

Covering 1st Jan - 31st Dec 2011

TABLE OF CONTENTS

PREFACE	3
FOREWORD	4
EXECUTIVE SUMMARY	5
Reports of illegal content fall by over 50% on previous year	5
Summary of hotline reporting figures for 2011	5
Record low in content assessed as CSAC	5
Survey commissioned by Hotline.ie	6
Reporting illegal use on all Internet services	6
Notable successes	6
The necessity to report	7
ANALYSIS OF HOTLINE ACTIVITIES DURING 2011	8
Input - The reports received	8
Reporting volume	8
External and derived reports	8
Monthly reporting patterns	8
Comparison to previous years	8
Report source	9
Suspicion quoted in reports	10
REPORT ASSESSMENT PROCESS	11
Reports which could not be processed	11
Reports where content was unobtainable for assessment	11
Reports not requiring content analysis	12

Fully assessable reports	12
Assessment criteria	12
Reports assessed as not being illegal	13
Misguided reporting	14
Illegal content	15
Report tracing	16
REPORT FORWARDING	17
International forwarding	17
Resulting action	17
THE HOTLINE SURVEY	19
Introduction	19
Browsing frequency	19
OBSERVATIONS TRENDS & SUCCESSES	23
Introduction	23
Illegal content being accessed less often	23
Bulgarian Arrest	23
Child Exploitation Directive	24
Strengthening partnerships and sharing knowledge	24
CONCLUSION	25

Covering 1st Jan - 31st Dec 2011

PREFACE



By Alan Shatter, T.D.

Minister for Justice,

Equality and Defence

Today we live in a time when, due to influences of information and communications technology, the way our children live their lives is constantly

changing. Nowhere is this more evident than with young people's use of the Internet. Email, instant messaging, texting, tweeting and social networking sites are allowing children in Ireland to connect with each other and engage with society in ways that were previously unimaginable. New media technology offers extraordinary opportunities for all of society and the Internet and new online technologies are now becoming a normal feature in everyday life, for children, young people and their families.

For many of us, the Internet is a positive and powerful medium for engaging in public life. We can use the Internet in our work, educational learning and socialising. However, along with the positive aspects of Internet use come risks to safety and exposure to illegal content and we need means and measures to address these risks. We must remain vigilant in tackling Internet downside issues, such as the abhorrence that is images of child sexual abuse. As we face these challenges there

is a need for constant review of the commitments for all those charged with protecting against these issues.

In this regard, the role of Hotline.ie as part of the international network of hotlines (INHOPE) is particularly important. Established in 1999, the Hotline provides a secure and confidential service for the public to anonymously report content they encounter on the Internet that they suspect may be illegal. Once reported, the material is assessed by Hotline Staff and, if considered to be probably illegal, steps are taken to instigate its removal from the Internet. Hotline.ie is funded by the Internet Service Providers' Association of Ireland (ISPAI) with support from the EU Safer Internet Programme. Ireland's participation in the EU Safer Internet Programme is coordinated by the Office for Internet Safety in my Department.

I note Ireland's excellent track record in not providing illegal content from the Irish jurisdiction was maintained during this reporting period and that since the Hotline establishment in 1999, only three cases of illegal content hosted from Ireland were discovered. I also note that the Hotline processed a report of suspected illegal activity on a P2P network and through the successful cooperation with the Bulgarian Hotline (one of the IP addresses was traced to a Bulgarian ISP) and the Bulgarian Police Force, the tracing actions of the Irish Hotline lead to the arrest of a teacher in a town in Bulgaria.

This case highlights the invaluable work done by the Hotline but we must never become complacent. I would strongly encourage anyone finding any trace of suspect activities when browsing the Internet to report it to the Hotline immediately. I believe that responsible states and citizens must do everything in their power to try to curtail the trade in these images that occurs on the Internet.

Finally, I would like to take this opportunity to thank Paul Durrant, General Manager of Hotline.ie and his staff for all their dedicated work. Through the right combination of reducing availability, restricting access and increasing resilience to harmful and inappropriate material online we can strive to make the Internet a safer environment for all our citizens, particularly our children

Covering 1st Jan - 31st Dec 2011

FOREWORD

By Paul Durrant

ISPAI General Manger



August 6th 2011 was the 20th anniversary of the World Wide Web being made available to the public.

Tim Berners-Lee's project did for the Internet what Frank Whittle's jet engine did for the aeroplane, catapulted it from exclusive use by the elite to common use by the masses.

The Web has driven demand for Internet connection, fuelling network expansion with increasingly wireless and mobile access. The prediction embodied in its name has been fulfilled with the Web having truly become the "Worldwide" means of mass communication, entertainment, business transaction and the phenomenal international repository of information, which it is today.

Unfortunately these same systems that bring so much benefit to humanity can equally be put to nefarious use by a small minority in society. This was recognised back in 1998 when the Government established the "Working Group on the Illegal and Harmful Use of the Internet". It was out of this Group's recommendations that the ISP industry agreed to self-regulation to combat illegal use and Hotline.ie came into being in November 1999 as central to this effort. The concept was that the Internet is so vast and so international that, unlike a shopkeeper who oversees what is available in his shop, it is impossible for ISPs to control what is available over their service. If the public want a safer Internet, they must act as "Neighbourhood Watch" and take responsibility to alert providers or police if they encounter content or activities that they suspect to be illegal. ISPAI members wish particularly to combine forces to try to eliminate the use of our Internet systems for the distribution of child pornography (now often referred to as child sexual abuse content, CSAC).

The Web has been particularly successful as a means of bringing together interest groups, irrespective of the geographical location of their members. The ease in which anyone with little or no technical expertise can readily participate in such groups has been exemplified by the success of social networking. We are witnessing an evolution of Internet use and particularly how people approach obtaining information from the medium.

This report shows over 2011 there has been a further decline in the number of reports received by Hotline. ie that are proving to be illegal. This is good news as it implies people are not coming across illegal CSAC with the frequency seen in the past. However, it has us concerned that some new dynamic is at play which may be assisting those with a sexual interest in children to use the Internet with less chance of ordinary people stumbling across their sordid caches of photos and videos.

Examining reports from other INHOPE Hotlines we also see a decline in CSAC reports but nowhere has the decline been as marked as in Ireland. We have no explanation as to why, given that we are receiving roughly the same number of reports of suspected illegal content. This prompted us to commission a nationwide survey undertaken by an independent survey company to judge people's experience of using the Internet, their perceptions about encountering illegal content, whether they are prepared to report it and to where. This is discussed in the main report and lends credence to the good news, that is, going about normal use of the Internet you are less likely to encounter CSAC than was the case a few years ago.

Covering 1st Jan - 31st Dec 2011

EXECUTIVE SUMMARY

Reports of illegal content fall by over 50% on previous year

In 2011, reports received by the Hotline where the content was assessed to be probably illegal under Irish law fell by a massive 50.5% on the previous year. When duplicates are excluded, there were 92 such reports in 2011 compared to 186 in 2010. Given that overall reporting to the Hotline has been similar to previous years, only decreasing slightly in 2011, this outcome is a welcome indication that the average Internet user is not encountering content they suspect to be illegal as frequently as occurred in the past. Given that reported illegal content is predominantly child sexual abuse content (CSAC) this does suggest that concerted international efforts are making headway.

This dramatic decrease further emphasises the everevolving landscape of the Internet. Recent studies ¹ ² have shown that CSAC is more frequently shared on technologies such as "peer to peer" (P2P) or web streaming services, rather than the older more traditional methods which were employed when Hotline.ie was in its infancy. It is now a challenge to the INHOPE network of hotlines to embrace these technological changes and adapt to ensure that notice for and takedown of CSAC remains a most effective tool.

Summary of hotline reporting figures for 2011

In brief, the statistics relating to reports received by the Hotline in 2011 are:

- 2,411 reports processed by the Hotline.
- 93 reports referred to illegal content resources (one duplicate report, i.e. two reports were received about the same content) giving a total of 92 unique reports of illegal content.
- 2,318 were assessed as not illegal or, could not be found or assessed for a variety of reasons, were queries or were simply outside the Hotline's remit. (A break-down of these is provided in the full report).

