabling, for example, is, presumably, subject to licence
13 conditions from Ofcom? Is that right?
14 **A. Yes, it's probably a level of detail that I'm not**
15 **a party to at the moment. I think what we -- we would**
16 **welcome the opportunity, once we've formulated our**
17 **response that will go back, I'm more than happy to share**
18 **that with the inquiry --**
19 MS SHARPLING: I see, thank you.
20 THE CHAIR: Thank you. We have no further questions. Thank
21 you, Mr Brown. We'll now break and return at 11.55.
22 (11.40 am)
23 (A short break)
24 (11.55 am)
25 MR KRISHNAN: Chair, just some brief reading to do before

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1 **The inquiry will be aware that this is**
2 **an adversarial space, in that, where technology provides**
3 **a way to intervene or block or disrupt CSA content,**
4 **determined actors will find a way to circumvent it, or**
5 **an alternative method altogether. All aspects of the**
6 **supply chain, from the creation of the material to**
7 **dissemination of that material, to technical ways to**
8 **circumvent interventions, continue to evolve at speed.**
9 **Consequently --**
10 Q. I just have an eye on the time.
11 **A. Okay, I just have one last --**
12 Q. Just one more minute, if that works?
13 **A. Perfect.**
14 **Consequently, the task of combating online CSA**
15 **content can be advanced by government providing**
16 **leadership and bringing together industry and law**
17 **enforcement agencies so there's a more effective**
18 **collaboration.**
19 **This is exactly the approach that has been made the**
20 **UK leader in combating other types of cyber crime.**
21 **Finally, Philip Jansen, BT's chief executive, states**
22 **that he is firmly committed to the fight against online**
23 **crime, online child sexual exploitation content. We**
24 **will continue to work with the government and industry**
25 **partners to innovatively confront this head on, and we**

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1 I pass you over to Ms Carey for the next witness.
2 Statement of MR MICHAEL ROBERTS (read)
3 MR KRISHNAN: Chair, this is the summary of the witness
4 statement of Michael Roberts of Kik Interactive Inc,
5 dated 17 January 2019. You'll find the statement at
6 tab 10 of your bundle.
7 Mr Roberts is a Kik chief technology officer. Kik,
8 a Canadian company, was established in 2009, it has
9 about 150 to 200 employees that work in offices in
10 Canada, the US and Israel. Mr Roberts started working
11 at Kik in April 2010. He describes Kik's mission as
12 being to offer a platform that is the best place to have
13 a meaningful conversation with someone new.
14 The original idea behind Kik was to allow users to
15 be able to communicate with one another no matter what
16 type of mobile phone they were using. Among other
17 things, it allows users to message one another, engage
18 in video chatting, and to share images and videos.
19 Users can locate and join public chat rooms by
20 searching for specific hash tags.
21 According to a July 2015 press release, Kik had more
22 than 200 million users worldwide. Mr Roberts says that
23 the current number of users is confidential. Most of
24 Kik's active users are in North America, although
25 Mr Roberts says that there is a small portion of users

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<p>1 in the UK.</p> <p>2 Users must be at least 13 years of age. Kik relies</p> <p>3 on users honestly stating their age during the process</p> <p>4 of registering for an account. It is not possible for</p> <p>5 Kik actively to confirm a user's age, although a parent</p> <p>6 could use parental controls to restrict the ability of</p> <p>7 their child to download and install applications like</p> <p>8 Kik.</p> <p>9 If Kik is presented with evidence that a user is</p> <p>10 under 13, it will delete the account.</p> <p>11 Mr Roberts acknowledges that the company is not</p> <p>12 immune to the problem of online-facilitated abuse. It</p> <p>13 is possible for users to share CSA content or to engage</p> <p>14 in grooming through private or public chat rooms or to</p> <p>15 disseminate material using live video chats. Mr Roberts</p> <p>16 says that Kik works hard to detect and prevent these and</p> <p>17 other prohibited activities; for example, in 2014, Kik</p> <p>18 launched a safety feature known as New People which</p> <p>19 blurs out content from unknown users until the receiver</p> <p>20 chooses to view such content.</p> <p>21 In 2015, Kik began using Microsoft's PhotoDNA and,</p> <p>22 in the following year, began using its own software</p> <p>23 known as Safe Photo.</p> <p>24 Reports about concerning material can also be made</p> <p>25 to Kik. Kik employs moderators which may be involved in</p> <p style="text-align: center;">Page 49</p>	<p>1 the review process.</p> <p>2 If it comes across CSA material, Kik makes reports</p> <p>3 to the Canadian National Child Exploitation</p> <p>4 Co-ordination Centre. This is pursuant to mandatory</p> <p>5 reporting obligations as a matter of Canadian law.</p> <p>6 Kik also works with organisations such as IWF.</p> <p>7 In terms of engagement with law enforcement in the</p> <p>8 UK, Kik will respond to requests made under MLAT,</p> <p>9 although, in emergency cases, it will provide some basic</p> <p>10 data voluntarily.</p> <p>11 Kik recognises the delays the MLAT process may</p> <p>12 involve and may voluntarily preserve information if that</p> <p>13 is requested by law enforcement until the MLAT process</p> <p>14 is completed.</p> <p>15 Kik encounters difficulties where law enforcement</p> <p>16 are not provided with a valid Kik user name, when</p> <p>17 requesting information about a user.</p> <p>18 Kik is unable to identify any account unless the</p> <p>19 specific and valid user name associated with the account</p> <p>20 is identified and is provided to Kik.</p> <p>21 Information such as legal names, and so on, are not</p> <p>22 enough for Kik to be able to identify a user in his or</p> <p>23 her data.</p> <p>24 In terms of any suggestions that Kik has for law</p> <p>25 enforcement, one example is that Kik would welcome being</p> <p style="text-align: center;">Page 50</p>
<p>1 provided with further hash values to allow it to</p> <p>2 identify more CSA material on its platform.</p> <p>3 That is my summary of Mr Roberts' statement.</p> <p>4 THE CHAIR: Thank you.</p> <p>5 Ms Carey?</p> <p>6 MS CAREY: Chair, can we hear now, please, from</p> <p>7 Ms Hargreaves and I will ask that she is sworn.</p> <p>8 MS SUSAN ELIZABETH HARGREAVES (sworn)</p> <p>9 Examination by MS CAREY</p> <p>10 MS CAREY: Ms Hargreaves, your full name, please?</p> <p>11 A. Susan Elizabeth Hargreaves.</p> <p>12 Q. I think you are the chief executive of the Internet</p> <p>13 Watch Foundation known as the IWF?</p> <p>14 A. Yes, I am.</p> <p>15 Q. Did you join the organisation in 2011?</p> <p>16 A. I did.</p> <p>17 Q. Prior to joining the IWF, can you give us, please,</p> <p>18 a summary of your working life, particularly any</p> <p>19 experience you've had in relation to child online</p> <p>20 safety?</p> <p>21 A. Prior to working at the IWF, I'd worked in the charity</p> <p>22 sector for about 25 years in a variety of roles. Many</p> <p>23 of the organisations I worked with had a focus on young</p> <p>24 people, but I had never actually worked in the online</p> <p>25 sector prior to joining the IWF.</p> <p style="text-align: center;">Page 51</p>	<p>1 Q. Do you, I think, sit on a number of different groups and</p> <p>2 organisations? Would you be able to give us a summary</p> <p>3 of the organisations you're involved with?</p> <p>4 A. Yes. I'm a director of the UK Safer Internet Centre,</p> <p>5 I sit on the NCA CEOP strategic governance group. I'm</p> <p>6 a member of the International Advisory Board of</p> <p>7 WePROTECT Global Alliance, and I'm also on a number of</p> <p>8 other groups as well.</p> <p>9 Q. Can you help us with WePROTECT. In a nutshell, what are</p> <p>10 the aims of that alliance?</p> <p>11 A. WePROTECT was established under Prime Minister</p> <p>12 David Cameron by Baroness Shields to form -- to merge</p> <p>13 the Global Alliance Against Child Sexual Exploitation</p> <p>14 and with a new organisation to fight online child sexual</p> <p>15 exploitation across the globe, recognising that this was</p> <p>16 an international issue, and it brings together a range</p> <p>17 of stakeholders, governments, law enforcement, industry</p> <p>18 partners, civil society to help work together to fight</p> <p>19 the problem.</p> <p>20 One of the outputs has been the Model National</p> <p>21 Response, which helps individual countries put in place</p> <p>22 the infrastructure to fight the problem.</p> <p>23 Q. The background to the IWF, please. I am aware that the</p> <p>24 IWF was set up in 1996. Can you help us, please, with</p> <p>25 why the IWF was established?</p> <p style="text-align: center;">Page 52</p>

1 **A. Yes. The IWF was established in 1996. So that's**
 2 **23 years ago, when the internet was in its early days**
 3 **and when it became apparent that internet service**
 4 **providers were actually enabling the facilitation of**
 5 **online child sexual abuse and that their networks were**
 6 **being abused for people to find this.**
 7 **The response to the government request and police**
 8 **requests to kind of play an active part was to actually**
 9 **set us up in response to that, to say we will take**
 10 **responsibility for keeping our own house in order, and**
 11 **we were established by eight original members, of whom**
 12 **there is only still one in operation, and that's BT.**
 13 **Q. Right.**
 14 **Can you help us with who the other original members**
 15 **were?**
 16 **A. I'm sorry, I can't even remember. They don't exist**
 17 **anymore. So we were set up by an internet entrepreneur**
 18 **who had an email account called dial.pipex and all sorts**
 19 **of things that just don't exist anymore.**
 20 **Q. It perhaps gives an indication of how things have moved**
 21 **on in the last two decades.**
 22 **A. Well, it's also important to note that when we were**
 23 **established, there was no Google, there was no Facebook,**
 24 **there was no Twitter. The entire internet landscape has**
 25 **transformed beyond belief.**

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1 **companies this week have testified, that actually we**
 2 **will -- we are recognised as a relevant authority so**
 3 **that we can actually assess and tell them about child**
 4 **sexual abuse online and then they can take action noting**
 5 **that our judgment is accurate and they can act upon it.**
 6 **Q. Three years later, in 2007, was the IWF's remit expanded**
 7 **to cover the reporting of extreme pornographic material?**
 8 **A. Yes, that's correct.**
 9 **Q. And was it further expanded in 2009 to cover what is**
 10 **called non-photographic depictions of children, NPI for**
 11 **short? What are NPI?**
 12 **A. So non-photographic images of children are child sexual**
 13 **abuse images that are not real photographs or real**
 14 **videos. So they may be computer-generated. So they may**
 15 **look extremely realistic, but are not actually a real**
 16 **child, or they may be cartoons and another example of**
 17 **that might be Japanese Manga, which is the sort of**
 18 **extreme cartoons that emanate from the sort of graphic**
 19 **novel-type things that you would be familiar with.**
 20 **Q. I want to, as we go through your evidence, try and**
 21 **concentrate on actual images of child abuse, but just to**
 22 **say the IWF's remit does take in NPI imagery and we**
 23 **might need to look at some of the statistics to break**
 24 **those down to take out NPI where possible.**
 25 **In 2014, is it right that the -- there was**

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1 **Q. As an indication of that, is it right that in the first**
 2 **year of its operation, the IWF processed 1,291 reports?**
 3 **And we'll come on to deal with what they actually mean**
 4 **but just as an overview. Currently, how many reports**
 5 **does it process in 2019?**
 6 **A. Well, in -- well, in 2019, obviously we're still -- we**
 7 **haven't those figures, but in 2018 --**
 8 **Q. Thank you.**
 9 **A. -- we processed 229,328 reports.**
 10 **Q. It's gone from just under 1,300 reports --**
 11 **A. Correct.**
 12 **Q. -- to the figure that you've just outlined.**
 13 **Over those 23 years, there have been a number of**
 14 **changes. Can I just deal with some of the perhaps more**
 15 **key changes.**
 16 **Is this right, in 2004, there was a memorandum of**
 17 **understanding between the NPCC and the Crown Prosecution**
 18 **Service that allowed the IWF to be treated as what is**
 19 **called a relevant authority. Can you help us, please,**
 20 **with what is the significance of being treated as**
 21 **a relevant authority?**
 22 **A. So the significance of the MoU is that it protects and**
 23 **covers us to enable us to do our work without fear of**
 24 **prosecution.**
 25 **But it also means that the IWF is, as the internet**

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1 **an amendment made to your memorandum of understanding**
 2 **which enabled the IWF to proactively search for child**
 3 **abuse images. Now, how did that come about?**
 4 **A. The -- up until 2014, the IWF's mandate was to work from**
 5 **public reports. So we would receive public reports,**
 6 **which I'm sure you will cover, but, you know, they're**
 7 **not particularly accurate. But there was a feeling that**
 8 **the IWF knew where this content was, but that we**
 9 **obviously didn't have the powers or the -- the**
 10 **permissions; not powers -- permissions to actually go**
 11 **out and actively search for it.**
 12 **So when the Prime Minister at the time,**
 13 **David Cameron, became involved in the issue, we were**
 14 **asked to change the way we worked to actually go out and**
 15 **actively search for it, and that's had a huge impact on**
 16 **the amount of content we've been able to return.**
 17 **As a result of that, we asked for CPS and NPCC to**
 18 **relook and update our MoU to ensure we were covered to**
 19 **do this, and which happened.**
 20 **Q. We will look at how reports are made, both in terms from**
 21 **the public and, indeed, proactive searches, in a moment,**
 22 **but to just deal with the membership of the IWF, can we**
 23 **ask, please, that called up on screen is IWF000018.**
 24 **Chair, it's behind tab 1 in your bundle.**
 25 **This, I hope, is going to be a list of members as**

