

Agenda Item 3.8

SPA Policing Performance							
Committee							
12 September 2023							
Video Conference							
<b>HMICS Assurance Review of Online</b>							
Child Sexual Abuse and							
Exploitation (8/21) - Police							
Scotland Improvement Update							
Bex Smith, ACC Major Crime and							
Public Protection							
For Discussion							
Yes							
Appendix 1: Discharged HMICS							
Recommendations							
Appendix 2: Use of Technology							

## **PURPOSE**

To provide members with assurance as to Police Scotland's continued efforts to tackle the threat, risk and harm posed by Online Child Sexual Abuse & Exploitation. This includes our relentless focus on perpetrators, our commitment to protecting and safeguarding children, our aim to safely exploit technology as well as our outward looking preventative and partnership working across the UK, Europe and globally.

An overview is provided of progress made by Police Scotland in response to the Recommendations made by HMICS in its Strategic Review of Police Scotland's Response to Online Child Sexual Abuse & Exploitation published in February 2020 and its subsequent progress review, HMICS' Review of Online Child Sexual Abuse, published in August 2021.

Members are invited to discuss the contents of this report.

#### 1. BACKGROUND

In February 2020 HMICS published its <u>Strategic Review of Police</u> <u>Scotland's Response to Online Child Sexual Abuse & Exploitation</u> (OCSAE) and a subsequent Progress Review in August 2021. The Strategic Review made 10 recommendations with an 11<sup>th</sup> added by the Progress Review.

Police Scotland has **discharged 7 recommendations** to the satisfaction of HMICS. These are summarised in **Appendix 1**.

**4 recommendations remain outstanding**. Police Scotland has continued its work towards discharging all remaining recommendations, ensuring an enduring focus on this high risk business area. This has been the catalyst for more wide ranging improvement work that continues as Police Scotland refuses to be complacent in the face of a persistent and enduring threat of significant harm to children in our communities.

The internet has enabled the production and consumption of Child Sexual Abuse Material (CSAM) on an industrial scale, creating new opportunities to sexually abuse and exploit children, with the growing volume of OCSAE offending testing Law Enforcement's capacity to respond.

Technological advances have served to aid both offending and detection, creating a huge surge in demand on criminal investigation and child protection services.

Police Scotland is committed to being at the forefront of international good practice and developments in the OCSAE arena. It is engaged with strategic partners across Scotland, the UK and beyond and is committed to robustly tackling perpetrators, partnership working and a preventative approach.

### 2. MAIN REPORT

## 2.1 Undischarged HMICS Recommendations

**Recommendation 5** - Police Scotland should review the current arrangements for allocation of specialist support in relation to online child sexual abuse to ensure the allocation is fair, equitable and meets the needs across the country.

This recommendation focused mainly on Police Scotland's Digital Forensics Unit. This department received an uplift of 29 staff with recruitment completed through 2022. HMICS indicated it wished to await the completion of recruitment and to assess whether the increased

SPA Policing Performance Committee
HMICS Assurance Review of Online Child Sexual Abuse and Exploitation (8/21) –
Police Scotland Improvement Update
12 September 2023

staffing taking effect was making a tangible difference to meeting demand.

Digital Forensics Unit has staff in post and trained. This now better matches demand, with all command areas having equitable access to digital forensic support to meet current demand.

This recommendation has been submitted to HMICS for discharge and a response is awaited.

**Recommendation 6** - Police Scotland should review the resources and structure of the Internet Investigation Unit and Communications Investigation Unit to ensure that the force is able to meet current and future demand in relation to initial risk assessment, triage and intelligence development.

The actions in the original recommendation (Internet Investigations Unit (IIU) and Telecommunications Investigation Unit (TIU) reviews) have taken place and other work developed from the dialogue with HMICS during the Progress Review. Work is ongoing work via the Critical Issues Project, under the scrutiny of Policing in a Digital World forum, to implement:

- A Solution to track, manage, assess, triage and prioritise all OCSAE referrals.
- Visual text analytics to identify more investigative leads in less time than manually reading through the unstructured data
- Investigators' Single Search

The introduction of this technology will address the above recommendation and improve our pursue capacity, helping to protect and safeguard the most vulnerable. The Critical Issues Project went live in March 2023 with an expected delivery date of spring 2025.

A further meeting is to be held with HMICS with documentary evidence to be provided on the work to ascertain if this recommendation can be discharged.

**Recommendation 8** - Police Scotland should work with the Crown Office and Procurator Fiscal Service (COPFS) to establish a pragmatic and realistic approach to digital forensic examination requests.