Of the 92 unique illegal reports processed, the assessment was:

- 83 were child sexual abuse content and were forwarded for action through INHOPE or law enforcement channels (via An Garda Síochána).
- 1 was a case of child grooming activities being carried out online and the matter was referred to An Garda Síochána.
- 1 was racism or threat of violence against an individual.
- 7 were financial scams that had an Irish connection.
 Where possible, these were referred to the ISP or owner for takedown.

In all of the above cases the source location of the illegal content proved to be outside of the jurisdiction.

Record low in content assessed as CSAC

While having processed 2,411 incoming reports in 2011 compared to 2,646 in 2010, a relatively small drop of 8.9 per cent, Hotline.ie has seen a much larger decrease in reports assessed as referring to illegal child sexual abuse content (CSAC) in the year. This fell from 183 unique illegal reports in 2010 to 83 in 2011, representing a massive 54.6 per cent drop. The number of unique reports confirmed as referring to illegal CSAC, is now at its lowest since 2001, when the Hotline had been operating for just over two years and the Internet using population of the country was tiny in comparison to that of today.

The Hotline is pleased to be able to report that for 2011 Ireland has returned to its clean record in relation to CSAC. That is, no report received by the Hotline which was assessed as referring to illegal content was traced to a source in Ireland.

It is worthy of note, that since its establishment in November 1999, the first proven incident of CSAC hosted in Ireland reported to Hotline.ie occurred in late 2009 and there were two further cases in 2010. This must be kept in proportion; three cases of CSAC in over eleven years is an outstanding record of which many of our INHOPE counterparts would be very envious. However, the challenges posed by the evolving Internet environment, such as cloud computing services, which the Irish government and industry is rightly keen to promote in this country, leave no room for complacency. Two of the three cases recorded involved content on

[&]quot;Quantifying Paedophile Activity In a Large P2P System" Measurement and Analysis of P2P Activity against Paedophile Content Project, LIP6, France

Covering 1st Jan - 31st Dec 2011

such cloud services hosted or mirrored in the Republic of Ireland.

Survey commissioned by Hotline.ie

Examining the falling trends in overall CSAC reported over the last few years, Hotline.ie was concerned that public attitude may have changed in some way that was affecting reporting of illegal content. To try to gain some insight into this, Hotline.ie commissioned a nationwide survey carried out by Behaviour & Attitudes Ltd. This was done as part of their February No. 1 Barometer multi-topic survey which is undertaken through face-to-face interviews of 1,000 adults (16 and over). By using this "offline" methodology, professional advice was that a more representative sample would be obtained than if an "online" survey had been used, where typically respondents would be skewed towards the more "Internet and computer savvy".

Some highlight findings are given here. Surprisingly 25% of respondents said they never use the Internet but in contrast 25% use it multiple times every day. The other 50% fell between using the Internet from once per fortnight to daily. In total, 71% used the Internet once a week or more. Regarding concerns over their children's use 50% of respondents had no children in the home. Interestingly, 30% of those who responded believe that their children used the Internet once a week or more, much less than the adults themselves and much less than recent surveys of children³ themselves.

Questions were asked to assess peoples' subjective view of potential dangers of content that may be encountered on the Internet. 69% felt that the Internet "can expose you to a lot of unpleasant images that could be illegal" and 39% had themselves come across content or spam emails that "often startled" them (but was not necessarily illegal). This was asked to gauge concerns about content that may not be suitable for their children. Of concern, is that only 19% claimed they had definitely installed software that can filter content in the home and it emerged that there was confusion about antivirus software (computer security) and filtering software (browsing security). 32% also felt that the Internet had to some degree become safer in recent years while 26% felt the opposite. 65% felt that there should be a simple system for reporting harmful or illegal content. When asked about their likelihood to refer the same to Hotline. ie, 69% responded positively, 18% didn't know and only 13% felt they would be unlikely to do so.

We hope this survey supports the view that the Internet using population are sufficiently concerned about illegal content that if they did encounter it, they are likely to report it and that the drop in illegal reports probably reflects a drop in this type of content being encountered.

Reporting illegal use on all Internet services

Illegal content makes up only a very minute percentage of all material available on the Internet; however, to-date most reports received by the Hotline refer to content encountered on the World Wide Web. So regrettably, the Hotline figures cannot indicate that the overall amount of child sexual abuse material on the Internet has fallen; only that such material is less often encountered by typical users of the Internet in Ireland especially when browsing the Web.

It is important that the general public using services other than the web, such as peer-to-peer (P2P), also report. When using P2P, if users encounter filenames (e.g. a torrent file) suggesting child pornography or a download unexpectedly provides a file with content they suspect to be illegal, they should report them anonymously in the same way they report content encountered on the World Wide Web. This also applies to UseNet, mobile apps or where spam email provides illegal content (CSAC, racist incitement) or links to such illegal content. Public reporting is an essential element in making the Internet a safer environment for all users, particularly children, not just here in Ireland but around the world.

Notable successes

Hotline.ie regards as a basic success every report of illegal content made to us where we found that content, traced its source on the Internet, and then forwarded it by the approved channels to that country for action by their Hotline or law enforcement authorities. Frustratingly, we rarely receive specific feedback on a given report. It would be gratifying to learn if a report had led to the child featured in the CSAC being rescued from abuse or that somebody has been prosecuted for uploading the images we have forwarded. However, we

Covering 1st Jan - 31st Dec 2011

do see the success of our actions in that on a worldwide scale, 82% of all content reported by INHOPE Hotlines has been removed from the Internet within 7 days and 58% is taken down with 48 hours⁴.

This year we are glad to report that we have learned of a specific instance of Hotline.ie's work which led directly to the arrest of a perpetrator. In April 2011, we received an anonymous report of CSAC being shared on the Bit Torrent network. After investigating the shared content and verifying it was illegal (a video of sexual scenes involving boys and girls aged approximately 8 to 12 years) one of the sharing sources was traced to Bulgaria. The information was forwarded immediately to the Bulgarian Hotline (Web112.net) who passed this technical information to the Bulgarian Police Cybercrime Unit. Their investigation resulted in the arrest of a 34 year old secondary school teacher. The police search of his home yielded large quantities of child pornography.

The necessity to report

Finally, Hotline.ie appeals to all members of the public, that if you want a safer Internet where especially CSAC is rapidly eliminated, it depends on you.

If you suspect something you encounter on the Internet (the World Wide Web, a peer to peer network, or other services) may be illegal, or appears to point to where CSAC may be located, please do not ignore it - report it using the forms at www.hotline.ie.

Hotline.ie is part of the Safer Internet Ireland project

consortium coordinated by the Office of Internet Safety within the Department of Justice and Equality. As part of this project, the Hotline receives part-funding from the European Union through the Safer Internet Programme. For more information on Hotline.ie, its structure, stakeholder relationships and operations, please visit the www.hotline.ie "about pages"

ISPAI members promote and financially support the Hotline service as part of their actions to help protect their services and customers from exposure to illegal content. The ISPAI members at the time of publication are:

















































Covering 1st Jan - 31st Dec 2011

ANALYSIS OF HOTLINE ACTIVITIES DURING 2011

Hotline.ie during 2011.September 2011, with just 92 reports, had the lowest reporting level of the year, while June, with 325, had the highest. In comparison, January

in 2008. This demonstrates the difficulty of applying Analyst resources to meet the target of, on average, processing all reports received within one working day.

INPUT - THE REPORTS RECEIVED

The Hotline.ie service acts on reports of suspected illegal content received from the public. Under the procedures agreed with Government, the Hotline is not permitted to proactively search for illegal content.

Reporting Volume

In the period from 1st January 2011 to 31st December 2011, Hotline.ie processed 2,411 reports about suspected illegal content.