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<p>1 at March of 2018.</p> <p>2 A. Yes, that's correct.</p> <p>3 Q. To help give everyone an understanding of those people,</p> <p>4 some of whom we've heard from during the course of the</p> <p>5 investigation this week, one can see there BT, as you</p> <p>6 mentioned, there's Facebook, Google, Microsoft, but</p> <p>7 other companies such as Yahoo, TalkTalk, DropBox,</p> <p>8 PayPal, I think there are some universities that are</p> <p>9 members.</p> <p>10 Can you just help us, perhaps, as you look down</p> <p>11 towards the bottom of the page, perhaps some of the</p> <p>12 names we'll be less familiar with, what are the kind of</p> <p>13 members that are made up of the names that appear at the</p> <p>14 bottom of the page?</p> <p>15 A. So we currently have 148 members and, in broad terms,</p> <p>16 the way the page is shown, the more they pay is at the</p> <p>17 top --</p> <p>18 Q. Right. We'll look at funding in a moment.</p> <p>19 A. -- and the less they pay is at the bottom. So we have</p> <p>20 a few categories of members. They go from the internet</p> <p>21 service providers -- so that would be TalkTalk, BT,</p> <p>22 Virgin and Sky, the search that we've heard from the US</p> <p>23 companies, social media, but we also have a number of --</p> <p>24 a lot of members who are filterers, so these are -- and</p> <p>25 you will probably never have heard of them, so these are</p> <p style="text-align: center;">Page 57</p>	<p>1 companies that take the IWF list and then merge it into</p> <p>2 their filtering solutions which then provide to a range</p> <p>3 of organisations. It may be a school where they take</p> <p>4 a number of lists, one of which is the IWF's blocking</p> <p>5 list.</p> <p>6 Q. Right.</p> <p>7 You touched on funding in your answer,</p> <p>8 Ms Hargreaves, but is this right, that the work of the</p> <p>9 IWF is 90 per cent funded by its 148 members?</p> <p>10 A. That is correct.</p> <p>11 Q. If we look at the fee structure, can I ask, please, that</p> <p>12 called up on screen is INQ004283_046 and 047.</p> <p>13 Chair, that's behind tab 4 in your bundle, at the</p> <p>14 very back of that page, but it might be easier just to</p> <p>15 look at it on screen.</p> <p>16 In broad terms, is there a fee range that is paid by</p> <p>17 the members into the IWF?</p> <p>18 A. Yes, our fees start at just £1,000 to enable smaller</p> <p>19 companies to come in, up to the top level, which is --</p> <p>20 actually, this year is £81,000.</p> <p>21 Q. This was probably taken from last year's --</p> <p>22 A. Yes.</p> <p>23 Q. So the bottom range is, forgive me, 1,070, I think it is</p> <p>24 now?</p> <p>25 A. Yes.</p> <p style="text-align: center;">Page 58</p>
<p>1 Q. To the top figure is 81 --</p> <p>2 A. Thousand.</p> <p>3 Q. -- 81,000, thank you very much.</p> <p>4 What determines the amount that a member pays?</p> <p>5 A. There are a number of metrics that we take into account.</p> <p>6 These have been developed in conjunction with our</p> <p>7 members.</p> <p>8 Size of organisation, scale of operation, what they</p> <p>9 actually do, numbers of customers, different metrics for</p> <p>10 different types of companies. And obviously, one of the</p> <p>11 things we want to do is, once they've come into</p> <p>12 membership, they are eligible to take all our services,</p> <p>13 regardless of what they pay. So we -- we regularly</p> <p>14 revisit this with our members in terms of membership</p> <p>15 fees.</p> <p>16 Q. Is that an annual revisiting of the fee?</p> <p>17 A. No, it's probably biannual.</p> <p>18 Q. I think you do say in your statement, though, that</p> <p>19 membership fees are 2 per cent index linked?</p> <p>20 A. Yes, they are.</p> <p>21 Q. So there is always a 2 per cent rise, but clearly,</p> <p>22 between 2018 and 2019, on what you said, there's been</p> <p>23 more of a rise than that?</p> <p>24 A. Right, we do an inflationary increase, yes.</p> <p>25 Q. The fees that the members pay, how is that spent? Is it</p> <p style="text-align: center;">Page 59</p>	<p>1 on salaries, is it on technical innovation? Can you</p> <p>2 help with just an idea of where this money goes and what</p> <p>3 it's spent on?</p> <p>4 A. Okay, so we don't break down exactly what the fees go</p> <p>5 on, because, obviously, it's 90 per cent of our</p> <p>6 turnover, so it contributes to everything.</p> <p>7 The money from the EU, which I know you're going to</p> <p>8 cover, is quite specifically ring-fenced for</p> <p>9 a particular area of work.</p> <p>10 So our turnover is just around under 4 million, so</p> <p>11 the fees go towards the running costs. The biggest cost</p> <p>12 for us is salaries, and then, obviously, everything</p> <p>13 else: technical, running costs, communications,</p> <p>14 membership costs, et cetera.</p> <p>15 Q. How many employees are there of the IWF?</p> <p>16 A. There are 42 employees at the moment, about 40 full-time</p> <p>17 equivalents.</p> <p>18 Q. Out of those employees, is this right, there are</p> <p>19 13 analysts who have the responsibility of effectively</p> <p>20 dealing with the reports, grading the imagery and then,</p> <p>21 thereafter, trying to ensure that the imagery is taken</p> <p>22 down?</p> <p>23 A. That is correct.</p> <p>24 Q. Some might think that for some of the companies,</p> <p>25 particularly in the top of that table there, that 81,000</p> <p style="text-align: center;">Page 60</p>

<p>1 is actually a relatively small or modest figure, in 2 terms of the money they make. Why is it that there 3 isn't a bigger ask particularly of the top two lines, 4 potentially, for more funding?</p> <p>5 A. We had a very big increase in our membership fees 6 following the intervention of the Prime Minister in 7 2014, which resulted in pretty much a doubling of fees 8 across the board. At the time, that felt appropriate 9 for what we were trying to do. There is no particular 10 reason why we might not ask them for more, it just 11 happens to be where the fee level is at the moment. 12 Undoubtedly, if we had more money, we could do more. 13 But, also, I think it's important to recognise that 14 particularly the big members don't just give us fees, 15 they give us other things in kind as well.</p> <p>16 Q. Is it right to say that if there were more money, there 17 is the possibility for more analysts?</p> <p>18 A. Yes, that's correct.</p> <p>19 Q. There is a suggestion in some of the evidence that the 20 inquiry has gathered that, in fact, the IWF effectively 21 minimises the call for additional funding, so as to not 22 upset the members who fund the work. What do you say to 23 that suggestion, Ms Hargreaves?</p> <p>24 A. The relationship with the members is obviously key to 25 the way that the organisation functions. And we -- we</p> <p style="text-align: center;">Page 61</p>	<p>1 don't shy away from having difficult conversations with 2 our members. It was quite a laboured process to go 3 through the membership change in 2014. But, if we 4 needed to, we would definitely revisit that.</p> <p>5 So I would say that that's not a fair accusation 6 against the IWF, we are happy to have that conversation, 7 but I think it needs to be done against the framework of 8 we need to do certain things and we need to have certain 9 resources to enable us to do that.</p> <p>10 Q. Is there any proposal, presently, to try and increase 11 the number of analysts that are working within the IWF?</p> <p>12 A. Not at this moment.</p> <p>13 That isn't to say that they won't change next year, 14 because our focus at the moment is, we've just brought 15 all our technology in-house, so we've built our 16 technical team and it's about embedding the current 17 technology in before we kind of take the next step up.</p> <p>18 Q. 10 per cent of the IWF's funding -- is this right? -- 19 comes from the EU.</p> <p>20 A. Correct.</p> <p>21 Q. And it amounts to about an average of £400,000 per year; 22 is that right?</p> <p>23 A. Correct.</p> <p>24 Q. You said that that money is in fact ring-fenced. For 25 what?</p> <p style="text-align: center;">Page 62</p>
<p>1 A. That goes towards 50 per cent of the analysts' salary.</p> <p>2 Q. The IWF is not a -- does not generate profit; is that 3 right?</p> <p>4 A. That's correct.</p> <p>5 Q. And does that include through making other members and 6 organisations selling your services, that doesn't bring 7 in any profit as far as the IWF is concerned?</p> <p>8 A. No, we don't sell our services, per se. If you become 9 a member of the IWF, you're entitled to take our 10 services. So you do have to be a member of the IWF to 11 take our services, so you could argue, what's the 12 distinction between paying a membership fee and paying 13 for services? But we don't currently sell our services 14 outside of membership and, of course, as a registered 15 charity and not-for-profit organisation, the money we 16 have goes back into running the organisation.</p> <p>17 Q. In the event that the UK Government does in fact leave 18 Europe, do you know what is the plan in relation to the 19 400,000 that currently comes from the EU?</p> <p>20 A. We have a -- our current tranche of funding -- I should 21 say we received the money from the EU as a third of the 22 UK Safer Internet Centre, so the Safer Internet Centre's 23 got three elements: a helpline run by South West Grid 24 for Learning; awareness raising run by our partners, 25 Childnet International; and the hotline element, which</p> <p style="text-align: center;">Page 63</p>	<p>1 is run by the IWF.</p> <p>2 Our funding has been confirmed until December 2020, 3 and we have commitment from the UK Government that, 4 should we crash out, they would pick up that if we -- if 5 it happened before December 2020. But at this moment in 6 time, there is no commitment from government to pick up 7 that balance.</p> <p>8 Q. Are the IWF in talks with the government to see what can 9 be done, or may be done --</p> <p>10 A. Yes --</p> <p>11 Q. -- pending on the outcome?</p> <p>12 A. -- we're in constant talks with the Home Office and DCMS 13 about this and we make regular representation, as do the 14 UK Safer Internet Centre, to the government on this 15 issue.</p> <p>16 Q. One of the things I would like your evidence on, 17 Ms Hargreaves, is the independence of the IWF and 18 particularly how that may affect the amount of funds 19 that you're able to receive.</p> <p>20 It may be sensible to start it in this way: I think 21 you say in your statement, at paragraph 3.8, that the 22 IWF was established on the principle that, as 23 an industry, self-regulatory body, it would be 24 independent of law enforcement and UK Government, but 25 work closely with both.</p> <p style="text-align: center;">Page 64</p>

<p>1 Why was that such a founding principle?</p> <p>2 A. The initial -- the way the IWF was set up was that, when</p> <p>3 it came to child sexual abuse, industry could very</p> <p>4 quickly get on the same page together, because it is</p> <p>5 clearly defined in law, and there was a concern that if</p> <p>6 the IWF had a sort of looser remit, that we could</p> <p>7 actually be, or industry could actually be, asked to go</p> <p>8 into areas which they were uncomfortable with where</p> <p>9 there perhaps wasn't as clear-cut definitions in</p> <p>10 relation to child sexual abuse.</p> <p>11 And interestingly, although -- it was mentioned at</p> <p>12 the beginning -- we have now dropped adult content, we</p> <p>13 no longer deal with obscene adult content -- and the</p> <p>14 reason for this is our remit we describe as "inch-wide,</p> <p>15 mile-deep", so that there was a very clear decision at</p> <p>16 the beginning, which we've always stuck to, which is</p> <p>17 that our mission is entirely around the elimination of</p> <p>18 online child sexual abuse, our focus is totally clear,</p> <p>19 and that we would not be in a position to be influenced</p> <p>20 by law enforcement or government to move in a particular</p> <p>21 direction.</p> <p>22 In reality, that arrangement provides us with a huge</p> <p>23 amount of support, so it's a genuine partnership with</p> <p>24 government and law enforcement, who are able to help us</p> <p>25 in -- and our relationship with industry, and we provide</p> <p style="text-align: center;">Page 65</p>	<p>1 an excellent sort of -- we're a conduit between law</p> <p>2 enforcement and industry.</p> <p>3 As one of the witnesses said this morning, you know,</p> <p>4 IWF is able to independently verify lists, et cetera,</p> <p>5 which provide a really important role in that kind of</p> <p>6 trusted triangle.</p> <p>7 Q. Does the independence also assist, as far as industry is</p> <p>8 concerned, in ensuring that effectively IWF is not</p> <p>9 an agent of the state?</p> <p>10 A. Absolutely, and that's particularly important with US</p> <p>11 companies under the Fourth Amendment.</p> <p>12 Q. If the UK Government were to make up the 400,000 that</p> <p>13 currently comes from the EU, is there any concern then</p> <p>14 that, inputting that amount of money, that would somehow</p> <p>15 compromise the IWF's independence?</p> <p>16 A. No, I think, you know, over the last year, in the</p> <p>17 lead-up to the Online Harms White Paper and looking at</p> <p>18 the potential new regulatory environment framework,</p> <p>19 I think, you know, whilst we definitely viewed ourselves</p> <p>20 as a self-regulatory body, I think the sort of direction</p> <p>21 we're going in is very much more about partnership and</p> <p>22 working together, and, frankly, where the money comes</p> <p>23 from I don't think is the biggest issue, I think being</p> <p>24 able to do the work is the biggest issue.</p> <p>25 So we would very happily accept a contribution from</p> <p style="text-align: center;">Page 66</p>
<p>1 government towards that.</p> <p>2 Q. In terms of the structure of the IWF, is it right that</p> <p>3 there is a board of 11 trustees -- I'm looking at your</p> <p>4 paragraph 2.1, Ms Hargreaves?</p> <p>5 A. Yes.</p> <p>6 Q. There's a chair, who is independent --</p> <p>7 A. Yes.</p> <p>8 Q. -- six independent trustees, three industry trustees and</p> <p>9 a co-opted trustee.</p> <p>10 Can I ask for your help in what that actually means</p> <p>11 in practice, who makes up the board?</p> <p>12 A. Okay, so we are a charity, so we exist for public</p> <p>13 benefit. We have, as you say, an independent chair,</p> <p>14 that's a paid position, and he works one day a week,</p> <p>15 broadly. He, actually, is a human rights expert and</p> <p>16 an expert in internet governance.</p> <p>17 We then go through a public recruitment process for</p> <p>18 our independent trustees. We're currently recruiting</p> <p>19 for three trustees. Now, trustees can only sit for two</p> <p>20 terms of three years each time. But we also have three</p> <p>21 industry trustees who are nominated by funding counsel,</p> <p>22 which is our industry body, and we do have a co-opted</p> <p>23 trustee. She is actually a human rights expert and she</p> <p>24 was co-opted around the time that Lord Macdonald did his</p> <p>25 human rights audit, because we felt that was a gap in</p> <p style="text-align: center;">Page 67</p>	<p>1 skills within the board at the time.</p> <p>2 Q. I think, is this also right, that the IWF members can</p> <p>3 nominate representatives to sit on the IWF Funding</p> <p>4 Council?</p> <p>5 A. Yes, so once -- when a member becomes -- sorry, when</p> <p>6 a company joins the IWF, they're eligible to join the</p> <p>7 Funding Council. The Funding Council is our kind of</p> <p>8 industry body, which sort of is there to advise us on</p> <p>9 policy and budget and also ensure that we stay within</p> <p>10 our remit.</p> <p>11 In terms -- and so they apply to become a member of</p> <p>12 Funding Council. Funding Council kind of runs as</p> <p>13 an autonomous organisation in its own right and it is</p> <p>14 Funding Council who nominate the three industry</p> <p>15 trustees.</p> <p>16 Q. Is there ever any concern that if there are members</p> <p>17 sitting on the Funding Council, there will be</p> <p>18 an inevitable sense by them that they don't want there</p> <p>19 to be an increase in the membership fee?</p> <p>20 A. In reality, you know, if you are funded by the very</p> <p>21 organisations that you are holding to account, there is</p> <p>22 always the potential for, you know, conflict and</p> <p>23 tension. And -- so we -- you know, and we recognise</p> <p>24 that, but also, because we don't actually have any</p> <p>25 powers, we -- all industry works with us on a voluntary</p> <p style="text-align: center;">Page 68</p>

