



# NETCLEAN REPORT 2017

8 IMPORTANT INSIGHTS INTO CHILD SEXUAL ABUSE CRIME

A report about child sexual abuse crime – based on a survey completed by 435 police officers in 33 countries, with observations and analyses from 15 leading experts in this field.



# 8

IMPORTANT INSIGHTS INTO CHILD SEXUAL ABUSE CRIME



## Introduction

# We are on the right track

In this year's report, the third of its kind, it is great to note how much good work is being done across the world. Even though the problem of child sexual abuse material is endemic and complex, we are on our way to tackle it.

To ensure that we continue down this path we need more knowledge. We need to share what we extrapolate from research so that we, as a society, can act accordingly – everyone can help stop the problem of child sexual abuse. This report aims to contribute to the debate and highlight established facts as to how we can stop this abuse.

In last year's report we looked at how child sexual abuse material is disseminated. In this report we focus on whether there is such a thing as a stereotypical offender. We look mainly at those who view child sexual abuse material, but also discuss the correlation between viewing material and hands-on sexual abuse of children. In addition we look at how and where offenders contact their victims.

Understanding the nature of the perpetrator ensures that we prioritise methods and resources to most effectively work to safeguard children. Without the right knowledge and understanding we risk focusing on well-known but largely incorrect stereotypes, with the consequence that we fail to address the real problem.

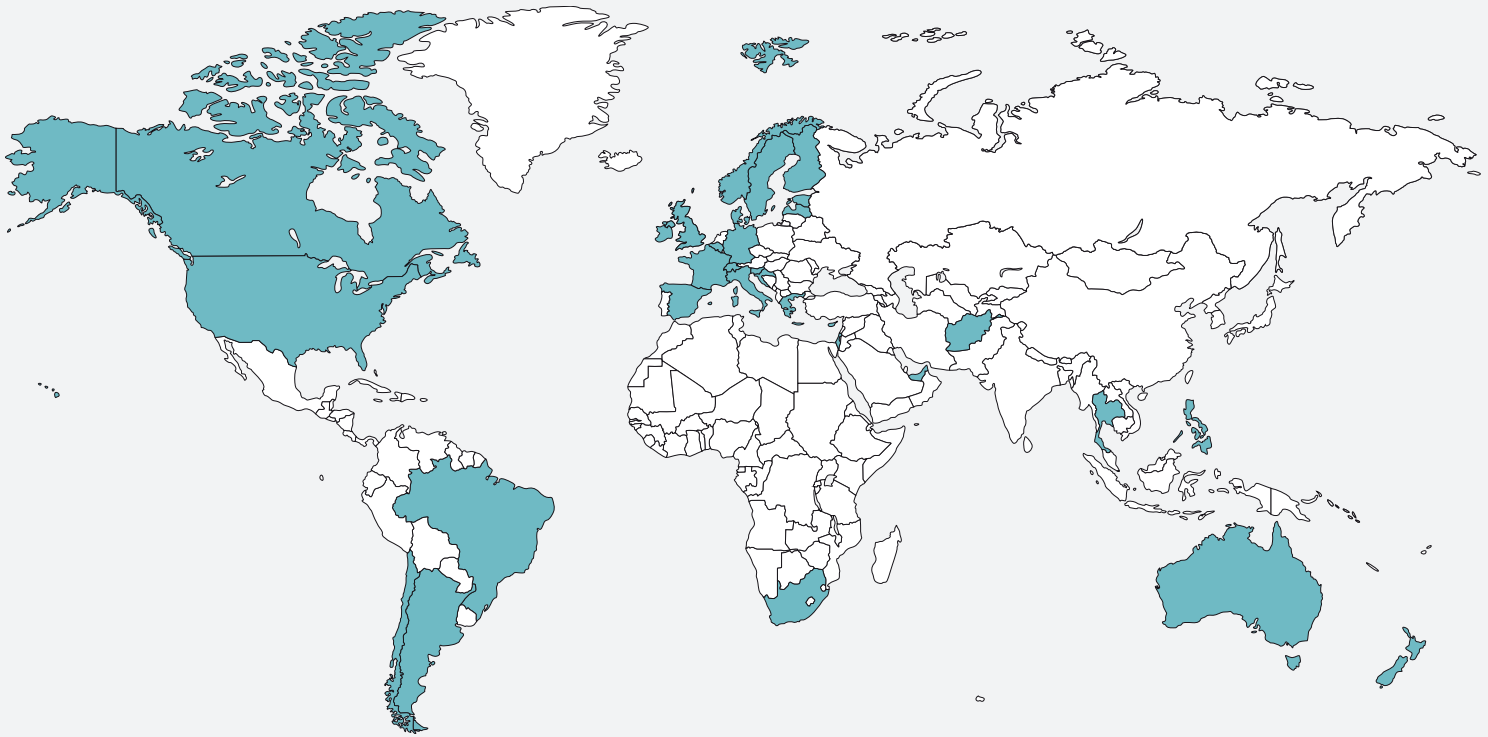
New to this year's report is that we asked a range of professionals to explain what their respective sectors are doing to combat the dissemination of child sexual abuse material. In conjunction with the expertise that the police officers share in the survey, this shows a very positive account of the work that is being undertaken and shows how important it is that different sectors collaborate.

I am very proud of the fact that some of the world's most respected professionals working to stop the problem of child sexual abuse have contributed to this report to share their knowledge and expertise. I would like to say a huge thank you to them, and to all the police officers who responded to our survey (which forms a central part of this report), and shared their experience and expertise.

I would also like to extend this thank you to all the individuals, organisations and businesses who work to combat child sexual abuse. Thank you for the amazing work you do every day to help children across the globe. We are still facing big challenges, however we are definitely on the right track to building a brighter future for all children.



**Anna Borgström,**  
Head of NetClean



# The NetClean Report 2017

This is the third report of its kind, following reports from 2015 and 2016. We have divided the NetClean Report 2017 into two parts:

The first part provides an overview of the global development of child sexual exploitation, and this year the report focuses on the offender. It looks at who consumes child sexual abuse material, the correlation between viewing child sexual abuse material and hands-on sexual abuse of children, and how the perpetrator comes into contact with children. This part of the report forms a unique insight into the expertise held by

police officers worldwide working on child sexual abuse investigations.

The second part of the report details how different sectors work to address the dissemination of child sexual abuse material.

The aim of the report is to create greater awareness and knowledge about child sexual abuse crime; to contribute to effective ways of stopping the dissemination of child sexual abuse material; and, ultimately, the goal is to reduce sexual abuse of children.

## 435 respondents from 33 countries:

Afghanistan, Argentina, Australia, Belgium, Brazil, Canada, Chile, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Israel, Italy, Latvia, Liechtenstein, New Zealand, Norway, Philippines, Switzerland, Singapore, Slovenia, Spain, South Africa, Sweden, Thailand, United Arab Emirates, United Kingdom, United States of America.

## Geographic distribution of respondents:

USA 55.4%  
 United Kingdom 11.7%  
 Sweden 6.0%  
 Canada 3.9%  
 Australia 3.9%  
 Norway 3.4%  
 Others 15.1%

### **The NetClean Report: Part 1**

The report is based on an anonymous survey completed by users of Griffeye Analyze DI, an investigative tool for images and video used by law enforcement agencies worldwide. Griffeye is NetClean's peer company. All respondents are police officers working on child sexual exploitation cases.

The survey was carried out between 23rd May and 14th August 2017. Responses were gathered through an online survey on Griffeye's user portal. 435 police officers across 33 countries participated in the survey. 55.4 percent of the respondents come from the USA, 31.5 percent are based in Europe.

To avoid skewing the results, many of the questions in the report were asked without any suggested alternatives, or as multiple-choice questions. This explains why the results for a number of questions add up to more than a hundred percent.

The NetClean Report 2017 also includes blocking statistics from Internet Service Providers using the technical solution NetClean WhiteBox. This tool blocks URLs that are known to contain child sexual abuse material. The lists of blocked URLs are provided by the police and Internet Watch Foundation (IWF).

To create a better and deeper understanding of the results of the study, we conducted interviews with a number of distinguished experts in this field.

### **The NetClean Report: Part 2**

The second part of the report consists of seven interviews with representatives from different parts of society, chosen to represent their sector and highlight the work that they are doing. They were all asked to share how they, at this current time, are working to tackle the problem of child sexual abuse, and what challenges they see in the future.

These seven sectors do not represent all the different parts of society that work towards stopping the dissemination of child sexual abuse material. They have been selected on the basis that they provide a good overview of the ambition that is out there and can showcase good examples of work being done both in the public and private sectors.

### **The following experts and organisations have contributed to the report:**

#### **Ernie Allen – Keynote**

Chairs the global initiative WePROTECT, adviser on child protection to governments, law enforcement, technology companies and more. Founder and former President and CEO of NCMEC and ICMEC.

#### **Anna Borgström**

Head of NetClean.

#### **Arnold Guerin**

Sgt., RCMP's Canadian Police Centre for Missing and Exploited Children/Behavioural Sciences Branch (CPCMEC/BSB).

#### **Björn Sellström**

Teamleader, Crimes Against Children Unit, Vulnerable Communities Team, INTERPOL.

#### **Christian Berg**

Founder, NetClean.

#### **Hanna Harnesk Hjortsberg**

Reg. Psychologist, works at Skogome Prison and with policy development at the Swedish Prison and Probation Service.

#### **Margaret (Maggie) Brennan**

Researcher and Lecturer in Criminology, University College Cork, Ireland.

#### **Mats Granryd**

General Director, GSMA (Groupe Speciale Mobile Association).

#### **Mats Odell**

Chairman, The Swedish Financial Coalition Against Sexual Exploitation of Children.

#### **Michael L. Bourke**

Ph.D., Chief, Behavioural Analysis Unit, United States Marshals Service.

#### **Steven Wilson**

Head of European Cybercrime Centre (EC3), Europol.

#### **Susie Hargreaves**

Chief Executive, Internet Watch Foundation (IWF).

#### **Taskforce Argos**

Task Force Argos, Queensland Police, Australia, is a specialist unit responsible for the investigation of online child exploitation and abuse. Five team members have commented as a group: Adèle Desirs, Jon Rouse, Paul Griffiths, Scott Ballantyne and Stuart Butler.

#### **Ulrika Rogland**

Lawyer, Ulrika Rogland Avokatbyrå AB.

#### **Volvo Group**

Has commented as a business.

# More than 3,100 children rescued

Keynote by Ernie Allen

Chairs the global initiative WePROTECT

When I read NetClean's 2017 Law Enforcement Survey and reviewed the results, I saw that two things stand out. Crucially, you can measure the impact of the past years' progress in human lives. Results from the report shows that in 2016 more than 3,100 children were identified and rescued through the use of technology and international collaboration, an 93.4 percent increase over 2015. Secondly, the key is collaboration; collecting and sharing information across the globe.

The NetClean Report is unique in the way that it gathers and contextualises data collected from law enforcement professionals across the globe who specialise in fighting child sexual exploitation. The report adds important value and insight by producing a better understanding of the problem of child sexual abuse, leading to relevant and informed actions and innovative technological developments, assisting law enforcement to address this serious and complex problem.

I chair the International Advisory Board for the WePROTECT Global Alliance. At its beginning the then UK Prime Minister David Cameron said, "the online exploitation of children is

happening on an almost industrial scale". He called it "a major international crime of our age."

Yet, too few understand that reality. Prior to the internet, someone with sexual interest in children felt isolated, aberrant, alone. Today, he is part of a global community. He interacts online with people of like interests worldwide. They share images, fantasies, techniques, even real children. And they do it all with virtual anonymity.

We are at a pivotal moment. Technology has changed every aspect of our lives, mostly for the better. Yet, there is a dark side. Technology also facilitates the exploitation of children, and it creates enforcement gaps. We have to change that. We have to catch up. We have to innovate.

Finding solutions is difficult. The sheer volume of child sexual abuse material exceeds what any of us ever thought possible. And it is growing and changing. It is moving from central servers to peer-to-peer\* networks; from PCs to mobile devices; from commercial to non-commercial distribution; from traceable to anonymous; and from local and national, to global.