A pilot between police Digital Forensics and COPFS and its Standard Forensic Instructions (SFI) was undertaken in the east of the country. This evidenced challenges with Police Scotland processes, but also the

benefits of having a single COPFS SPOC. COPFS has committed to rolling this out across the rest of the country. However, this has not yet taken place and Police Scotland is reliant upon COPFS to identify and train staff. COVID impacted training delivery, but dialogue with COPFS remains open and work continues to fulfil this ambition.

A case management system was introduced impacting positively with police Examination Request Forms (ERFs) backlogs.

The original recommendation sought evidence of a "realistic and pragmatic approach to DF examination requests" with COPFS. HMICS' assessment from the Progress Review reiterated the need for an 'urgent review' of Digital Forensics. This has been effected and evidence of the outcomes of staffing uplift is detailed above under Recommendation 5.

Separately Police Scotland and COPFS have had discussions on evidential thresholds and whether limiting examinations in terms of numbers of devices being examined or applying numerical thresholds to images recovered is desirable. However concerns about potentially missing "first generation" imagery were unresolved.

Police Scotland (Digital Forensics and SCD Public Protection) continues to explore whether an "Abbreviated Examination Policy" might be achievable. This will build in investigating officer safeguards and relate to the Risk of Serious Harm posed rather than focusing on the number/type of images – this has been agreed as fundamental to ensuring Police Scotland fulfils its child protection obligations. If this can be finalised it will be presented to COPFS for its view. Further internal work is required.

Police Scotland might reasonably be said to have done as much as it can to achieve a "realistic and pragmatic approach" with COPFS and the recommendation might be discharged, especially given that these matters will continue to be the subject of ongoing dialogue. However, HMICS has indicated a preference to await confirmation of the further COPFS SPOCs being in place.

## Further discussion with HMICS is required.

**Recommendation 11** - Police Scotland must ensure that sufficient welfare provision is available and provided to staff working within this area of policing.

A final draft welfare strategy has been approved by Police Scotland TOCSA Tactical Group, and is currently subject to review by staff associations and Federation. The strategy encompasses each business

SPA Policing Performance Committee
HMICS Assurance Review of Online Child Sexual Abuse and Exploitation (8/21) –
Police Scotland Improvement Update
12 September 2023

area involved in the end-to-end process of OCSAE Investigations. It is anticipated the strategy will be signed off by relevant staff associations by the end of summer 2023, thereafter published within Police Scotland and at that time it will be submitted to HMICS for consideration of the recommendation being discharged.

# 2.2 Timescales & Interdependencies

As previously reported, the impact of the pandemic on timescales for progress was not insignificant. Many of the recommendations required collaboration across multiple Police Scotland business areas, as well as ICT work and HR processes where recruitment has been required. These complex and cross cutting interdependencies have at times pushed out timescales for certain recommendations, however there remains an enduring commitment to drive progress to discharge the outstanding recommendations.

## 2.3 Demand

All progress is set against the backdrop of sustained increases in OCSAE, by any measure.

### Crimes

In 2022/23 1,928 online child sexual abuse crimes were recorded in Scotland, an **increase of 6.6% on the five year mean**. (The 2021/22 figure was 1,911 crimes, constituting an 11.3% increase on the 5 year mean.)

### Referrals

As with Law Enforcement across the UK, Police Scotland has endured **sustained increases in OCSAE referrals**, with some evidence of a plateau this most recent year:

OCSAE referrals	2015	2016	2017	2018	2019	2020	2021	2022	2015 - 2022 %
Total referrals	509	817	1,581	1,346	1,961	2,422	3,111	3,054	change
% change from prev. yr.	n/a	+60.5%	+93.5%	-14.9%	+45.7%	+23.5%	+28.4%	-1.8%	+500.0%

As of the 18<sup>th</sup> May 2023, having been fully triaged, **974 referrals await full assessment and development** by the Internet Investigations Unit (IIU).

Suspect National Online Child Abuse Prevention (NOCAPs)

Flowing from the sustained increase in referrals is the sustained suspect NOCAP demand, illustrated in the following table:

Year	2017	2018	2019	2020	2021	2022	2017 - 2022	
Suspect NOCAP allocation	626	463	609	910	979	846	% change	
% change from previous year	n/a	-26%	+31.5%	+49.4%	+7.6%	-13.6%	+35.1%	

Since 2021 **circa 83%** of the Suspect NOCAPs have been taken by the NCAIU (National Child Abuse Investigation Unit), a reversal of the prepandemic allocation policy). In addition to suspect NOCAPs, the referrals also generate Child at Risk (CAR) NOCAP investigations. Of all NOCAPs, circa 75% are suspect NOCAPs and circa 25% CAR investigations. The latter are almost exclusively allocated to Local Policing Public Protection Units.