<p>1 basis. So that relationship between us and industry is 2 absolutely critical for us to be able to achieve our 3 mission. And what is also clear and I in no way 4 belittle or -- in terms of the amount, the amount of 5 content on the networks and the platforms that we've 6 heard about this week, but when it comes to actual child 7 sexual abuse images as defined under UK law by us, 8 industry will generally step up and do the right thing. 9 They don't want that on their networks.</p> <p>10 So what we find is that, whilst there is the 11 potential for conflict, and fees are a great example, 12 the reality is that, once they're in the room, they do 13 tend to put the greater good at the forefront and 14 certainly, for us as an organisation, we are absolutely 15 committed to putting our mission first and foremost 16 in -- you know, when it's at the table, my job is not to 17 protect the reputation of an individual company, my job 18 is to eliminate online child sexual abuse, and we're 19 very, very clear about that.</p> <p>20 So in response to, could there be those issues, yes, 21 yes, there could, but at the same time, at the moment, 22 we're currently looking at a governance review, we're 23 currently looking at transparency and accountability 24 with our members to ensure that we are fit for purpose 25 in the new regulatory framework.</p> <p style="text-align: center;">Page 69</p>	<p>1 Q. You mentioned in that answer that the responsibility of 2 you, and indeed those that work at the IWF, is to 3 eliminate online child sexual abuse.</p> <p>4 The job of searching the internet and assessing the 5 reports that come into the IWF, does that fall on the 6 hotline team?</p> <p>7 A. Yes, it does, yes.</p> <p>8 Q. Is that the 13 analysts of which we spoke earlier?</p> <p>9 A. Well, there are actually more people who see content, so 10 I would say about -- about half the staff at IWF, 11 slightly more, have -- are able to see content. So 12 that's the hotline team; the technical team, of whom we 13 have six people; we also have three quality assurance 14 officers; and then the senior members of staff as well. 15 So anybody who legally has a reason to see the content. 16 So it is for that group of people that we have 17 a specific welfare package.</p> <p>18 Q. Right. May we just touch on that?</p> <p>19 A. Okay.</p> <p>20 Q. We're going to look at, actually, what the hotline team 21 does and what is the IWF's attitude towards protecting 22 those in -- under its care that have to look at this 23 imagery, day in day out?</p> <p>24 A. This is paramount to the successful running of the IWF. 25 You know, these are real people looking at these images</p> <p style="text-align: center;">Page 70</p>
<p>1 day in, day out. So we go through a very detailed 2 recruitment process, which involves not just your 3 standard application form and standard interview, but 4 a psychological profiling interview. Once analysts 5 accept the job, it's subject not just to references -- 6 and, indeed, yes, we have advanced DBS checking -- but 7 also, we ask them to come in on a Friday and view 8 images, which we take them up very gradually. They then 9 have the weekend to think about it and, at that point, 10 some people do pull out and they are able to access our 11 counsellors.</p> <p>12 Once they start working with us, it's a six-month 13 training process where we gradually introduce them to 14 the images. They have mandatory monthly counselling, we 15 do quarterly group work together and everyone who sees 16 images has an annual online assessment with a clinical 17 psychologist, and then we also do a number of whole 18 company away days, because one of the issues for us is 19 that half our staff are kind of behind a sealed door, 20 for those staff who do work in the images section and 21 those that don't, so we have a kind of environment at 22 work where we have a break-out room with ping pong and 23 we have Sky TV, and things like that, to try and 24 encourage people to mix, and they have enforced breaks 25 and lots of rules about how they work.</p> <p style="text-align: center;">Page 71</p>	<p>1 Q. Can we turn then, please, to the operation or the 2 hotline operation?</p> <p>3 A. Sure.</p> <p>4 Q. You've told us in the initial evidence you gave about 5 the fact that there are reports coming into the hotline 6 and there is also the work of the IWF in proactive 7 detection. I would like to try and break those down. 8 Can we start with, in fact, the proactive detection --</p> <p>9 A. Okay.</p> <p>10 Q. -- please.</p> <p>11 Clearly, from 2014 onwards, the IWF were empowered 12 to do that.</p> <p>13 Can you just explain how that works in practice? 14 I'm looking at, if it helps, Ms Hargreaves, at your 15 paragraphs 5.6 and 5.7 in your statement.</p> <p>16 A. Okay.</p> <p>17 Okay, so -- so the first thing about proactive 18 searching is that we have a huge amount of intelligence 19 within the hotline just gained over years of looking for 20 child sexual abuse. So that's the first thing we do, is 21 we harness the intelligence of the analysts, the hotline 22 team and our technology team. So they kind of know 23 where to start looking for it.</p> <p>24 The second thing is we also have a range of 25 technology that helps us in our proactive searching.</p> <p style="text-align: center;">Page 72</p>

<p>1 And that includes the IWF crawlers, as you will have 2 heard this week, we are also working on deploying 3 a number of classifiers, that includes using key word 4 terms, that includes a whole range of methodologies that 5 we will use to go and actively search for that content. 6 It will also include the intelligence that's 7 provided by the public reports where those are accurate 8 as well, because, whilst the public might give us 9 some -- a lead to a particular site, or a particular 10 place where we didn't know there was content, so we will 11 use that intelligence. 12 And I think it's important to recognise that the -- 13 the bulk of the content we see is not on your -- on the 14 names that we've been hearing this week; okay? So, you 15 know, it's on image hosting boards, it's in cyber 16 lockers, it's on dedicated child sexual abuse 17 websites -- and you want me to talk about that; yes? 18 Q. No, it's just I want to try and make clear, when you say 19 that it's on "image hosting boards", what do you mean by 20 that? 21 A. So an image hosting board will be -- there are a lot of 22 these around the world, so places where people will host 23 lots of images and they will host hundreds and thousands 24 of images. The majority of them won't be illegal, but 25 people will put the images on those hosting boards, and</p> <p style="text-align: center;">Page 73</p>	<p>1 so, when we go into a website, when we try and -- when 2 we locate where it's hosted, the actual image might be 3 pulled from an image hosting board. So big names of 4 image hosting board organisations like Imager, companies 5 like that. So in themselves, they're not child sexual 6 abuse sites, they're just hosting thousands and 7 thousands of images. 8 Q. You also referred to a "cyber locker"? 9 A. Yes. 10 Q. Can you help us with what that is, please? 11 A. So a cyber locker is just a kind of online storage 12 place, so somewhere where you'll find content that 13 people are sort of storing it in their file. 14 So we heard about iCloud from Microsoft, so that 15 would be a good example of a cyber locker. 16 Q. In the proactive searching, I think you make this point 17 in your statement, that "this is not a fishing 18 expedition". Why did you feel it necessary to make that 19 clear at the outset of your evidence in relation to 20 proactive searching? 21 A. It's absolutely essential to us that not just from the 22 point of view of the best use of our resources, because 23 the internet is huge, but, actually, that we go where we 24 think the content is most likely to be, to have the 25 maximum return to remove the maximum amount of content.</p> <p style="text-align: center;">Page 74</p>
<p>1 We also are very respectful of people's privacy and, 2 actually, you know, in order to speak to our public 3 legitimacy, we want to ensure that we're acting 4 responsibly. So fishing, for us, is just not an option. 5 Q. The web crawling technology that the IWF has developed, 6 how does that work? 7 A. Okay, so you'll have heard discussion about Arachnid, 8 and later I will tell you the difference between 9 Arachnid. So the way it works, Arachnid is a great name 10 for it, actually, because it's a spider. So basically, 11 you feed it -- you start off with -- we start off with 12 a web page, a URL of child sexual abuse, and you put it 13 into your crawler, which is like a spider, and then it 14 will take that web page and it will start crawling and 15 looking for similar things. So it will go into that web 16 page and it will go to the next level down, next level 17 down, it will see a link and it will keep going and keep 18 going. And every time it finds something that might be 19 suspected child sexual abuse, it will return that back 20 to us. We can then match that against our hash list, 21 which you've heard about as well, so that, if we see 22 immediate matches, we can take action accordingly. 23 In terms of the IWF web crawler, because we don't do 24 fishing, our crawlers have been developed to be highly 25 targeted. So we will point them in a specific place</p> <p style="text-align: center;">Page 75</p>	<p>1 where we believe child sexual abuse is and we will use 2 that and follow those leads for maximum return and that 3 will also include the dark web. 4 Q. The benefit of the crawlers, as I understand it, to make 5 sure this is right, is that it allows a large amount of 6 data to be identified far quicker than any human analyst 7 could do? 8 A. Absolutely so, yes. 9 Q. But the returns from the crawler do they nonetheless 10 need to be viewed by the IWF? 11 A. Absolutely. So IWF's work, it's essential that all our 12 work is quality assured. At the moment, there is no 13 technology in the world that can absolutely do the 14 quality assurance of a human being, and we require 15 everything that we take action on to be viewed, have 16 an eyes-on approach. Now, I know that we could take, if 17 we had 100 per cent match against our hash list, then 18 yes, you could take action on that, because one of the 19 things people haven't mentioned about PhotoDNA is you 20 can set the tolerances. So you can say, "I will only 21 take action if it's 700 per cent match", or you can say, 22 "I'll take action if it's a 30 per cent match." So 23 obviously if it's a 100 per cent match that's what we're 24 working on, 100 per cent matches. 25 But because this technology is still quite new, and</p> <p style="text-align: center;">Page 76</p>

<p>1 because we are still developing the number of crawlers, 2 we have a commitment to have eyes on for the foreseeable 3 future; but it will expand in time. 4 Q. And when was this technology developed? 5 A. The first crawler we started was about a year ago. 6 Q. We'll look at some on the returns and the impact that's 7 had on the work of the IWF in a moment, but you 8 mentioned that the IWF's web crawling technology is 9 different in fact from Project Arachnid. 10 A. Yes. 11 Q. Can you help the chair and panel with in what way it's 12 different? 13 A. So the first thing to say is that they are entirely 14 complementary, and we all have a commitment to be 15 working together, and ultimately we need to be sharing 16 hash lists and sharing our methods of working to fight 17 the problem collectively. And that's particularly us, 18 NCMEC in the States and the Canadians who run Arachnid, 19 it's their product. 20 Arachnid, they do a kind of much broader searching, 21 whereas we, as we say, ours are very highly targeted. 22 The other thing which you can't compare between 23 Arachnid and the IWF crawlers is that we count 24 differently, and we count differently on a number of 25 reasons, one is that legislation is different in Canada</p> <p style="text-align: center;">Page 77</p>	<p>1 to the UK, so what might be illegal in the UK is not 2 necessarily illegal in Canada. They have a bit more 3 flexibility about their thresholds than we have. The 4 second is they count at image level, whereas we count at 5 URL level and take action at -- 6 Q. At web page level. 7 A. -- at web page level, yes, which means that the numbers 8 are smaller but the images are still within the 9 millions. 10 Q. A different counting system. We have looked at some of 11 the Project Arachnid figures, before we look at the 12 IWF figures. 13 A. Yes. 14 Q. In addition then to the proactive detective techniques 15 there is the way that the hotline operates, and I'd like 16 your help just before lunch, please, with that. 17 How does someone report a suspected child sexual 18 abuse image to the IWF? 19 A. So we want people to report to us, the hotline provides 20 a safe and anonymous place for people to report to the 21 IWF. If you want to report to the IWF, if you just went 22 into a browser -- and we saw this on Google's browser 23 yesterday -- that if you just said, "How can I report 24 this?" we would pop up. So they don't necessarily need 25 to know it's the IWF.</p> <p style="text-align: center;">Page 78</p>
<p>1 Q. No. 2 A. Then you go into our website, and there's a very easy 3 four or five-stage process, depending on whether you 4 want feedback or not. You're asked to say whether you 5 think you're reporting child sexual abuse content or 6 non-photographic images of child sexual abuse. You are 7 then asked to -- 8 Q. What if the user doesn't know the difference or doesn't 9 understand the difference between an actual image and 10 a non-photographic image? is that an impediment to 11 reporting? 12 A. No, and in fact, when we come to the accuracy of the 13 public, they will report regardless. 14 Q. Right. 15 A. So just tick a box, to get it sent to us. 16 We then ask them if they wish to report anonymously, 17 and the majority of them do report anonymously. If they 18 wish to have feedback on their report they have to give 19 us their email address and some details so we can reply 20 to them. 21 Q. Can you give us an indication of how many report 22 anonymously, the percentages of those that report 23 anonymously and those that leave their names for 24 feedback? 25 A. It's about 80 per cent report anonymously, and that's</p> <p style="text-align: center;">Page 79</p>	<p>1 gone up, actually, over the years that I've been at the 2 IWF. 3 Then they have to send us the URL, so they have to 4 send us the web page link. So it's not enough to say, 5 "I saw something really bad on the internet", because 6 obviously we can't find it, so we actually need that web 7 page so that we can then open the web page and have 8 a look and assess if it's illegal content. 9 Q. Does the IWF website explain, if someone is not 10 particularly technical, how to actually attach the web 11 page that they want to report? 12 A. Yes, it's a really easy process. 13 Q. And once the report then comes to the IWF, would you be 14 able to talk us through what happens then? 15 A. Yes. So once -- every report that comes in is assessed 16 by an analyst, so they're cued up, and we deal with 17 public reports first. Public reports don't just include 18 the members of the public, they also include other 19 public external sources. 20 Q. Such as? 21 A. The police, other hotlines, industry. 22 Q. Right. So the term "public" encompasses -- 23 A. So we use that to encompass all -- 24 Q. -- generically. All right. 25 A. -- yes.</p> <p style="text-align: center;">Page 80</p>