Child sexual abuse material online is a problem that cannot be solved by one country, one agency or one discipline acting alone. It requires collaboration. It needs more research, more data, more analysis, and above all, it needs more innovation.

Indeed, technological innovation is the key to preventing the proliferation of child sexual abuse online. When I first met Christian Berg he had just launched NetClean with the ambitious goal to confront the explosion of child sexual abuse material on the internet. The progress has been remarkable. Multinational companies, government agencies, internet service providers, and law enforcement professionals now use NetClean and its sister company, Griffeye's, tools.

That is why NetClean is even more important today than it was in 2003 when it opened its doors. NetClean has made extraordinary progress toward achieving the bold vision Christian Berg and his co-founders laid out in 2003. It has changed the lives of thousands of children. However, NetClean's work has only just begun.

## Explanation of concepts

\* Peer-to-peer / P2P file sharing is a way to directly share files between two or more people without having to store the files on a central server.



# 3,114

## children rescued from sexual abuse during 2016

The police officers in the survey were asked how many children their unit had rescued from sexual abuse in 2016. Together they had rescued 3,114 children!

In the NetClean Report 2016 this number was 1,610 children rescued.

### **About the author**

Ernie Allen is an adviser to governments, law enforcement, technology companies and others on the digital economy, public-private partnerships and child protection. Appointed by UK Prime Minister David Cameron, he chairs the global initiative WePROTECT to combat online child abuse and exploitation. He is a founder and the former President and CEO of NCMEC (the National Center for Missing & Exploited Children), and ICMEC (the International Centre for Missing and Exploited Children).

# Eight important insights into child sexual abuse crime

1

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DEVELOPMENT OF TECHNOLOGY – BOTH  
A CHALLENGE AND AN OPPORTUNITY

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3

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THERE IS NO SUCH THING  
AS A TYPICAL OFFENDER  
(Consumer of child sexual abuse material)

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2

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THE “NORMAL” INVESTIGATION:  
FEWER THAN 50,000–500,000 IMAGES

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4

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THERE IS A CORRELATION BETWEEN  
VIEWING CHILD SEXUAL ABUSE MATERIAL  
AND ABUSING CHILDREN

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# 5

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THE OFFENDER IS MOST LIKELY TO  
VICTIMISE CLOSE FAMILY MEMBERS  
OR RELATIVES

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# 7

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TRENDS: THE USE OF CHATROOMS  
AND APPS IS INCREASING

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# 6

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CHILD SEXUAL ABUSE MATERIAL IS VIEWED  
24-HOURS A DAY, THROUGHOUT THE WEEK  
– INCLUDING HOURS SPENT IN THE WORK PLACE

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# 8

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TRENDS: THE USE OF ANONYMISATION  
TECHNOLOGIES, ENCRYPTION AND  
CLOUD STORAGE IS INCREASING

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# 1

## Development of technology – both a challenge and an opportunity

### Increased workload

Three quarters of the police officers say that their workload increased last year. Close to a quarter say that their workload is unchanged. This was also the case in the NetClean 2016 report.

According to the survey, the two biggest reasons for the increase in workload is an increase in data and more frequent and larger storage units, as well as new challenges brought on by developments in technology. Compared with last year's findings, significantly more police officers state that development of technology is a reason for the increased workload (22.4% as compared with 13.3% in 2016). To further explain the increase, the police officers surveyed also pointed to two, previously unmentioned, reasons: The wider use

of the internet and the increased number of reports from Industry.

The increase in workload is not just a negative. With an increased awareness of the crime and with more sectors responding in an effective way, more crimes are detected. The police officers pointed to three factors in the survey that highlighted this: Greater general awareness and increased tendency to report the crime; a rise in mandatory reporting from industry; and better work processes and capacity.

### Better equipped

Three quarters (74.1%) of the police officers surveyed state that their ability to process child sexual abuse investigations has improved compared with the previous year. They state the reason for this is improved tools,

Project VIC\*, more education and more resources.

In the NetClean Report 2016 a staggering 92 percent indicated that they are working under better conditions. Although the number is still high this year (74.1%), in comparison, it is lower in this year's report. Without further investigation it is not possible to determine why this is the case.

### Technology – a common theme

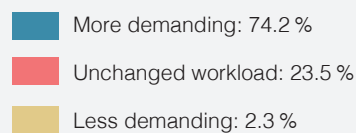
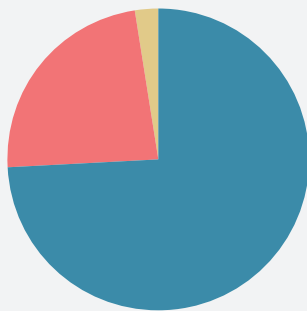
'Technology' is listed as a common theme both explaining why workloads have increased and as an answer to why police officers feel better equipped to deal with child sexual abuse investigations. While the development in technology presents big challenges for the police, it also offers the police new ways to deal with the crime.

### Explanation of concepts

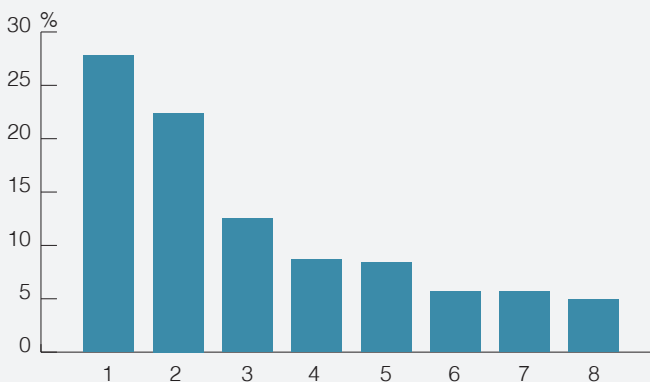
\* Project VIC is an important driver behind the development of CSA investigations by producing innovative technology and new ways of ensuring a victim centric approach. Project VIC is a coalition between law enforcement across the world and the private sector.

## INCREASE IN WORKLOAD

Change in workload in 2016



Reasons why work is becoming more demanding (answers in free text)



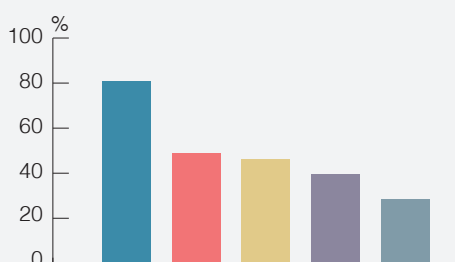
1. More data, more and larger storage units: 27.8 %
2. Challenges following on from development in technology: 22.4 %\*
3. Increased number of cases: 12.5 %
4. Lack of resources: 8.7 %
5. Increased awareness and more people reporting the crime: 8.4 %
6. Increased mandatory reporting from industry: 5.7 %\*\*
7. Increased / wider use of the internet: 5.7 %
8. Better work processes and increased capacity: 4.9 %\*\*\*

\*Includes: Cloud storage, TOR, encryption, an increased number of apps, development of mobile phones etc

\*\*This comes primarily from the USA where by law social media platforms must report child sexual abuse material

\*\*\*Includes: Better tools, more training, better collaboration and increasing resources

Reasons why police officers believe they are better equipped to deal with child sexual abuse material cases compared to last year (multiple choice option)



## COMMENT ON INSIGHT 1

Steven Wilson, Head of European Cybercrime Centre (EC3), Europol.

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# The problem is not increasing – we're getting better

I believe there are two key reasons for the increased workload that law enforcement officers working with child sexual abuse crimes are seeing.

### Development in technology

The first underlying cause is technology. Bigger hard drives mean a surge in material coming in. We see it first-hand as a clearing house for NCMEC\*, for 19 of our 28 member states, and we see far more data coming to us every year.

We also see more self-generated material; children voluntarily putting inappropriate images online. Even in cases where images have been shared within a relationship, we see a number of them migrating to both the open and dark web, adding to the amount of material in circulation.

### Increased awareness

The second cause has to do with an increase in reports from the public.

They have become more aware and understand the value of reporting this crime. In addition, the response from industry, businesses etc, has also improved significantly, with more and better reporting. What we are seeing is a problem that is not necessarily getting bigger, but societies and law enforcement that are more aware of this crime type and are prepared to tackle it as a priority.

### A positive trend

I am really pleased to see that three quarters of the police officers surveyed, report that they feel better prepared now compared to last year. That is a strong validation that we are showing progress across Europe, and across the world.

I believe that a combination of factors contribute to this positive result. Police forces are increasingly approaching challenges on a more strategic level, there is greater awareness of how

to tackle and prioritise this crime, better training for staff and also a greater awareness of the improved tools and resources that are available.

To give an example, training is one of the things that we focus on at Europol. Over the past several years we have offered a week-long training programme for enforcement professionals, as a result several hundred officers from all member states and other countries have been trained on the latest investigation tactics and have had the ability to develop an extensive network to share expertise. The outcome is a more congruent response to this crime, and we are seeing a better and more even response to what we term best practice, and victim identification.

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### Explanation of concepts

\* NCMEC: National Centre for Missing and Exploited Children and clearing house for reports from US based IT companies, and Hotline for cybertips from individuals in the USA.

# 2

## The “normal case”: Fewer than 50,000–500,000 images

Police officers handle great volumes of data and large numbers of images and videos in investigations of child sexual abuse material. There are many theories about the number of images cases comprise of and to what extent the crime is increasing. To get a better overview, in this report we separate the total amount of images that a case comprises of from the number of images that contain child sexual abuse. The report also considers what an ‘average’ case is.

### Verified numbers

#### – Taskforce Argos

To verify the numbers provided by this year’s survey, we also looked at the numbers involved in a specific operation consisting of close to a 100 seizures, led by Taskforce Argos\* in Australia.

### How many images does the average case contain?

The police officers surveyed reported that the number of image-files that they handle in an average case can be anywhere between 50,000 images to five million images. This includes

images that do not contain child sexual abuse. Hence, the estimate varies greatly. However, the majority of respondents pointed to fewer than 50,000 images or 100,000–500,000 images. Taskforce Argos numbers shows that a case on average contains 125,000 images.

90 percent of police officers reported that the number of images that actually contain child sexual abuse in an average case is fewer than 50,000, and more than half say that the average case contains fewer than ten hours of video. Taskforce Argos corroborates these numbers saying that their average investigation contains 25,000–30,000 images and 700–900 files with filmed child sexual abuse material.

“Fewer than ten hours of film” and “700-900 files of material” might be viewed as widely different, however as films showing child sexual abuse generally are very short, these two measurements indicate a similar amount of content.

### The biggest cases

The very biggest cases are enormous with up to 100 Terabytes (TB) of material or 100 million images in total and 30 TB of material or 10 million images showing child sexual abuse content. The numbers shared by Taskforce Argos are not of that magnitude, but highlight that cases can be different in terms of how much relevant material they include. One case they worked on contained almost six million images, whereof “only” 24,000 images showed child sexual abuse. Another case contained 3,5 million images of which more than 2,3 million turned out to contain child sexual abuse, most of it previously not known to the police.

### 20,000 images is a considerable amount

The overall picture shows that even though the biggest investigations are abnormally large, most cases are nowhere near that big. Still, 100,000 images is a huge number to scrutinise, and 5,000, 20,000 and 30,000 images is a considerable amount of child sexual abuse material to possess.

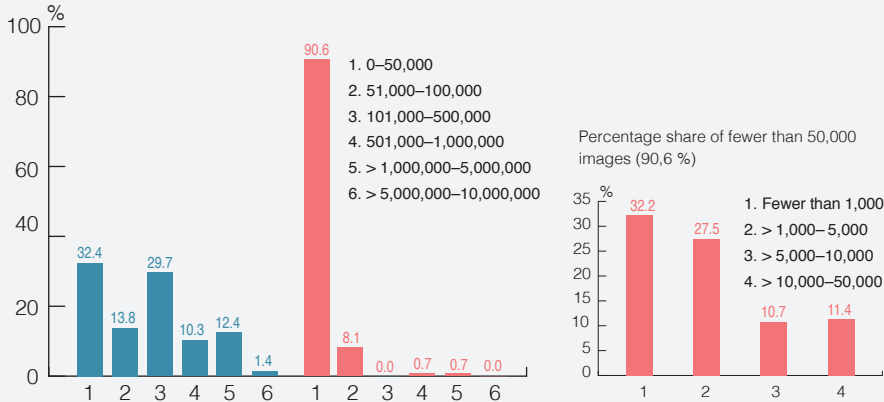
### Explanation of concepts

\* Task Force Argos, Queensland Police, Australia, is a specialist unit responsible for the investigation of online child exploitation and abuse. Approximately 40 people work at Taskforce Argos.

