METROPOLITAN POLICE SERVICE

DATA PROTECTION IMPACT ASSESSMENT (DPIA)

ANNEX: FACIAL RECOGNITION TECHNOLOGY (FRT) EQUITABILITY STUDY

Suitable for Publication?	Yes
Overarching DPIA	DPIA relating to the use of Live Facial Recognition by the Metropolitan Police Service (**MPS**) – 2.1. (the **MPS LFR DPIA**)
DPIA Annex Title	FRT Equitability Study DPIA Annex
Purpose	This is a DPIA annex (the **Annex**) to the MPS LFR DPIA. This Annex addresses the further data processing and privacy considerations relevant to protecting the rights and freedoms of data subjects in relation to the Equitability Study as further identified in the FRT Trial Plan Documents. It is further supported by the MPS LFR Form 1, which is used to apply for, authorise and review an LFR Deployment.
Summary	This Annex meets the purpose identified above related to the Equitability Study. The Trial adopts the MPS LFR DPIA for the purposes of the trial and this Annex then addresses any necessary differences from the MPS LFR DPIA related to the Equitability as further identified in the Trial FR Plan Documents. Such differences are therefore addressed by exception, as described below. The MPS LFR DPIA as amended by this Annex to: - Provide a description of the envisaged processing operations - Provide an assessment of the risks to the rights and freedoms of data subjects and the measures in place to address those risks; - Outline the safeguards, security measures and mechanisms to ensure the protection of personal data and demonstrate compliance with the Data Protection Act 2018 (**DPA**).
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Creating Unit	MPS FR
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Version	Author	Completion date	Summary of changes
1.0	███████████	30th June 2022	Initial issue for the Equitability Study.

A. Key Abbreviations, Terms & Definitions

1. Unless otherwise defined in this FRT Equitability Study DPIA Annex, capitalised terms shall have the meaning given to them (in priority order) in the MPS LFR DPIA and the FRT Equitability Study Plan:
    a. **Consent Documents** means the (i) agency volunteer consent form and (ii) the cadet volunteer consent form and the associated information provided with such documents.

b. **Equitability Study** means the work to assess accuracy and demographic differential performance in relation to FR algorithms as outlined in the FRT Equitability Study Trial Documents.

c. **Equitability Study Report** means a report authored by NPL to the MPS and SWP on the findings of the Equitability Study.

d. **FRT Equitability Study Trial Documents** means:
   i. FRT Equitability Study Appropriate Policy Annex (including any overarching DPIA and associated MPS LFR Documents, as the context requires).
   ii. FRT Equitability Study DPIA Annex (including any overarching DPIA and associated MPS LFR Documents, as the context requires).
   iii. FRT Equitability Study Process Summary
   iv. FRT Equitability Study Plan

e. **FRT Equitability Study Plan** means the test strategy document for the equitability study.

f. **MPS TRI** means the MPS Technology, Research and Innovation team within MO3, a dedicated unit including technologists with industry leading expertise relating to facial recognition technologies in the law enforcement context.

g. **NPL** means the National Physical Laboratory, the UK's national body with recognised expertise relating to science and engineering, providing measurement capability that underpins the UK's prosperity and quality of life.

h. **SWP** means South Wales Police and the Chief Constable for South Wales Police as a controller of personal data.

i. **UK Law Enforcement Community** means Competent Authorities listed at Schedule 7 of the DPA 2018 with a focus on policing bodies found at paragraphs 5 – 17 and the National Crime Agency paragraph 24, together their partners in order to achieve a law enforcement purpose.

B. Purpose of this Annex to the MPS LFR DPIA

1. This is an Annex to the MPS LFR DPIA. To the extent necessary, this Annex updates and amends the MPS LFR DPIA to reflect the specific further processing activities and processing purposes to be undertaken as part of the Equitability Study.

2. The MPS LFR DPIA and the Annex together with the FRT Equitability Study Trial Documents constitute the DPIA for the purposes of Section 64 of the Data Protection Act 2018.

