

Herman Goldstein Award Submission

Operation Parallelogram

Submitted by Durham Constabulary

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Operation Parallelogram

Summary

Scanning:

During 2018 the National Crime Agency received 113,948 reports of child sexual abuse material linked to the UK. In 2019, there were approximately 6,000 arrests relating to indecent images of children (IIOC) nationally. In the same year over 3,000,000 new images were added to the Child Abuse Image Database (CAID).

Nationally there is a year-on-year increase of between 6-7% of Registered Sex Offenders (RSOs) added to the Sex Offenders Register. In 2016 there were 830 RSOs in Durham, compared to 1263 in 2022, over a 50% increase over 6 years. 32.7% of Durham's RSOs committed their index offence online.

Analysis:

Prior to Operation Parallelogram Durham Constabulary did not have a formal, agreed triage method to deal with this kind of offending at scene. If offences were suspected, all devices were seized and added to the Digital Forensic Unit (DFU) workload. Suspects were bailed or released under investigation until devices were examined. 34 RSO cases were sitting in the DFU. This consequently impacts on the capability and capacity of the DFU to manage ongoing workload demands. This translated in up to 9 months of a RSO suspect under investigation without an indication of what, if any, offending was present on their digital footprint. This was not acceptable.

Response:

The framework of Parallelogram was to conduct a weekly operation where an examiner from the DFU would co-attend high harm RSOs with a Public Protection Unit (PPU) risk management officer. Specifically, those suspected of potentially offending online were prioritised.

Unannounced visits take place at the RSO's home address where an in-depth forensic examination of devices would take place. This would involve router checks, manual and automated digital triage of devices, risk assessments, generating intelligence and identifying offending.

Assessment:

Over 350 joint RSO visits have been conducted under Operation Parallelogram and over 1000 devices triaged or examined. 10 RSOs arrested & finalised with a positive outcome, including sentence time totalling over 12 years. Children have been made safe after secret relationships were uncovered and grooming identified. A better intelligence picture to drive informed risk management plans. Device details and usernames have been recorded for over 200 RSOs. Demand reduction of RSO cases awaiting DFU lab work from 34 to 5.

Summary Word Count: 364

Operation Parallelogram

Description

Scanning:

Operation Parallelogram is an innovative and collaborative project created to target registered sex offenders who sexually offend online. Utilising cutting edge technology provided by the FBI, the project brings together skill sets from the Public Protection Unit, Neighbourhood Policing Teams and the Digital Intelligence and Investigations (DII) unit to tackle online offending and uncover the levels of deception and depravity undertaken by Registered Sex Offenders (RSO) within County Durham.

The number of indecent images of children continues to rise. During 2018 the National Crime Agency received 113,948 reports of child sexual abuse material linked to the UK. The following year, in 2019, there were over 3,000,000 new images were added to the Child Abuse Image Database (CAID). And approximately 6,000 arrests relating to IIOC nationally. Furthermore, the availability and capacity of digital continues to grow. Hard drives and phones increase in size, as depicted in the graphs contained in **appendix one**, and new iterations of smart devices are added to the market every single day. At the end of 2022 the average size of a new hard drive sold by Seagate was 7.1TB. This is a vast amount of data equivalent to 2,201,000 pictures, 3,550 hours of video, or 300,000 days of music.

In addition to the rise in indecent images, nationally there is a year-on-year increase of between 6-7% of RSOs added to the Sex Offenders Register. In 2016 there were 830 RSOs in Durham, compared to 1263 in 2022, over a 50% increase over 6 years.

From scanning offence types, it was established that 32.7% of Durham's RSOs committed their index offence online.

This information demonstrates that there is a national problem of increasing amounts of indecent images of children and increasing numbers of RSOs, which is replicated in Durham's data. This indicates the risk of serious harm to children within those images. It also demonstrates that demand on Policing to investigate offences is also significantly increasing.

The objective of this problem-solving approach was to improve Durham Constabulary's response to sexual offending online to in turn safeguard children within our communities.

Analysis:

There are several reasons why this offending trend has emerged. There are more people using the internet online than ever before. Illegal content is much more readily available, and both the number and type of internet enabled digital devices has increased exponentially. Anecdotally, it is no longer the past time of somebody behind a computer in a dark room, it can be obtained on a mobile device, anywhere. Use of the Dark Web, VPNs and free anti-forensic tools make online activity harder to trace. The population is more "tech savvy" than ever before.

Offending increased during the Covid lockdown periods with a significant increase in CEOP referrals from the NCA. The vast majority of online offending does take place at the home address, and offending takes place on multiple devices and media stored around the home.