## AVERAGE CASES

### Number of images encountered by surveyed police officers

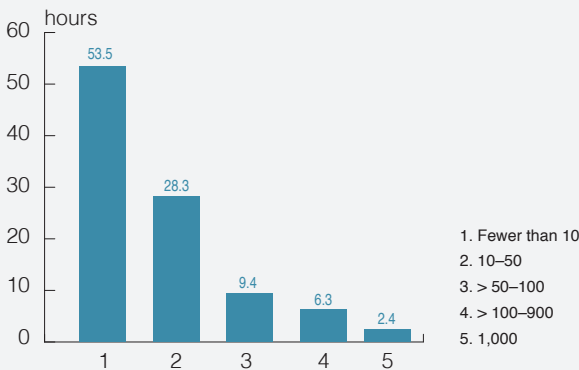
(answer in free text)



■ The size of an average case: Total number of images, including images that do not contain child sexual abuse material (CSAM)

■ The size of an average case: Total number of images containing only CSAM

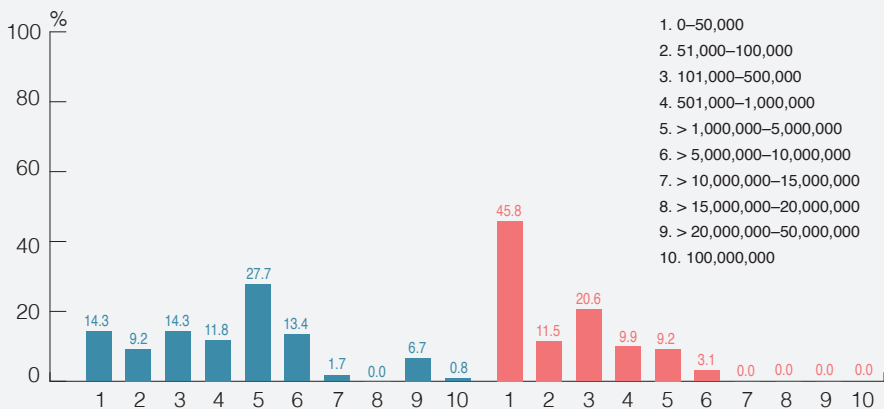
### Average hours of film showing CSAM per case:



## LARGEST CASES

### Number of images encountered by surveyed police officers

(answer in free text)



■ The size of large cases: Total number of images, including images that do not contain CSAM

■ The size of large cases: Total number of images containing only CSAM

## Statistics shared by Taskforce Argos

### Number of investigations

91 seizures, all from the same police operation. Each case represents one suspect.

### Total amount of material in the investigation

60.4 TB

### Biggest case in the investigation

5.1 TB

### Total amount of CSAM in the investigation

12.1–15.1 TB

(estimate based on the fact that normally 75–80 % of material in an investigation does not contain CSAM).

### “The Average case”

Based on these numbers an “average case” would look like this:

In total almost 700 GB data or 500,000 files.

Of these 125,000 files will be images and 3,600 videos.

The case would contain 140–170 Gigabytes CSAM, ca 25 000–30 000 images and 700–900 videos.

### Two examples showing that cases can be very different

#### Case 1:

- 5,930,915 images.
- 413,355 previously unknown images to the police, which needed reviewing.
- 24,431 contained CSAM.

#### Case 2:

- 3,552,994 images.
- 2,580,360 previously unknown images to the police, which needed reviewing.
- 2,353,550 contained CSAM.



## COMMENT ON INSIGHT 2

Taskforce Argos, Queensland Police, Australia: Adèle Desirs, Jon Rouse, Paul Griffiths, Scott Ballantyne and Stuart Butler.

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# It shouldn't be a numbers game

We would like to see the public and media debate move from talking about bigger and bigger cases and the nature of the material getting worse and worse. It doesn't help the cause; it just turns it into a numbers game and diverts attention away from what is really happening and from what is really important.

### No drastic change in case sizes

In our experience, cases are not growing exponentially bigger. We seize bigger hard drives, but they are normally not full. The average case is probably around 200,000–300,000 images, where about 80 percent can be ignored. This has not changed over the last number of years.

Offenders' collections of child sexual abuse material don't seem to be getting bigger either. If anything, they might be getting smaller, and we see more of a trend towards offenders keeping smaller collections of the kind of material that interests them.

### Increase in links being shared

The reason for this change is probably the speed of which the internet can be accessed and how easy it is to find child sexual abuse material there. Offenders don't need to download and keep large collections when they can achieve immediate gratification by viewing what's online. Instead we have seen an increase in people sharing and trading collections of links to child sexual abuse material.

Another reason that smaller collections of material are being stored locally is that the offenders are more careful. They are aware that people involved in child sexual abuse crime are getting arrested and that unencrypted drives and locally maintained collections is a significant risk.

We still see offenders that compulsively collect images and videos and store enormous volumes of material, but they are not the norm.

### The myth of more violence

Another myth that must be challenged is that the material is getting 'more violent' and the children portrayed are 'getting younger'. Not because some of the material is not already violent and that the children are not very young, but because it has been like this for the past ten years.

Instead of focusing on numbers, we should focus on how we identify, find and rescue the children depicted in the images. We should also focus on learning more about offender behaviour changes and the new methods and technology that they use\*.

\* Read "We need to teach kids safe internet behaviour" under Insight 8 about some of the new offender behaviour that Taskforce Argos think are important to take notice of.

# 3

## There is no such thing as a typical offender

### (The consumer of child sexual abuse material)

There is a notion that it is possible to identify who is and who isn't a perpetrator. However, is there such a thing as a stereotypical offender? Is it someone of a specific sex, and of a certain age? Is it somebody who lives in a specific way and holds down a typical job? Has the offender changed over time? For this insight we surveyed the police officers to see if they, with all their expertise, could tell us who typically would view child sexual abuse material.

#### A man of any age

##### The majority are men

In last year's report we asked the respondents if they had worked on cases that featured female offenders during 2015. More than 50 percent of the police officers said that they had not come across a female offender, and 25 percent said that they had only worked on a few cases that had a female offender. This result confirmed other previously documented data and research that states that even though female offenders exist, and while awareness of them is increasing, the majority of offenders are men.

##### All ages

According to the survey, police officers come across offenders of all ages in their investigations. The most common age is between 20–50. However, this result mirrors the general demographics in the US, Europe and

Australia, which is where the majority of the respondents work. Consequently people who view and share child sexual abuse material can be found in all age categories.

##### Clarification of the cohort “Below 20 years of age”

Several of the police officers felt compelled to explain that the offenders listed as 'Below 20 years of age' may often not have a sexual interest in children. According to the police officers these youngsters have instead shared or possessed nude or partly undressed images of themselves or people similar to their own age. If they are under the age of 18, the images are classified as illegal.

“... the 'under 20' is mostly just high school type issues where they do not realise the consequences of sending naked pictures to each other.”

“Young people quite often have pictures and videos of friends and people they know from parties or other situations, where they have been filmed, or 'snapchats' they have made themselves.”

#### Is often in a relationship, but can also be single

38 percent of the respondents said that the most common scenario is that

a suspect who is being investigated for possession and/or dissemination of child sexual abuse material is married or living with a partner. Nearly 44 percent of the police officers stated that it is just as common for the offender to be in a relationship as it is for them to be single. Thus according to the responses it is more common for an offender to be in a relationship than not. However, some of the police officers commented on the fact that this number could be skewed because of the way that investigations are prioritised.

“In the cases I have personally been involved with, the subject had a partner or was married.”

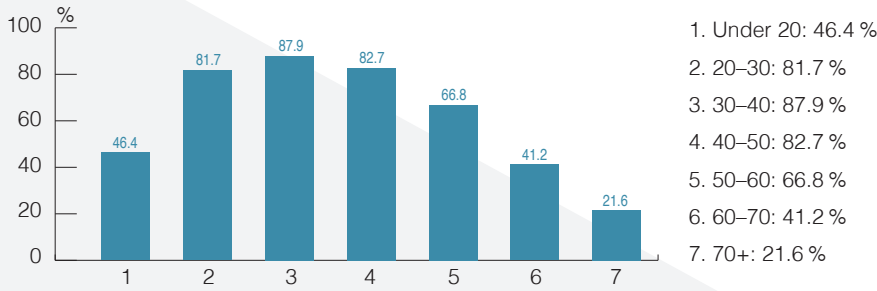
“It is bit more common with singles, but lately we tend to focus on those who are married or especially those who have children. That may bias my experience”

#### Is in close proximity to children

Closer to three quarters of the police officers surveyed reported that suspects who are being investigated for viewing or distributing child sexual abuse material also are in close proximity to children. More than 60 percent reported that it is common or very common.

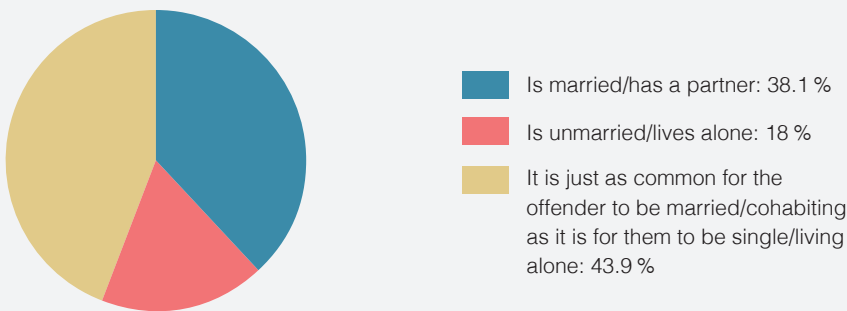
## OFFENDER AGE IN INVESTIGATIONS PERTAINING TO CSAM

Breakdown of offenders according to age, based on results gathered from police officers



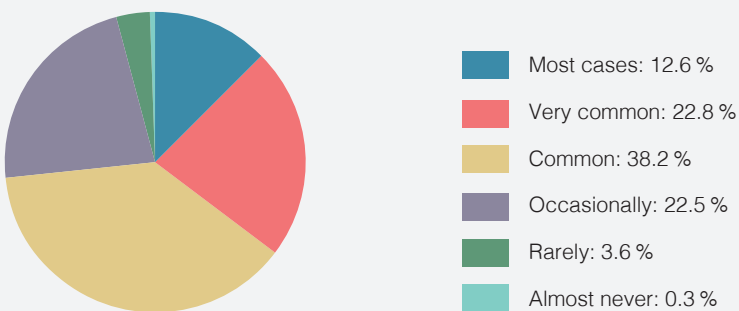
## OFFENDER MARITAL STATUS IN INVESTIGATIONS PERTAINING TO CSAM

Breakdown of marital status, based on results gathered from police officers



## CHILDREN IN OFFENDERS' PROXIMITY

Extent to which offenders also have children in their proximity, based on information gathered from police officers



Various ways in which the offenders have access to children, according to the police officers surveyed

	Very common	Common	Uncommon
Family (own children or partner's children)	39.2 %	55.2 %	5.6 %
Extended family	37.4 %	60.2 %	2.4 %
Friends/neighbours or similar	14.8 %	69.4 %	15.7 %
Recreational activities	15.4 %	61.2 %	23.4 %
Professional life	9.9 %	55.7 %	34.4 %

The most common scenario is, according to the respondents, that suspects are close to children either because they have children of their own or have a partner who has children. Another possibility is through the extended family (nieces, nephews or grandchildren). The least common scenario is through their work life.

## Exists within all professions

More than 60 percent of the police officers surveyed answered that it is most common for the suspect who is being investigated for viewing or disseminating child sexual abuse material to be in employment. Just over 30 percent said that it is just as common for the suspect to be employed as unemployed.