<p>1 So they come into the hotline, they are cued up for 2 individual analysts who prioritise the public reports. 3 So they also get -- clean the public reports, clear them 4 as a priority each day. What happens is that the 5 analysts have to open up the public reports, and then 6 they assess whether it is, first of all, child sexual 7 abuse content. Only about 28 per cent of the reports 8 are accurate. 9 Q. We'll come on to the figures in a moment. 10 A. Okay. 11 Once they -- so on the basis that they've opened it 12 up, it is child sexual abuse content, the analysts then 13 do a number of things. They grade the image -- 14 Q. Can I pause you there, because in fact we haven't heard 15 in evidence the three levels of grading -- 16 A. Oh, okay. 17 Q. -- in this phase of the investigation. Can I just ask 18 you about that, please. Is it right that there are 19 three different levels of imagery, A, B and C? 20 A. Correct. 21 Q. That category C images are indecent images that don't 22 fall within an A or B, and A or B are the most serious 23 imagery that's out there? 24 A. That's correct. 25 Q. Category B involves images where there is</p> <p style="text-align: center;">Page 81</p>	<p>1 non-penetrative sexual activity, and category A images 2 are the more extreme end where there is penetrative 3 sexual activity, sexual activity with an animal or 4 sadism? 5 A. Correct. 6 Q. So the analyst, as I understand it, has to then look at 7 the image to determine whether it's a category A, 8 category B or category C image; is that right? 9 A. That's correct, and that's why the training takes such 10 a long time. So they assess the category, they age the 11 child. 12 Q. Now, on the ageing, I understand why it's important, but 13 that is not a feature of the grade, it does not become 14 a category A just because it involves a baby -- 15 A. No. 16 Q. -- as long as there is penetrative activity or it's 17 animals or sadistic, then irrespective of the age, 18 providing they're under 18, the imagery is a category A 19 image? 20 A. Absolutely. 21 Q. But why do you try to determine at the IWF the age of 22 the child in the image? 23 A. We assess the age because it's really important to 24 understand the nature of the abuse. And, for example, 25 if you look at the last three years of nought to</p> <p style="text-align: center;">Page 82</p>
<p>1 two-year-olds, 65 per cent of that has been category A. 2 So it's important that we recognise that some of the 3 most serious abuse is with some of the youngest 4 children. 5 It also helps us identify which are the most 6 vulnerable groups, and can help people in terms of 7 prioritising awareness raising, or other particular 8 campaigns to target particular children. 9 So it gives a picture of the -- the more 10 intelligence we can collect, that's more granular in 11 detail, the more we can understand the problem, really, 12 and we share that with our partners. 13 Q. I think the IWF also looks at the gender of the child? 14 A. Gender, yes. 15 Q. Any other attributes that might be of assistance, 16 whether there's one or more children in the imagery? 17 A. Yes. And we assess it on the basis, the severity and 18 age -- if there's more than one child in the image the 19 assessment on severity and age is made on the basis of 20 the youngest child in the -- 21 Q. In the image. 22 A. -- in the image, and the worse level of severity in the 23 image. Yes, and we also record the ethnicity of the 24 children as well. 25 Q. Once that grading and all of the various attributes have</p> <p style="text-align: center;">Page 83</p>	<p>1 been recorded by the analyst -- is this right? -- that 2 the image is downloaded and captured for evidential 3 purposes? 4 A. Yes, that's correct. 5 Q. What does that mean in layman's terms? 6 A. So we do two things, one is we hash the image, and 7 that -- if it's a unique image we hash it, because we're 8 dealing mainly with duplicates -- so if it's a new image 9 we will hash it on the fly as we go, but also we 10 maintain the images and we have an arrangement to pass 11 the images over to the police. 12 Q. Can I pause you there because you've mentioned 13 duplicates. 14 A. Yes. 15 Q. If someone reports an image and the IWF has seen it one 16 or countless times, does there still need to be the 17 analyst's eyes on it to grade it or is there a way of 18 speeding up that process? 19 A. Yes. So I mean increasingly we're able to run it across 20 our hash list, which also has a great benefit in terms 21 of the analysts' welfare, so they don't have to look at 22 everything that they've seen hundreds of times before. 23 So if it's a match on our hash list, which is 24 a quality-assured hash list, then we know it's legal, we 25 know it's matched, it might be category A, this age, we</p> <p style="text-align: center;">Page 84</p>

<p>1 can then move towards the hosting and removal stage.</p> <p>2 Q. So, to take an example from the IWF's 2018 annual</p> <p>3 report, you may recall, Ms Hargreaves, that in opening</p> <p>4 I informed the chair and panel about a girl called</p> <p>5 Olivia.</p> <p>6 A. Mm-hm.</p> <p>7 Q. I think on a single day -- sorry -- over a three-month</p> <p>8 period you saw an image of Olivia over 347 times, which</p> <p>9 was about five times a day.</p> <p>10 A. Correct.</p> <p>11 Q. If that image of Olivia is sent in then by someone</p> <p>12 reporting this afternoon, do I take it that, although</p> <p>13 for accounting purposes and for the purposes of the</p> <p>14 report you monitored how many times you saw her,</p> <p>15 an analyst wouldn't have to keep looking at the images</p> <p>16 of Olivia?</p> <p>17 A. That's correct.</p> <p>18 Q. Right.</p> <p>19 Once it has been downloaded and captured and hashed</p> <p>20 what is the next stage in the procedure?</p> <p>21 A. So the next stage is to locate where that content is</p> <p>22 hosted. So, just to clarify, the content will be hosted</p> <p>23 in a particular country, that's not the -- you know,</p> <p>24 that's just where that company's based, basically. So</p> <p>25 they may not be aware that they're hosting it. So we</p> <p style="text-align: center;">Page 85</p>	<p>1 will then -- we use open source software, three types,</p> <p>2 to look -- to do accurate hosting location.</p> <p>3 Q. Are there different outcomes depending on -- sorry,</p> <p>4 different procedures depending on where the image is</p> <p>5 hosted?</p> <p>6 A. Not really, no. We just -- oh sorry, in terms of</p> <p>7 actioning it?</p> <p>8 Q. Yes.</p> <p>9 A. Yes, sorry, yes, there is. Sorry, sorry.</p> <p>10 Q. Before we come on to actioning it, let's look at the</p> <p>11 scale of the problem, please, and can I ask that is</p> <p>12 called up on screen IWF0000021. Chair, if it helps you,</p> <p>13 it's in Ms Hargreaves's second statement, behind tab 2,</p> <p>14 on the second page of that statement.</p> <p>15 I may have read out too many zeros. So it's</p> <p>16 IWF0000021. Thank you. Could we expand, please, the two</p> <p>17 tables that we can see there.</p> <p>18 Dealing firstly with the top table, Ms Hargreaves.</p> <p>19 You've told us about the external reports that come in</p> <p>20 from the public in its widest sense and the proactive</p> <p>21 reporting. I would just like to look at the top line</p> <p>22 dealing with the total reports processed. Is that from</p> <p>23 both external sources and proactive detection, once you</p> <p>24 have that proactive --</p> <p>25 A. Correct.</p> <p style="text-align: center;">Page 86</p>
<p>1 Q. Ability?</p> <p>2 All right. So in 2015 there are 112,975 reports,</p> <p>3 a slight decrease in 2016.</p> <p>4 In 2017, 132,636 total reports on both of those</p> <p>5 sources, and in 2018, 229,328 reports that you alluded</p> <p>6 to at the start of your evidence.</p> <p>7 A. Yes.</p> <p>8 Q. Can you help us, please, why, in your view, is there</p> <p>9 such a significant jump between the 2017 number of</p> <p>10 reports and the 2018 reports?</p> <p>11 A. There are a variety of reasons.</p> <p>12 Also I would say in 2016 the dip is -- there's</p> <p>13 a reason for that as well.</p> <p>14 Q. Let's deal with the increase and then we'll look at the</p> <p>15 dip.</p> <p>16 A. So a couple of reasons. So the first is increased</p> <p>17 technology. So, you know, we have better technology to</p> <p>18 find it. So in terms of our proactive we're able to</p> <p>19 find more, so the use of the crawlers, the hash list,</p> <p>20 et cetera.</p> <p>21 Q. I think you said that came in about a year ago.</p> <p>22 A. Yes.</p> <p>23 Q. Was that, I think, towards the end of 2017 -- so that</p> <p>24 will account potentially for some of the increase?</p> <p>25 A. Absolutely. The second thing is we've had a number of</p> <p style="text-align: center;">Page 87</p>	<p>1 quite successful campaigns that we've run, we're</p> <p>2 currently in the middle of a campaign with the</p> <p>3 Home Office targeting young men and we ran a campaign</p> <p>4 with the Home Office last year. And whilst we can't say</p> <p>5 categorically that is why we had a spike in terms of</p> <p>6 public reports, we're very encouraged by -- that we ran</p> <p>7 a social media campaign last year in conjunction with</p> <p>8 The Lad Bible, which had a lot of traction, and that</p> <p>9 resulted in some spikes around the same time.</p> <p>10 The third is, of course there's more content, bt</p> <p>11 nobody knows how much.</p> <p>12 Q. Help us with the dip, what's the explanation for that?</p> <p>13 A. Well, the dip, I think, is almost more important,</p> <p>14 because we didn't have a dip in content that year, we</p> <p>15 just had a dip in -- we just had a realignment in terms</p> <p>16 of where we were focusing our energies. In that year</p> <p>17 we'd hashed half a million images for CAID, for the</p> <p>18 child abuse image database, so it meant we had to take</p> <p>19 analysts off proactive searching to hash. So it was</p> <p>20 a resource issue.</p> <p>21 Q. Looking at the 2018 figure, of that 229,000-odd total</p> <p>22 reports, I think if we look at the bottom box, are you</p> <p>23 able to say that out of the 229,000 how many came in</p> <p>24 from the public reporting and how many came in from</p> <p>25 proactive detection?</p> <p style="text-align: center;">Page 88</p>

<p>1 A. Okay. So of those reports processed, we actually -- if 2 you were to talk about the public just for child sexual 3 abuse images -- 4 Q. Yes. 5 A. -- not child sexual abuse and non-photographic images, 6 which is that 109,000 figure, the figure was actually 7 106,830, of which they came from all external sources. 8 Q. So that is public, police -- 9 A. Yes. 10 Q. Industry members, any other sources? 11 A. Correct. 12 Q. So if we exclude the non-photographic, it's 106,000 13 reports from the external sources. 14 A. Correct. 15 Q. It follows, therefore, that there's over 100,000 found 16 from the proactive detection. 17 A. Correct. 18 Q. Now, the reports coming in, though, is there data kept 19 by the IWF as to actually how many of those reports do 20 in fact contain child sexual abuse material? 21 A. Yes. Over the -- in 2018 we had a 28 per cent accuracy 22 on public reports. 23 Q. So there's an awful lot of reports coming in, but 24 actually, once the analyst grades them in accordance 25 with UK law, they are not all in fact child sexual abuse</p> <p style="text-align: center;">Page 89</p>	<p>1 material? 2 A. That's correct. 3 Q. Can you give us an idea of what other things are 4 reported that are not in fact determined to be child 5 sexual abuse material? 6 A. A wide variety of things. They may vary from naturist 7 images, through to adult content, through to horrible 8 content that they just don't know where to report, a 9 beheading, torture of a dog. It might be something 10 that's absolutely unrelated. So a variety of sources. 11 We also have a number of serial reporters who send us 12 huge amounts of content on a frequent basis which is off 13 remit. 14 Q. Is there also some reporting where there is perhaps 15 an age boundary and so the reporter has erred on the 16 side of cause and said, "I think this might be child 17 sexual abuse", but in fact, when it's analysed, the 18 image is of someone who is 18 or over? 19 A. Yes, and that represents a challenge to us anyway, 20 because when a child is 16, 17, 18, it's impossible to 21 age them accurately whether they are 17 or 18. 22 Q. Does the IWF run any public campaign or any kind of 23 advertising to try and help inform the public as to what 24 in fact amounts to an illegal child abuse image? 25 A. Yes, we do, we do have limit resources to run campaigns,</p> <p style="text-align: center;">Page 90</p>
<p>1 but the example of the campaigns we run in the 2 Home Office has been a great example of where we've 3 benefited from -- they've paid for it, basically. We 4 ran one last year about targeting young men, what does 5 18 look like? So trying to identify that just because 6 you think someone is -- looks 18, they might be 14 or 7 15. 8 We also work in conjunction with our partners in the 9 Safer Internet Centre to ensure that we do awareness 10 raising in schools, and we promote the work we do. 11 Recently we ran a very successful campaign with Everton 12 Football Club targeting young men around sexual 13 behaviour, so that they could understand what was 14 illegal, what wasn't illegal, as well as what was 15 appropriate sexual behaviour. 16 Q. Lest it be thought that the evidence you've just given 17 is to try and actually deter the public from reporting, 18 can I have the IWF's views before lunch on why it is so 19 important there is still a number of external reports 20 even if, in fact, they don't turn out to be indecent 21 imagery? 22 A. I think it's crucial because the public needs to know 23 that there is an independent body there that exists for 24 them to report anonymously and to do the right thing. 25 Also -- so it's important for our public legitimacy that</p> <p style="text-align: center;">Page 91</p>	<p>1 that function exists. 2 Also, they do provide us with intelligence, the 3 accurate reports do provide us with useful intelligence. 4 So whilst on one level it can be quite frustrating that 5 we're having to look at all these reports, you know, our 6 approach to this now is that our job is to improve the 7 accuracy of their reporting, not to stop the public 8 reporting. 9 Q. Finally -- we'll deal with take down after lunch -- but 10 I just want to try and encapsulate what this means on 11 a daily basis for the IWF. Can I have your help, 12 please, with the bottom box and the bottom row. 13 Does it come to this, that on an average daily basis 14 in 2018, that in the morning at the IWF there were 299 15 reports awaiting analysis? 16 A. That's correct. 17 Q. By those working at the IWF? 18 A. Yes. 19 Q. One can see the increase over the last three or four 20 years in terms of the work they've got to do. 21 Chair, would that be a convenient moment for lunch? 22 THE CHAIR: Yes. 23 MS CAREY: Thank you very much. 24 (1.00 pm) 25 (The short adjournment)</p> <p style="text-align: center;">Page 92</p>