Police have a finite number of resources. The management of RSOs is a particularly challenging area of policing given the number of offenders who are managed in the community and the high harm

implications of offenders upon victims and the community at large. Offenders have either been convicted, have received a civil order to meter their activity, or are a Potentially Dangerous Person. However, limitations on people's life are determined by legislation and the courts, and as such must still provide freedoms under the Human Rights Act.

RSO management provides control over these individuals, however it is impossible to conclusively predict when RSOs will re-offend. Understanding the information and intelligence around RSOs provides the police with a better insight and understanding of and RSOs likelihood of offending, and as such what control measures can be brought unilaterally, or through multi-agency working under MAPPA, etc.

Prior to Operational Parallelogram Durham Constabulary did not have a formal, agreed triage method to deal with this kind of offending at scene. Consequently, if offences were suspected, all devices were seized and became part of the Digital Forensic Unit's workload. This impacted on suspect management, with long bail periods or release under investigation (without the control of bail) until the devices could be triaged. At this time, 34 cases sitting in the DFU queue were related to RSOs, generating a significant burden on the DFU and also resulting in carrying an exceptional amount of risk. This consequently impacts on the capability and capacity of the DFU to manage ongoing workload demands such as the constant generation of CEOP workload, balanced against urgent operational requirements such as homicide, stranger rape, child death, etc. type investigations.

This consequently translated in up to 9 months of a RSO suspect under investigation without an indication of what, if any, offending was present on their digital footprint. This was not acceptable, and a new process was clearly required.

Response:

There was a requirement to think differently; to improve practise through innovation and collaboration. Through stakeholder consultation a pilot scheme was established, bolstered through Home Office funding and Operation Parallelogram was born.

In thinking differently, we researched technology solutions that could assist. Several different options were scoped, and the capability and capacity of the current forensic tooling is an ongoing and evolving process. Initially the project agreed upon a forensic tool. This specifically was chosen as it is a free offering from the FBI which provides detailed results to digital forensic investigators in minutes, highlighting harmful and illegal content from embedded data collated in law enforcement databases. Additional front line forensic tooling has been adopted over time, having utilised Home Office and commercial suppliers to ensure the operation remains fit for purpose, and is always at the leading edge of identifying digital harm.

The diagram in **appendix two** demonstrates the power/interest analysis for the response phase, to understand who the stakeholders are and assess their degree of power and interest.

The framework of Operation Parallelogram was to conduct a weekly operation where an examiner from the DFU would co-attend high harm RSOs with a PPU risk management officer. Specifically, those suspected of potentially offending online were prioritised. This process was formalised and embedded in January 2021.

Unannounced visits take place at the RSO's home address where an in-depth forensic examination of

devices would take place. This would involve router checks, manual and automated digital triage of devices, risk assessments, generating intelligence and identifying offending.

PPU officers have also been trained in some of the forensic triage tools in order to bolster the tools in their arsenal when conducting RSO visits. The training has been facilitated by the DFU at no additional cost to the organisation.

A large number of hidden digital devices, not previously recognised, have been identified. The images are contained in **appendix three**.

Case study 1

PPU & DFU attend a high risk RSO's address. Forensic software is run on the subject's devices whilst PPU conduct the risk assessment. During the course of the visit the suspect is evasive when being questioned and behaviour becoming increasingly erratic. DFU examiners locate IIOC on the laptop and he is arrested on scene. The subject is subsequently charged and convicted, to serve a 16-week prison sentence.

Case Study 2

PPU & DFU attend a proactive, unannounced visit to an RSO's address. The subject immediately runs into the bathroom, locking the door behind him. Entry is forced and the subject is arrested. Forensic software is run on the devices, and it is established that the suspect was in the process of deleting illegal material from his device, which was found by the DFU.

During examination it was evidenced that the subject was the lead in a paedophile ring who were sharing child sexual abuse images on KIK. The group was titled "Gay Teen Trade 12-19." To be accepted into the group you had to share an image of a child you know in underwear.

He was convicted and sentenced to 12 months in prison, 10 extra years on the Sex Offenders Register, and a renewed Sexual Harm Prevention Order.

Case Study 3

PPU & DFU conducted a proactive operation in relation to "Alice Day," the infamous annual paedophile pride day. During the course of this operation an RSO was found to be in breach of their Sexual Harm Prevention Order, using Mega.NZ cloud storage. He was found to be in possession of over 200 indecent images of children, of which over 100 were the most serious category A.

He was arrested, charged and convicted, currently serving a 27-month prison sentence.

Assessment:

Prior to implementation, zero joint visits or proactive examinations of RSOs occurred. Since implementation, over 350 joint RSO visits have been conducted under Operation Parallelogram and over 1000 devices triaged or examined. This number continues to grow as Parallelogram continues to be run by the DFU and PPU. This has resulted in several benefits to date:

Identification and investigation of offences in a timely manner

10 RSOs have been arrested, of which 9 were charged and remanded immediately. The other offender was bailed and subsequently received a caution. All positive indications have resulted in guilty pleas due to the quick investigatory turnaround. Sentence time for these offenders has totalled over 12 years.

