

ETHICS COMMITTEE

Wednesday 21st July 10:00 - 14:00 hrs

Meeting held virtually via Zoom

Present:

Marion Oswald (MO) Chair of Ethics Committee

Jamie Grace (JG) Vice Chair of Ethics Committee

Thomas McNeil (TM) Assistant Police & Crime Commissioner

Anindya Banerjee (AB) **Ethics Committee** Claire Paterson-Young (CPY) **Ethics Committee** Malcolm Fowler (MF) **Ethics Committee** Janine Green (JG) **Ethics Committee** Peter Fussey (PF) **Ethics Committee** Jennifer House-go (JH) **Ethics Committee** Derek Dempsey (DD) **Ethics Committee** Andrew Howes (AH) **Ethics Committee**

Jonathan Jardine (JJ)

Rachel Holtham (RH)

Secretariat - OPCC

Povin Porret (DR)

Davin Parrot (DP)

Samantha Todd (ST)

Karl Shutes (KS)

Data Analytics Lab – WMP

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Chris Todd (CT) Assistant Chief Constable - WMP
Matthew Tite (MT) Superintendent, NDAS SRO - WMP

Luke Robertson (LR) Accenture

Samantha Kenny (SK) Observer from House of Lords Achille Versaevel (AV) Observer from House of Lords

Apologies:

Tom Sorell (TS) Ethics Committee

The Chair welcomed everyone to the meeting and extended welcome to observers from House of Lord Committee Members.

The newly elected PCC attended to introduce himself and to share words of encouragement, state his support for the ethics in policing technology agenda including proposals for a national ethics model and to thank all Committee members for showing interest and their commitment.



A quick update was given on recruitment for new members and will be advertising really widely accompanied by genuine efforts to have a diverse pool of candidates.

2 Social Network Analysis Primer

Committee members who are experts in data science put together this paper on social network analysis largely because there has been a lot of projects that have been brought to the Committee that have used social network analysis.

Purpose is to provide information on how these are developed and the descriptive techniques used to help understand concepts and to address at a high level some of the key ethical concepts that they bring out and focussed on the analytics.

The following feedback on the paper was given:

- A Committee member thought it was a very helpful document especially as there have been a number of network analysis projects bought to the Committee.
- A member asked if any of the key principles highlighted in the document that the data science experts felt applied particularly with some of the network analyses seen from WMP, either NDAS or the Data Analytics Lab. The member added that they hadn't seen anything that related directly to any of the work or projects that have been presented to the Committee.
- A member noted if there was an opportunity to use documents like this to enhance and streamline the whole oversight process and help focus scrutiny. Another member added that this would be a good idea in terms of the national agenda and making sure that there is more of a consistent set of standards and guidelines for this whole area.
- A member picked up on the section around network dismantling and noted the potential of a score that seeks to show the extent of network connectivity at the start of the police operation, and then the extent of network connectivity in an organised crime but at the end of an operation, could feel like a really useful way of understanding value for money and outcomes in that part of policing.

Action: consider this 'dismantling' scoring concept as part of the evaluation.

3 Ratification of the previous recommendations

Chair went through the advice and minutes from the meeting on the 8th June 2021 as the meeting was not quorate, the Committee unanimously approved the recommendations give.

Updates not on agenda

Schools Catchment Area Project

No updates on this project due to capacity constraints within the Lab. DP noted there may have been some previous misunderstanding on the project, the aim was to create an origin destination matrix based on events and schools, but more



from the point of view of trying to identify schools where Project Guardian wouldn't currently go to.

A Committee member noted that if this project was to continue it would be worth engaging with Jen Pearson who is an expert in child's data rights.

IOM Model

Should be able to beta test this model within the next 5 weeks with two volunteer offender managers, to be undertaken by an independent researcher as part of that PhD, they would look to focus on engaging with the local offender managers, both pre and post deployment to understand how they're using the insights and the degree to which they find the tool useful and whether they perceive this as offering any improvements.

First round interviews are to understand how they currently use information and data to undertake their risk assessments then the second round of interviews, towards the end of the pilot phase, is to understand how the offender managers are using the new tool and whether it's offering any improvements in their ability to identify risks.

Then analysis of the data by that independent researcher in order to be able to provide feedback to the Lab. Researcher also wants to be able to do some participant observation exercise, which would mean sitting next to some offender managers to see how they actually use the tool and see what kinds of decisions are made and how then it then feeds into their normal risk assessment processes.