External and derived reports

This comprises reports received directly from the public ("External Reports") and reports derived directly from links or references in external reports that lead the Hotline Analysts to other sources of illegal content ("Derived Reports"). In 2011 there were 34 derived reports. Therefore, to carry out its function, the Hotline relies totally on the public to initiate reports.

Monthly reporting patterns

As can be seen from Figure 1, the number of reports received each month can be highly variable. On average just over 200 reports per month were dealt with by

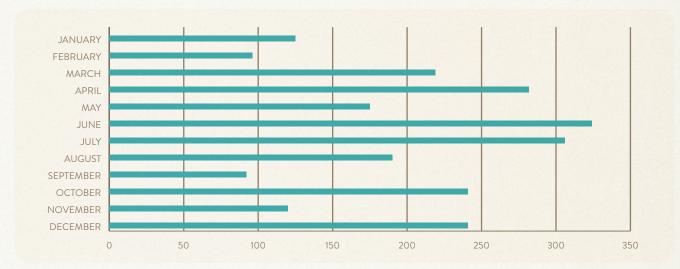


Figure 1: Monthly distribution of reports handled in 2011

2010 had the lowest reporting level, with just 113, while July, with 504, had the highest. In stark contrast, January 2009 recorded the highest level of reporting that year. This highlights the fluctuating manner in which reports are received by the Hotline. It is impossible to establish a pattern with such reporting.

The range of reports (the difference in number received from the highest to the lowest month) for the year 2011 was 233, a significant decrease on 2010 which had a range of 391. This figure, in 2011, returned somewhat to a level which the Hotline has encountered in other previous years, with a figure of 273 in 2009, and 274

Comparison to previous years

Over the last seven years (2005 to 2011 inclusive) average monthly reporting has fluctuated between an average low of roughly 164 per month (2008) to an average high of just over 223 per month (2006). The total reports per year have fluctuated around an average of just on 2,323 per annum (Figure 2) since 2004. However, this does not seem to bear any relationship to the number of instances where the content, to which reports referred, is subsequently determined as illegal. This is demonstrated by the fact that 2008, with the lowest in total reports received over the seven years, had the

Covering 1st Jan - 31st Dec 2011

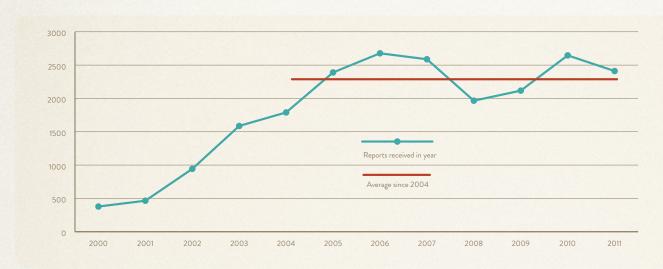


Figure 2: Number of reports received each year since 2000

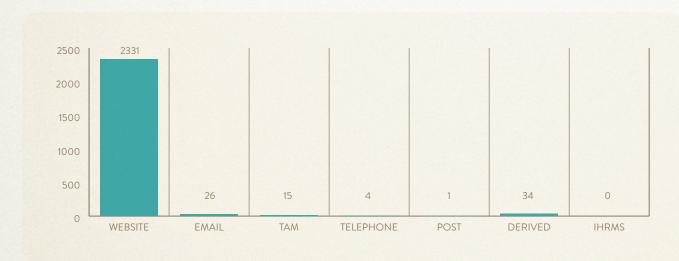


Figure 3: Reports handled by Hotline by report source

second highest occurrence of unique illegal reports, not just in the seven year period, but since Hotline.ie was established! In contrast, 2010 had the second lowest level of illegal determinations in the seven year period and the lowest since 2003, when Internet usage was very much lower than it is now! This would suggest that the public remain just as inclined to report what they suspected may be illegal content as they were in the past.

These reports of course represent suspicions about possible illegal content expressed by the members of the public who reported them. On assessment by the analysts the majority do not translate into cases where illegal content is actually found.

Report Source

In 2011 the Hotline processed 2,411 reports. These were made up of 2,377 external reports and 34 derived reports. The reports received from the public are referred to as "External Reports". On assessment, these may or may not prove to be probably illegal under Irish law.

"Derived Reports" always refer to illegal content as they are created and logged when the Hotline Analyst, in examining the content at the location referred to in an external report, finds links to other resources hosted at a different location (IP or domain) which are also assessed as probably illegal content. This does not comprise proactive searching as the content is derived in the course of processing a report initiated by the public in line with the procedures agreed with Government. For more information on the different types of reports, please see www.hotline.ie.

Covering 1st Jan - 31st Dec 2011

Hotline.ie prefers to receive reports from the public through the web forms provided on the Hotline.ie website. These are accessed by clicking the large button "Make a Report" which can be found prominently positioned on the Home Page (and all pages) of the www.hotline.ie website. Reports may also be submitted by e-mail, telephone, letter and the automated "Lo-Call" answering service at 1890 610710. The proportion of reports submitted in 2011 through each channel is displayed in Figure 3.

If Hotline.ie receives a report from another INHOPE member Hotline, this is now received via a system known as the INHOPE Report Management System (IHRMS)⁵. As can be seen from figure 3, no reports were forwarded via this system to Hotline.ie. This means that no foreign INHOPE Hotline received a report which they assessed as illegal and traced to Ireland. This corroborates the evidence of the Irish public that Internet users are not encountering illegal content hosted in Ireland.

Suspicion Quoted in Reports

When a person makes a report to Hotline.ie there is usually a specific reason given or implied. Where the Hotline.ie web forms are used, it is mandatory to select from a drop down menu which category of suspected illegal content is being reported. Figure 4 shows the suspicion given by reporters on reports.

Where a method other than the web report form is used to submit a report and the reporter has given some indication of the nature of their suspicion, the Hotline Analyst will attempt to assign it to the appropriate standard category. If no reason is given or the Analyst cannot decisively deduce the reporter's reason, the suspicion is set to "other". Note the suspicion recorded is taken purely from the words used in the report and recorded in advance of any attempt by the Analyst to access and assess the content.

Figure 4 shows the distribution of suspicion made by the reporter. The numbers include derived reports where in 2011 all cases were child pornography.

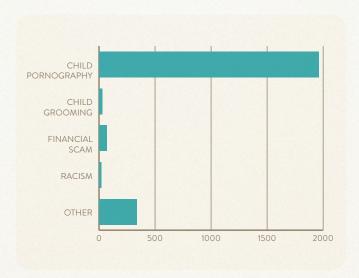


Figure 4: Reports by suspicion

Covering 1st Jan - 31st Dec 2011

REPORT ASSESSMENT PROCESS

In order to enter the content analysis process the report must be about content that is (or was) actually on the Internet and the reporter must also have given a reasonable indication as to where, or how, the Analyst may find the content in question so an assessment can be made. Of the 2,411 reports logged during 2011 there were 2,058 reports that entered into the full content analysis process, leaving 353 reports which could not.

REPORTS WHICH COULD NOT BE PROCESSED

There are two broad reasons for reports failing to enter the analysis process, one is they are not really a report referring to specific content or, while they refer to content, the Hotline Analyst could not obtain the content for assessment at the time of processing the report. These are examined below.

Reports where content was unobtainable for assessment

As shown in Figure 7, of the 353 reports that could not complete the Hotline analysis process, 304 referred to content that could not be assessed by the Hotline for one of the reasons given below:

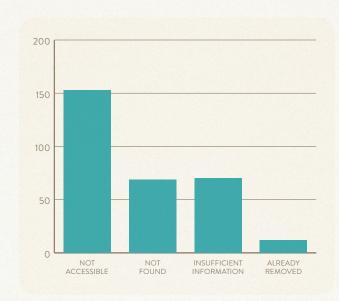


Figure 5: Reports where content could not be assessed

Insufficient information: 70 could not be processed because the reporter did not provide sufficient information for the Hotline Analyst to work out where on the Internet the suspected illegal content could be accessed. If the reporter has provided contact details, the Hotline Analyst will attempt to contact the reporter and try to get further details that could assist in locating the content in question. Often the reports are made anonymously so no follow up is possible and in many cases where the reporter is contacted they don't have the necessary information.