Safeguarding of children and vulnerable persons

Multiple safeguarding reports have been submitted. Children have been made safe after secret relationships were uncovered and grooming identified. Immediate disclosures have been made to individuals and partner agencies to safeguard the most vulnerable. This has led to increased joint working with children services and probation through positive action.

Building a better intelligence picture to ensure better informed risk management plans

Device details and usernames have been recorded for over 200 RSOs. These are added to target profiles and utilised in ongoing management. This conversely, also provides reassurance that present risk management plans are informed and helping prevent offending.

Demand reduction

Owing to the work conducted at scene, the DFUs workload was significantly reduced, with the cases slashed down to 5 from 34. Owing to PPU officers being trained in some of the on-scene triage tools, there has also been a reduction in the requirement of the DFU to support the operation. This has allowed for the DFU to concentrate on the higher and complex end of the risk spectrum, provide operational resilience and flexibility to the organisation, and increase its reactive capability when particularly difficult cases come in requiring specialist DFU skills and experience.

9 RSOs who were previously being managed in the community were now in custody, consequently not requiring ongoing management. Since the introduction of Parallelogram there have been over 30 RSOs who have been reduced from high to medium, resulting in less management needing and a lesser draw on specialist resources.

Durham Constabulary are leading the change nationally and are the only police force taking this joint approach. Parallelogram was recognised as good innovative practice during the 21/22 PEEL Inspection and 7 police forces to date have requested information around the scheme.

“Durham Constabulary is good at managing offenders and suspects. The force is effective in managing the risk registered sex offenders pose. Operation Parallelogram is a force initiative in which specialist staff from the digital imaging investigation team and MOSOVO staff (the unit that manages sexual and violent offenders) visit registered sex offenders. They are able to detect any devices connected to the internet. They are then able to check them to make sure that offenders aren't committing further offenders or breaching the conditions of an order by accessing, sharing or downloading illegal content.” (His Majesty's Inspectorate of Constabulary and Fire and Rescue)

Sustainable approach

The model adopted under Operation Parallelogram has been and continues to be sustainable. It is now adopted as part of everyday business by both the PPU and DFU teams. It is widely recognised by the force that tackling this harm at the earliest opportunity and being proactive in policing online

sexual offending reduces the likelihood of consequential offending and reduces the overall amount of cases requiring examination in the DFU.

Financial benefits

Due to the increase in device capacity, and a 100% case increase in submissions to the DFU over the previous 5 years, the overall workload in the DFU has increased by 500%. This is a significant amount of workload increase. Therefore, in terms of cost-efficiency, proactively dealing with digital forensics in the field at the earliest opportunity is a must. This is a much more financially viable and efficient model by officers identifying the devices with the relevant harmful material, rather than a scoop and run approach of seizing all devices which then sit to be examined in and amongst the rest of the force's demand.

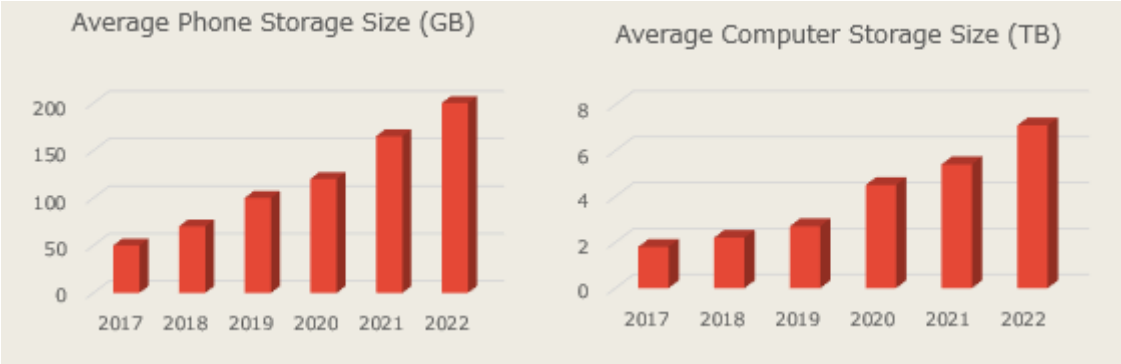
Furthermore, participation and referrals to welfare have risen in the past year by 72%. Academic research and Durham's own data highlight the risk to individuals if they are not supported and the risk is not managed properly. By reducing the risk at the front door to the DFU and PPU around ongoing investigation and backlogs, this consequently has an impact upon staff welfare and wellbeing, enabling more individuals to remain in the workplace.