<p>1 (2.00 pm) 2 MS CAREY: Thank you, chair. 3 Ms Hargreaves, before lunch, we were looking at the 4 number of images, the grading system and generally how 5 the IWF processes the image. 6 You touched upon evidence which tended to suggest 7 you needed to understand where the image was hosted. 8 I'd like to start this afternoon by looking at that and, 9 if it helps, chair, I'm at paragraph 4.16 in 10 Ms Hargreaves' statement. 11 I understand there is potentially a distinction 12 depending on whether the image is hosted in the UK or 13 not, so can we just look at the position in terms of the 14 UK firstly. If the content is hosted in the UK, what 15 happens next? 16 A. If the content is hosted in the UK, we are able to issue 17 a notice and takedown, and we are only able to do that 18 once we have checked with law enforcement, which in this 19 case is CEOP, whether there is an ongoing investigation 20 and if they wish us not to issue a notice and takedown. 21 Having said that, they always give us permission to 22 issue a notice and takedown and that is an almost 23 instant process. 24 Q. What does the actual notice and takedown procedure 25 involve?</p> <p style="text-align: center;">Page 93</p>	<p>1 A. The notice and takedown procedure, once we've got 2 authorisation from NCA CEOP is to go to the hosting 3 provider, we actually call them up and say, "You're 4 hosting illegal content". 5 Q. You actually ring them? 6 A. We do, as well as sending them a notice. So we actually 7 send them a notice, and the notice tells them the 8 content that they're hosting and gives them the details 9 of the content, but, also, they have details about 10 making sure that they retain the information in case any 11 evidence is needed by the police. 12 Q. Does the IWF tell the host that -- give them a time 13 frame by which this imagery must come down? 14 A. We don't give them a time frame, but under the 15 EU Directive, the e-Commerce Directive, once you're 16 notified that you're hosting illegal content, you are 17 criminally liable for that content. So it's in their 18 interests to act as quickly as possible and, in fact, 19 one of the things we're most proud of is the speed that 20 the content is removed. 21 Q. Can I ask, please, that we call up on screen 22 INQ004283_035. Chair, that's behind your tab 4, the 23 bottom section of that page. It was taken from the 2018 24 annual report. 25 There is the section there covering "UK child sexual</p> <p style="text-align: center;">Page 94</p>
<p>1 abuse content removal in minutes". 2 I think in the body of the text, it sets out: 3 "14 companies' services in the UK were used to host 4 child sexual abuse images or videos in 2018." 5 They were given takedown notices, irrespective of 6 whether they were IWF members or not, although 12 were 7 not IWF members and two were. 8 And then, if one looks to the stopwatch on the 9 right-hand side, 35 per cent of the takedown notices 10 were actioned in 60 minutes or less; is that right? 11 A. That's correct. 12 Q. Do you have any idea of what the fastest time was for 13 takedown? 14 A. I think it was two minutes. 15 Q. Two minutes? 16 A. Yes. 17 Q. 10 per cent was taken down between an hour and two 18 hours; then 55 per cent taken down after two hours. 19 What happens if, after two or three hours, nothing 20 has seemingly happened and the imagery is still visible? 21 A. It's absolutely crucial to us that the UK remains one of 22 the most hostile territories in terms of hosting child 23 sexual abuse, so once we have notified a company, we 24 just consistently contact them and demand its immediate 25 removal. So it's a particular analyst will be</p> <p style="text-align: center;">Page 95</p>	<p>1 responsible for that, so they would just call them on 2 sort of a frequent basis, hourly, until it's removed. 3 Q. Have you come across instances where a company has 4 refused to take down the imagery? 5 A. No, we haven't had an absolute refusal, but we've had it 6 take time, which skews the figures. So perhaps, if it's 7 a company that's not used to the ramifications of it or 8 they don't really realise how serious it is, we have to 9 kind of go through a sort of learning process with them, 10 but generally, no, because, once they're notified and 11 they're aware that they are now liable for that content, 12 they will act to remove it. 13 Q. I asked you about the quickest takedown time, what about 14 the slowest takedown time? 15 A. I don't know, actually, I'd have to check that figure, 16 but I do know that we had one or two that might have 17 been a day or so. 18 Q. Now, where the content -- just finally on the content 19 being hosted in the UK, do you know what actually is 20 shown to the public once the image has been taken down 21 or the URL has been taken down? Is the page 22 inaccessible? 23 A. I don't actually, sorry. I know what happens against 24 the URL list, so I think it might depend from company to 25 company, but we can check that for you.</p> <p style="text-align: center;">Page 96</p>

<p>1 Q. Turning to content that's hosted outside the UK, how 2 does the IWF communicate with those hosts outside of 3 this country?</p> <p>4 A. So if content is hosted in the UK, as you say, we issue 5 a notice and takedown, and that's less than 6 0.04 per cent in 2018. So that was only 31 notices. 7 If it's outside of the UK, which is obviously the 8 bulk of the content, we then have to work in a variety 9 of ways. So if they have a hotline -- so there are 10 52 hotlines in 48 countries -- we send the content via 11 the INHOPE database -- and INHOPE is the umbrella 12 organisation for all the hotlines and INHOPE hosts 13 a centralised database. 14 What happens is they push out content to the right 15 country, so if someone -- say, for instance, a German 16 hotline -- found content in the UK, they wouldn't send 17 it to us directly, it would be via the INHOPE database.</p> <p>18 Q. And vice versa?</p> <p>19 A. And vice versa. And I'm pleased to say the majority of 20 it is going in that direction. So we will send it to 21 INHOPE. INHOPE, they keep statistics on what's 22 happening with all the hotlines and then they push it to 23 the appropriate hotline. 24 If there isn't a hotline, we then have to work 25 through law enforcement and we'll do that in maybe two</p> <p style="text-align: center;">Page 97</p>	<p>1 ways: we might have a direct link to law enforcement in 2 that country and, if so, we will just deal directly with 3 that law enforcement; or else we go via CEOP who will go 4 through their international procedures.</p> <p>5 Q. In the example you gave, perhaps, of IWF finding content 6 hosted in Germany, you'd go through INHOPE, and INHOPE 7 would presumably then liaise with the German company to 8 issue a takedown or have it taken down?</p> <p>9 A. The hotline in Germany or the Netherlands or whatever, 10 they would -- the only country where that's different 11 for us is we have the ability to give simultaneous 12 alerts to US companies. So whilst NCMEC are members of 13 INHOPE, we -- if we find content in America, in the US, 14 we will actually -- at the same time as notifying NCMEC, 15 we will also notify the company, if they're a member of 16 ours.</p> <p>17 Q. Is there any way that the IWF can put pressure on the 18 German hosting company, in this instance, to actually 19 take it down or is that INHOPE that tries to encourage 20 speedy removal?</p> <p>21 A. It's the responsibility of the hotline in that country. 22 So if it's a particularly bad hosting country that has 23 a lot of content, they may have an excellent hotline 24 but, actually, it's -- the relationship is -- between 25 the companies is with the hotline in that country, if</p> <p style="text-align: center;">Page 98</p>
<p>1 they've got a hotline, in the same way as we would 2 expect any content in the UK, that another hotline would 3 not go to a UK host, they would do it through us.</p> <p>4 Q. Can we have a look at some of the figures involved in 5 hosting outside the UK. Can I ask that INQ004283_032, 6 is called up on the screen.</p> <p>7 Ms Hargreaves, this should be, in a moment, taken 8 from the 2018 report, the global hosting section of the 9 annual report.</p> <p>10 INQ004283_032. Thank you very much.</p> <p>11 A. Yes, okay.</p> <p>12 Q. I think you said that, at the top of that section: 13 "In 2016, the IWF saw for the first time the 14 majority of child sexual abuse web pages assessed by the 15 analysts were hosted in Europe, which was a shift away 16 from North America. Since then, the trend has continued 17 and, in 2018, 79 per cent of child sexual abuse content 18 was hosted in Europe, 16 per cent was hosted in 19 North America." 20 One can see that --</p> <p>21 A. Mm-hm.</p> <p>22 Q. -- in the table, for want of a better word, that is set 23 out on the right-hand side of the page. 24 Now, can you help, does the IWF have any indication 25 of why, now, there has been this shift away from hosting</p> <p style="text-align: center;">Page 99</p>	<p>1 in the States to more content being hosted in Europe?</p> <p>2 A. Yes. There are two reasons for that. One is that there 3 is still a lot of content hosted in the States but, 4 because of the mandatory reporting system in the US, by 5 the time the companies report the content to NCMEC, the 6 content has been removed. 7 So that content doesn't make those centralised 8 figures, so in terms of we don't get that content 9 reported to us to remove, so this is -- this doesn't 10 mean there isn't a lot of content in the States, there 11 still is a huge amount; however, we've seen an increase 12 in the amount of content hosted in the Netherlands and 13 that's been growing year-on-year.</p> <p>14 Q. Can I ask that we look within the same URN, but at 15 page 021 -- just a few pages earlier in your bundle, 16 chair -- because there's a graphic that sets out in 17 terms of the top five countries in 2018 that hosted this 18 material, and one can see -- sorry, the bottom section 19 of the page, please. 20 One can see there that 47 per cent of the total 21 imagery was hosted in the Netherlands?</p> <p>22 A. Mm-hm.</p> <p>23 Q. United States figures are given there, then Russia, the 24 Slovak Republic and France. 25 In comparison, how much of the content -- I think</p> <p style="text-align: center;">Page 100</p>

<p>1 you said 0.04 per cent is hosted in the UK; is that 2 right? 3 A. That's correct. So just to remind you, the panel, that 4 each URL could have from one to thousands of images. 5 So each web page, it's not about numbers of images. 6 This still equates to millions of images. So for each 7 of those web pages in 2018, we only had, in total, 8 41 web pages that were hosted in the UK, which was 9 31 notice and takedowns that we issued. 10 So that represents 0.04 per cent of all the content 11 we removed in 2018. 12 Since 2006, our content has been less than 13 1 per cent in the UK, because we do have a zero 14 tolerance approach to removing it. 15 In relation to the Netherlands so that 16 47 per cent -- so that's about half of the content that 17 we took down last year -- it's -- there are a number -- 18 often, content is hosted where there is -- where the 19 internet industry is, so there is a reason why a lot of 20 it is in the States or in the Netherlands, because that 21 tends to be places where legitimate businesses have 22 their businesses. 23 And with the Netherlands, it's just becoming there 24 are a number of quite bad hosters and it's becoming 25 a major issue in relation to them not doing enough to</p> <p style="text-align: center;">Page 101</p>	<p>1 have it removed and that's no reflection on the hotline. 2 It may be because they have different legislation, 3 different approaches, law enforcement, different 4 protocols, but, from our perspective, it's becoming very 5 difficult to get this content removed in the 6 Netherlands. 7 Q. Just so that one understands what this graphic is 8 depicting, the 48,900 figure, in the central column in 9 relation to the Netherlands, does that relate to web 10 pages? 11 A. Yes. 12 Q. So there's 41 pages in the UK that were taken down? 13 A. Yes. 14 Q. And that's where you found CSAM content? 15 A. Correct. 16 Q. In relation to hosting in the Netherlands there were 17 48,900 -- 18 A. Correct. 19 Q. -- web pages that IWF encountered this material on? 20 A. Correct. 21 Q. And within those web pages -- obviously, they could be 22 one image -- do you know what the maximum number of 23 images is found on a web page? 24 A. No, I don't. 25 Q. But it could --</p> <p style="text-align: center;">Page 102</p>
<p>1 A. It could be thousands. 2 Q. It could be thousands? 3 A. Yes. 4 Q. All right. 5 Do you know, are there any efforts being made by the 6 IWF to try and collaborate with the Netherlands to see 7 if they can improve these statistics? 8 A. We have offered to help and support the Dutch hotline, 9 we also have raised it consistently with UK Government, 10 and it's something that we have actually been quite 11 public about in terms of the media, because we actually 12 think it's becoming a bit of a safe haven in terms of 13 hosting child sexual abuse and which we don't think is 14 acceptable. 15 Q. More generally speaking, the chair and panel have heard 16 a number of times about the liaison between industry, 17 law enforcement, and/or government agencies and other 18 third-sector parties, what about liaison with the actual 19 companies hosting this material? Are there any efforts 20 being made, that you're aware of, of targeting that kind 21 of host? 22 A. I'm not aware of any in the Netherlands I mean 23 obviously, in the UK, you know, the major hosts, the 24 ISPs, will be, you know, the Big Four, and of course 25 they do co-operate and work together. In terms of their</p> <p style="text-align: center;">Page 103</p>	<p>1 sort of -- for instance, the splash page that was shown 2 this morning against the URL list, that -- all the big 3 ISPs work together on getting that implemented, but I am 4 not aware of ISPs that work with us putting particular 5 pressure on others and, unfortunately, they tend to be 6 quite small ones who tend to host a lot of this content, 7 not the big name brands. 8 Q. Ultimately, does the IWF have any power to get 9 a non-UK-hosted web page taken down? 10 A. No. 11 Q. But it relies on the hotline of the respective country 12 to enforce its own -- 13 A. To be fair to the hotline, it relies on law enforcement 14 and legislation in their country, and the support they 15 have. We -- we benefit hugely from having government 16 and law enforcement support in the UK. 17 So -- and being an authorised body -- so that, 18 actually, if we notify, it would be very difficult for 19 a host in the UK to say "We're not taking what you're 20 telling us seriously", because we have the backup and 21 support of everything behind us. 22 Q. Now, those URLs or web pages that are hosted outside of 23 the UK, are they nonetheless added to the URL list? 24 A. Yes. So if content is hosted in the UK, we don't add it 25 to the URL list, because the best way to remove content</p> <p style="text-align: center;">Page 104</p>