An example of insufficient information is where a person reports only the home page of a very large website comprising of user generated content. The Hotline Analyst may well be presented with hundreds of topic links each with hundreds if not thousands of postings. The Analyst has no idea in which area the alleged illegal image or posting may reside. It is simply impossible for the Analysts to spend hours on what might be "a wild goose chase".

Not accessible: There were 153 reports which were not accessible at the time the Hotline Analyst processed the report. This does not imply that the reporter did not encounter the content, but one of the following applied when the Hotline Analyst tried to access the reported content to assess it:

- · The domain name does not exist.
- The domain resolves (showing it exists) but the server is no longer functioning.
- The site requires payment for registration (username and password) to the area reported and these have not been provided.
- In the case of P2P it might be that a file is no longer being shared..

Not found: There were 69 instances where reports referred to a specific location but at the time of processing the Hotline Analyst could not find any content of the nature described in the report at that location (or linking from it) and there is nothing to suggest that it had been removed by the ISP or authorities. Put more technically, the domain name resolves and the server is responding but the content served is not as described by the reporter. Examples of how this might arise are:

Covering 1st Jan - 31st Dec 2011

- The reporter has typed in the URL (rather than copying and pasting) into the report and made an error. (Typically a 404 error "page not found" is returned).
- The author/owner of the site has removed or altered the page so the content as described is not present.

Already removed: This outcome is only recorded by the Hotline Analysts when there is a clear message, displayed at the reported location, stating that content has been removed. There were 12 such cases in 2011. Usually this message will refer to the content having broken the terms and conditions of the ISP. Hence, the Analyst cannot state for sure that the content would have been contrary to Irish law.

Reports not requiring content analysis

Of the 353 reports that could not complete the Hotline analysis process, 49 were not related specifically to content which required a Hotline assessment (Figure 6). These were either queries that related to the work of the Hotline or concerned issues or content types which are outside the Hotline's remit. Such reports can take up a considerable amount of the analysts' time as, where possible, the analyst will provide an explanatory response as to why the report is outside remit, and where possible, will suggest the appropriate body to deal with the reporter's concern. The report is then closed as "Outside Hotline Remit" or "Query" as applicable.

Where the report is a query and the reporter has provided contact information, the Analysts do their best

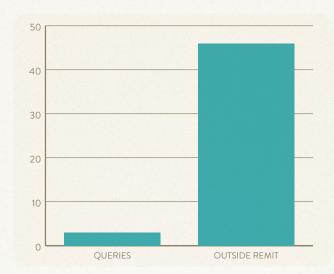


Figure 6: Reports not involving content access and assessment

to respond helpfully. However, Hotline.ie cannot offer legal advice and often we must refer people to other agencies. In many cases, the query actually progresses into a report about content which may or may not be assessed as illegal. These are converted to a full report and not counted as a query.

Surprisingly, some reporters make the mistake of asking a question but then submit it anonymously. This happens on both the Automated Telephone Answering Service and on the Web forms. Members of the public wishing to submit a question which is within the Hotline's remit or require a response on a report should ensure to include contact details so that the Content Analyst can respond.

FULLY ASSESSABLE REPORTS

These are reports where the Hotline Analyst was able to obtain the content to which the reporter referred and undertake an assessment of the content present at that location at the time of processing. Of the 2,058 reports which could enter this assessment phase, 1,965 were assessed as referring to content that was legal (i.e. not specifically illegal) under Irish law and 93 were found to be "probably illegal" under Irish law. One case of illegal content was reported twice (duplicate report) leaving 92 unique cases where the content was assessed as "probably illegal" under Irish law.

Of these 2,058 reports 34 were derived from the external reports. This means that only 59 external reports were themselves directly assessed as probably illegal.

Assessment criteria

Hotline.ie does not make moral judgements on content. Hotline.ie does not exist to decide what citizens in Ireland may or may not view on the Internet. It is not a censorship board. We exist as a shared service acting on behalf of our ISPAI members, to assess reports and notify them of illegal content they might be hosting when it is brought to our attention, so they can act to remove it as required by law. The Hotline also cooperates with International counterparts so illegal content notified to Hotline.ie but traced to a foreign jurisdiction can be notified to them and vice-versa.

The Hotline's Analysts are trained to assess content referred to the service solely on the basis of whether it

Covering 1st Jan - 31st Dec 2011

is "probably illegal" under the letter of the applicable Irish law. The assessment is based purely on the image (still or video), text or sound track as it presented on the computer screen or speakers. The Hotline cannot forward notices of content for action to other jurisdictions unless it is assessed as "probably illegal" in this jurisdiction.

Reports are received from the public where they suspect content as being "illegal" because it refers to an activity which, if it occurred as a real world incident (as opposed to a staged portrayal of that activity with consenting adults), may be a prosecutable offence. However, if the content "in itself" is not contrary to law it is assessed as not illegal and Hotline.ie will not take any action.

The Hotline Analyst's assessment can only go as far as stating that content is "probably illegal" under Irish law. Only a Court of Law can make a judgement as to whether something is definitively illegal under the law. However, under the transposition of the EU Directive on electronic commerce. ISPs must take action within a reasonable time where illegal material is brought to their attention, hence ISPAI Hotline Analysts who are acting on behalf of the ISPAI membership, make a best assessment on whether content is probably illegal and if so, take appropriate action. The ISPAI member then takes down the content on the basis of their terms and conditions for acceptable use to which the customer agrees on signing their contract to obtain a hosting or connection account. Where "probably illegal" content is notified to ISPs it is simultaneously notified to An Garda Síochána who may then choose to initiate a criminal investigation.

Reports assessed as not being illegal

Adult pornography: As can be seen from figure 7, of the 1965 "non-illegal" assessments, the majority of reports suspected to be child pornography actually proved to be adult pornography. In many cases the report proves to refer to "teen porn" websites where the models are assessed as over 17 years of age (the age specified in the Child Trafficking Pornography Act, 1998). The Hotline similarly receives a vast amount of reports where pornography videos have titles or tags which suggest that they depict schoolgirls, young maids, or siilar. These are staged scenarios containing actors, and while they may be dressed in pseudo school uniforms with their hair in pigtails, the clearly observable stage of body development shows that they are adults. These are not assessed as breaking the law which requires that

the image "....relates to a person who is or is depicted as being a child", and so these cases are categorised as adult pornography. If the dominant characteristics of any actor in the photo or video under examination were those of a child then the content would be assessed by the Hotline Analyst as child pornography and action taken as such on that report.

Extreme adult pornography: Some reports of adult pornography are categorised as "Extreme". These involve portrayals of activities which may be considered illegal (e.g. bestiality) or websites that purport to capture rape, incest, etc., where the act, if it were not a staged consensual performance, would be classed as a criminal offence. This concept is no different than that for main stream TV programmes, where murders, assaults, robberies, etc., are common place. If portraying



Figure 7: Reports where content was assessed as not being illegal

Covering 1st Jan - 31st Dec 2011

an action which is an offence made the video content illegal, much of our T.V. and cinema would be rendered illegal! The Hotline's role is only to give notice in cases where the Analysts deem the content itself likely to be illegal. Hence, these images are assessed as to the apparent age of the actors (i.e. less than 17 years of age) or whether they are depicted as a child, that is, the dominant characteristics are that of a child. Only where these criteria are met and the "child" is engaged in or witnessing sexual activity, are they classified as illegal content and further action taken.

While the Hotline would stress that members of the public should not be deterred from reporting anything which they even suspect could possibly be illegal, it is important to note the distinction between actual illegal content and content which is not outlawed by the legislation.