The -13.6% decrease for 2022 may not be a true reflection of demand because of the number of suspect NOCAPs that will undoubtedly be generated in time from the 974 referrals awaiting full assessment in IIU.

The professional assessment is that the NOCAP allocation for 2022 was 80-120 short of what would be expected from the volume of referrals sitting within IIU, meaning true allocation in 2022 should have been 846 + circa 120 = 966 i.e. closer to that of 2021.

966 would mean the 2017 to 2022 NOCAP allocation increase was in fact **circa 54%** (not 35.1%) illustrating the scale of the continued demand.

In the financial year 2022/23 there were **712 suspect NOCAP** investigations, with **489 arrests and 782 children safeguarded**.

These investigations can vary hugely in complexity, some being comparatively straightforward whilst others are hugely complex with UK or international dynamics requiring protracted investigation across jurisdictions. Many can lead to real time child protection enquiries requiring urgent safeguarding.

## Strategic Risk - Demand vs. Capacity

The work of Operation PARROR has now been embedded into business as usual activity through the establishment of dedicated online CSAE enforcement teams. Demand levels have continued to rise beyond that experienced throughout the period immediately prior to and during Operation PARROR, and, consequently maintaining proportionate levels of enforcement has proven challenging. There has always been workflow

with a number of NOCAP investigations awaiting enforcement - a consequence of demand exceeding resource capacity.

# 2.4 Key Successes

Victim Identification and Child Abuse Images Database (CAID)
Over the past two years Police Scotland has invested heavily in promoting and supporting its small but effective OCSAE Victim Identification (VID) team. Located within the NCAIU, these officers investigate to identify children depicted in images recovered during investigations but whose identity is unknown. It is vital to resolve these identities to ensure the welfare of the children, invoke child protection processes and ensure safeguarding. The number of investigations supported by the VID team has increased by over 300% in the past year (172 in 2022/23) and Victim Referrals into the National Crime Agency (NCA) and CAID by over 100% (158 in 2022/23).

Police Scotland's Digital Forensics team has significantly improved its compliance in terms of uploads to CAID and Police Scotland now features in the top 10 performing forces in the UK.

# <u>Pro-Active Approach – Operation Overview</u>

Operation Overview is Police Scotland's recently (November 2022) refreshed approach to the authorised use of the Undercover Online (UCOL) tactic. The authority enhances our ability to respond more efficiently and effectively to high harm OCSAE threats within Scotland, ultimately increasing our ability to protect children in Scotland.

Since the operation was launched, 36 males have been arrested and charged with various OCSAE offences, including grooming charges. 10 nominals have been identified in other jurisdictions, predominantly England and Wales, with evidential material provided to pertinent Home Office police forces, or other law enforcement, for progression.

# 2.5 Governance & Strategic Engagement

### Governance

Police Scotland's internal governance remains improved and its wider strategic engagement is demonstrable. Police Scotland internally operates a TOCSA Gold (Strategic) and Silver (TOCSA Tactical) structure with various subgroups. (This led to the discharge of Recommendation 3 in August 2021).

## <u>Strategic Engagement - NCA</u>

Police Scotland remains pro-actively engaged with the NCA and its UK structures including its Strategic Governance Group and Pursue and Prevent Boards. A Police Scotland delegation recently visited NCA in London to meet with its Child Protection Advisor team. Discussions took place on how the NCA can best engage with multi-agency Child Protection services across Scotland and the best pathways for sharing Child Protection concerns.

# 2.6 Partnership & Prevention

# Multi-Agency Preventing OCSAE (MAOCSAE) Group

The MAOCSAE group meets quarterly with a focus on new innovation, public safety awareness, as well as recognition of streamlining and mutually supporting media activity and campaigns.

Stop It Now! Scotland (SIN!) is a key MAOCSAE member driving the inception of a group to focus on the 'Indirect' victims of OCSAE – the partners and families of persons arrested and charged with OCSAE offences who endure enormous impact and strain but often lack support. Police Scotland continues to provide those arrested for OCSAE offences with SIN! literature which signposts to SIN! services.