3. The MPS consider that it is appropriate to use an annex to an existing DPIA where the proposed Equitability Study key aspects on the same (or at least very substantially the same) technology as an existing DPIA but where certain aspects of that the use case (e.g. because of specific privacy concerns, further processing, differing processing purposes) means that separate and further consideration of the issues, rights and risks in relation to data subjects is necessary.

C. Background and justification for proceeding with the Equitability Study

The importance of FRT to UK Law Enforcement and the MPS:

1. The MPS LFR Documents explain how LFR is used by the MPS as an overt operational tactic. It helps keep Londoners safe by enabling the MPS to locate people where it is necessary and proportionate to do so. In many situations, officers have failed to locate people using other policing methods and would otherwise be unaware there is a person sought by the police or with an outstanding court warrant for their arrest passing them by. As a result, the use of LFR can prevent and detect crime, ensure public safety, safeguard national security and uphold the administration of justice.

2. Whilst the MPS does not use Officer Initiated Facial Recognition (OIFR) at present, with strong results experienced elsewhere within UK Law Enforcement from a trial of the technology, the use of technology generally where it can help tackle violent and other serious crimes remains under review.

3. The MPS has recently benefited from a decision to update its RFR search capacity to enable a more effective use of images and image frames from video across its investigations. Technical advancements made over recent years will now enable opportunities to match persons in probe images to existing holdings. The intelligence value of this potential match, if verified, will allow investigations to be progressed. Whilst this DPIA is not for the operational use of RFR, its use represents a chance to realise significant savings in terms of the officer time it takes (where even possible) to reconcile an image of a person to that person's identity. As a result, the use of RFR can prevent and detect crime, ensure public safety, safeguard national security and uphold the administration of justice.

4. The critical value that FR Technology can offer to UK Law Enforcement is not just recognised by the MPS. As reported in the Financial Times:[1]

    Fraser Sampson, the newly appointed commissioner whose job it is to scrutinise how police and other authorities deploy biometrics and surveillance cameras on the public, told the Financial Times he believed "police will have no alternative but to use facial recognition along with any other technology that is reasonably available to them."

    His reason, among others, was that criminals are increasingly relying on sophisticated technology, and police "need to match their technological capability".

    He added that artificial intelligence — a crucial tool for complex data processing — will be an "inevitable" and "increasingly necessary component of policing".

Understanding algorithm performance and its relevance to UK Law Enforcement and the MPS:

5. **The legal context to support the need for the Equitability Study:** There are a number of legal obligations which cause it to be necessary to understand the performance of FR algorithms in the context of overall accuracy and demographic differential performance. These include:

    a) Human Rights Act 1998: The use of FR technology typically engages human rights considerations where interference with qualified rights needs to be justified on the basis of necessity to achieve the legitimate aim. It therefore follows that the technical ability to achieve the legitimate aim needs to be considered and understood. It also follows, as part of the proportionality analysis that the degree to which those not of interest to the police are subject to interference is relevant.

    b) For example, those added to a LFR Watchlist or passing a LFR system have their Article 8 rights engaged as a result of the biometric data processing activity. Similarly for OIFR and RFR, those submitted as a probe image for searching result in biometric data processing. Amongst other requirements, as a qualified right, the interference can be justified where it is necessary and proportionate to the legitimate aim sought.

    c) **For LFR:** if locating someone is necessary, this raises the question 'necessary for what'. The 'what' – or in legal terms, the legitimate aim, means there needs to be an understanding as to the prospects of an Alert being triggered if the person sought passes through the Zone of Recognition. Why use LFR if it is unlikely at a technical level to generate the Alert? Similarly, if it was known that an algorithm would generate a high number of false alerts, this consideration should be factored into the proportionality consideration (and mitigated where it is possible to do so).

d) **For RFR and OIFR:** if it becomes necessary to submit a probe image for searching against an image reference library to progress an investigation, it follows that if a corresponding image of the subject is in the library, there needs to be an understanding as to the likelihood of that being returned as a potential match. Otherwise the probe image may lack a point or otherwise provide false confidence a subject is not known to the police if a potential match is not returned.