Child erotica: These are images judged to have been taken of children posed in an inappropriately sexual manner but are not illegal as they do not meet the criteria set in law. In all cases these were hosted abroad and Hotline.ie cannot forward a report for action unless the material is assessed as probably illegal. (If they were found to be hosted in Ireland on an ISPAI member's facilities, though to-date this has never happened, Hotline.ie would notify the ISP to consider removing the content under the ISPAI Code of Practice.)

Child nudity: This refers to images where the children may be naked but the photo or video was not produced for pornographic purposes. Examples include pictures of naked children in famine or war zone situations, naturist

sites where pictures are taken in family contexts, or images taken for diagnostic reasons which are presented in a medical context.

Computer incident: These are cases where the report turns out to be an issue due to a computer virus, hacking or similar that may for example redirect the user to unintended websites (usually trying to sell lifestyle drugs or subscriptions to fake anti-virus packages). In these cases, while the reporter may have been seriously inconvenienced and the Hotline may provide advice on where to seek assistance to remove the malware, as it does not involve illegal media content, the report is closed. If an ISPAI member is hosting a website that is placing malware on users' computers a notification will be sent for their information so they might act under their terms of service and have the owner remove the offending executable files.

Other not illegal: These are instances where the content found by the Hotline Analyst at the location specified cannot be interpreted as, for example, having been mistaken for child pornography, is simply an opinion that is not inciting to hatred, or other subjects which are simply not illegal. Sometimes links or filenames can have names that imply illegal content but when it is accessed it is just an advertisement for so called lifestyle medications or the like. There were some other categories of content leading to mistaken reports which are described below.

Misguided reporting

During the year Hotline.ie has received a significant number of reports which allege child pornography but are assessed as "other not illegal content". For example, reports have been received about articles on discussion boards or online encyclopaedias which are merely discussing the dangers of child pornography or defining what constitutes child pornography under various jurisdictions. Some are written by victims relating what has happened to them and how it affected their lives. These are not assessed as child pornography as they do not breach the legislation and no action is taken and the report is closed as "Not Illegal".

We tend to receive a large number of reports relating to animated pornographic content also. The legal status of cartoon pornography depicting minors is a difficult subject which interacts in some countries with obscenity laws and specific laws against child pornography. The law in Ireland criminalises "any visual representation" depicting a child as being engaged in sexually explicit activity. Some argue that obscene fictional images portray children as sex objects, thereby contributing to child sexual abuse. Almost every instance of cartoon pornography, which was reported to the Hotline, depicted characters with fully developed adult body parts even though their faces may have big eyes and button noses giving what can be interpreted as a young looking face. The portrayal of their bodies clearly show they are not intended to be children and these are classified as probably not illegal under Irish law by our Analysts. There was one instance in the year when

Covering 1st Jan - 31st Dec 2011

we received a report of drawings on an underground art website which depicted what were clearly children engaged in sexually explicit acts. These illustrations, although not real images, were classified as probably illegal and forwarded to the USA Hotline for analysis and subsequent removal. This case was recorded as one of the 92 instances of illegal content in 2011.

One trend which we have experienced consistently throughout the year is the reporting of images which appear in the results of a Google search which the reporter entered. For example, the reporter may be searching in Google Images for a particular name which also happens to be that of an adult pornography star. They appear to have been disconcerted when pornographic images of that star appear in the search results alongside, perhaps the social networking profile photograph of an early teen girl, with a similar name. These images are not related and therefore do not constitute visual representations breaching Section 2(a)ii of the Act which relates to "... a child... depicted as witnessing any such [explicit sexual] activity by any person or persons". In such cases, where none of the images are illegal, merely being returned as a result of a search on a certain set of terms, does not render them illegal.

The Hotline's role is to give notice about material which the Analysts deem likely to be illegal. While the Hotline would stress that members of the public should not be deterred from reporting anything which they even suspect could possibly be illegal, it is important to note the distinction between actual illegal content and content which merely provides information on

the problem or content which is not outlawed by the legislation, such as adult pornography.

ILLEGAL CONTENT

Of the 93 reports referring to content that was assessed as probably illegal there was 1 duplicate report, leaving 92 unique illegal reports. The breakdown of these is shown in the table below.

CATEGORY	ALL ILLEGAL	DUPLICATES	UNIQUE Illegal
CHILD PORNOGRAPHY	84	1	83
INCITEMENT TO HATRED	1	0	1
CHILD GROOMING ACTIVITIES	1	0	1
FINANCIAL SCAMS WITH IRISH CONNECTIONS	7	0	7
TOTALS	93	1	92

Table 1: Categories of illegal content reported in 2011

Child sexual abuse content: CSAC (termed Child Pornography in legislation) remains by far the leading category of illegal content reported to the Hotline. However, the number of reports so assessed by the Hotline has fallen dramatically over the last number of years. When found it typically is of a severe nature, involving predominantly girls but also boys of quite young age being abused. Disturbingly, ages of the children generally range from 5 to 12 years old, though there have been younger. However, the severity as per the 1 to 5 level system (developed by the UK courts),

does not seem to have changed over the last few years.

Racist and Xenophobic content: Racist material, which in Ireland equates to content that is illegal under the "Prohibition of Incitement to Hatred Act 1989" is very rarely reported. In most cases, the material does not constitute illegal content under this Act and more often are defamatory remarks that fall under civil law where the Hotline is unable to take any action. However, it must be said that in most cases material reported has been hosted in the U.S.A. where there is little possibility of having the content removed due to the very wide application of the 1st Amendment upholding freedom of speech.

Financial scams: The number of financial scams reported was surprisingly low despite the level of phishing and other e-mail scams that prevail on the Internet. It may be considered that the Internet population has become so inundated and annoyed by these scams that they simply ignore and delete them. The Hotline only deals with those that might be hosted in Ireland through our membership.

However, where they are assessed as purporting to be a legitimate company in Ireland to fraudulently obtain credit card details or similar, we attempt to notify the company and/or the ISP in the jurisdiction where it is hosted so they may remove it but we cannot state that action will always be taken. This is because there is no international network equivalent to INHOPE (where all members must deal with child sexual abuse content) which deals with financial scams. Other reported scams, for example emails claiming you have won an online

Covering 1st Jan - 31st Dec 2011

lottery draw, or have inherited a deceased foreign banker's estate, etc. that do not have any connection with Ireland, are categorised as "Outside Hotline Remit".

Note in the above bar chart INHOPE countries where no reports were forwarded in the year have been omitted. There are now INHOPE hotlines in 36 countries around the world.

REPORT TRACING

Having assessed a report as probably illegal, the Analyst then uses a suite of tools and services to trace the apparent location of the content. Only content that is assessed as "probably illegal" is traced – no tracing is done on any other category of content. In the case of a website, a trace includes finding its IP address, identifying the hosting ISP and establishing the applicable jurisdiction. For e-mail it consists of identifying the IP address which was allocated to the sender of the e-mail, the ISP who provided that account connection and the applicable jurisdiction. Similarly for peer-to-peer filesharing and other services the objective is to trace the ISP who provided the account connection.

In 2011 the results of tracing the 92 unique illegal reports are shown in Figure 8. Apparently duplicate reports (i.e. the having the same URL) when received some time apart are traced again because it is possible the content has been moved to a different IP address. Only where both the URL and the IP are the same is the report accepted as being a duplicate.

Unfortunately tracing is not always successful and in some cases the analysts cannot tell with any degree of certainty which jurisdiction was the source. Also some ISPs' networks straddle borders so the best estimate is used. This is why Hotline.ie always uses the term "apparent location".