Barnardo's and Police Scotland have worked collaboratively for a number of years to tackle OCSAE through the RISE (Reducing the Impact of Sexual Exploitation) Service. This seeks to support Police Scotland's operational child protection response by improving support to children under 18 who have been affected by Child Sexual Exploitation through the provision of additional specialist advice and consultation.

Police Scotland has strengthened relationships with Ofcom Scotland in anticipation of the new Online Safety Bill and Ofcom Scotland's enhanced regulatory role in the Bill. A memorandum of understanding has been developed to ensure clarity of process to allow Police Scotland to effectively recover any Child Sexual Abuse Material received by Ofcom in Scotland.

Given the prevalence of female victims in OCSAE offending Police Scotland recognises the importance of ensuring our VAWG (Violence Against Women & Girls) work is informed by our OCSAE work and there is integration where possible. As such the emerging trends and threats discussed at MAOCSAE can help make informed assessments and decisions regarding VAWG.

### Cybercrime Harm Prevention

Police Scotland's Partnerships, Prevention & Community Wellbeing (PPCW) Cybercrime Harm Prevention (CHP) Team has a multifaceted approach to educating young people about online abuse, grooming and exploitation. Where possible children and young people are addressed directly, however, work is also done with parents, schools, sports clubs service providers and various partners to reinforce messaging.

CHP is a member of MAOCSAE and national campaigns are also supported by disseminating alerts, resources and campaign materials via internal networks across local policing divisions and via an extensive external network of Web Ambassadors.

CHP is a key member of the Cyber Scotland Partnership, taking a leading role in the annual Cyber Scotland Week event, tailoring events to attract engagements from parents and schools.

CHP works with Police Scotland's Children & Young Persons team to increase the number of school liaison officers who access the Glow network. This has almost doubled to 142 nationally.

CHP has also partnered with the Children's Hearing Scotland national training leads to commence work on sessions for 22 divisional teams consisting of 3,000 panel members. These will focus on the realities of online experiences of young people, exploitation and online safety.

### Horizon-EU

Police Scotland is part of the Horizon-EU funded "Prevent & Protect Through Support" (2PS) project. This is a 22 strong international consortium of partners, funded for 3 years, to fight child sexual abuse, reduce the number of abused children and protect those at risk of exploitation. The consortium is made up of a number of EU law enforcement agencies, academia and other organisations.

### Childlight – Global Child Safety Institute

Police Scotland is actively engaged with Childlight, with the Chief Constable speaking at its launch event at the University of Edinburgh in March 2023. Childlight aims to understand the prevalence, nature and scale of child sexual exploitation and abuse worldwide. Police Scotland is working to share data to inform Childlight's work.

## ISPCAN European International Congress 2023

Police Scotland will co-chair the upcoming conference being held on 24th to 27th September in Edinburgh this year. ISPCAN has also partnered

SPA Policing Performance Committee
HMICS Assurance Review of Online Child Sexual Abuse and Exploitation (8/21) –
Police Scotland Improvement Update
12 September 2023

with Childlight - Global Child Safety Institute. Planning for ISPCAN remains ongoing.

# **Use of Technology**

This is linked to action <u>PPC 20221207-007</u> - <u>Online Child Sexual Abuse</u> – <u>Police Scotland to provide a report to a future committee which details the potential introduction of technology that would be of benefit in this area</u>.

Police Scotland has a Policing in a Digital World Programme to examine how to grow and shape capabilities to meet the increasing threat and harm from child sexual abuse and exploitation.

Police Scotland aims to make best use of available technologies to assist us, whilst recognising the need to ensure public confidence and appropriate safeguards in developing new technologies, to better enable us to fulfil our statutory obligations in keeping children safe.

Developing and introducing new technologies often also requires significant financial investment and additional resource to assist with the change and transformation process.

There are a number technical solutions which would bring greater efficiency in the world of OCSAE investigations. Although the vast majority of NOCAP offending relates to Indecent Imagery of Children there is a growing number of investigations which requires the identification, examination and analysis of chat logs. This can be in tandem to imagery or as a standalone aspect of investigation. There are a number of tools which can assist on these fronts, some of which are detailed in **Appendix 2**.

## 3. FINANCIAL IMPLICATIONS

There are cost implications associated with some of the technological work relating to Digital Forensics which Police Scotland continues to manage and develop. This also pertains to the matters described in Recommendation 6. However it is assessed that there are no significant financial risks associated with the delivery of the recommendations.

### 4. PERSONNEL IMPLICATIONS

There are resourcing and wellbeing aspects to some of the recommendations, but there are no strategic personnel issues identified.