When asked to elaborate on whether they were aware of any profession that is overrepresented in their investigations, 38 percent of the

respondents said that they do not view any professions to be more common than others, and that all jobs are represented. Likewise the offender can come from all segments of society.

“All walks of life. It is independent of profession.”

“I do not believe so, however teachers, law enforcement, sports instructors and legal professions are given priority and are given more press time.”

“No specific occupation is more prevalent.”

Meanwhile 27 percent said that it is more common for offenders to work in professions with proximity to children. Some of the professions and workplaces that are mentioned are childcare occupations in nurseries and schools, social workers, police officers, psychologists and professions within religious institutions.

Some of the police officers commented on this saying that these professions seem to be more prevalent as a result of the cases being prioritised because of the fact that the offender is in close proximity to children.

“Yes, but that is perhaps more due to our prioritisation of the targets. A school teacher, a kindergarten employee, a priest, a cop will always go higher on the list than someone that does not have that kind of access to children or level of trust in society. That said, I sense that we have seen more people with child related work than any other.”

17 percent of those who commented also mentioned professions that require a high degree of knowledge of IT.

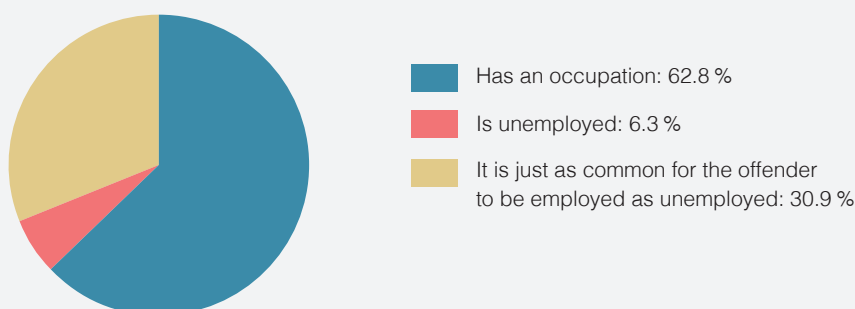
“IT/Information Technology/computer related jobs.”

## Has not changed over time

More than 80 percent (81.5%) of the police officers surveyed said that the general picture of the offender has not changed over time. However, those who stated that they have seen changes pointed to an increase in younger people looking at and disseminating child sexual abuse material, and more offenders who have a high level of IT and technological ability. This was also mentioned by a few police officers when asked about trends that they have observed.

### EMPLOYMENT STATUS

Employment status according to the police officers surveyed



### **An increase in technologically sophisticated offenders**

In response to the question regarding new or increasing trends, 3.7% of the police officers stated that the offenders are increasingly becoming more technologically sophisticated.

“Getting more tech savvy i.e. encryption, obfuscation apps.”

“They are becoming more digitally forensics aware using other tools to hide their online activity”

“They are becoming more technologically literate and better at avoiding law enforcement.”

### **An increase in younger offenders**

3.3 percent of the police officers surveyed state that a new or increasing trend is more young offenders. As before, when queried about age (Insight 3), some police officers point out that many of the younger offenders have images and videos that depict people of their own age.

However some police officers point out that they have also seen an increase in young people who have a sexual interest in children.

“More younger / juvenile suspects.”

“Consumers have more often started their consumption as a result of exploring sexuality. Consumers are also younger than previous years.”

“The growing number of younger people.”

### **View and delete**

Another trend that is highlighted by several police officers (4.9%) and also remarked upon by Taskforce Argos in the commentary to Insight 2, is a behavioural change in offenders, where they have reduced the amount of material that they download and save. Instead the offenders delete the material once it has been viewed. One of the reasons for this, according to Taskforce Argos, is that with an increasingly faster internet and an

abundance of material there is little need for it to be saved. Read more about this in Insight 2.

“More offenders are deleting the CSAM after viewing it.”

“Less collection and more P2P trading, viewing, then deleting.”

“We are seeing that most cases involve people downloading, viewing, and deleting material. Awareness among their community has increased and we don't see as many people amassing large collections anymore. This is usually due to fear of prosecution.”

## **Conclusion**

The typical offender who views and disseminates child sexual abuse material is most often a man. He is most often between 20–50 years old, but it is not uncommon for the perpetrator to be older or younger. It is just as common for the offender to be in a relationship as not. He has often got a family, but it is not uncommon for

him to live alone. No matter his marital status and living arrangements he has often got children in his proximity, either through family or through friends. He is often employed and can be so in any type of profession. It is slightly more common that he is in a profession that involves children and that he has a high level of IT skills.

The conclusion we can draw from this is that, apart from it is most often a man, there is no such thing as a typical offender. There are no distinguishing attributes such as age, marital status or profession that can be said to be stereotypical.

### COMMENT ON INSIGHT 3

Hanna Harnesk Hjortsberg, Reg. Psychologist, works at Skogome Prison and with policy development at the Swedish Prison and Probation Service.

## It's important not to believe in the stereotype

On one level it is correct that anyone can be a child sexual abuse offender. There is no specific personality type or segment of society that are more prone to committing these crimes, however one generally knows that the perpetrator is a man. Still, it cannot be said that anyone can become an offender. Specific risk factors, and what we presume is a combination of several contributing factors, form the basis of why an offender would choose to sexually abuse children.

### Don't believe in the stereotype

These risk factors can exist in someone who is successful, has a family and an active social life just as well as they can in someone who fits the stereotype – a loner – of an offender. We learn more about these factors through research and clinical work that determines who is more likely to offend, and we should turn our attention and efforts towards them.

If we get too preoccupied with the idea of the stereotypical offender we risk overlooking real offenders and, consequently, children who have been or are being abused. To safeguard children it is important that we understand that the people who might commit these crimes often

differ from the stereotype and could be individuals who are socially adept and friendly.

### Several different risk factors

The biggest risk factor is feeling a strong sexual attraction towards children. Different statistical groupings are also important, one example being age; people tend to become less prone towards criminality as they become older.

A history of unhealthy relationships is another risk factor. Men who sexually abuse children have often experienced unhealthy relationships, which include promiscuity, difficulties with intimacy, difficulties in trusting others, fear of rejection, and addiction problems.

Another example of behaviour that falls within the category of risk is a preoccupation with sex, or as it is often labelled 'Sex Addiction'.

### Hiding behind justifications

Many of those who view child sexual abuse material seek to justify this behaviour, often as a way to address their feelings of shame. They tell themselves that 'many others are doing the same thing'; 'these images

have been viewed by many others'; and, 'it's just an image.' Others share this type of material with the child that they are abusing in order to make the child more tolerant towards what is happening. 'Look, it happens to all children.' In this way the perpetrator tries to shift the blame on to the child.

### Demonising the perpetrator does not protect children

To safeguard children it is important that we don't allow perpetrators to continue their abuse. We have to look beyond our revulsion towards these crimes and combine prison sentences with rehabilitative work that reduces the likelihood of reoffending. As a society we should offer the right support by addressing the identified risk factors.

By demonising and excluding offenders we risk entrenching their risky behaviour and marginalisation, leading to more children being abused. It might be controversial, however in order to make sure that we serve in the best interest of children we should offer support and counselling for offenders to ensure that they can move away from their negative behaviour.

*“If we get too preoccupied with the idea of the stereotypical offender we risk overlooking real offenders and, consequently, children who have been or are being abused. To safeguard children it is important that we understand that the people who might commit these crimes often differ from the stereotype and could be individuals who are socially adept and friendly.”*

# 4

## There is a correlation between viewing child sexual abuse material and hands-on child sexual abuse

There is a wide debate to what extent the correlation exists between viewing and disseminating child sexual abuse material and hands-on child sexual abuse. In last year's report Michael Bourke, from US Marshals, pointed to several studies that show that the correlation between these crimes is somewhere between 50–85 percent. We asked the police officers in the survey how often they find that someone who is suspected of viewing child sexual abuse material is also suspected of sexually abusing children. 30 percent answered 'it is common', 'it is very common' or 'most cases'. Only one percent answered that 'there is no correlation'. Fifty percent answered that only 'occasionally' do they find that the suspect has also abused a child, while 20 percent said that it was 'rare'.

The police officers who commented on this questions highlighted that they would find a higher correlation, uncover that offenders who had viewed child sexual abuse material had also sexually abused children, if they were tasked to look for evidence of abuse.

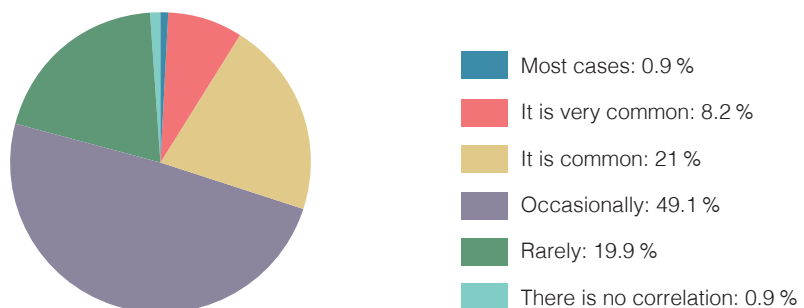
“But with that said I feel with more time allowed and other investigation techniques this would be much more common. I think a lot of victims go unidentifiable because of this.”

“I think this is more frequent, but we either don't look deep enough to find the victims, the victims don't want to talk, or the victims are not known to law enforcement.”

“It's all up to the quality of the investigations and the level of invested time in the seized material if this is revealed or not. I think we are missing some hands-on abusers.”

### CORRELATION BETWEEN VIEWING CSAM AND COMMITTING HANDS-ON ABUSE

The extent to which police officers find that people suspected of viewing CSAM have also sexually abused children





## Two points of view

Michael L. Bourke, Ph.D., Chief, Behavioural Analysis Unit, United States Marshals Service.

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The findings in this report most likely reflect the extent to which law enforcement look for victims in their investigations.

As outlined in The NetClean Report 2016, studies have shown that 50–85 percent of consumers of child sexual abuse material also commit hands-on abuse. Police officers in this year's study may not see a higher correlation because of time constraints and workload. After making an arrest, detectives are often encouraged to move on to the next case to identify as many offenders as possible. To continue digging into one case to learn about additional undetected crimes can be viewed as a less productive use of law enforcement resources.

The lower correlations in this study may also reflect the erroneous belief that individuals who possess child sexual abuse images and those who commit hands-on abuse are separate types of offenders. To make the correlation more apparent we must raise awareness at all levels of the judicial system. We must give victims a voice, empower those whom they tell to respond appropriately, and teach investigators how to dig beneath the surface. Prosecutors and members of the judiciary must be better informed, improving their understanding of the risks these men pose to children.

It is imperative for professionals across the spectrum to understand that individuals who are sexually interested in children commit a variety

of fantasy-based criminal acts. Crimes against children occur in a context of secrecy; we typically learn about only one facet of an offender's offence history, if we learn about the exploitation at all. If we raise awareness and increase understanding, officers will have time to spend on further investigating cases. Prosecutors will not be content to simply charge the offender for the child abuse material on his computer without additional investigation. And we will dispel the mindset that convictions for possession and distribution of child sexual abuse material are "enough," especially if the suspect is facing a long sentence. With lives at stake, "enough" is simply not enough.

Hanna Harnesk Hjortsberg, Reg. Psychologist, works at Skogome Prison and with policy development at the Swedish Prison and Probation Service.

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I work in a high security prison, and most of the offenders I treat have sexually abused children. I rarely see offenders who have 'only' viewed and downloaded child sexual abuse material as that crime only seldom leads to imprisonment in Sweden. As a consequence when I meet someone who has viewed child sexual abuse material, there is an established link to a hands-on offence.

I cannot however say that there is a general correlation between viewing child sexual abuse material and committing hands-on child sexual abuse. It is rather the individual risk factors that are important in evaluating an offender's level of risk (see comment on Insight 3).

What we know is that perpetrators who both view child sexual abuse material and abuse children are the most sexually deviant category of offenders. Although there is not always a correlation between the two crimes, there can be a risk of escalating behaviour. This can happen in instances where offenders have a preoccupation with sex and compulsions. Just as in the case of a flasher whose offending can escalate to rape (which is why it is so important to report these crimes to the police), someone who views child sexual abuse material might graduate to abusing a child.