The Committee made the following comments and questions:

It was great for a PhD researcher to be involved but that it may potentially not necessarily provide them with all the evaluation that is needed, therefore might be a good idea to have some separate consideration of the evaluation criteria as well. DP added they were also looking to do their own analyses, particularly if they've got information regarding how often it's been accessed, so that they can then begin to assess from there and probably undertake their own conversations and discussions with people as well, so that they can include various other items that might be required.

Action: An opportunity to be given for the Committee to make suggestions on IOM evaluation criteria/scheme.

4 Short Term Knife Predictions

This paper is to provide short term 4 weekly hot spot analysis but would be predictive not retrospective, majority of the report was looking at methodology. The paper is returning to the Committee after input from the Committee members that are Data Scientists outlining changes regarding assumptions of the average age of offenders, information around timing of attacks, information around sensitivity analyses, costs benefit analyses, and a comparison between different predicative analysis methods.

The Committee made the following comments and questions:

 The Data Scientists who had input in the changes noted that they had constructive conversations which resulted in significant improvements and the material in the addendum was useful.



- It was worth noting for the benefit of the House of Lords observers that the Data Scientists were recruited specifically for this purpose and noted of the value of having subject experts within the committee.
- A member commented on the predictive value and that there were a few sections in the paper which highlights some uncertainties. DP added that this is the nature of statistical analyses that there will be uncertainty, which is always something that they're interested as statisticians in measuring and identifying. In terms of moving forward they would like to start beta testing it and provide it to Guardian or the VRU between three to six months, to find out if it is useful, how it performs overall as a model in terms of their predictive capability. Also, to find out what they used it for and if they are seeing any benefits from it.

It's really hard for as a Committee to look at the ethical impact of using the model without understanding the clear path effectively to the operationalisation of the model and how it's actually going to be used within the Force. DP added that in terms of hours used operationally, WMP weren't the original intention, this is to be provided to Project Guardian and VRU not the Force as a whole. So, it's more about the specific uses and activities that Project Guardian/VRU use it which will likely be based around a lot of school work/projects. Every time it is run the Lab will check the efficacy of the model to keep track of its accuracy and then take actions to rebuild the model and will then come back to the Ethics Committee to update.

- A member asked if they could get additional data and feedback once the model has been used. DP added that they are keeping a list of questions and comments from the Committee and if there are any changes they can provide that as a separate paper.
- The position as a committee has always been the relationship between the data science and then what happens in practice that makes the contribution of this committee so relevant. Is there going to be any pushback on openly communicating to the Committee on some of the more traditional policing activities which the committee could then comment on, understanding that it is only an advisory committee? ST added that Guardian is funded from the Home Office which is dependent on certain types of activities provided, they don't need to do all activities but it is for the senior leaders within Guardian to decide, regardless of where analysis comes from, but analysis for hotspots will feed in from the Lab. The member added that the Committee may want to consider to what extent do they want to be specific in what advice is given otherwise, it could be accidentally seen as endorsing an approach which could potentially spark public trust issues, depending on how it was delivered.
- For one Committee member they didn't necessarily want to know what tool is going to be used for every scenario type, but having the reassurance of how that decision making is carried out and that the processes are correct and considers the right things.

5 Long Term Violence Predictions

This paper is also intended for Project Guardian and it's to aid strategic decisions about the prioritisation of investment from the Home Office and the OPCC. Therefore, it needs some evidence as to where things are potentially going over the next one to five years in order to be able to make suggestions as to the degree



of funding that may or may not be available. It feeds into strategic type assessments rather than anything operational and in terms of the spatial sense it's not gone any lower than NPU, which is the same as Local Authority areas except for Birmingham where it is split into east and west.

There was a previous comment from the Committee regarding whether other factors other than just crime could be looked at in order to be able to ascertain useful information or to take potential socio economics into account. Therefore, a large part of this report is now looking into these factors which includes non-payment of council tax in those local authority, percentage of those on free school meals and unemployment information.

Following on from these various analyses it seems for form better and produce more results and predictions that might be useful for about a year but unreliable when it comes to the fifth year due to the amount of uncertainty that actually surrounds the predictions.

The modelling included in the report was there to show that proper due diligence had been done and wanted to demonstrate that the other factors had been included and to appreciate that the analyses had been done in a rigorous way.