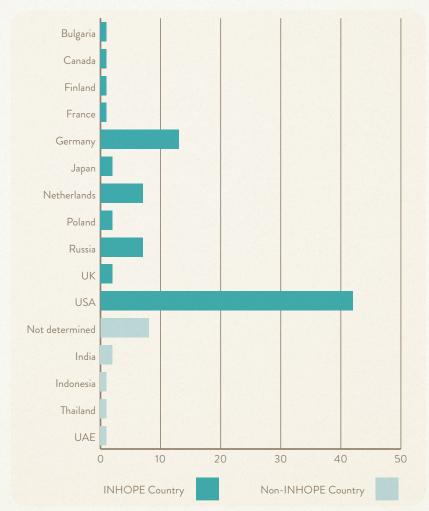


Figure 8: Apparent location of traced illegal content

Covering 1st Jan - 31st Dec 2011

REPORT FORWARDING

The next stage in the process is to make a "forwarding report" to notify authorities in the apparent location. Hotline.ie tries to avoid multiple reports being sent about illegal content. Therefore only unique illegal reports are forwarded (i.e. duplicates have been removed). As mentioned previously, in 2011 there were 92 "unique illegal reports" which could potentially be forwarded

International forwarding

The majority of these reports were forwarded via INHOPE of which Hotline.ie is a long standing member. In 2010, INHOPE introduced its new centralised report forwarding system called IHRMS (INHOPE Report Management System) and in 2011 continued to improve upon this system. This is improving international report tracking within the INHOPE network and providing enhanced statistics.

Forwarding procedures: Where an INHOPE hotline exists in the country to which the apparent location was traced, the report is forwarded to that hotline via IHRMS. If there is no INHOPE hotline in the jurisdiction, it is forwarded to An Garda Síochána so they can send it through police channels to Interpol, who in turn passes this to police in the jurisdiction of the apparent location. An entry is also made in IHRMS for statistical record purposes even though the report cannot be forwarded by IHRMS.

If illegal content is traced to Ireland, it is forwarded to An Garda Síochána and the ISPAI member and there is close cooperation to speedily act on the report. It is also entered in to IHRMS.

Information forwarded: Hotline.ie only forwards details about content which is at the target of a report. The details forwarded along with a unique case reference number are as follows:

- The date and local time the report was made to the Hotline and, where it is provided, the date and time the reporter encountered the illegal material.
- The URL or other identifier where the content reported may be accessed.
- A very brief description of what was observed that resulted in the assessment that the content was probably illegal under Irish law.
- Up to three unique identifiers (e.g. URLs) of specific illegal images at, or referenced in, the location reported and a terse description of the image or video, etc. at these locations.
- The date and local time that the Hotline Analyst accessed the content retrieved from the reported location.
- The technical tracing information obtained by the analyst that apparently shows the ISP/Hosting Provider in the country (jurisdiction) which is the source of the content.

The actual illegal images or files are never forwarded. The Hotline does not retain any illegal images, etc. once the report is closed. If downloading of files was necessary to assess content, on closing the report the downloaded files are securely deleted. Under the terms of operation agreed with the Government, Hotline.ie does not hold a database of illegal content.

Information about the reporter (if it has been supplied) is never passed on. If law enforcement investigations in the other jurisdiction can be assisted by the reporter and that jurisdiction requests to make contact, the Hotline will only provide the reporter's details having first contacted them to obtain their express permission. If the reporter refuses or they cannot be contacted their details will not be provided.

It is significant that as more hotlines have been established worldwide and joined INHOPE, the proportion of reports having to be forwarded via law enforcement has dropped from 37% of all reports in 2007 to just over 5% in 2011. This shows how development of the INHOPE network can save considerable amounts of police time, not just in An Garda Síochána but also at Interpol, as in the absence of an INHOPE Hotline in a recipient country they would have the burden of routing these reports to the appropriate jurisdiction.

Resulting action

INHOPE's 2011 Annual Report presents data comparing the last two years of IHRMS operation. It demonstrates the scale of the collective effort with some 29,908 reports being input by all the INHOPE Hotlines in 2011. This equated to 27,239 unique Uniform Resource Locations (URLs) where illegal content was allegedly located. What

Covering 1st Jan - 31st Dec 2011

is more 82% of all of these URLs were removed within 7 days.

There is a 24% increase of reports handled through IHRMS in 2011 versus 2010. However, there were a number of Hotlines who were still adapting systems and procedures to switch over to IHRMS during 2010. On receiving Government and Garda approval for the new IHRMS procedures, Hotline.ie started contributing in December 2010. Some other Hotlines were still in the process of adapting to IHRMS over 2011. In addition new Hotlines have joined the network during 2011.

Nevertheless some very encouraging statistics are emerging from that system. Of particular note is that at a global level, reports initiated in one country and often acted upon in another, are achieving take down of the offending content within just two days of it being first processed by the initiating Hotline. The majority of illegal content is shown to be taken down within 7 days. For further detail see the full report on www.inhope.org.

Covering 1st Jan - 31st Dec 2011

THE HOTLINE SURVEY

Introduction

Hotline.ie is continually concerned that the service we provide is seen as accessible to the public and that people would opt to use it if they encounter illegal content on the Internet. To obtain an overview of public perceptions on these matters Hotline.ie commissioned a nationwide survey in February 2012.

The objective was to better understand adult Internet usage, adults' views of children's usage, the perceived likelihood of encountering illegal content and adults' willingness to take measures to protect their children or report illegal content. We took this approach because most surveys about Internet safety tend to focus on the children's online habits. However, the Hotline.ie service is primarily aimed at the vast majority of adults who should take responsibility and report content that they believe to be illegal.

This survey was conducted by Behaviour and Attitudes Ltd. who interviewed 1000 adults aged 16 and over, across the country as part of their monthly barometer multi-topic survey. Questions were asked about their Internet usage habits and the concerns relating to illegal or harmful content on the Internet.

Hotline.ie chose this form of survey as it contains many different topics in the poll and so respondents were not prepared for an "Internet-related" survey as no advance notice was given. We believe this gives little time to prepare "expected or right" replies in relation to the issues.

Browsing frequency

The first questions asked how often they personally browsed the Internet.

As can be seen from Figure 9, the surprising response here was that 25% of respondents across the country NEVER use the Internet. On average nationwide, 54% of adults go online at least once a day with 25% doing so multiple times. 8% used the Internet from four to six times a week but not every day and the remaining 13% were more occasional being from a few times a week to a few times a month. 71% of respondents used the Internet once a week or more.

The second part of the question was their perception of how often their children go online. 50% of the sample had no child dependents (under 16). Remarkably, the 500 respondents with children believe that on average their children use the Internet less than they do. Only one person replied that they had no idea, which Hotline. ie suspects may be a little admitted but more widespread reality.

Only 8% believe their children go online a number of times a day, with 11% opting for "at least daily", with a further 4% believing their children went online somewhere between four and six times a week. This accounts for 28% of children where parents believe they go online multiple times a week and more. (19% reported that their children never went online. This may well be the demographic for homes with babies and toddlers

who are too young to operate a computer.)

It was quite a revelation that parents believe their children go online less often than the parents themselves.

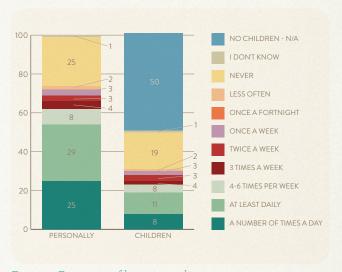


Figure 9: Frequency of browsing online

When this is compared to the EU Kids Online Survey⁶, children (9 to 16 years old) themselves say they go online much more often, with 53% saying daily or almost daily and a further 36% using it once or twice a week. That's 89% of all children stating they go online multiple times a week and more. Though the questions are not identical so there is an expected discrepancy, the result is very different to the 30% according to the sample of parents in this survey which, if adjusted for the 50% with no children, equates to approximately 60% believing their children go online once a week and more.

⁶Risks and safety for children on the Internet: the Ireland report", Initial findings from the EU Kids Online survey of 9-16 year olds and their parents January 2011. O'Neill, Grehan and Ólafsson, ISSN 2045-2551

Covering 1st Jan - 31st Dec 2011

Given that this gives some indication of the Irish population's use of the Internet, questions were then asked to obtain what can only be a subjective view of the potential dangers presented by content on the Internet. The interviewer presented a statement "Using the Internet can expose you to a lot of unpleasant images that could be illegal" and asked respondents whether they agreed or disagreed (Figure 10). Over two thirds (69%) agreed (whether strongly or slightly) whereas only 7% disagreed, with just 23% either being neutral or didn't know.