e) If it was known a particular algorithm was particularly weak at locating/matching a person of a particular demographic, the necessity for use of that particular FR algorithm may not be made out – other tactics (potentially including more intrusive ones) with stronger prospects of success should then be considered as part of the necessity and proportionality decision as to how to achieve the legitimate aim.

f) Further, this will be relevant not just when using the algorithm, but procuring FRT algorithms too. The algorithm's performance needs to respond to the MPS's particular use case for the FR technology.

g) Some use cases will require uniform level of performance across a broad range of demographics – e.g. RFR for investigations, where to keep Londoners safe, any algorithm will need a high level of accuracy and *uniform* performance across demographics – reflecting the community the MPS serves.

h) It is also conceivable, as technology continues to develop that FR algorithms may also be used for very specific use cases. In those circumstances, the focus on accuracy and demographic performance needs to be made in the context of performance against that specific use case in order to maximise the changes of achieving the legitimate aim and minimising the impact on those who will actually be subject to the processing.

i) Importantly, the Equitability Study will provide the UK Law Enforcement Community with a much needed means by which to assess algorithms using operationally realistic data to ensure they can better select, anticipate the performance characteristics of, and mitigate adverse impacts arising from and use of algorithms. This will enable the police to better deliver on their law enforcement purposes in a proportionate way; and for the MPS, to keep Londoners safe.

j) <u>Data Protection Act 2018</u>: Section 35(5) of the DPA 2018 requires that biometric data processing in relation to FR algorithms needs to be to a strict necessity standard for a law enforcement purpose.

k) For similar reasons to those explained in the context of human rights, a technical understanding as to the prospects of the algorithm being able to help the MPS achieve that purpose is needed in order to make a necessity and proportionality decision to process data or not.

l) Furthermore – compliance with the data protection principles underpin the driver to conduct an operational Equitability Study, particularly in two respects:

- **Principle 1 -** the processing of personal data for any of the law enforcement purposes must be fair. Fairness in this context includes how the algorithm performs to ensure there is an equality of impact and effectiveness and any adverse impact can be mitigated, and residual effect, justified. To this end it is important to understand how the algorithm performs.

- **Principle 4** – this principle concerns data accuracy, and in the context of the algorithm, the statistical accuracy of the algorithm. Again, understanding algorithm performance is important in order to be able to assess any risks to data subjects and seek to mitigate them. For example, this:
  - may result in more focused training to those who undertake human-in-the-loop reviews;
  - may see details of algorithm performance shared with any RFR potential matches to another police force investigating a crime so they are fully informed and understand how the match was generated. This could then inform that police force's use of the details for their investigation and avoid a risk to the data subject

which may come from over-reliance on the data or a failure to fully understand what might be needed from the human-in-the-loop.

m) Equality Act 2010: The terms of the Public Sector Equality Duty (PSED) are set out in section 149(1) of the Equality Act 2010 as follows:

A public authority must, in the exercise of its functions, have due regard to the need to—

1. *eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;*
2. *advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;*
3. *foster good relations between persons who share a relevant protected characteristic and persons who do not share it."*

n) Whilst the courts have made clear that the 'impossible' is not required, there is a need to take reasonable steps for a police force to satisfy itself, either directly or by way of independent verification, that the algorithm in this case does not have an unacceptable bias. The 'reasonable steps' obligation is therefore one which needs to be set in the context as to what is reasonable and possible in the context of the FR algorithm and how it will be used. The MPS has taken reasonable steps to be informed prior to use for FR technology given its evaluation of the NIST Tests (see below) and an absence of further, more relevant data. Such data necessitates testing in an operational environment – reflective of real-life data and the operational need. The Equitability Study therefore reflects that the MPS will continue to take 'reasonable steps' and is reflective of the going nature of the PSED.

o) Caselaw: The '*Bridges'* Court of Appeal judgment[2] considered SWP's use of FR technology in the live context at specific deployments. Whilst the findings are relevant to that case, they have wider application to the lawful use of LFR, wider LFR use-cases and other FR technology applications within law enforcement. Key points relevant to the Equitability Study include:

- **Legal basis**: The Court of Appeal recognised the sufficiency of the legal basis for FR (including the common law and S.64A PACE).
  "The short answer, in our view, to this submission is that the legal framework which regulates the deployment of AFR Locate [SWP's name at the time for LFR] does contain safeguards which enable the proportionality of the interference with Article 8 rights to be adequately examined."