I believe it is crucial to focus on the fact that viewing child sexual abuse

material in itself should be viewed as a very serious crime. Importantly, the material contains a child that has been abused. Research shows us that if the victim knows that the abuse has been documented and spread on the internet it seriously deepens the child's trauma. Every time an image is shared the abuse is perpetrated all over again, leaving children struggling to recover.

It is important that we target resources towards preventative measures aimed at crimes of possession and distribution of child sexual abuse material, including offenders who already view child sexual abuse material as well as individuals with risk factors who have not yet offended.

# 5

## The offender is most likely to victimise close family members or relatives

In Insight 3 the police officers pointed to the fact that most people who are suspected of viewing and / or disseminating child sexual abuse material are in close proximity to children. In addition to this we asked how the hands-on offenders come into contact with the children that they abuse. Existing numbers show that 80–90 percent of all child sexual abuse is done by someone close to the child.\*

This is further confirmed by the survey, as police officers point to the fact that

the most common scenario is that the offender is the child's parent or lives with the child's parent. The second most common scenario is that they are related to the child, and it is also common for the offender to know the child through friends, neighbours etc.

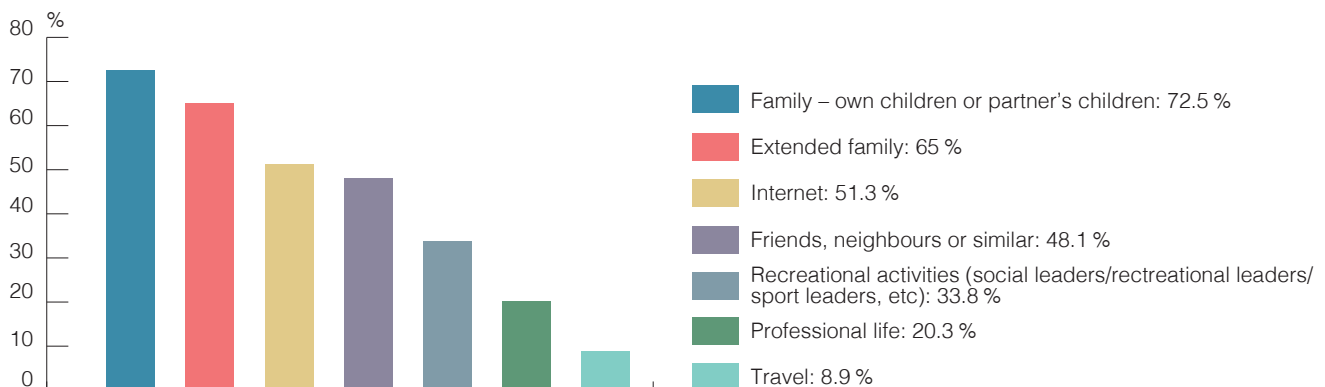
The third most common way for a perpetrator to get in contact with children is through the internet. This indicates that adults who are previously completely unknown to children can easily befriend them. This changes the established pattern

that an offender must be in close physical proximity to the child.

According to the survey, the least common way for an offender to contact a child is through the work place or travelling offenders. A few police officers (2.5%) however, said that they believe that travelling sex offenders is an increasing trend.

### CONTACT WITH CHILDREN

The most common ways for a hands-on offender to get in contact with children



\* E.g.: The Bureau of Justice Statistics: <https://www.bjs.gov/content/pub/pdf/saycrle.pdf>

## COMMENT ON INSIGHT 5

Björn Sellström, Teamleader, Crimes Against Children Unit,  
Vulnerable Communities Team, INTERPOL.

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# We can only speculate as to what the real numbers are

We cannot say with certainty that we know where sexual abuse crimes are being committed, nor can we say to what extent child sexual abuse material is being distributed on the internet. We are in a dire need of a global scan to uncover much of this information. This makes it difficult to comment with certainty on the results in this report.

### **The home and close to home is the most common ground for abuse**

Although we can only speculate, the data in this report seems to reflect what we know. Most sexual abuse of children occurs in the home or somewhere that is close or familiar to the child. This is based on the assumption that a person who has a sexual interest in children is likely to abuse those close to them. The reason why we are nowhere close to understanding the extent of this problem is because of the psychological strain that it places on the

child to report an adult close to them. It simply does not happen very often. However, based on the knowledge that we have law enforcement knows to investigate people close to the child.

### **The internet poses a big risk**

I agree with the data in this report that shows that the internet poses a big risk for children, and that many fall prey to people who try to groom them. In my opinion, child sexual abuse has changed now that it is easy for a perpetrator to contact children on the internet. The abuse is no longer always about physical contact, instead we see online crime that includes threats and blackmail.

The investigations that deal with grooming are different to the more traditional cases of child sexual abuse. The number of victims involved is often much higher. This is because the perpetrator can reach a larger

number of children on the internet than most can in their physical environment.

We are also seeing an increase in live-streaming. These crimes are difficult to detect, hard to prove, and as a result we have little knowledge of to what extent this is happening. Simply put, if the material is not saved to a device it is impossible to detect the crime. In cases like this we need to rely on a victim to testify to what happened to them.

### **Perpetrators that travel**

I believe that the number of perpetrators who travel to abuse children is higher than the data shows in this study. Even if the comparable numbers are correct it would be wrong to dismiss this group as being small or insignificant. The reason why this issue has not been picked up more is probably due to the fact that it is not being addressed as much as other similar issues.

# 6

## Child sexual abuse material is viewed 24-hours a day, throughout the week – including hours spent in the work place

Looking at the general picture of the offender it is interesting to note when and where child sexual abuse material is consumed. We can extrapolate this data through technology that NetClean's customers use.

### 24 hours a day

Data from Internet Service Providers across the world who use NetClean WhiteBox\* to block access to websites that are known to contain child sexual abuse material, shows that people search for this material 24-hours a day, all days of the week.

The highest rate of searches occurs on Sundays, after which the numbers start reducing, showing the lowest search rate on Fridays. On Saturdays the numbers start to climb again.

If you compare across 24 hours, the highest number of searches occurs in the evening and is at its lowest in the early morning, rising between 7 a.m. and 10 a.m.

Between 10.00 a.m. and 9 p.m. the search rate remains constant.

### The workplace

The statistics above show that people search for child sexual abuse material even during working hours. Two thirds (65.5%) of the police officers surveyed stated that during the past year they had worked on investigations where child sexual abuse material was found on workplace computers in the private sector. Almost half of the police officers (44.2%) said that they had found material on computers in the public sector.

Comments that the police officers provided in the survey show that they have varying experiences of investigations that include child sexual abuse material found on workplace computers. Some police officers stated that this is most likely a hidden problem as the workplace seldom features in investigations and is therefore not scrutinised.

“We predominantly find personal or home PCs and laptops are being used. There have been occasions when we have taken school laptops and tablets.”

“I think that because we do not usually target workplaces, we simply don't know.”

“Persons bringing USB devices to work or accessing online storage.”

Data collected from NetClean customers shows that 1 out of 1,000 people view and/or download child sexual abuse material on their work computer / device. Some of these cases are reported to the Swedish Police, and the department that specialises in investigating child sexual abuse. Information released in 2017 by this department shows that approximately 90 cases of child sexual abuse material found on work computers are reported by businesses to the Police every year in Sweden.

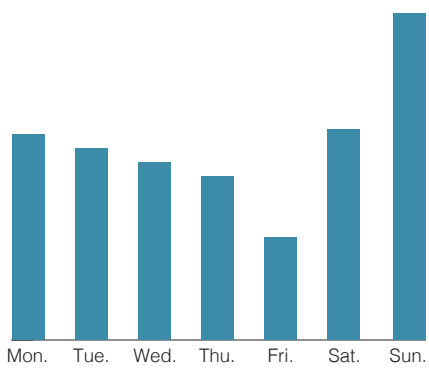
### Explanation of concepts

\* NetClean WhiteBox is a technical solution used by Internet Service Providers to block access to URLs known to contain child sexual abuse material.

### SEARCHES FOR CSAM BROKEN DOWN OVER A WEEK

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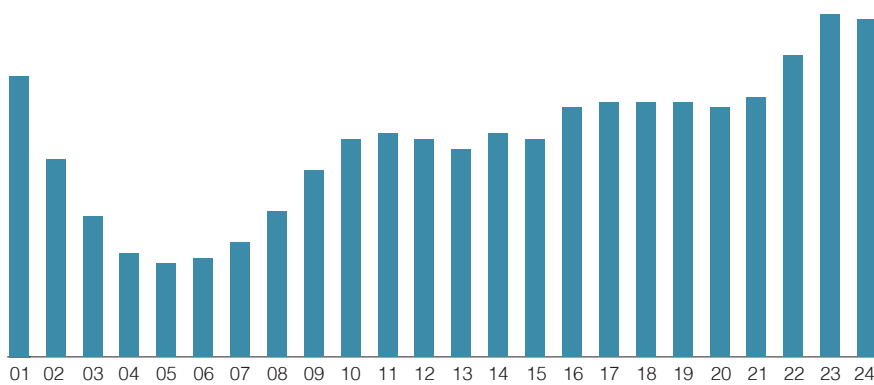
Searches for sites known to contain CSAM, broken down over a week



### SEARCHES FOR CSAM BROKEN DOWN OVER 24 HOURS

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Searches for sites known to contain CSAM, broken down over 24 hours



The charts show search patterns, not exact findings.

# 7

## TRENDS: The use of chatrooms and apps is increasing

In response to what the police officers view as new or increasing trends in ongoing investigations, almost half (46%) say that the use of social media, chatrooms, and apps (especially in mobile phones) is increasing. They connect this trend to the fact that grooming and live-streaming is on the rise too. When surveyed for last year's report, 34 percent of police officers pointed to these increasing trends.

### Increase of apps and chatrooms

The police officers who responded to the survey listed increased use of apps and chatrooms as the biggest new trend (25.5%). Ten percent say that they have noticed an increase in the use of mobile phones, often linked to increased use of mobile phone apps. Social Media and apps are often used to contact children for grooming purposes. The conversations are then often moved to private chatrooms where the child is either coerced or forced to send images. Chatrooms are also used by offenders to liaise with other offenders and share material.

“Live-stream of abuse. Contacting a child through a mobile app like Musical.ly, then moving to a more secure and less monitored Chat App for abuse and sextortion.”

“Increasing trends utilising social media apps for new contacts, increase is self-produced child sexual abuse material due to the use of social media applications, and also an increase in sextortion incidents.”

“Short blog and chat room sharing of child sexual abuse material.”

“More internet based abuse. Offenders can more easily reach their victims by apps and services on the internet.”

### Increased cases of grooming

8.6 percent of the surveyed police officers state that they believe that incidences of grooming on the internet it increasing. Offenders contact children, often using a false identity pretending to be much younger than they really are, and persuade children to send them images. Several police officers mention that gaming platforms aimed at children are used by offenders to get in touch with children.

“Grooming is increasing. The children have access to the internet sooner and sooner.”

“Grooming via social media apps. Offenders can hide behind spoof profiles, where they generally lie about their age and sometimes gender. They then repeatedly ask for indecent pictures / videos, or send videos of themselves.”

“Offenders are using more gaming platforms and chatting applications to communicate with their victims.”

### Live-streaming is increasing

10.7 percent of police officers surveyed state that they have seen an increase in live-streaming in chatrooms and through chat applications where online abuse happens in real-time.

“Encrypted live-stream shows over conferencing or messaging programs.”

“Live-streaming of child abuse, whereby the suspect offers money in exchange to view online abuse – this footage is rarely saved onto the devices by the suspect however chat logs indicate that streaming took place.”

“Children live broadcasting on apps like Periscope, where they are asked to undress and to do sexual acts.”

## COMMENT ON INSIGHT 7

Taskforce Argos, Queensland Police, Australia: Adèle Desirs, Jon Rouse, Paul Griffiths, Scott Ballantyne and Stuart Butler.

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# We need to teach kids safe internet behaviour

Offenders modify their methodology and behaviour with the development of technology, but also as a result of specific police methods becoming publicly known. It is important that all of us in law enforcement and industry are careful about what we share. We know that every piece of information that gets out into the public, also gets shared onto the darkweb forums and platforms.