They were also asked had they come across such content themselves "I am often startled by things I come across online or by unsolicited e-mails" and 16% strongly agreed with 23% slightly agreeing, a total of 39%. 15% disagreed strongly and 13% disagreed slightly. 15% were neutral and 17% didn't know.

In consideration of children using the Internet a statement was made "I worry about what my children may come across on the Internet" and all asked to respond (Figure 11). While this showed a concern it seems they didn't think children as likely to encounter such content as the adults were, as indicated in the previous question. In contrast only one third were in agreement with far more neutral or not knowing (36%).

Interestingly the demographic split was evident, 67% of those with children agreed at all while just 19% of those with no children agreed.

In relation to concerns about children encountering harmful or illegal content concern was greater in more affluent and urban communities.

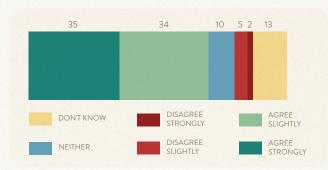


Figure 10: Potential exposure to unpleasant or illegal images

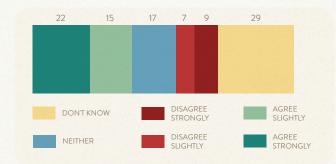


Figure 11: Worry about what my children may come across online

In an attempt to gauge whether expert advice is heeded that those with children should install filtering software to protect children from accessing websites inappropriate to their age, the statement "I have installed software that blocks access to inappropriate websites at home" was presented.

As can be seen from Figure 12, there was an alarming lack of certainty as to whether this was present or not. Ideally one would expect a clear I "definitely have" or

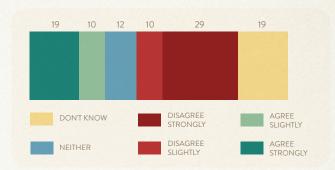


Figure 12: Have installed filter software at home installed filter software at home

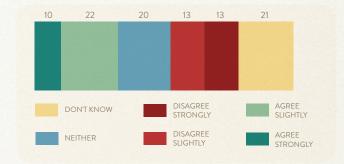


Figure 13: The Internet has become safer in recent years

"don't have" or "don't know".

Only 19% seemed to clearly know that they had installed such software. However, anecdotal feedback from the interviewers shows further that people were confused by all the security systems on their computer, such as antivirus, spam filtering, built in systems like Microsoft's "Windows Defender" and software that actually does provide filtering for browsing security. In a further breakdown of these figures, of those who agreed at all

Covering 1st Jan - 31st Dec 2011

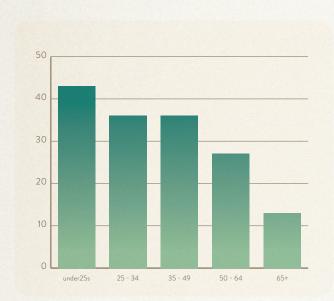


Figure 14: Percentage within age subgroups who agree that the Internet is becoming safer.

(e.g. combining the definite and "I think so" agreements), 45% of parents were in this group as opposed to 20% of non-parents. Also more affluent socio-economic groups had a higher response than less affluent groups, at 36% versus 28% respectively agreeing that filtering software was installed

A question was asked on perceptions of whether the Internet was becoming more safe or less safe than it was in the past. This may also have an influence on perceptions of the need to report to achieve a safer Internet environment. Respondents were asked to express agreement or otherwise with, "The Internet has become cleaner and safer in recent years". As seen from Figure 13, there was only a 6% difference between

those who generally agreed and those who generally disagreed, with 20% believing it was neither. (21% didn't express a view).

Interestingly, 43% of the under 25 age group agreed that it was cleaner and safer in recent years. This is shown in Figure 14 along with the percentage expressing this view from other age groups. As this survey was only carried out with persons over 16 the under 25 age group actually means person aged 16 to 25 years old.

A question was then asked to assess whether people would be prepared to report content they suspected could be illegal if they encountered it. It is accepted that this is rather hypothetical as when presented with a situation of content of this nature, people may not react as they think they would. The Hotline Analysts have had calls from the public saying they came across images that so shocked them, that they panicked and simply switched off the computer, and then on thinking about it, felt they should have reported it but could no longer remember the specific location.

The question was "If you or a family member came across something upsetting and possibly illegal, how likely would you be to refer the site or its content, in confidence to Hotline.ie?" The result was overwhelmingly that people of all groups would probably report. This was particularly strong amongst those having children but was still prevalent for those who don't. (Figures 15, 16 and 17)

The survey provides statistical evidence that:

a. About 2/3 of the Irish adult population uses the



Figure 15: Potential to report (a)
All respondents

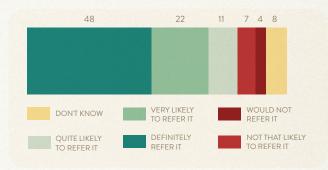


Figure 16: Potential to report (b)
Respondents with children

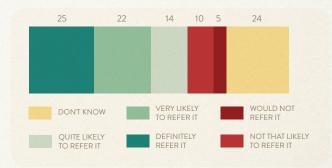


Figure 17: Potential to report (c) Respondents with no children

Covering 1st Jan - 31st Dec 2011

Internet on a daily basis or more. Hence there are a large number of people browsing information from all over the Internet any of whom have a chance of encountering any information provided openly on the World Wide Web. A small proportion of that may be illegal and one wold expect that to be encountered with a frequency that is some factor of the "browsing population" and their usage habits.

- b. A similar proportion expresses awareness and concern about the possibility of encountering unsavoury content on the Internet some of which could be illegal.
- c. This concern is translated into a willingness to report should they encounter content that is sufficiently severe that they suspect it may be illegal.

We hope that the drop we have witnessed in reports to the Hotline that refer to illegal content is therefore a function of this content simply not being encountered by Irish users to the same frequency as in the past. We trust that the other possibility, that suddenly Irish citizens have become unwilling to report, is shown to be unlikely by this survey.

While we would like to believe that paedophiles are not using the Internet to store and share their illegal content, there is no evidence to support this wishful thinking. A possible explanation for the drop, assuming people are as willing to report as previously, is that the way in which the general public use the Internet has changed considerably from the mid-2000s. This is discussed in the next section.

Covering 1st Jan - 31st Dec 2011

OBSERVATIONS, TRENDS & SUCCESSES

Introduction

The number of reports received per year grew from establishment of Hotline.ie until 2006 and this was assumed to be due to the increasing population of Internet users in Ireland. However, as can be seen from Figure 18 (and Figure 2), since 2004 the level of reporting appears to be hovering in and around 2,400 per year. (The actual average 2004 to 2011 inclusive is 2,323).

While the peak year so far for reporting was 2006, occurrences of reports assessed as referring to illegal content reached a peak the following year. In contrast to the overall reporting which seems to be oscillating around approximately 2,400 reports per annum, reports which have actually been assessed as referring to "probably illegal" content have steadily declined since 2007. Logically one would expect them to have behaved similarly to overall reporting and have fluctuated around a certain average level over the last number of years as Internet usage reaches near saturation level within the country.

Illegal content being accessed less often

ComReg's Quarterly Key Data Report⁷ in December recorded a total of over 1.68 million active Internet

subscriptions in Ireland in 2011. This is a 1.1% increase on the total number of subscriptions recorded in 2010. While the percentage rise wasn't as sharp as the 7.5% encountered the previous year, it remains an increase nonetheless. It is interesting to note that although these figures are rising, the number of reports received by the Hotline, has not been proportional. It would have been reasonable to expect a more substantial level of reports particularly in view of the fact that each broadband connection is typically used for longer periods of time and by multiple users who access far greater volumes of data than users on a dial-up connection (which was still prevalent in the years prior to 2007).