- **The PSED, where the focus should be and the 'Reasonable Steps' test**: The Court of Appeal recognised, applying the 'reasonable steps' test, that the need to make enquiries as to the performance of the algorithm, focusing particularly on race and sex – conditioned on what is reasonable in the context (emphasis added):
  "We acknowledge that what is required by the PSED is dependent on the context and does not require the impossible. It requires the taking of reasonable steps to make enquiries about what may not yet be known to a public authority about the potential impact of a proposed decision or policy on people with the relevant characteristics, in particular for present purposes race and sex."

  "all police forces that intend to use [LFR] in the future would wish to satisfy themselves that everything reasonable which could be done had been done in order to make sure that the software used does not have a racial or gender bias."

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[2] https://www.judiciary.uk/wp-content/uploads/2020/08/R-Bridges-v-CC-South-Wales-ors-Judgment.pdf

6. **Context from regulators and authorised professional practice:** Law enforcement benefits from a number of regulators with interest, guidance and opinion in the area:

   a) The Information Commissioner's Office:

   - **Opinion**: The then Information Commissioner has issued an opinion (dated 31 October 2019) concerning the use of live facial recognition technology by law enforcement in public places. In that opinion, the then Commissioner remains concerned about the potential for inherent technical bias in the way LFR technology works.
   - **Data analytics:** The Information Commissioner's Office has issued a Toolkit for data analytics. The Toolkit asks controllers to consider how they will:
     - Understand and minimise the impact that inclusion in a data analytics system may have on the individual. To be able to consider the inclusion impact on data subjects in the context of FR, there is a need to understand the algorithm's technical performance.
     - Understand algorithm statistical accuracy of the data analytics solution. The ICO notes that the output is not intended (in many situations) as being factual information but represents a statistically informed position. Understanding the performance of FR algorithms is necessary to get to an informed position.
     - Prevent bias throughout the project. This recognises that it might result in disproportionate policing of certain communities which may perpetuate a bias.
     - Continue to understand accuracy and bias performance, especially in the real world. This recognises that you may measure on static test data during a design phase (in the FR context – by reference to NIST Tests) but also need to understand performance in 'real life situations'. The ICO term this 'concept/model drift' and the Equitability Study reflects the MPS commitment to validate the NIST Test findings in the operational environment. The collations of a curated dataset, reflective of a law enforcement environment will also enable policing to continue to validate operational real-world performance. By contrast, at present, there isn't a suitable operationally realistic test data to do so.

   b) The Biometrics and Surveillance Camera Commissioner: The then Surveillance Camera Commissioner published 'Facing the Camera' containing good practice and guidance for the police use of overt surveillance camera systems incorporating facial recognition technology. This recognises the need for the police to be satisfied that there are 'no undue risks of 'bias' within the system'. He recognised that concerns largely arise from the potential for algorithms in some systems to be less accurate when producing an indication of likeness where faces are female, from members of the black, Asian and other ethnic minority communities in particular.[3]

   c) Furthermore, the latest Surveillance Camera Code of Practice recognises that any use of facial recognition systems need to be "suitable validated" and that

   "Relevant authorities should satisfy themselves that a surveillance camera system does not produce unacceptable bias on any relevant ground or characteristic of the individuals whose

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[3] UK law enforcement have found that this can arise in a way which does not inconvenience the data subject i.e. the FR algorithm being less likely to generate an True Alert is a person is on a Watchlist, and being less likely to generate a False Alert if a person is not on the Watchlist as they pass a FR system. What is important here is to be aware of how the FR system performs, to assess if that performance still enables the law enforcement purpose to be met, and to mitigate the impact – in this case, flagging to officers to be aware and particularly vigilant as the FR system may not flag an Alert in 100% of cases where people sought pass the LFR system.

images might reasonably be expected to be captured by it and operators should take particular account of the Public Sector Equality Duty."

d) The College of Policing: The College of Policing has issued Authorised Professional Practice in relation to LFR. Whilst focused on LFR, there is read across to FR more generally in the context of algorithm performance. It reflects that Forces should (amongst other points) be:

- Satisfying themselves that everything reasonable that could be done has been done, to ensure that the software does not have an unacceptable bias on any basis, including on the grounds of race, sex, religion or belief.