<p>1 is to remove it at source. Blocking is a means of 2 stopping people from accidentally stumbling, but it 3 won't stop the determined person from trying to get 4 around. There are ways to circumvent blocking. 5 So what we do, if it's in the UK, we simply issue 6 a notice and takedown and have it removed, full stop. 7 If it's outside of the UK, we don't have the ability 8 to have it removed at source, which is why we put it on 9 the URL list until such time as it's removed. 10 Q. The URL list I think we've heard is updated twice a day? 11 A. That's correct. 12 Q. So presumably, at some stage, once you have put it on 13 the list, in theory, that web page should not be 14 available to someone who is trying to look at it? 15 A. If the -- if it's -- if the list has been deployed 16 across that platform, yes. 17 Q. But once the indecent imagery is taken off that, then 18 the web page will then become visible? 19 A. That's correct, so we -- it's a very dynamic list, so 20 it's checked twice a day so there may be, you know, 21 300 or 400 come off each day and go on each day. 22 There's 5,800 URLs on it today -- 23 Q. I was going to ask -- 24 A. We're going to come to that? Okay. 25 Q. No, I was just going to ask exactly that.</p> <p style="text-align: center;">Page 105</p>	<p>1 A. Okay. So, at its peak -- it's been at 12,000 URLs; 2 today, it's 5,800, which is pretty average, actually, 3 and I think there were 300 came off yesterday -- what we 4 do is there's two kind of -- as people say, two sort of 5 swim lanes, in the sense of, while it's on the list, 6 we're working hard to get it removed, so that it's 7 a constant piece of work, but obviously, as soon as it's 8 been removed, we want to take it off the list, so it's 9 highly important to us that it's very dynamic and 10 accurate. 11 Q. The URL list, who is that made available to? 12 A. The IWF URL list is made available to all of our 13 members. If they take it, they do so under a very 14 strict licence, which governs the way it's deployed. 15 Obviously, we're talking about criminal content, it's 16 highly sensitive material, so there are all sorts of 17 rules about how you can use it. And it's absolutely 18 essential that the URL list isn't leaked and that it's 19 deployed correctly. 20 There are 69 companies, I believe, currently 21 deploying our URL list and Microsoft and Google deploy 22 across the world. 23 Q. Just to look at the data in relation to the URL list, 24 can I ask, please, that we look at INQ004283_038? 25 A. Okay, yes.</p> <p style="text-align: center;">Page 106</p>
<p>1 Q. So does it come to this, over 2018, there were over 2 100,000 unique URLs included on the list. It sets out 3 there that was a 31 per cent increase from 2017. On 4 average, there are 376 new URLs added each day and, in 5 fact, the average in 2018 was 6,046 URLs contained on 6 the list -- 7 A. Mm-hm. 8 Q. -- each day. 9 Do you have any sense of, now we're five months into 10 2019, what the sort of figures are looking like for this 11 year? 12 A. I would say around the same. There are some peaks and 13 troughs on the list, but it's roughly about the same. 14 Q. Allied to imagery, can I ask you, please, about how the 15 IWF deals with its images in relation to the national 16 police Child Abuse Identification Database, or CAID, as 17 we also know it? 18 A. So the IWF has been part of the development of CAID, the 19 Child Abuse Image Database, and right from the inception 20 of the database. So we were asked to join a team -- so 21 my deputy is on the CAID board -- and actually to help 22 in its construction. So we have been the only 23 organisation that's not -- non-police and non-government 24 that has assessed images, it's been built up, and we are 25 the only non-law enforcement organisation to have direct</p> <p style="text-align: center;">Page 107</p>	<p>1 access into CAID. 2 It's still work-in-progress, so whilst we have 3 direct access into CAID -- so when it first started, we 4 had to receive images on a disc to assess. Now the 5 theory is we have the technology to go directly into 6 CAID, and -- and share images. 7 So in the same way as we will be able to pull images 8 from CAID and hashes, we will also be able to feed into 9 CAID all the unique images and hashes that we find as 10 well. 11 Progress in some ways has been slow because -- not 12 just because there's been some technical hitches in 13 terms of making sure all our systems are aligned, but 14 actually, we're limited at the moment about trying to 15 resolve issues around data sharing under GDPR. So this 16 is a major sort of stumbling block to the free sharing 17 of images via CAID and via the IWF. 18 Q. Another stumbling block in the fight against this type 19 of image may be considered to be the dark web. I'm 20 looking now, please, at your paragraph 6.1 in your 21 statement, Ms Hargreaves. 22 But can you outline for the chair and panel what IWF 23 are doing in relation to trying to combat the problem on 24 the dark web, please? 25 A. Yes, of course.</p> <p style="text-align: center;">Page 108</p>

<p>1 So the IWF's remit is to work on the open web, we 2 don't work on peer-to-peer sharing, we do some work in 3 the dark web, but the issue with the dark web is, of 4 course, we can't locate -- if the content's hosted 5 within the dark web, we can't actually locate and have 6 that content removed; however -- so, to a large extent, 7 the work that happens within the dark web is law 8 enforcement territory.</p> <p>9 So -- but we can do quite a lot within the dark web. 10 One of the things we find, often, is that we'll find 11 images in the dark web which are actually hosted out on 12 the open web on image hosting boards, so we're able to 13 go in, if we locate it's hosted on the open web, we are 14 able to action and have it removed at that source. 15 We're also able to go in, identify images and then hash 16 them, so that, whilst we might not be able to remove 17 them if they're hosted in the dark web, we can use that 18 hash to locate any potential duplicates and ensure 19 they're not uploaded in the future. And we also share 20 intelligence.</p> <p>21 One of the other things we find, which is incredibly 22 helpful, is in forums on the dark web, intelligence 23 about perhaps when people start their journey into 24 looking at child sexual abuse, so there are frustrations 25 and limitations to what we can do in the dark web, but</p> <p style="text-align: center;">Page 109</p>	<p>1 there are also things we can do as well.</p> <p>2 Q. Can I ask, please, that we look on the screen at 3 INQ004283_034.</p> <p>4 Just at the bottom of that page, one can see there, 5 highlighted in black, that in 2018 the IWF identified 6 85 new hidden services, an increase from 44 in 2017?</p> <p>7 A. Yes.</p> <p>8 Q. In addition to the URL list preventing this kind of 9 imagery being available, can I just ask you, please, 10 about some of the other methods that the IWF deploy, 11 starting with image hashing, which obviously we have 12 touched on a number of times.</p> <p>13 A. Yes.</p> <p>14 Q. But is this right, that the IWF has an image hash list?</p> <p>15 A. Yes.</p> <p>16 Q. Can you help us with how many images that hash list now 17 has on it?</p> <p>18 A. Okay, so we have two hash lists: we have the IWF hash 19 list, which is hashes that are generated from work -- 20 images we find and hash on our proactive programme; 21 and we also have access to CAID hashes.</p> <p>22 So if I may just deal with those separately?</p> <p>23 Q. Please do.</p> <p>24 A. So the IWF hash list are hashes that we categorise as A, 25 B, C, obviously, and that are made available to any IWF</p> <p style="text-align: center;">Page 110</p>
<p>1 members under a hash licence agreement. The CAID 2 hashes, we are only able to share those with the US 3 companies that have been approved by the Home Office, 4 and that's currently the US companies that have 5 mandatory reporting.</p> <p>6 We are unable to share CAID hashes at the moment 7 with any UK company, so BT, for example, cannot have any 8 hashes directly from CAID, but they could have all our 9 hashes.</p> <p>10 And we -- each company then chooses what level of 11 hashes that they can take, so they kind of -- once they 12 take the licence agreement, if they're taking IWF 13 hashes, they choose whether they want category As, Bs or 14 Cs and, in relation to CAID, the hashes, the companies 15 also indicate which level of hashes they want.</p> <p>16 We are very fortunate in that Microsoft not only 17 made PhotoDNA available to us, they also allow us to 18 pass the PhotoDNA licence on to our members, which means 19 that the smaller members can access IWF hashes via the 20 Azure cloud storage system of Microsoft, which means 21 they don't need to have the technical infrastructure to 22 run the hash system themselves, they can just run their 23 images against this. So it's a solution that can work 24 for small companies as well as big companies.</p> <p>25 The other -- with CAID hashes, we also are --</p> <p style="text-align: center;">Page 111</p>	<p>1 because of GDPR issues, we're not able to run CAID 2 hashes through our crawlers at the moment and, again, if 3 we could, given that there are potentially 10 million 4 images in CAID, that we would be able to massively 5 increase our ability to bring down content if we had 6 access to the CAID hashes --</p> <p>7 Q. Can I pause you there because, to put that into 8 perspective, I think in the 2018 report at the end of 9 last year, the IWF's own hash list had 345,961 10 individual images on it?</p> <p>11 A. Yes.</p> <p>12 Q. Whereas I think you just told us the CAID hash list has 13 got over -- is it 10 million, did you say?</p> <p>14 A. According to law enforcement, but we haven't -- they 15 are -- what I don't know, I'll be honest with you, is 16 exactly what those images are: are they all categorised; 17 are they indicative images; are they child sexual abuse?</p> <p>18 One of the things we are in discussion with the -- 19 with the Home Office and law enforcement about is how we 20 go into CAID and hash their images. So we are -- we 21 have a higher threshold level in terms of assessment 22 than the law enforcement, because, obviously, we're not 23 law enforcement so we need to ensure that our -- all our 24 hashes are quality assured and meet the threshold.</p> <p>25 So we have today, on our hash list, 378,000 hashes,</p> <p style="text-align: center;">Page 112</p>

<p>1 but these are unique hashes of -- of -- hashes that have 2 our category A, B or C in the UK, and which have been 3 quality assured. 4 Q. You said there that there were some GDPR issues in terms 5 of the IWF getting access to the CAID hashes. 6 A. Yes. 7 Q. Can you help the chair and panel with the kind of 8 liaison that is going on with, perhaps, the Home Office, 9 or whichever government department it is, to try to 10 resolve these GDPR issues? 11 A. So the -- it's fair to say we all want to resolve them, 12 it's not that -- that one of us doesn't. So -- and 13 obviously it's fair to say that the overall intention of 14 all of us concerned is to use the hashes responsibly and 15 to put victims at the centre of what we're doing. 16 That goes to the heart of part of the issue, which 17 is that a hash, which is this numbered digital 18 fingerprint, it can't be reverse engineered in the sense 19 that you can't make it back into a picture, but what it 20 can do is actually go out and match a picture, and 21 there's the potential, we would say, a very, very small 22 potential, that a child could be identified and that is 23 an issue to be resolved under GDPR. 24 So we're in discussion with NCA CEOP the Home Office 25 the ICO, in terms of finding a way through this, so that</p> <p style="text-align: center;">Page 113</p>	<p>1 we can all ensure that the work we're doing is 2 legitimate and is used for the right reasons, to find 3 images of child sexual abuse. 4 So it's -- likewise, we are unable to share our 5 hashes with NCMEC for the same reason. So we are all 6 working towards a goal, it is a lengthy process, but the 7 intention is there from us all. 8 Q. In addition to the URL and the hash list, can I ask you 9 about the key words list? 10 A. Yes. 11 Q. In a nutshell, what is that, please? 12 A. Okay, so the key words list, these are specific terms 13 that paedophiles would use to try and search for child 14 sexual abuse so they might not be, you know, words that 15 you or I would recognise, they might be a series of 16 numbers or exclamation marks or different languages or 17 weird terms, and what we try and do is we collect those 18 through intelligence gathering on forums, and then we 19 provide that key word list so that people can block 20 search to child sexual abuse. 21 We have around just under 500 key words on our list, 22 we actually have another 8,500 that we just do not have 23 the resource to assess at the moment. 24 So we want -- you know, we need to -- you know, we 25 could have more key words on the list, and of course,</p> <p style="text-align: center;">Page 114</p>
<p>1 you obviously have to keep updating it to ensure that 2 we're keeping ahead of the paedophiles. 3 Q. Do you know in practice what happens if one of the words 4 on the IWF's key words list is put into a browser, do 5 you know what is returned? 6 A. Yes, because we have to test them, yes. So, obviously, 7 we wouldn't put something on the key words list unless 8 we knew it was a returner. 9 Q. If a user did put in one of the key words, what would, 10 actually, they see at the end of having typed out the 11 key word? What would actually practically happen once 12 they hit "Return"? 13 A. If they weren't blocked? 14 Q. Yes -- no, if they were blocked, what would they 15 actually see? 16 A. Oh, if they were blocked. Okay, so -- I don't actually 17 know what the return is they'd get from the different 18 search engines. I'd have to come back to tell you that. 19 I don't know if it's just an error message or if there 20 is a splash page. 21 Q. You've told us in evidence about the various ways in 22 which now the IWF tries to prevent people accessing such 23 imagery. And I think you are aware, Ms Hargreaves, that 24 the National Crime Agency have urged industry to 25 consider prescreening and prefiltering and I would just</p> <p style="text-align: center;">Page 115</p>	<p>1 like you to outline what, really, the IWF's response is 2 to that NCA ask? 3 A. We would support anything that stops people accessing 4 child sexual abuse, but we're obviously also concerned 5 about privacy issues and, you know, ensuring that 6 there's not undue amounts of monitoring in terms of 7 people's own private networks. 8 The -- in terms of prescreening and content in the 9 UK, you know, we have very little content hosted here, 10 so we don't really think it's that relevant in terms of 11 the area of our work. 12 The other side we have is that we are concerned, 13 whilst this technology is developing -- because it's all 14 still quite new -- is the problem of false positives. 15 So, actually, we still want to have eyes on everything, 16 so do human assessment. So we have a kind of guarded 17 approach to prescreening. 18 Obviously, we would like as many companies as they 19 can to take our hash list, to take our URL list, to take 20 whatever tools they can to stop the upload in the first 21 place. 22 Q. Just looking at your paragraph 14.3 towards the end of 23 your statement, you say there that, "for prescreening of 24 content to be even a policy option, the UK Government 25 would need to amend the e-Commerce legislation".</p> <p style="text-align: center;">Page 116</p>

1 Could you just help explain why you speak to this in
 2 your statement?
 3 **A. Okay, so, I mean, prescreening isn't accounted for**
 4 **within the e-Commerce Directive, so -- and at the**
 5 **moment, what the e-Commerce Directive says is that**
 6 **companies are liable once they're notified. So if they**
 7 **are prescreening, then they would be finding content in**
 8 **advance of notification. So it just has a different**
 9 **ramification in terms of how companies would have to**
 10 **deal with it or not.**
 11 **So I think -- I don't think we're saying it's right**
 12 **or wrong, what we're saying is it's not correctly**
 13 **allowed for.**
 14 Q. In relation to law enforcement, you have spoken a number
 15 of times of the liaison you have with both the Crown
 16 Prosecution Service, the National Crime Agency, with the
 17 Home Office, with DCMS. Can you just give us
 18 an indication, please, of how often do you liaise with
 19 law enforcement and in what kind of forums?
 20 **A. Okay, so law enforcement -- we work very closely with**
 21 **NCA CEOP, we also have quite a lot of contact with Chief**
 22 **Constable Simon Bailey from the NPCC. With law**
 23 **enforcement, we have an MoU -- well, we have two MoUs,**
 24 **so we have a service level agreement that governs our**
 25 **day-to-day operations --**