Over the last few years there is anecdotal evidence and website usage evidence that people are going online into portals such as large social networks. If usage is largely taking place within the confines of such networks there is a much reduced chance of happening on CSAM particularly. That is not to say that social networks are not also misused but such misuse is in private groups that can only be accessed by invited profiles.

In addition, in the mid-2000s when incidents of reported illegal content was many times that of today, criminal organisations were using spam e-mails to advertise subscriptions to commercial CSAC. These spam e-mails randomly appearing in users' mailboxes drove a considerable portion of reports received. Hotline.ie is glad to be able to report that no spam emails advertising illegal content were received in 2011. We hope this problem will remain a thing of the past.

When the above ComReg subscriber data is also taken

into account for those reports that were assessed as probably illegal, assuming a constant level of illegal content dispersed around the world's servers, statistically one would expect a larger number of people to happen upon that content more often. However, the reverse appears to be true if Hotline's figures can be taken as a representative sample.

As can be seen from Figure 18, the number of unique illegal reports forwarded by Hotline.ie has dropped from the high of 684 in 2007, to 497 in 2008 then to 275 in 2009, to 186 in 2010 and has dropped significantly again to 92 in 2011. Unless the Irish Internet using population has suddenly become unwilling to report illegal content, which the authors believe to be extremely unlikely, the only reasonable conclusion to be drawn is that Internet users are encountering illegal content on the Internet less often than in the previous three years.

Bulgarian Arrest

In April 2011, an anonymous report was submitted to Hotline.ie detailing a suspiciously named file which was being shared on the BitTorrent peer-to-peer network. After successfully connecting to the BitTorrent swarm where the content was being distributed, the Hotline Analyst traced an IP address in Bulgaria from which a video of a scene with two boys engaging in sexual activity with two girls was shared. The estimated age of the boys was 8 to 10 years old, and the estimated age of the girls was 10 to 12 years old. The Hotline Analyst immediately determined that it was illegal under Irish law, and gathered the necessary technical information

Covering 1st Jan - 31st Dec 2011

which would ultimately be used to trace and identify the specific ISP connection used by the alleged perpetrator.

The information was then transmitted by the Irish Hotline to our Bulgarian counterparts. This aided the Bulgarian Police Cybercrime Unit in locating and downloading the particular video, classifying it as illegal and requesting log-files from the relevant Internet Service Provider. As the activity was occurring on a service distributing dynamic IP addresses to the customers, the details provided by the Irish Hotline allowed to the Bulgarian Cybercrime Unit to trace the illegal activity to one specific IP address and identify the user as a 34 year old school teacher in the city of Plovdiv who had been teaching geography to pupils from 12 to 15 years of age.

On the 12th May the Unit arrested the teacher and

during the search in his home a large quantity of child pornography involving mainly pre-pubescent girls was discovered and confiscated as evidence. He was charged with possession and distribution of child pornography.

This case shows how effective international cooperation between INHOPE Hotlines, Police and ISPs can be in tackling online distribution of child sexual abuse content. This arrest resulted specifically from the police investigation initiated by this report.

Child Exploitation Directive

The European Union "Directive on combatting the sexual abuse and sexual exploitation of children and child pornography" (Child Exploitation Directive) was signed into the official journal on the 18th December



Figure 18: Reporting and assessment trends 2000 to 2011 inclusive

2011 and must be transposed into national law by 18th December 2013. There have been indications from Government that a bill may be brought forward to address this by the end of the year. Hotline.ie welcomes this and calls on Government and other member states to support systems to facilitate the rapid takedown of illegal content at source when notification is received. The self-regulation practices and procedures which are currently in place in Ireland between Hotline.ie, industry and law enforcement already meet the needs of this Directive, which advocates removal at source as the best way to combat CSAC online.

Strengthening partnerships and sharing knowledge

In an impressive example of the trans-jurisdictional cooperation that is crucial in tackling the global problem of the distribution of CSAM online, Hotline manager Paul Durrant was invited to join speakers from around the globe in Taiwan in April 2011, to share his expertise on the need for initiatives to keep pace with the ever evolving technological landscape. This is indicative of the continual progression of the Irish hotline in increasing their technical knowledge in meeting the advances on the Internet. The borderless nature of the modern Internet necessitates international cooperation and communication and it is reassuring to see events such as this bringing expertise from countries as far afield as USA, Australia, Japan and South Korea.

Further demonstrating the strengths of the Irish hotline, Content Analyst Alan Hannaway shared his

Covering 1st Jan - 31st Dec 2011

expertise in a presentation entitled "P2P Networks and Child Pornography – Towards making these networks a difficult place to trade illegal content" to hotline delegates at the INHOPE General Assembly in Vilnius in March 2011. This well-received address warned member hotlines of the dangers of becoming lax about new technologies, called for P2P to be prioritised on the INHOPE agenda and encouraged INHOPE to be the catalyst for advancement in combatting CSAM on P2P and to update their training and technology accordingly.

As a result of this demonstration of expertise, the Irish hotline was subsequently chosen to receive Content Analysts from the Slovenian hotline as part of the INHOPE Bursary Programme. This allows Analysts from one member Hotline to visit another member Hotline to enable the exchange of knowledge, experience and techniques in many of the areas involved in running an effective Hotline, including tracing techniques; new technologies; advice on security issues; statistics; and staff welfare. This not only proved to be a great success because the Slovenian analysts returned to their native hotline having acquired new skills and ideas, but also because it helped to build solid working relationships within the ever expanding network that is actively combatting CSAM online.

CONCLUSION

It is pleasing to see that in its thirteenth year of operation, the usage by the public of this invaluable service remains at a consistent level. It is this contribution of the public and their vigilance which has been central to the success of the Hotline to date, and we look forward to continuing in our endeavours to make the Internet a safer place for users with the on-going support and cooperation of the public.

It is most encouraging that while the Hotline continues to receive a similar level of reporting from the public to the years where reports confirmed as illegal were at their peak, the level of content which was confirmed as illegal CSAC in 2011 has reached a record low since the growth of widespread use of the Internet. The nationwide survey which was conducted by the Hotline earlier in the year confirmed that more than two thirds of the population are likely to refer material which they encounter on the Internet and suspect to be illegal to the Hotline. This positive attitude corroborates the reporting level which we continue to experience, and given the colossal reduction in confirmed illegal content in 2011, this can only mean that the average person browsing the open web is not encountering this content as frequently as occurred in the past.

It is worthy of note that the Irish public were found, in the Eurobarometer Cybercrime Poll conducted by the European Commission in 2012, to have a higher than average social networking usage as compared to their European counterparts. These habits have transitioned the way in which the average user in Ireland accesses the Internet and we must acknowledge that this may be part of the reason why CSAC is being encountered less often by the average Internet user. It now appears that CSAC is no longer being as widely distributed on the open web, and that criminals are using more sophisticated

technologies to distribute this illegal content. The phenomenon of commercial CSAC websites advertised by spam email which drive a lot of reporting in the mid-2000s, is thankfully a thing of the past. Therefore unfortunately the positive figures reported by the Hotline in 2011 cannot be said to reflect the levels of this content which are available on the entire global Internet which includes not only the world-wide-web but also on other less open networks. We now need to ensure that we adapt to meet this challenge and strive to have the same successful effect that we have had thus far, on other less familiar services such as Usenet, peer-to-peer and cyberlockers.

Fortunately, the constantly growing network of hotlines which exists worldwide as part of the INHOPE organisation, which now has 41 member hotlines in 36 countries and more in the pipeline, means that now more than ever, there is a concentrated international effort which is at the very least dissuading criminals from sharing this material on the open Internet. It is thus essential that the on-going collaboration between not only the Hotline, ISPAI members, the Garda Síochána and the Government is maintained in order to ensure that Internet hosting services in Ireland continue to be avoided by those who might attempt to use them for the distribution of illegal content but that we also continue to cooperate with our European and International counterparts in order to continue in our endeavours to make the Internet a safer place for its users.