### 5. LEGAL IMPLICATIONS

There are no legal implications in this report.

### 6. REPUTATIONAL IMPLICATIONS

There are reputational implications, as detailed in the main body of this report, aligned with the ability to effectively meet demand and keep children safe.

# 7. SOCIAL IMPLICATIONS

There are social implications as detailed in the main body of this report, aligned with the ability to effectively meet demand and keep children safe.

## 8. COMMUNITY IMPACT

There are community implications, as detailed in the main body of this report, aligned with the ability to effectively meet demand and keep children safe.

# 9. EQUALITIES IMPLICATIONS

There are no equality implications in this report.

### 10. ENVIRONMENT IMPLICATIONS

There are no environmental implications in this report.

### **RECOMMENDATIONS**

Members are invited to discuss the contents of this report.

# **Appendix 1**

# **Discharged HMICS Recommendations**

**Recommendation 1**- Police Scotland should improve the means by which recorded data can accurately inform assessment of the scale and nature of online child sexual abuse.

<u>Discharged August 2021</u> - Context:

OCSAE markers now in place across force systems.

**Recommendation 2**- Police Scotland should review the level of analytical support provided to the Public Protection business area and consider the appointment of a dedicated analytical resource.

Discharged June 2022 - Context:

OCSAE now has dedicated analytical support. Examples of analytical product being a bespoke strategic threat assessment, management data on POWER BI, monthly snapshots circulated highlighting current demand, response and assessment of change/emerging threats.

**Recommendation 3** - Police Scotland should ensure a strategic governance framework is in place, which provides support, direction, scrutiny and quality assurance to the force's response to online child sexual abuse.

## <u>Discharged August 2021</u> - Context:

Internally we operate a Tackling Online Child Sexual Abuse (TOCSA) Gold (Strategic) and Silver (TOCSA Tactical) structure. Various subgroups, such as the Online Child Abuse Activist Groups (OCAG) Practice & Policy Group, the Multi-Agency Preventing OCSAE Group Child Abuse Image Database (CAID) Working Group, National Child Exploitation Policy and Practice Group and OCSAE Tasking and Planning meeting (LPD\SCD forum to bid for specialist support to target CSAE) all report to TOCSA Tactical. There is a Local Policing Detective Superintendent\LPD representation at TOCSA Tactical and the various subgroups.

**Recommendation 4** - Police Scotland should undertake an Online Child Sexual Abuse Strategic Threat Assessment to accurately identify the scale, nature and threat to children from online child sexual abuse.

## Discharged August 2022 - Context:

In 2022 we produced a Police Scotland/Scottish OCSAE Strategic Threat Assessment. A further assessment is now under review to ensure we seek to identify the scale and nature of the threat to children from OCSAE in 2023.

**Recommendation 7 -** Police Scotland and National Crime Agency should work together to ensure that all capabilities are being exploited to their full potential and intelligence is shared effectively.

## Discharged August 2021 - Context:

Police Scotland are now an active participant in the UK NCA-led structures including the Pursue and Prevent Boards and the NCA Strategic Governance Group, the UK Law Enforcement UCOL network and the UK CSE UCOL Coordination & De-confliction (CUCD) meeting. Our commitment to these meetings ensures we seek to identify and understand the scale and nature of the threat regarding CSAE.

**Recommendation 9** - Police Scotland should review its capacity and capability to conduct undercover online covert operations in support of its policing priorities and ensure that undercover online operatives are sufficiently equipped and supported to identify and equitably assess the risk to children as a result of online offending.

# <u>Discharged August 2022</u> - Context:

SCD-PP-Operational Lead team in place (1 x DI, 1x DS and 4 x DCs) to enforce undercover online covert operations. Special Operations Unit in place (1 x DI, 1 x DS, 2 x Cover and 3 x UCOLS) to conduct undercover online covert operations. Overarching Authority in place meaning our ability is enhanced to respond more efficiently and effectively to high harm OCSAE threats within Scotland, ultimately increasing our ability to protect children in Scotland. Authority is SIO led via the Operational Lead team ensuring a Child Protection focus, with support structures in place via a Special Operations Unit regarding tactical and welfare advice for UCOL deployments.

**Recommendation 10** - Police Scotland should ensure that arrangements for deploying undercover online specialist resources are directed by formal tasking arrangements aligned to risk, priority and demand.