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1 **contact with our members through from, you know, again,**
 2 **operationally, you know, implementing the URL list right**
 3 **through to more strategic working with them on the**
 4 **policy level.**
 5 **We tend to work very closely with the large**
 6 **companies, so we will work with their policy teams,**
 7 **with -- we've -- we generally have good access to senior**
 8 **level people within industry.**
 9 **One of the areas, you know, people have mentioned**
 10 **is, you know, that we -- that we don't publicly call out**
 11 **members of industry if -- if we think they've done**
 12 **something wrong. This is things that people will say to**
 13 **us. And it's a policy of ours to work closely with**
 14 **them, we believe it's better to work with**
 15 **an organisation than to call them out publicly.**
 16 **A good example of this is the Bing example that was**
 17 **given yesterday by Microsoft, where we're working very**
 18 **closely with them, and we don't shy away from difficult**
 19 **conversations --**
 20 Q. Can I just ask you about that, because perhaps one of
 21 the benefits of an article such as there was about Bing
 22 was it brought about, by Microsoft, changes to their
 23 development in terms of technology.
 24 **A. Mm.**
 25 Q. So there is potentially a benefit in naming and shaming,

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1 Q. Yes.
 2 **A. -- we have the CPS/NPCC MoU, but we also have a sort of**
 3 **high-level MoU with CEOP, which is about mutual respect**
 4 **and trust and understanding. So we meet once a quarter**
 5 **to kind of give each other an update, share what's**
 6 **happening, discuss ways in which we can work together.**
 7 **We also have a very effective day-to-day working**
 8 **relationship, and that works on lots of levels.**
 9 **So the hotlines work in operationally with CEOP all**
 10 **the time, but also, I'm in constant contact with**
 11 **different members of CEOP, as indeed are members of our**
 12 **team. They regularly -- we have a current project where**
 13 **CEOP are represented on the advisory group. I will meet**
 14 **the director of CEOP on a regular basis at events. So**
 15 **I believe that the communication is very positive and**
 16 **frequent.**
 17 Q. Turning to the liaison with industry, can you give us
 18 an idea of how it is that the IWF liaises with industry
 19 and, again, what kind of situations and forums?
 20 **A. If they're members or if they're not members?**
 21 Q. Well, start with if they are members, because I suspect
 22 there's a distinction.
 23 **A. Well, we have membership team, so the membership team**
 24 **are working very closely with our members, so there**
 25 **is -- there are lots of levels in which we will be in**

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1 because it often tends to lead to action.
 2 Why is it the IWF have preferred to try and
 3 collaborate and deal with them on a more -- working more
 4 with them on a closer basis, than actually calling out
 5 a bad actor in this space?
 6 **A. It's a very good question. The policy of ours has been**
 7 **to work with them, and I think -- and, obviously, the**
 8 **reality is often that a media storm will prompt**
 9 **immediate action on lots of levels that would happen**
 10 **across the board and I'm not denying that's the case.**
 11 **What you don't see is all the work we have done**
 12 **behind the scenes on particular issues that have been**
 13 **quite difficult. So, yes, one or two of them might make**
 14 **it to the media and we might not know about them, but**
 15 **then, again, we will also be working on a constant basis**
 16 **with our members, raising issues if we see problems,**
 17 **and, you know -- so I think that there is a bona fide**
 18 **reason to say, "Why don't you publicly name and shame?",**
 19 **but at the same time, we think we've achieved a huge**
 20 **amount by working closely with them.**
 21 **The reality is for -- especially new internet**
 22 **companies, that they start off as a great idea and they**
 23 **don't build in safety by design and, unfortunately, it**
 24 **takes some kind of bad thing where -- for the**
 25 **organisation, as they grow, to kind of get on board with**

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1 this, and we try and reach out and say, "We can help
 2 you, we can help you clean up your services. Work with
 3 us".

4 There's another reason we don't name and shame.
 5 It's that the majority of the child sexual abuse content
 6 that we see is not generally on the household names --
 7 I'm talking about the actual images -- it's on the
 8 smaller -- the smaller platforms, and we don't want to
 9 direct people to them. So it's kind of -- it is
 10 a judgment call, you know, so we're actually going
 11 through a transparency and accountability piece of work
 12 with our members, and that may change in the future, but
 13 that's kind of where we are now because we believe that
 14 gets the best results.

15 Q. So it's not the case that the IWF won't name and shame
 16 lest, actually, it might lead to a loss of funding if
 17 one of the members took umbrage at being publicly
 18 exposed?

19 A. I don't really accept that. I understand, yes, yes, the
 20 members could vote with their feet they could just walk
 21 out. I mean, that's a fact. But I think it would be
 22 very difficult for a very large member or a big name to
 23 do that, you know, because even worse than the media
 24 story they had to begin with, is a media story which
 25 says they don't support the IWF.

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1 we work very closely with Facebook on lots of things.
 2 The first time they raised the issue about the URL list,
 3 they wanted to use it for monitoring purposes, which is
 4 not a designated use of our list. At the time, it was
 5 felt that wasn't appropriate. I think that might change
 6 in the future. So that was the end of the first
 7 discussion.

8 The second time they raised it, they wanted to use
 9 it as a blocking list, and this is the negotiation
 10 that's gone on for some 18 months through our legal
 11 departments.

12 They -- we have a standard licence for our list,
 13 which is pretty much taken up by every single company
 14 that uses it. We are able to make some small changes.
 15 But fundamentally, it's a licence with a range of
 16 conditions around the control and quality of the list,
 17 and Facebook have asked for a number of clauses to go
 18 into that licence, which the IWF simply cannot accept.

19 Q. Is there a resolution in sight?

20 A. I hope so. I mean, we've had constant discussions with
 21 Facebook, we want them to take the list. But at the end
 22 of the day, it's our list, and our reputation and
 23 integrity is based on that list, and we need to ensure
 24 that the list is deployed in the manner in which we're
 25 able to retain our control of that list.

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1 So our policy around not naming and shaming is
 2 simply because we believe that the best way to deal with
 3 this is to deal with it behind the scenes.

4 And the Bing example, you know, since January, we've
 5 run 18 tests on Bing, so we are consistently on --
 6 working with them to say, "It's getting better, keep it
 7 going, it's getting better", and that's just been a sort
 8 of judgment call policy decision, and we may change it
 9 in the future if we felt we weren't getting the results,
 10 because, ultimately, as I said before, we exist to
 11 eliminate online child sexual abuse not to protect the
 12 companies' reputations.

13 Q. One specific piece of evidence that the inquiry has
 14 heard this week was in relation to Facebook's potential
 15 adoption of the URL list --

16 A. Mm.

17 Q. -- which I think Facebook said the conversation about
 18 this started in 2014. It may have fallen into abeyance
 19 and was perhaps brought back to the fore in the last
 20 18 months or so, and I think the concern was that,
 21 five years on, this still hasn't been resolved.

22 Can I ask, please, for the IWF's perspective on that
 23 piece of evidence?

24 A. Okay, well, first off, Facebook want to have the URL
 25 list for good reasons and we want them to have it, and

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1 Q. Can I turn, please, to liaison with government. We've
 2 not already considered the position.

3 A. Sure.

4 Q. In particular, Ms Hargreaves, can I ask you, please,
 5 about your paragraph 11.15, which is the potential
 6 impact that leaving Europe might have on the work of the
 7 IWF.

8 I don't want to overly politicise the position, but
 9 can you help us, please, with what IWF's concerns are in
 10 the event that we leave Europe?

11 A. So we have significant concerns about leaving Europe
 12 related to the the IWF and, of course, our role within
 13 the UK Safer Internet Centre.

14 Our partners in the Safer Internet Centre rely on
 15 a lot more, in terms of percentage-wise for their
 16 European funding, so there's a lot more at risk than
 17 just the IWF's funding here. A principal thing at risk
 18 is the UK Safer Internet Day, which is wholly funded by
 19 the European Union and also the work of the awareness
 20 raising centre and the helpline.

21 In relation to us, we have significant concerns that
 22 go beyond the money, and the key issue is that our work
 23 is international. So, however great we get at resolving
 24 the issue in the UK, we are working on a global stage
 25 and the internet knows no geographic borders, so it's

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1 absolutely essential that we are able to work
 2 internationally, that we are able to deploy legislation
 3 internationally, that we are able to share information
 4 with other hotlines, that we are able to be
 5 an international player in this, and so we've got real
 6 concerns: for example, once we lose our funding from the
 7 EU, in theory, we wouldn't have to put any data into the
 8 INHOPE database. We will continue to do so and, in
 9 fact, my deputy is the president of INHOPE, because we
 10 want to ensure that we remain part of a global solution.

11 Q. In the event that we do leave Europe, have the IWF got
 12 in place any plans or proposals of how they will, for
 13 example, continue to perhaps lobby on a European stage?
 14 Can you give us an indication of where the IWF might go
 15 in that regard?

16 A. Yes, we have. So as I say, we have Fred Langford, who's
 17 my deputy, as the president of INHOPE. So we
 18 deliberately decided that we wanted him to do that so
 19 that we could retain our position at the table in
 20 Europe. We feel that, as the largest hotline in Europe,
 21 we are the second largest hotline in the world, and we
 22 account for around 60 per cent of the INHOPE database,
 23 that, actually, it's absolutely essential that we are
 24 part of those discussions and working collaboratively
 25 towards a solution. We also have policy work in

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1 lower level of abuse because, for the children in those
 2 images, that is still real abuse and they are real
 3 victims, and we want to ensure that they feel that they
 4 are not being overlooked, because, as we heard earlier
 5 this week, you know, even if there's not contact abuse,
 6 the impact on the child is absolutely severe. So we
 7 want to ensure that there is awareness raising and
 8 resource to target the lower level of abuse as well, in
 9 terms of online viewing.

10 But it's absolutely right that the law enforcement
 11 need to focus their energies where they'll have the
 12 maximum effect.

13 Q. The second area for potential improvement surrounds the
 14 measurements of online child sexual abuse imagery. The
 15 box there suggests that better estimates for the amount
 16 of content circulating on the internet, the number of UK
 17 users viewing it, is vital to ensuring a public
 18 understanding of the scale of the problem.

19 Now, Ms Hargreaves, the chair and panel have heard
 20 a number of statistics from a variety of sources, why is
 21 it, notwithstanding all of the data that's already out
 22 there and available, there is this recommendation that
 23 perhaps more still needs to be done to get across the
 24 scale of the problem?

25 A. This is a really important recommendation in relation to

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1 Brussels, and we're working quite extensively with
 2 a team out there to ensure that we are influencing and
 3 impacting on future legislation and policy.

4 Q. Turning to the future, then, can I ask you, please,
 5 about some recommendations that were made in a Demos
 6 briefing paper, which I think the IWF commissioned
 7 in January of 2018.

8 Chair, if you look behind tab 2 in the bundle, and
 9 can we call up on screen, please, IWF000008_030 and 031.

10 We're still with page 30, firstly, before turning to
 11 page 31, but the Demos paper concluded that there were
 12 seven areas in which government tech companies and the
 13 media might improve -- approve combating CSA.

14 Can we start with what's termed there "Focus on the
 15 top of the pyramid"?

16 What does IWF say about this recommendation in this
 17 paper?

18 A. Well, obviously, this is a recommendation for law
 19 enforcement. And I know there have been ongoing
 20 discussions about the best way to maximise resources for
 21 maximum effect and, you know, we think it's right that
 22 there is a focus on contact abuse and the more severe
 23 levels of abuse.

24 We also think there's quite a lot of work to be done
 25 in terms of ensuring that we don't lose sight of the

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1 the -- our work and what we think. So the truth is,
 2 nobody knows how many images are out there, and the
 3 problem is that, when you hear the phrase "There are
 4 millions of images", I don't think people realise that
 5 we're not talking about unique images, we're talking
 6 about duplicates, obviously new images are coming online
 7 all the time, so it's a constantly dynamic and changing
 8 environment. Plus we don't classify images the same
 9 across the world, there is no standardised approach to
 10 images, so what you get are -- it's very hard for you to
 11 make sense, is it a good thing that Facebook removes
 12 7 million images or is it a bad thing?

13 You know, so it's really, really hard to know if
 14 those measurements and mechanisms that we're all talking
 15 about, you know, what they actually mean in real terms.

16 So we would totally support some way, and preferably
 17 on an international basis, of having some kind of
 18 standardised form of recording and measuring, you know,
 19 classifications, how many images, so that we are all on
 20 the same page and we are comparing like with like. The
 21 Arachnid example is a good one I gave you. We're not
 22 comparing like with like.