The Committee made the following comments and questions:

- A member wanted to clarify that because this is a macro model its intended purpose was to inform policy or a resourcing requirement in terms of future budgets? DP noted that possibly not budgeting decisions directly within Project Guardian but in order to be able to help inform budgets when discussing with Home Office.
- An issue was raised with pandemic activity which might skew the model considerably. KT added that the data was falling off the end when the pandemic hit and was not much they could do to include a pandemic factor.
- A member appreciated the difficulty that this modelling has entailed because of all the uncertainties that adding macro information will make to the model but it's not credible to believe that macro-economic factors are not going to be important in determining what they're trying to model. So instead of saying that simple models are the ones that are to be looked at, could they try and get better data on these variables in the hope that modelling can improve as clearly socio-economic factors are going to be important in determining crime.
- It's very ambitious trying to get five-year predictions, therefore could they look at more short term and perhaps one to two-year forecasts. DP noted that they have suggested it is better to do one year rather than five.
- It raises a wider issue of data quality needed to actually look at the causes of violence on a wider basis.
- If these models are taken and implemented seriously, then these have very important consequences on peoples lives so we need to be sure they have been done extremely well before it can be used in a meaningful way but do understand the difficulties involved.

6 Coffee Break 7 NDAS Update - Organised Exploitation Case Studies



MT noted they had made a funding bid to operationalise the OE model - unfortunately not successful so OE won't be operationalised this financial year. Feedback from the Ethics Committee suggested major amendment in terms of the project proposal papers, a substantive 'addition' in the form of a more qualitative narrative outlining illustrative case studies demonstrating how decisions are made on the victim/perpetrator thresholds – this would help bring this vital component to life more, in contrast to the more abstract technical descriptions.

MT presented case studies on Organised Exploitation, this case study has been compiled showing how the NDAS Organised Exploitation dashboard can give WMP an understanding of identifiable networks of nominals linked to Organised Exploitation and using the intelligence to engage with multiple agencies to initiate a disruption plan.

The dashboard helps to identify three groups of nominals; Perpetrators (**Pursue**), Victims (**Protect**) and those that fall within the middle of the Victim/Perpetrator scale (**Prevent**). For the purposes of this case study, a network of nominals linked to organised exploitation has been generated with one nominal from each of the groups mentioned above being chosen to demonstrate the end to end user journey of identification. The nominal business rules that place the nominal along the Victim/Perpetrator scale will also be highlighted for each example.

For the purposes of this case study, the relevant teams ROCU, SOCEX and Organised Crime and Gangs Team and an LRO (Local Responsible Officer) within WMP have been engaged during workshops by NDAS to gain an understanding of the action which could be considered were this to be a real-life scenario.

The **Pursue** nominal identification was discussed with the SOCEX and ROCU Team and some issues were identified such as, high-ranking gang nominal in a wall established gang, history of not co-operating with the police and serious crimes including firearms and attempted murder. There are a number of different options to pursue offenders ranging from overt to covert enquiries. The overall aim would be to identify evidence of conspiracy to supply drugs as well as exploit young and vulnerable people to do so. There will often be opportunities to investigate other offences, including firearms and other violent offences. In conjunction with activity around the other Ps which should disrupt the activity of the network, convicting the perpetrators that present the most threat for substantial offences, and making use of Orders (civil or on conviction) will contribute to the long-term protection of the public from these perpetrators.

The **Protect** nominal identification was presented to the LOMU (Lifetime Offender Management Unit) and the Organised Crime & Gangs Team, some issues were identified such as they were a victim of a serious assault and possible exploitation, intelligence relating to drug use, intelligence relating to gang affiliation, intelligence regarding the child's mother being a prostitute and child protection issues and serious offending at a young age and escalating. Due to the issues raised the operational response would be targeted heavily towards safeguarding and diversion and could include, referral to Catch 22 who deal with children in gangs and is a project run by ex-gang members, be part of a Buddy Tag Service, counselling services through Barnardo's and St Giles or working



with a designated nurse for children and young people in care for mental health or issues raised, for example the Wolverhampton Clinical Commissioning Group.

The **Prevent** nominal identification was presented to the LOMU and the Organised Crime & Gangs Team, some issues were identified such as there was intelligence relating to involvement in gangs and OCGs, potential child protection issues with their mother and has a serious offence history which is escalating. Due to the issues raised the operational response would be targeted heavily towards safeguarding and diversion and could include liaising with Neighbourhood Teams to make them aware of the individual for safeguarding and intelligence gathering, Offender Management attend their houses to ask if they will engage and have intervention, if they don't comply they still will be visited and monitored or the Police working closely with the Youth Offending Team.

In summary the NDAS OE Dashboard will be a powerful tool providing efficient and effective identification of networks and threats. This will save many hours of work for analysts and will assist with prioritisation of the right threat(s) on the Force's Threat Grid. It gives the ability to identify networks and to target them systematically using the 4 P approach. Once the identification has been made of a nominal and their tier (using the business rules of the model) on the Boston Plot, this will be cross referenced with Policing Systems such as Connect, PNC and PND. All information would be assessed, graded and scored. This would be then viewed alongside the Threat Grid, with analyst support and professional judgement from the Senior Leadership Team in SOCEX. The dashboard can support a systematic problem-solving approach to the disruption of criminals and the robust safeguarding of victims using the breadth of existing law enforcement and other multi agency tactics. This multi layered approach encourages greater focus for understanding the cause of a problem so that tactics can be more effective and efficient in the long term. This approach can assist in developing a coherent, targeted and prioritised disruption plan using a combination of tactics from multiple agencies.