From our experience it is increasingly difficult to identify child victims due to the offenders de-identifying images in different ways. There is a high demand for new and unique material and in order to stay anonymous offenders hide clues and crop out information.

### **More material from Latin America**

In most cases when an image is shared onto a group on the darknet, it progresses to be widely shared on the clearnet after six to eight months. What we are seeing both in offenders' collections and by monitoring online groups and distribution methods, is that images containing more detail and information get shared within a very small group of people. These images are perceived as of higher 'value' and as such, generally don't get shared outside of closed networks as readily as less 'desirable' material.

One of the reasons for this is that offenders want to fantasise about the images and with highly anonymised photos there is less for them to focus on. We are now seeing a rise in images from other parts of the world, such as Latin America, where offenders are not yet disguising/masking/removing backgrounds and faces.

### **More "innocent" images**

Following this trend, we are also seeing more collections of images that are originally innocent (from beaches, carnivals, or pictures that people post of their children in their social networks) as it is now incredibly easy to access this type of material online. We notice it because we are currently looking online for children that are not necessarily depicted as victims of hands-on sexual abuse. However, when you think about the children and parents, who are unaware that these images have been put on child sexual abuse websites, you wish that people would be more careful with what they post online.

### **More live-streaming**

We are also seeing more images generated from live cams and live-streaming. There are dedicated sections on forums explaining how to access children online and there are people who specialise

in videoing victims. Significantly, we are seeing that children are now self-producing more material than ever before. There are, for example, online challenges among kids where they are daring each other to touch different parts of their bodies or to carry out other acts that are then shared online. Another example is a recent investigation we conducted where a man convinced over 150 children globally that he was Justin Bieber and instructed them to do horrendous acts on camera for him in the belief they would get concert tickets or VIP passes.

As a global community we are struggling with the best way to talk to children about these issues and the serious ramifications of what they are doing. We need to find an effective way to inform and educate children and parents about online safety and that the video and images they are posting online are ending up in the collections of child sex offenders globally.

# 8

## TRENDS:

# The use of anonymisation technologies, encryption and cloud storage is increasing

Almost a third (30.5 %) of the police officers surveyed pointed to trends that are informed by development in technology or increased use of different technologies. This refers mainly to anonymisation technologies, encryption and more material being saved in cloud storage\*.

16 percent of police officers surveyed said that they are seeing an increase in the use of different anonymisation technologies (e.g. TOR\*\*, VPN\*\*\* or use of proxy servers\*\*\*\*).

11.5 percent pointed to an increase in the use of cloud storage to save or view child sexual abuse material, and 11 percent said that they see encryption increasing.

Anonymisation technologies, encryption and increased use of cloud storage was also mentioned as some of the key challenges and trends in the NetClean Report 2016. This shows that the police officers are continuing to face the same challenges. However, in this year's report, the NetClean Report 2017, markedly fewer police officers mentioned anonymisation technologies and encryption compared to last year, instead more mentioned cloud storage as an increasing trend.

“More use of VPN or proxys to cover up IP addresses.”

“It seems the use of TOR and VPN/VPS is increasing. The ability to do this is easier and the knowledge of how to do it is more accessible. Also, the direct sharing through cloud storage systems is increasing”

“Child sexual abuse material possessors are using more encryption, cloud storage, and other networks that are making them harder to find/identify. Some of this is just due to advancing technologies and not because they are actively seeking it”

“Frequent use of TOR. The use of online storage areas to avoid detection.”

### Explanation of concepts

\* Cloud storage, offered by IT providers, enables people to store and share content with others without saving it to a computer.

\*\*TOR is the most commonly used software to access anonymous websites and encrypted networks on the darknet. It makes it possible to communicate anonymously on the internet.

\*\*\*VPN (Virtual Private Network) is technology that makes it possible to create a secure connection between one or several computers on a network (often on the internet).

\*\*\*\*A proxy-server works as an intermediary between two computers or between one computer and the internet, working similarly to a firewall.



## COMMENT ON INSIGHT 8

Arnold Guerin, Sgt., RCMP's Canadian Police Centre for Missing and Exploited Children/Behavioural Sciences Branch (CPCMEC/BSB).

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# Technological development means positive change

It is hard to say whether the use of encryption, TOR, VPN and cloud storage is increasing, but it is something that we see in our investigations. TOR investigations are a huge challenge, leading us to spend large amounts of time analysing films and images. We know that we cannot turn back the clock, technology will keep evolving and we are primed to address this by collecting data from the dark web. In this we are not alone. Partnerships, like the one with Thorn\*, who do a lot of work on darknet, are improving our work.

### Reports from cloud providers

One of the reasons that cloud storage is reported as increasing in the NetClean 2017 Report, may be that we have seen an increase in alerts from cloud providers. Even the less engaged cloud storage companies are quite proactive in reporting child sexual abuse films and images. This is because they aim to protect their reputation and not be known as a

place where perpetrators store child sexual abuse material. The offenders who store material in the cloud are therefore operating in an increasingly hostile environment.

### Live-streaming is a challenge

Increasingly social media and mobile chat apps are being used for sextortion and live-streaming. This is clearly a proactive effort to avoid evidence on devices, as it leaves very few traces. A lot of offenders are downloading peer-to-peer material, consume it, and then delete both the material and the app. Live-streaming is not going to go away, and it is a difficult challenge to tackle.

### Positive change

However, we also see some positive change in social media. Children are increasingly starting to report these sorts of crimes. In addition more children are standing up for themselves, in chat logs for example, threatening to report perpetrators who contact

them. Social media platforms are also starting to take the issue more seriously, and we are seeing good collaboration between law enforcement and some of these companies.

### Technology development

There is also a lot of positive development in technology. Moving intelligence applications into the cloud, i.e. collecting data in one national database, like CAID\*\* in the UK, is going to make a big difference in Canada. Technology companies working together to integrate their tools is saving law enforcement a lot of time. There are major projects in the pipeline on machine learning, classifiers for child sexual exploitation material and chat sextortion that are going to assist us. With Project VIC Global Alerts\*\*\*, USA, Canada and Australia will be joining forces with automatic sharing of hashes between countries. That will be a game changer.

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### Explanation of concepts

\* Thorn is a US based NGO that works to stop child sexual abuse and so called "child trafficking" through lobbying and development of technology.

\*\*CAID (Child Abuse Image Database) is a UK Government initiative that stores all child sexual abuse material seized by law enforcement in the UK. CAID ensures that police can work more efficiently and has introduced new ways for police to identify children.

\*\*\*Project VIC Global Alerts is a new system that enables police officers connected to Project VIC to collaborate. The Alert system automatically notifies investigators if critical information is linked to several investigations, bringing the investigators together for further collaboration.

# Thoughts on the report

## Christian Berg, founder NetClean.

Three things strike me in particular about the conclusions of this year's report: the nature of the offender; the myth that images are becoming more violent and feature increasingly younger children; and the new trend showing that offenders now more frequently delete child sexual abuse material.

To eradicate child sexual abuse we need more resources, and, most importantly, they need to be applied in the right way. To identify the right resources, we need a thorough understanding of the problem of child sexual abuse, and we need to understand the technologies that are both driving the problem and presenting the solutions to it. Therefore, we have to face some of the truths about child sexual abuse, even though they might be uncomfortable. If we do not, we risk focusing on the wrong issues and investing in solutions that do not properly address the problem.

### **Offenders exist everywhere**

Realising that offenders exist everywhere is perhaps one of the truths that is hard to acknowledge.

Ten years ago it was established that most child sexual abuse is committed by someone in the family or close to the family. However, this perception is still not commonly held by most people, nor is it reported this way by media. Hence, when we talk about putting the right resources in place we need to focus on reported facts and not on ill-conceived stereotypes.

### **The myth that victims are getting younger and the crime more violent**

Another myth to tackle is the idea that victims are getting younger, and crimes more violent. Police officers that we speak to all say the same thing: this crime cannot get any more violent nor the offenders any younger. They also highlight that focusing on that problem does not assist their investigations. Instead they argue that we must focus on identifying the children depicted in the images, and work to understand how offenders are using technology development to view and share child sexual abuse material. I am hopeful that this report will increase the debate around these issues.

### **“Deleters” bring on new challenges**

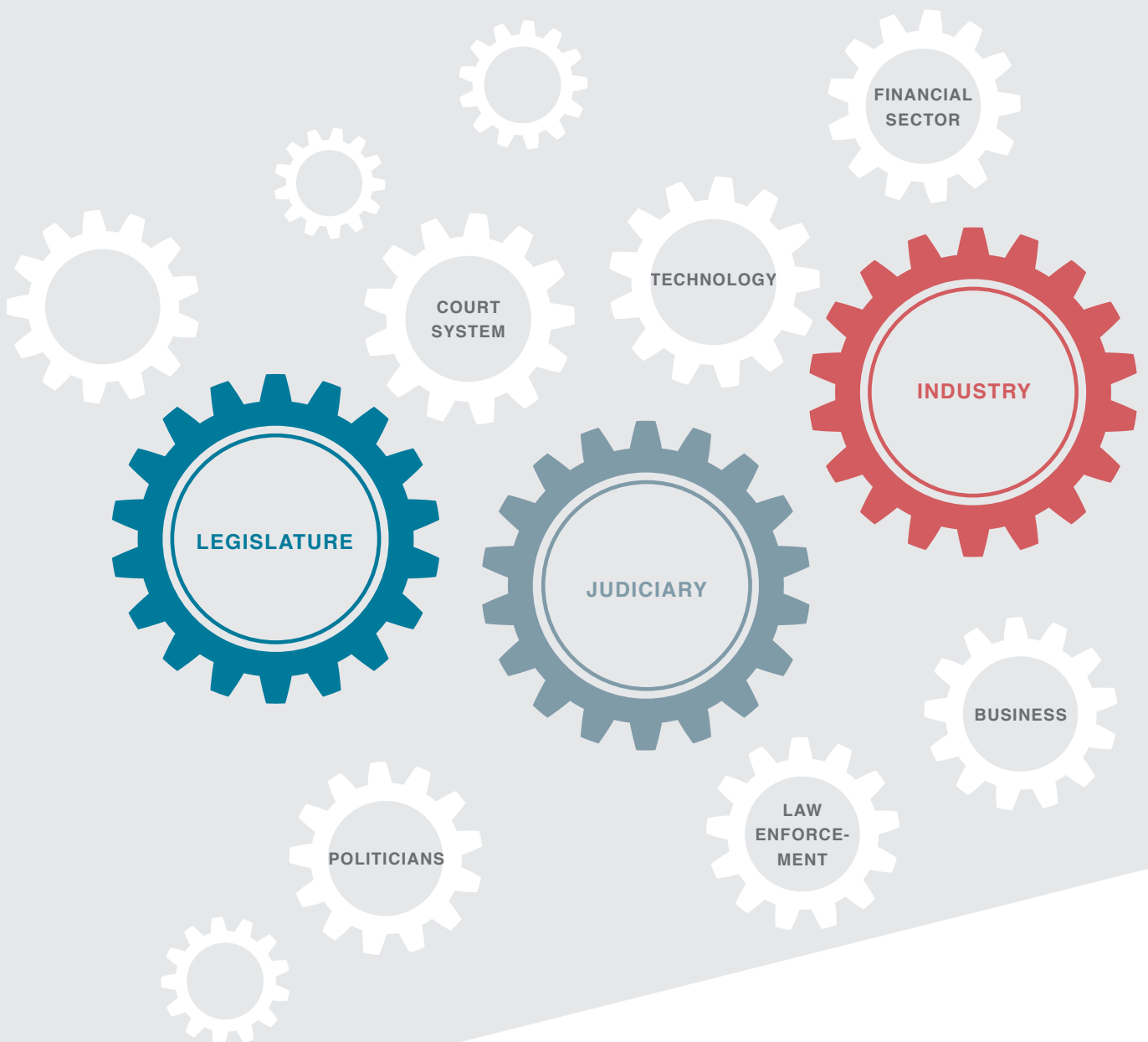
Another important insight is that offenders increasingly delete child sexual abuse material rather than storing it to their hard-drive. Consequently, police officers need resources to invest in equipment and new ways of working. This means addressing the crime as and when images are being viewed or shared, and developing technology to find and stop sharing of images, and improve ways of blocking child sexual abuse material.