23 Q. Within that box, there is reference to the technology
 24 companies being transparent and keeping data about the
 25 volumes of material. Now, there have been some

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<p>1 transparency reports that, indeed, the inquiry has 2 looked at during the course of this week. Why does the 3 IWF consider it important that the tech companies should 4 keep that data? 5 A. Again, I -- my personal view and at the IWF is that 6 there needs to be a sense that -- that if tech companies 7 shared that information, it was very sort of damaging to 8 their reputation and brand, but the reality is people 9 know that they are legitimate platforms whose services 10 are abused and that, actually, you can find this 11 content. So, of course, how you frame it and talk to 12 the public about it, it's very important but, actually, 13 if we're committed to fighting the problem, we've got to 14 be open and transparent about the size of the problem 15 and what we're seeing. 16 So, you know, I think it would be very helpful if 17 they chose to be more transparent and open about it, how 18 they're fighting it, the scale of problem, and 19 an opportunity for them to talk about how they're 20 addressing it. So it's potentially a very positive 21 thing. 22 Q. Scrolling down, please, perhaps on that page, we've 23 already considered with you the ways in which -- that 24 technology is shared, improving existing technology. 25 The bottom box deals with investing in technology. At</p> <p style="text-align: center;">Page 129</p>	<p>1 the conclusion of that box, there is a statement that 2 reads: 3 "We would encourage the creation of a dedicated fund 4 for anti-CSAI technology overseen and evaluated by the 5 IWF and law enforcement." 6 Can you help explain or expand on what you actually 7 envisage by that? 8 A. Well, the first thing to say is this is a Demos 9 recommendation. 10 Q. Yes, understood. 11 A. So whilst we commissioned Demos, they're an independent 12 think tank, so this isn't necessarily our 13 recommendation. So I think the principle we support of 14 a dedicated -- of companies making funds available 15 for -- to support fighting the problem. The reality is 16 that there are more and more, actually, since this 17 report was published, we've had a number of Hackathons 18 where companies have come together and said, "What do 19 you need? What's the problem? How can we provide it?" 20 You have heard about the Googler in Residence, we've had 21 a Microsoft engineer. I think there are ways, and some 22 companies do more than others, but, actually, they have 23 the best technical expertise in the world, so we want to 24 access that and harness it and give them a problem and 25 ask them to help us find a solution.</p> <p style="text-align: center;">Page 130</p>
<p>1 So the principle of some funding is something we 2 would totally support. 3 Q. Can I turn to a slightly different topic. Clearly, we 4 have been considering, with your evidence, the fight 5 against indecent images of children. 6 Looking at your paragraphs 13.1 onwards, I just 7 would like your assistance, please, with a paper that, 8 although dealt with the capturing of live-streamed child 9 sexual abuse, encompassed within that the problem of 10 live streaming itself. 11 A. Yes. 12 Q. Help us, firstly, with why the IWF recently produced 13 that report, which, chair, extracts you will find 14 between -- behind our tab 3. 15 A. We have -- we're obviously very interested in the 16 changing patterns of where child sexual abuse is and 17 where it's found, and the impact on children. 18 So in the eight years I've been at the IWF, in the 19 first five years, about 80 per cent of the content we 20 saw was of children aged under 10. In the last three 21 years, that's shifted to be 50 per cent under 10. And 22 that's because of the increase in what we describe as 23 self-generated content. 24 One of the areas we're able to look at and to help 25 inform and share intelligence with the companies, is to</p> <p style="text-align: center;">Page 131</p>	<p>1 the extent to which we see web captures. So if I can 2 just describe what those are. 3 So this is content that has been live streamed, 4 which has then been photographed or videoed and then 5 made its way on to a child sexual abuse website. So we 6 don't see it in real time, we see it afterwards, so 7 after it's been recorded. 8 And we were seeing an increased amount of this 9 content, so Microsoft, actually, have funded three years 10 of research. This the third report that they've done, 11 they've all been slightly different. And this last 12 report we did, we really wanted to focus on webcam 13 captures of content that has been of children in their 14 bedrooms and domestic settings, and how that is coming 15 back into the work of the hotline. 16 Q. Can I pause you there, please, because it might be of 17 assistance to call up on screen IWF000010_011. 18 Some of the results we already considered in the 19 evidence in relation to Microsoft, but just looking at 20 the age of the children section in the middle of that 21 page, and it's perhaps easier to look at the box in fact 22 under the graph. This was, of course, a study that 23 I think was conducted over a three-month period 24 between August and October 2017. 25 A. That's correct.</p> <p style="text-align: center;">Page 132</p>

<p>1 Q. What one sees there is that, in terms of the age ranges 2 that were used, the vast majority of the reports were in 3 the 11 to 13-year age bracket, 69 per cent of that was 4 in that age range. 5 Do you know, is there any updated figures to help 6 with either 2018, or a more recent position? 7 A. Yes. So this was a time-limited period where we 8 captured data. If I could just clarify that when we say 9 "self-generated content", so this is content where 10 a child is on their own in their bedroom or a domestic 11 setting and they are definitely coerced. We don't know 12 what happened at the other end of the camera, but we 13 know these are children that have been coerced and it is 14 child sexual abuse, so -- 15 Q. Can I just pause you there because I can just give the 16 figures to the chair and panel to assist on that. 17 I think, in fact, in this study, over that period in 18 2017, of the total images and videos, which was 2,082 in 19 total, 2,003 of those images and videos featured 20 children who were physically alone at the time the 21 content was created. Typically the victims were in 22 their bedrooms, as Ms Hargreaves just said, or 23 a bathroom with the door closed, apparently within 24 a home environment. In one case the victim, at 25 intervals, turned her attention from the webcam to</p> <p style="text-align: center;">Page 133</p>	<p>1 engage in a routine conversation with a parent who was 2 outside. 3 That's just to give a flavour of perhaps the lone 4 children that Ms Hargreaves was just speaking to and 5 give you the figures. I'm sorry, I interrupted you, the 6 2018 update -- 7 A. No, no, no, and also, if I could just also add to that, 8 one of the -- sorry, I forgot to say under the 9 motivations for doing this is that clearly there is 10 a major issue with live streaming of children in 11 countries like the Philippines, and that is absolutely 12 appalling and obviously really needs to be tackled. But 13 we also wanted to bring the attention to the fact that 14 it wasn't just children in the Philippines, that 15 actually -- and other countries -- that actually we have 16 children potentially in this country who are at risk as 17 well. So we wanted to give a broader picture. 18 So if I could just say that, in terms of an update, 19 in the first four months of this year we've actually 20 seen an increase in the self-generated content, which is 21 now at 36 per cent of all the content we actioned. So 22 over one in three. So in that period, the first four 23 months, we took action on 15,264 URLs of self-generated 24 content. 25 This is the statistic I really want to share with</p> <p style="text-align: center;">Page 134</p>
<p>1 the panel, because we're all so worried about this, is 2 that 81 per cent of those were children aged 11 to 13 3 and predominantly girls. So, you know, 90 per cent 4 girls. So we are extremely worried about girls, young 5 girls, 11 to 13, in their bedroom with a camera-enabled 6 device and an internet connection. 7 Q. I think you also say later on in that report that there 8 was, certainly on the 2017 figures, a finding of 9 28 per cent of the children were being assessed as ten 10 years or younger. 11 A. Yes. 12 Q. Which brings me on to one of my final two topics, 13 please. And, chair, if I may make this suggestion, 14 I have nearly concluded my questioning with 15 Ms Hargreaves, might it be sensible to conclude that and 16 not take the break at this stage? 17 THE CHAIR: Yes. 18 MS CAREY: Thank you. 19 Help us, please, then with, Ms Hargreaves, what the 20 IWF considers to be the future challenges for detecting 21 and indeed preventing access to child abuse imagery. 22 A. So the danger we have here is that the numbers are so 23 huge and, you know, the numbers will go up this year as 24 well. That we are losing sight of the children within 25 those numbers. So what we are wanting to do is not just</p> <p style="text-align: center;">Page 135</p>	<p>1 continue to remove the content, because it's essential 2 for the children in those images that they know that 3 there's an organisation like us that can remove that 4 content, that there is some hope for them, but at the 5 same time we have to focus a lot of our energies on 6 stopping the content being uploaded in the first place 7 and we need to focus on prevention. 8 We want to move more into a space where we're doing 9 that. So we will continue to work with technology 10 companies to do everything we can, to use innovative 11 technology to disrupt the distribution of child sexual 12 abuse and stop it being uploaded, but we also want to 13 work on the messaging, we also want to work with our 14 partners, particularly the police, government, other 15 NGOs, to work collectively to form some kind of national 16 prevent campaign where we're all working together to 17 develop a sort of zero tolerance approach to looking at 18 child sexual abuse. 19 We believe that is possible, we believe there have 20 been public campaigns on drink driving or equivalent 21 where we have been able to bring about a change in 22 hearts and minds. 23 It's difficult to talk about child sexual abuse, 24 people don't want to talk about it, but we have so many 25 people looking at child sexual abuse and we need to be</p> <p style="text-align: center;">Page 136</p>

<p>1 more open and upfront about that. We need to do more --</p> <p>2 alongside that we need to do a huge amount more of</p> <p>3 awareness raising with children and be more upfront</p> <p>4 about -- and their parents -- about the dangers of being</p> <p>5 online. Particularly one of the things I would like to</p> <p>6 see is hardware manufacturers doing more to perhaps</p> <p>7 ensure that camera-enabled devices can be easily</p> <p>8 disabled in children's bedrooms. And that we need to be</p> <p>9 absolutely clear what the risks are.</p> <p>10 So our view is you can't resolve this just from</p> <p>11 technology. We utterly concur with industry that there</p> <p>12 is no silver bullet. You need the three-pronged</p> <p>13 approach, you need law enforcement legislation, you need</p> <p>14 technology, but you also need awareness raising and</p> <p>15 education. Where we would like to move is more into</p> <p>16 that kind of awareness-raising space but not at the cost</p> <p>17 of removing images at the same time.</p> <p>18 Q. You spoke of a three-pronged approach and indeed how</p> <p>19 there would be potentially law enforcement and</p> <p>20 legislation. Insofar as you are able, Ms Hargreaves,</p> <p>21 can you help with the IWF's views on the Government's</p> <p>22 Online Harms White Paper, and in particular the proposal</p> <p>23 that there should be a regulatory framework? What does</p> <p>24 the IWF say to that proposal?</p> <p>25 A. Well, as similar to everyone else who has spoken, we're</p> <p style="text-align: center;">Page 137</p>	<p>1 obviously in the middle of developing our response to</p> <p>2 the Online Harms White Paper. What we can say is that</p> <p>3 we are broadly supportive for a new regulator and</p> <p>4 clarity around what is within scope. We welcome the</p> <p>5 code of practice. We particularly welcome that in</p> <p>6 relation to child sexual exploitation and what the</p> <p>7 expectations of companies are.</p> <p>8 We very much hope that the legislation will be</p> <p>9 flexible enough to allow growth within the internet and</p> <p>10 the changes within the internet, but also allow for</p> <p>11 different companies of different sizes to be able to</p> <p>12 engage with and take advantage of the technologies</p> <p>13 around.</p> <p>14 We look forward to working with the new regulator,</p> <p>15 and looking at ways in which we can support what the</p> <p>16 regulator will do.</p> <p>17 We have highlighted within our report a concern</p> <p>18 about potential unintended consequences of too</p> <p>19 restrictive regulation in our space. At the moment we</p> <p>20 are in a very fortunate position in the UK in that we</p> <p>21 don't have to go to court to get a court order to get</p> <p>22 content down, which means we can move incredibly</p> <p>23 quickly, in a way that other countries just can't.</p> <p>24 So we don't want the good things that have been</p> <p>25 achieved to be thrown out, and we want those to be kind</p> <p style="text-align: center;">Page 138</p>
<p>1 of recognised and we want to ensure that the victims are</p> <p>2 put at the heart of any new regulation.</p> <p>3 Questions by THE PANEL</p> <p>4 MS CAREY: Ms Hargreaves, they are all the questions that</p> <p>5 I have.</p> <p>6 Chair, can I see if there's any questions from</p> <p>7 either yourself or the panel?</p> <p>8 THE CHAIR: Mr Frank.</p> <p>9 MS CAREY: Thank you.</p> <p>10 MR FRANK: Thank you.</p> <p>11 Just focusing on one thing, really. You remember</p> <p>12 earlier in the week we heard from Mr Milward from</p> <p>13 Microsoft, and he had a number of recommendations to</p> <p>14 make to us, including that there should be more</p> <p>15 engagement with other participants in this space,</p> <p>16 including hosters, payment providers, porn companies,</p> <p>17 who all have a role to play and are potentially able to</p> <p>18 assist in the interdiction of these images coming onto</p> <p>19 these websites.</p> <p>20 I notice that you have some payment providers as</p> <p>21 members of your foundation.</p> <p>22 A. Yes.</p> <p>23 MR FRANK: But do you get as much co-operation from payment</p> <p>24 providers as you would like? Or are you able to expand</p> <p>25 your membership in that area?</p> <p style="text-align: center;">Page 139</p>	<p>1 A. That's a very good question. So we do work with UK</p> <p>2 finance, because about 20 per cent of the content we see</p> <p>3 is behind payment barriers. The difference, obviously,</p> <p>4 is that's organised crime and that's for payment, that's</p> <p>5 for money, whereas the majority of the content that we</p> <p>6 see is about behaviour and, you know, people's prudish</p> <p>7 position towards child sexual abuse.</p> <p>8 We can do more, actually, with payment providers,</p> <p>9 and it's something we're working on. So it's a very</p> <p>10 good point, and it's something we would like individual</p> <p>11 payment providers to kind of do more with us. So we're</p> <p>12 in discussion with a lot of them.</p> <p>13 In relation to the adult industry, that's also</p> <p>14 an excellent point to raise. Particularly now that age</p> <p>15 verification will be coming in in terms of the Digital</p> <p>16 Economy Act. Up until age verification coming in it was</p> <p>17 quite hard for us to engage with adult providers as</p> <p>18 a member of the Safer Internet Centre when children were</p> <p>19 clearly having access to inappropriate content, not</p> <p>20 illegal but inappropriate adult content. So what we</p> <p>21 wanted to do was start a conversation with the adult</p> <p>22 providers where, once they are kind of ensuring that</p> <p>23 children under 18 can't access their content, where we</p> <p>24 could say, "Look, we'd like to work with you in some</p> <p>25 way", because we know that a lot of young men access</p> <p style="text-align: center;">Page 140</p>

<p>1 child sexual abuse potentially through adult content in 2 the first case. 3 So although I can't give you the details, we're 4 actually in discussion with one of the major adult 5 providers, once age verification comes in, to run 6 a pilot year where they would take our services to do 7 what we can to particularly target that age group of 8 young men. 9 So it is an excellent question. Thank you. 10 MR FRANK: Thank you. 11 THE CHAIR: Thank you, we have no further questions, 12 Ms Hargreaves, thank you. 13 THE WITNESS: Thank you very much. 14 MS CAREY: Chair, that in fact concludes the live evidence 15 due to be heard this week, returning in week 2 to 16 consider the law enforcement and Government response, 17 amongst other things. But that's all the evidence that 18 we're able to call this week of the investigation. 19 THE CHAIR: Thank you, Ms Carey, we'll reconvene on Monday. 20 MS CAREY: Thank you. 21 (3.05 pm) 22 (The hearing adjourned until 23 Monday 20 May 2019 at 10.30 am) 24 25</p> <p style="text-align: center;">Page 141</p>	<p style="text-align: center;">I N D E X</p> <p>1 2 3 MR KEVIN WILLIAM BROWN (sworn)1 4 Examination by MR KRISHNAN1 5 Questions by THE PANEL47 6 7 Statement of MR MICHAEL ROBERTS48 8 (read) 9 MS SUSAN ELIZABETH HARGREAVES51 10 (sworn) 11 Examination by MS CAREY51 12 Questions by THE PANEL139 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p style="text-align: center;">Page 142</p>

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