Operation Parallelogram continues to be a success and continues to run. There is a requirement for continuous innovation as technology advances, particularly around the digital triage of mobile phones. Due to the risk identified, additional forensic tools have been procured to secure the success of identifying and managing this type of offending, specifically taking into account the emerging risk around cloud-based offending.

To date (25/03/2024) there has now been over 600 visits conducted. 18 people arrested and over 20 years' worth of prison sentences. The advantages to Operation Parallelogram are not only in the convictions of suspect. It provides valuable intelligence and safeguarding information and reassurance around RSO risk, allowing risk assessments to give a lower grading, reducing demand on the Public Protection Unit and allowing resources to be focussed on where the risk actually lies.

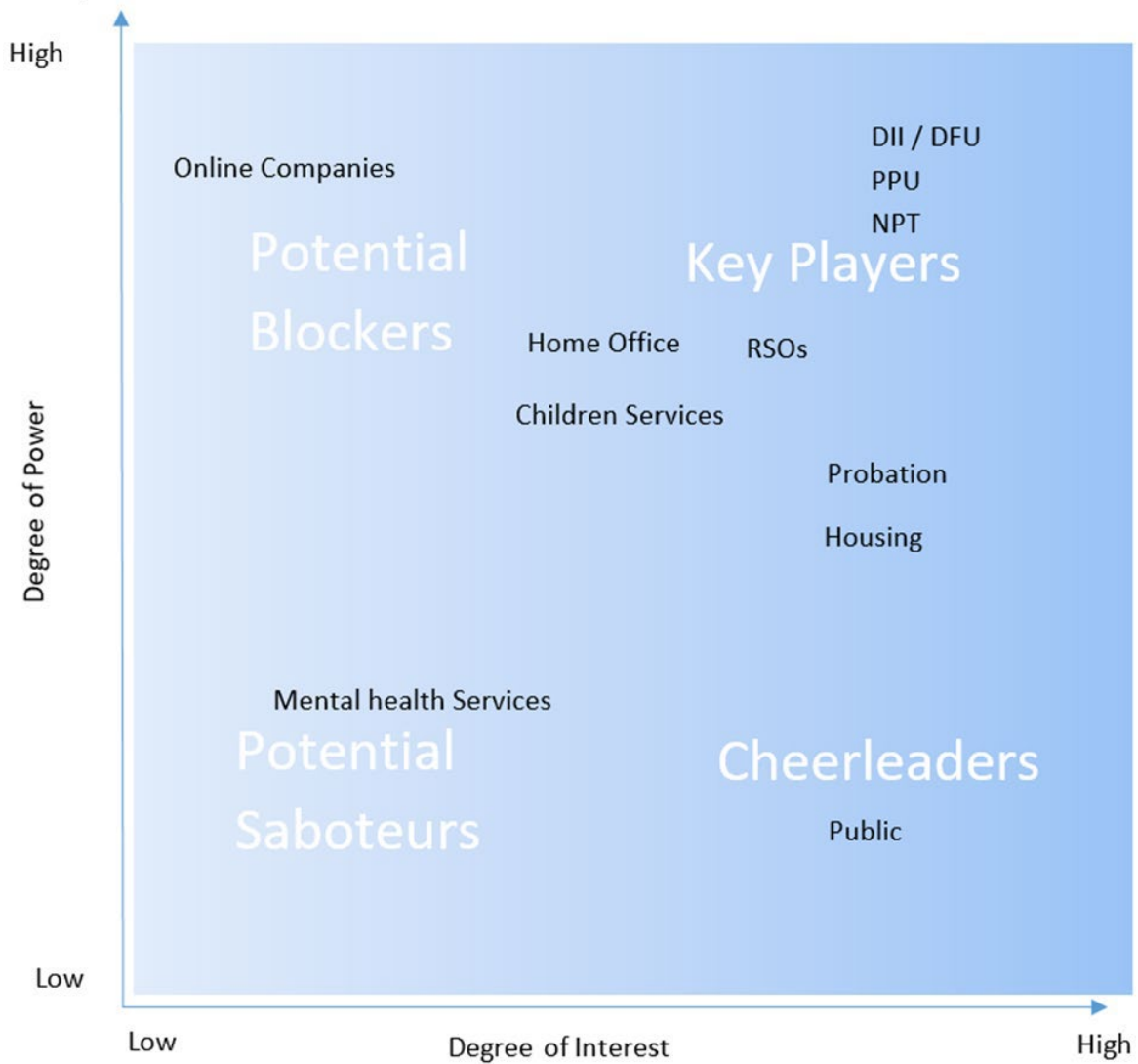
Description Word Count: 2,300

Appendix One



Appendix Two

Power/interest analysis for the response phase, to understand who the stakeholders are and assess their degree of power and interest.



Appendix Three