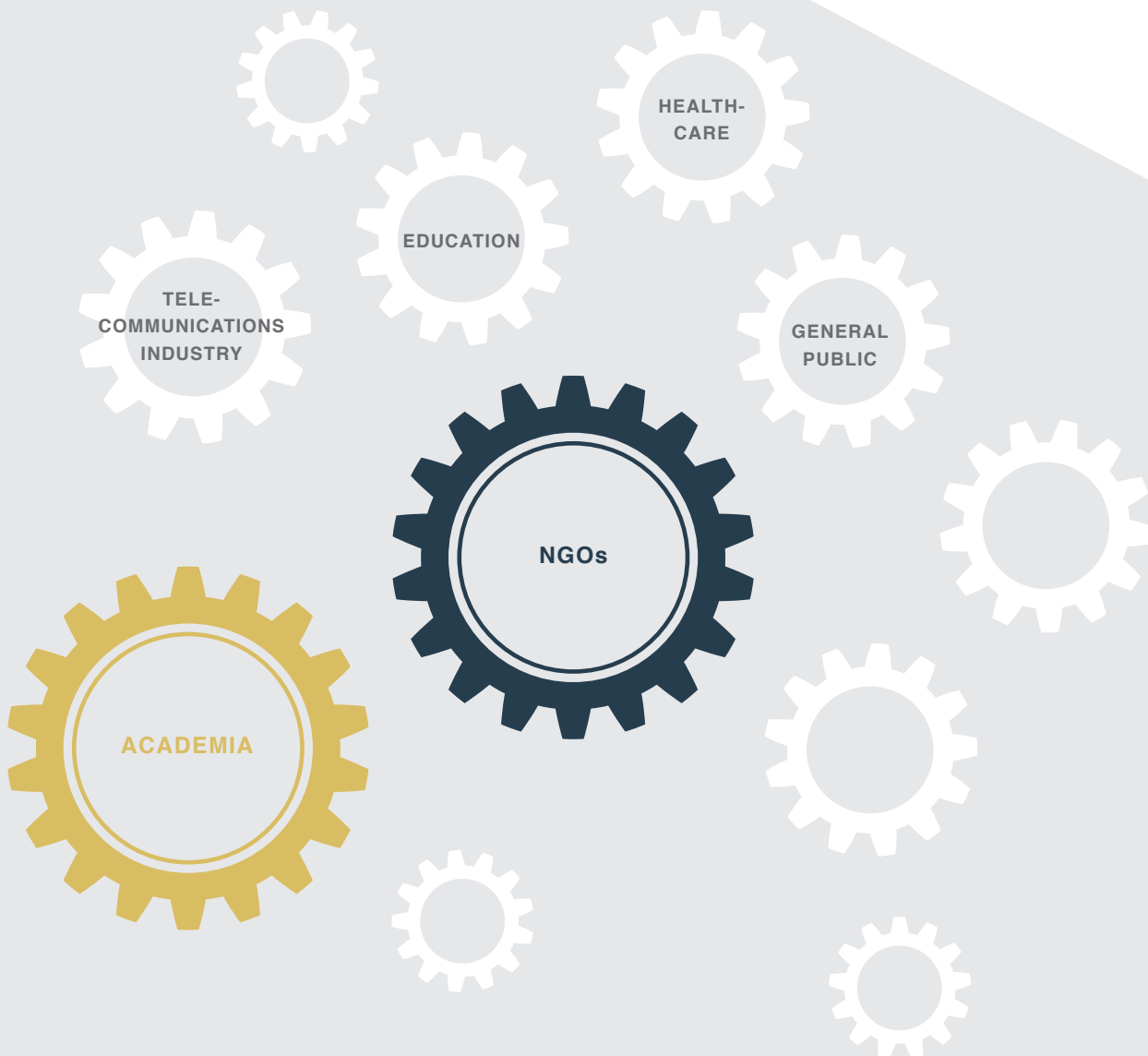
### **A perception that the problem is increasing**

Two years ago I said that I hoped that this problem would increase. I did not mean that I hoped that the problem in reality would get worse, but that we would uncover the real scale of the problem as more resources were put in place. This is happening! We are uncovering more crimes and consequently finding and rescuing more children. Hopefully we will reach a point where we will see numbers start to fall, but in order to get there we have a lot of work to do.

*“To eradicate child sexual abuse we need more resources, and, most importantly, they need to be applied in the right way. To identify the right resources, we need a thorough understanding of the problem of child sexual abuse, and we need to understand the technologies that are both driving the problem and presenting the solutions to it. Therefore, we have to face some of the truths about child sexual abuse, even though they might be uncomfortable. If we do not, we risk focusing on the wrong issues and investing in solutions that do not properly address the problem.”*

# Seven accounts detailing how different parts of society fight the dissemination of child sexual abuse material





Like cogs in a big piece of machinery, all parts of society must work together to stop child sexual abuse.

*The second part of the report consists of seven interviews with representatives from different parts of society, chosen to represent their sector and highlight the work that their part, their cog, is doing. They were all asked to share how they, at this current time, are working to tackle the problem of child sexual abuse, and what challenges they see in the future.*

*These seven sectors do not represent all the different parts of society that work towards stopping the dissemination of child sexual abuse material and child sexual abuse. They have been selected on the basis that they provide a good overview of the ambition that is out there and can showcase good examples of work being done both in the public and private sectors.*

## There has been significant improvement

### Steven Wilson

Head of European Cybercrime Centre, Europol.

The problem of child sexual exploitation needs to be tackled on a global level. If we try to tackle it on a national level we will only have partial success. As a pan-European organisation, Europol has a position that enables a larger overview than a more limited national perspective. We can make strategic assessments of the threat, how it is actioned, and what actions are needed across Europe. We also work closely with international partners such as INTERPOL and federal authorities in the US to coordinate our actions worldwide.

### Pan-European resources

Education is one of the areas that Europol focuses on in order to develop pan-European resources. One example is the “Say no” project which is aimed at the significantly growing problem of extortion. This is where adults or organised crime groups force a child to send images, that are then used to blackmail the child either for financial gain and/or for additional images. We have created a video and educational material which aims to give teachers, parents and children an understanding of the threat and

how to act if exposed to it. The material has been distributed to all countries within the EU.

### Two major challenges

Two challenges that I would like to highlight are encryption and the growing amount of data. Increasing use of encryption can make recovery

*“...over the last two years there has been a significant improvement in the European and global commitment to tackling child sexual exploitation.”*

of evidence a significant challenge for law enforcement. The second problem is the growing amount of child sexual exploitation material and self-generated material (mentioned above) circulating, which generates a growing amount of data that needs to be handled in each case. Staying on top of all this data is a big challenge.

### More focus on darknet

In the future I believe we will see an increased use of dark markets and the dark web. Offenders are growing more technically sophisticated and are taking measures to evade law enforcement. As a result, we are establishing more resources to focus on investigating the dark web in relation to many different crimes; not just child sexual exploitation.

We will also see a need for improved training for police officers to ready them for the challenges that we are facing. That will include increased cooperation with industry to use technology, machine learning, and artificial intelligence to assist law enforcement in dealing with the material.

### Significant improvement

I don't underestimate the challenges ahead. However, over the last two years there has been a significant improvement in the European and global commitment to tackling child sexual exploitation, and I believe that the response is only going to get better.

### Europol and European Cybercrime Centre (EC3)

Europol assists the 28 EU Member States in their fight against serious international crime and terrorism. Europol set up the European Cybercrime Centre (EC3) in 2013 to strengthen the law enforcement response to cybercrime in the EU and help protect European citizens, businesses and governments from online crime.

## Embracing partnerships is essential

### Susie Hargreaves

Chief Executive, Internet Watch Foundation (IWF).

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Our Hotline is the core operation of the IWF. In the UK our aim is to remove child sexual abuse material from its source, and outside of the UK we advocate notice and takedown. We operate a number of services like our URL list, which is deployed across the world by companies like Google and Microsoft. We also do research into trends and patterns, offer a keywords list, domain alerts, and we are growing our hash list that we disseminate to our members.

#### International solutions necessary

We are very aware that child sexual abuse is a global problem and therefore solutions need to be applied internationally. We are members of the WeProtect Global Alliance where we, among other things, are developing ways to work more effectively with other organisations such as NCMEC (National Centre for Missing and Exploited Children) and Cybertip Canada.

We are also working to set up reporting portals in countries where there are no reporting tools. The portals are

local reporting web pages that direct to our system in the UK, where we treat the alerts as any other report. The reporting portals do not replace hotlines, but they are a way to take action in countries where a hotline is lowly prioritised. So far, we have set up eighteen portals in, for example, Tanzania, Uganda, Namibia and India.

#### Constantly looking at new ways

The challenges ahead are related to the growth of the internet across the world and the proliferation of child sexual abuse material as a result. The sheer volume of material is the biggest problem.

New technology will be used by offenders to provide access to images and to disguise and hide child sexual abuse content. We work hard to stay abreast of that technological development, constantly looking at new ways of reinventing ourselves.

#### Defending and challenging industry

Another challenge is balancing our role as an industry body. There is

a widespread perception that the business world doesn't do enough to fight the dissemination of child sexual abuse material, so we spend a lot of time highlighting the good work that they do. That said, we spend an equal amount of time demanding that industry increase their awareness and engagement.

#### Collaboration is key

Although we don't see a clear path to solving this problem, I am always hopeful for the future. Child sexual

*“...the one issue where everyone will work together and set aside that they are otherwise competitors.”*

abuse is the one issue where everyone will work together and set aside that they are otherwise competitors. It is essential that we all embrace partnerships in order to tackle this problem. Not one sector can resolve this on their own.

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#### The Internet Watch Foundation (IWF)

The IWF is an independent not for profit organisation based in the UK that works with the global internet industry and the European Commission. They work internationally with the aim to make the internet safer by removing images of child sexual abuse.

# Blocking child sexual abuse content is common sense

## Mats Granryd

Director General, GSMA.

All organisations and businesses within the telecoms industry are aware of the problem of child sexual abuse content, and the industry is addressing it in many different ways. GSMA runs an initiative called Mobile Alliance Against Child Sexual Abuse Content, which has a membership of more than 100 mobile operators from 65 different countries. Members sign up to deliver on three objectives:

1. To notify law enforcement and aim to have the content removed from source.
2. To support the implementation of a reporting-mechanism, such as a hotline, in all countries where they operate.
3. To work towards restricting access, where allowed, to URLs or websites which feature child sexual abuse content, and to do this by using INTERPOL or other international organisations' lists of known sites.

### Knowledge and best practice

A key piece of work for GSMA going forward is to educate both businesses and the governmental sector about child sexual abuse content and the

consequences that it has for the children involved. Businesses need to be aware that child sexual abuse material is evidence, and in order to protect the children depicted in those images and films that evidence has to be handled correctly. We work closely together within the Alliance to share best practice around this. When we work with government departments and the public sector we focus on promoting the WePROTECT Global Alliance Model National Response framework, including legislation and how it needs to be written and implemented in a digital world.

*“A key piece of work for GSMA going forward is to educate both businesses and the governmental sector...”*

### The biggest challenge

The biggest challenges are the material moving to the darknet and the potential impact of other technologies that could hinder us from finding and getting at the material. To counteract these

challenges, we are developing efforts that look at piecing information together and finding patterns in information that can indicate that networks are being used to share content.

### Covering a billion subscribers

Within the Alliance we work together with many organisations such as INHOPE, IWF (Internet Watch Foundation), UNICEF, Child Helpline International and ICMEC (International Centre for Missing and Exploited Children). Together all the mobile operator members make an impressive difference, covering more than one billion phone subscribers.

However, we still need to continue working hard to improve our methods, to ensure that hotlines are in place, to work with law and policy makers and more. Personally, I would like to see changes in legislation so that it was possible to restrict access to child sexual abuse content in all countries across the world. In my opinion, that should not be something that is difficult to understand; it is common sense.