The Committee made the following comments and questions:

- Regarding the business rules for validation are these the only data sets used? MT added that what the system looks at in terms of being able to put somebody on this plot for the purpose of placing them as a victim, a perpetrator or somewhere in the middle, the data that is seen on the 'business rules description' are the only elements that used in terms of making that determination.
- Understand there is a delay in it being operationalised but is this approach going to be updated regularly based on the fact that research and developments in this area are in constant flux? MT noted that with absolute certainty it would be updated and aligned with new research because another use case that NDAS developed was a firearms use case that has never been operationalised but has spent a significant amount of time recently updating this and would do the same on this use case in exactly the same circumstances.
- One member still remains uncomfortable around the age of an 'assumed' perpetrator. People can still be exploited at 19+ and if this model was used and then the information was made public it could be heavily criticised and the member was also concerned ethically that somebody of the age of 19 will have a +1 mark against them taking them towards the



scale of perpetrator, simply based on their age and recommended these assumptions within the business rules be dropped.

- A Committee member with a law background noted on the concern about the age criterion in the weightings/scoring/'business rules'. Understands where colleagues are coming from on this, in that the tipping point into adulthood seems to make a key difference in the outcome for a 'nominal', with little regard for the fact that 18-23-year olds can still be very vulnerable. Perhaps the solution would be to still use age in the scoring system, but not add points to the score for over-18s, and still deduct points from the score for under-18s. From a human rights law and public law point of view (thinking specifically of the Article 8 ECHR rights of children, interpreted with the 'best interests of children' principle from Article 3 UNCRC), there is a decent legal rationale for this.
- A member wanted more information around the Buddy Tag Service. MT added this is an electronic tag which looks like the ones used by the courts, where the child has to agree to wear which them gives them the excuse or the idea to gang members or people they are being exploited by that they are being monitored by the Police which then makes them less likely to be exploited.
- A member found the protect case study really interesting as it shows a high threshold under which the police showed significant flexibility and open-mindedness to explore public health and prevention approaches even when a child's behaviour had become seriously concerning.
- A member really wanted to thank MT and team because they have given so much detail and have really listened to the Committee and provided a lot of granularity about what this means in practice.

8 Comfort Break

9 House of Lords Committee observers to ask questions of the ethics committee

Private discussion

10 Committee Advice and Discussion

Short Term Knife Predictions

The Committee unanimously voted in favour of option 'B' under the Terms of Reference, meaning "It advises approving the project with minor amendments"

The committee commends the Lab for its development of the project and addressing the points made previously by the committee and in the data science assessment. The committee requests that evaluation process during beta testing and the incorporation into the wider decision-making processes pursuant to Project Guardian be discussed with the committee as these are developed, and in particular how the model will be used to inform the actions open to the police under Project Guardian, and how this model will be tested/validated for predictive accuracy in the operational environment (and thus how its accuracy or otherwise may affect the actions under Project Guardian).

Long Term Violence Predictions



The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".

The Committee wants to encourage to not just accept a simple model but to reconsider how the model could be made the best possible, on a more short-term basis of one to two years with the use of better data. The model needs to be disseminated with the appropriate caution and warnings of its uncertainty.

NDAS OE Case Study

The Committee unanimously voted in favour of option 'C' under the Terms of Reference, meaning "It advises approving the project with major amendments".

The Committee appreciates that this model may not be developed further due to funding issues. It is recommended that any development of the model takes into account the following comments - a) further clarity is needed as to whether the model is identifying new and valuable information; b) the issue of the use of age needs to be addressed due to the potential legal and ethical concerns - one suggestion is that age could be taken into account for those under age 18 (in terms of deducting points) to ensure that the police's safeguarding duties are incorporated into the model, but that 'points' would not be added to individuals over 18 in respect of age; c) further consultation with organisations and representatives of victims and those subject to safeguarding in terms of the categorisation by the model and the business rules used is recommended; d) a validation of the model needs to be conducted in a comprehensive manner; e) the consequences of the use of all intelligence without distinction between reliable and unreliable intelligence needs to be investigated and clarified in respect of the outputs and categorisations that are generated; and f) more detail is needed regarding the consequences of and controls over downstream use.

11 Meeting Close