### Discharged August 2021 - Context:

Tactical tasking and co-ordinating processes submitting bids to either SCD Operational Delivery Board (SCD ODB) and Multi-agency Tasking and Delivery Board (MATDB). Furthermore a new regional layer of tasking has been introduced, Regional ODBs for North, East and West which encourages assessment of the required resource across divisions within each region. If the bid cannot be resourced at Regional ODB then this can escalated to SCD ODB. There is also a Dynamic Tasking Register held at SCD to collate specialist support provided by SCD to local divisions out with the monthly tasking cycle. This commenced in April 2021 and is welcome in terms of transparency and visibility. There is also an OCSAE Tasking and planning meeting (LPD\SCD forum to bid for specialist support to target CSAE) held monthly, chaired by SCD and LPD invited into forum (as well as wider SCD) all seeking relevant undercover online specialist support.

# **Appendix 2**

# **Use of Technology**

**CAID Facial Matching** – Following endorsement by the SPA, Police Scotland has now endorsed the use of CAID Facial Matching. This went live in July 2023. The introduction of this tool will bolster our current ability and will realise both investigative and Child Protection benefits. Use will be monitored on an ongoing basis.

**Vigil AI-** Home Office project which has just completed an assessment by a number of forces across the UK. The capability would point towards images which are contained on a device, are <u>not</u> on CAID and provide a probability as to the likelihood of these being indecent images of children. This could potentially speed up the obtaining of evidential material by pointing the DF analyst towards the images of 'interest' and greatest risk at the start of an examination.

Camera Forensics on CAID- This will be able to highlight to the analyst/ investigator when a camera has been used across multiple images, not just those images involving OCSAE. This brings subsequent investigative opportunities from the content of those other images that can help identify offenders and children. The VID Team is currently piloting this Camera ID product. Essentially images taken by a digital camera (whatever the device type) have a unique 'finger print' linked to whatever device they are taken from. Image/s from a suspect's device can be sent to Camera Forensics which will extract the photograph's 'fingerprint' and then search it across the internet to find other images taken with the same device. This brings the investigative opportunities. Unlike metadata, this fingerprint cannot be stripped out by software.

**Text Analytics-** This is being explored through the Critical Issues Project where the opportunity to analyse conversation and text would identify the likelihood of ongoing offending taking place and highlight this to an investigator at the earliest opportunity.

**Cyacomb-** This is a triage tool which will quickly identify images contained on a computer which are present on CAID potentially reducing the time taken for an analyst to triage a device a locus from hours to minutes, this should be moving to proof of concept via the Policing a Digital World forum.

**Web Image Metadata Matching** – NCAIU's Victim Identification Team is undertaking a pilot project with the Home Office in respect of Web Image Metadata Matching (WIMM). Essentially CAID is linked to Camera Forensics and this will extract the Exif data from images and search them across the web for matches through the Camera Forensics platform which would produce additional investigative opportunities to identify and target offenders.

**Uniform Database** – The VID Team continues to use the Uniform Database as part of a pilot (the platform will be rolled out across the UK next year). A number of successes have been realised, where we have been able to identify and safeguard children uniform identification.

**INSPECTR** - This is an Online Investigation tool kit that extracts data from various profiles. It looks at the number of words, sentences, frequency of verbs, punctuation and sentence context to identify the user and if they are using any other different profiles. The issue with this is that it requires a minimum of 500 words and it has not been tested on different platforms.

**LOCARD** – Is a reporting tool kit that standardise the process of preparing and generating Digital Forensic Reports to present to the courts. The process has not been tried out by an UK or European Court.

**AVIATOR** – A tool that priorities NCMEC referral reports using an automation and intelligence tool. This reduces the labour required to process the reports.

**AIRA - T3KA1 -** The company states that its system can quickly identify a number of crimes including CSAM using hash value comparison.

**Dark Web Monitor -** This is a company that monitors the Dark Web 24 hours 7 days a week to detect crime and uncover evidence. It looks at dark web domains and establishes who the host of a domain is. With this information the specific host can then be examined to establish what other domains are held by the host. This can assist in identifying the legal and illegal sites set up by the host. Part of the work is the detection of CSAM and identification of subjects involved in this.

**Developing Resistance Against Grooming Online – Spot & Shield (Dragon S)** – Academics at Swansea University have developed a spotter tool which integrates Linguistics and AI to detect online grooming content, pinpointing the manipulative language tactics that groomers use: from making children feel emotionally isolated to communicating sexual intent implicitly and explicitly to them. This Spotter tool will aid law enforcement's online grooming detection work and could have a significant impact on our ability to keep children safe from online grooming.