## GSMA

The GSMA is an industry organisation representing the interests of the world's nearly 800 mobile operators. GSMA works with strategic issues, technology (standardisation, different types of identity solutions etcetera), advocacy (focus on policy making, law making and regulations, as well as their own foundation "Mobile for Development" with projects around the world), and industry-leading events such as Mobile World Congress.



# We need better research for better intervention

**Maggie Brennan**

Researcher and Lecturer in Criminology, University College Cork, Ireland.

Academic research is central to better, evidence-led decision making in the fight against online child sexual exploitation. An unprecedented volume of offences is making offender management by prosecution harder than ever before. This challenge, along with the growing complexity of cases, limits law enforcement's capacity to detect and prosecute offending, let alone curb the growing scale of the problem. Our research focus must adapt to address these problems.

*“Improved collaboration will enhance professional practice, and develop better strategies for prevention, assessment, treatment and management.”*

## **We need to evaluate our approaches to management and prevention**

In most jurisdictions, management and prevention depends on post-conviction treatment and intervention. Oftentimes, there is little focus on 'at-risk' individuals, who have not yet offended, and only those convicted have access to services.

Moreover, there is little independent empirical evaluation of the effectiveness of our management and prevention interventions. Prevention efforts must extend their focus from criminal justice to community-based interventions. Undetected individuals, at risk of CSAM use and other forms of sexual offending need to be identified and, where eligible, steered towards community-based as opposed to criminal justice intervention, where these can be demonstrated to enhance preventive capacity.

## **We need to bring children's voices to our research**

The challenge of protecting children from online abuse and exploitation has become increasingly complex in recent years, as more children generate sexual imagery, and suffer related forms of victimization, whether in peer or adult-perpetrated forms. Our evidence and interventions need to engage with children's experiences in order to understand and respond to them, e.g. why they engage in such behaviour, or their needs around prevention and intervention.

## **We need closer collaboration**

Finally, there is an urgent need for

closer collaboration. Researchers are developing knowledge in the assessment, risk management and treatment of online child sex offenders, as well as strategies to prevent such offences. However, current research is limited by the types of study, accessibility to frontline practitioners and relevance across jurisdictions. There is little knowledge exchange between researchers and practitioners, which means that practitioners and policy makers cannot always make use of the research that does exist.

Improved collaboration will enhance professional practice, and develop better strategies for prevention, assessment, treatment and management. The dynamic nature of online sex offending makes it critical that future research addresses new technology, how offenders are using it, and delivers evidence-driven responses. Academia, policy makers and professional stakeholders need a permanent intervention-oriented platform for this purpose – to advance and share knowledge, to ensure that academic research assists practitioners, and focuses resources where they are needed.

**Maggie Brennan**

Maggie Brennan is a lecturer in Criminology at University College Cork, Ireland, and a co-founder of CyberSafeIreland, a national charity for child online safety and well-being.

# Technical developments give hope

## Mats Odell

Chairman, The Swedish Financial Coalition Against Sexual Exploitation of Children.

Trafficking, which includes child sexual abuse material, is the world's third largest and most profitable organised crime. Financial coalitions across the world have however managed to stop the use of banks and cards to ensure that the ability to pay for this crime through legitimate transaction channels has in the main ceased. It has been a very successful way to counter-attack this type of organised crime.

*“It has been a very successful way to counter-attack this type of organised crime.”*

### Great support

The Swedish Financial Coalition has made a significant impact in fighting this crime as it has received great support and involvement from the entire banking sector, credit card businesses, and government departments. The Financial Coalition is also

a good example of a very successful collaboration between government departments, private industry and the not-for-profit/NGO sector. Examples of organisations working together within the Swedish Financial Coalition are: The Police (The National Operative Department); the Economic Crime Authority; the Ministry of Justice; the Finance Inspectorate; popular movements such as ECPAT Sweden; and a number of businesses from the private sector.

### Crypto currencies are a challenge

Although transactions have ceased within legitimate transaction channels the trade continues to flow elsewhere. Both perpetrators and criminal organisations have worked to find new ways to exchange goods and currency. To combat this the Financial Coalition works with its members and universities to uncover trade happening on the darknet and other places where it is acceptable to use bitcoin and other crypto currencies.

### Technical developments give hope

As before, a key challenge is the sheer number of people who look for and consume child sexual abuse material. However, the fact that the dissemination of material happens online means that it can be fought and tracked with the help of technology. New technological developments give us hope that we will be able to halt this type of crime.

### Civil Society can really make a difference

We are really proud of the impact we are making to help stop the trade in child sexual abuse material. The Financial Coalition has also shown that collaborations between civil society, private and public bodies can prevent this type of crime. We have proven that society as a whole, in addition to government departments and official legislation, can make a real difference.

## The Swedish Financial Coalition Against Sexual Exploitation of Children

The Financial Coalition works to stop child sexual abuse by utilising financial institutions. The unique collaboration between government departments, the private sector and the not-for-profit/NGO sector has stopped all trade of child sexual abuse material using legitimate transaction channels.

# Ensuring that the Police receive the right resources is the biggest challenge

## Ulrika Rogland

Lawyer, Ulrika Rogland Advokatbyrå AB.

The Swedish National Courts Administration, which includes prosecutors, judges and other lawyers, is limited in its ability to address cases concerning the dissemination of child sexual abuse material, as courts can only hand down sentences based on the evidence produced by the Police. This puts a lot of weight on the skills and work of the Police who investigate the crime, view and evaluate the material that has been found, and choose a selection of material to be presented to the court.

*“This puts a lot of weight on the skills and work of the Police who investigate the crime...”*

### **The conditions are right for the court system**

In my opinion the Courts Administration is well set up to deal with cases involving child sexual abuse material. It is the Police that are struggling to find sufficient resources and build an organisational structure that suits the

crime. Currently they do not have time to prioritise these investigations and they do not have the time to conduct all the technical investigative work that is required, which means that limitation period for cases has frequently expired before they can be brought in front of a court.

### **Education and specially trained judges**

The Swedish court system could be improved by further education about child sexual abuse crimes, and with the introduction of judges who are specially trained to deal with these types of cases. There is a general lack of understanding and knowledge around sexual abuse aimed at children, and there have been few convictions involving child complainants as the courts are not equipped to base their verdicts on evidence given by children.

In Sweden there is a debate regarding increasing sentences for viewing and downloading child sexual abuse material. Although I do not believe this will deter the perpetrators, harsher sentences will highlight the severity of

these crimes. Likewise, the discussion to move cases with child sexual abuse material into a different code of criminal procedure would mean that it would cease being a crime solely against the public order, and become a sexual crime with a victim. This would signal the grave importance of these crimes. However, I feel that too much hope is placed on the potential effectiveness of that change, I don't believe that it will have a big effect on the crime itself.

### **Lack of resources**

However you choose to view the work around solving child sexual abuse crimes, the issue always comes back to the fact that the Police lack resources. The scarcity of resources is all the more obvious because more cases need specialist technical investigations. It is not until the Police are better funded that we will be able to understand how the courts can be further improved. The consequence would most likely be that the number of prosecutors and other court resources would have to be increased, however, on this we can only speculate at this stage.

## Ulrika Rogland

Ulrika Rogland is a lawyer who specialises in crimes against children, domestic abuse, sexual abuse and honour violence. She has previously worked as a judge, prosecutor, counsel for the complainants and as a special representative. She has been involved in several high profile cases in Sweden and is greatly involved in the debate around increasing the court system's awareness of crimes against children, sexual violence and domestic violence.

# An opportunity to contribute

## Volvo Group

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Our mission is to drive prosperity through transport solutions. This requires us to create value for the Volvo Group, our stakeholders and society at large. We are a value based company where respect for human rights and people's dignity is inherent in parts of our DNA. People are at the heart of what we do.

### Contribute to sustainable societal development

We believe that, based on our values, we have the opportunity to contribute positively to sustainable societal development. Primarily we do this through our transport solutions and services, but also by being a good corporate citizen and together with other societal stakeholders tackle challenges in our local communities.

### Three examples

In Africa we saw a business challenge with lack of aftermarket technicians.

At the same time there is a societal challenge with lack of education and job opportunities for youth. Therefore, we have started vocational training schools for mechanics together with our collaboration partners in Zambia, Ethiopia and Morocco and will soon start up driver trainings as well. So far, all graduated students got a job after graduation, which also supports our customers in keeping the uptime of their products. This way we can create shared value for society and our business.

Traffic safety is another societal challenge with more than 1.3 million people who die each year on the world's roads. A particular vulnerable group is children. We have developed a "stop, look, wave" initiative with the aim of increasing awareness among children of the importance of paying attention when in traffic. The Group's 100,000 employees have been

encouraged to spread the campaign among their children and their classmates. So far we have reached around 200.000 children globally, and counting.

*"We believe in being a joint force in tackling this problem. Together we can make a difference."*

To contribute to the work of preventing children from being sexually abused, has become a natural part of the Volvo Group's corporate social responsibility and goes hand in hand with our values. Therefore, we have installed technology to ensure that we detect child sexual abuse material if someone should handle such within our IT environment. We believe in being a joint force in tackling this problem. Together we can make a difference.

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## Volvo Group

The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. The Volvo Group employs about 95,000 people, has production facilities in 18 countries and sells its products in more than 190 markets.

# A global problem that needs a global response

**Anna Borgström, Head of NetClean.**

It is interesting to note that the individuals and organisations contributing to this report all highlight the same issues despite the fact that they seek to tackle the problem of child sexual abuse from different points of view. Three main themes have emerged: education; further technical development; and collaboration.

## **Education**

It is imperative that what we know about child sexual abuse is shared across the whole of society. The public needs to have greater awareness of the problem; businesses need to understand how it affects them and how they can work to prevent the problem, by establishing firm code of conducts and incorporate child sexual abuse into their sustainable ways of doing business; and policy makers need a deeper understanding in order to write laws and regulations that are coherent and effective. It is also important that further education is delivered in areas such as health care and within the education system.

I am convinced that better education for the police could help address some of the problems they experience through lack of resources, which Ulrika Rogland discusses in her interview. Education will not solve the resource problem as a whole, however more

knowledge will produce better and more efficient strategies and enable more efficient use of existing resources. It is also important to note Maggie Brennan's call for more research into current methods and strategies to ensure that the problem of child sexual abuse is addressed in the most effective way.

## **Further technical development**

Further advancement in technology e.g. encryption, is one of the big challenges that we will face in the future. In fact, four out of seven of the contributors to this report, Steven Wilson, Susie Hargreaves, Mats Granryd and Mats Odell highlight the problem of encryption. Still, when we face challenges brought on by new technical developments we know that we can overcome these problems by making use of other advances in technology. Therefore, in order to stay ahead of the game we need to see effective collaborations aimed at finding and optimising technical solutions. I am convinced that the people and organisations involved in fighting child sexual abuse can work together to meet all the challenges we face.

## **Collaboration**

This last theme, collaboration, is closely linked to the two points raised

above, education and further technical development. Child sexual abuse and dissemination of child sexual abuse material is a global problem that requires a global response. We have to work across border and continents. However it is not enough to address this problem in geographical terms. To achieve further success we need to work across sectors, industries and organisations to ensure that we all address this issue in the right way. Volvo is a good example of a business that addresses this problem seriously and helps inform how we can make our world a better place.

## **A brighter future**

Child sexual abuse is a distressing issue. Many focus on the fact that it is an expanding problem and that it can be difficult to keep up with new developments. This NetClean Report is an antidote to this. It brings out the important and encouraging work that is happening around the globe. It also reflects our experience at NetClean: That more people and organisations around the world are doing more to efficiently fight this crime. This gives us hope for a brighter future for children across the world.

## **TOGETHER WE CAN CREATE A BRIGHTER FUTURE FOR CHILDREN**

In order to stop child sexual abuse all parts of society must work together. Every sector is a cog-wheel in a big piece of machinery providing solutions, and all must work efficiently to support initiatives and drive the cause forward.

Through collaboration law enforcement, policy makers, NGOs, governments, businesses and private individuals can save children and give them the opportunity to have a safe childhood and a bright future.





**NetClean.**

a Safer Society Group company