- Ensuring that the force's use of LFR, the performance of its algorithm and any mitigations that the force uses to ensure its compliance with the PSED are subject to ongoing review, and that all reasonable steps continue to be taken to provide assurance of PSED compliance.

7. **The MPS position and rationale for the Equitability Study – why intrusion in the context of human rights is necessary, and the processing of data is strictly necessary:** The MPS believes that FR is a valuable policing tool that helps the MPS to keep the public safe and to meet its common law policing duties, which include the prevention and detection of crime, safeguarding national security, the preservation of order, and bringing offenders to justice.

8. The MPS has published a detailed, public-facing "Understanding Accuracy and Bias" document. It reflects that:

> *"an accurate system requires that (i) whenever an individual on the Watchlist passes the system the LFR system should generate an alert and (ii) whenever an individual who is not on the Watchlist passes the system, the LFR system should not generate an alert and should automatically delete all data relating to that individual. In addition to having good accuracy it is also important that the LFR system performs well in terms of minimising algorithmic / system biases, e.g. any performance differentials between different demographic groups that would disadvantage one demographic group in comparison to another. The Court of Appeal in the Bridges case identifies race and gender as being particularly relevant considerations for LFR systems. "*

9. The MPS has evaluated the relevant FRT tests undertaken by the National Institute of Standards and Technology (NIST) who have run open, large-scale tests (the NIST Tests) to assess the accuracy of FR algorithms since 2004. These tests allow the MPS to understand baseline accuracy of different algorithms from different vendors and monitor the notable improvement of FR algorithms over time. The document explains how this provides significant assurance to the MPS as the test showed that the variation in accuracy between male, female, black and white individuals in the NEC face comparison algorithm is imperceptible. The NIST Tests provide the MPS with robust, transparent, independent and comparable information on how different algorithms including the NEC algorithms perform both in terms of accuracy and bias.

10. However, the MPS also recognises that the NIST Tests can only provide so much assurance, without testing in the operational environment. The NIST Tests do not directly replicate the conditions found when deployed to support law enforcement use cases given the differences when using facial recognition in an operational environment. These include factors such as environmental conditions (lighting, camera positioning), the number and density of subjects passing the LFR system, how subjects behave when passing the LFR system or having their image captured (for RFR and OIFR), variations in image background,

and occlusion given the uncontrolled environment. The MPS and NIST recognise this and recommend that end users should 'know their algorithm' [in the context of their system and Concept of Operation].

11. Reflective of the need (and legal obligations – outlined above) to undertake testing in realistic operational conditions, the MPS has committed to continue to monitor its FR system's performance, both in terms of overall system accuracy and demographic differential performance going forwards. The Equitability Study proposed, reflects this, will 'bridge' between the NIST Tests and the operational use cases law enforcement have as follows:

  • The Objectives (at Section D below) explain the technical output and why this is necessary from the MPS perspective. This covers points as regards establishing the overall accuracy of the FR system, its demographic performance and how the testing process and objective proposed achieve this purpose. It also covers the ongoing need for the curated dataset (including filler, volunteer data and footage) to continue to support the UK Law Enforcement Community procure and use only effective FR algorithms in an ethical, lawful and considered way to best achieve their law enforcement purposes.

  • Beyond the technical, the law enforcement context and benefits to the MPS and the UK Law Enforcement Community is covered in this DPIA Annex too (at Section F). At a time when the MPS is focused on tacking violent and other serious offences, the ability to effectively use technologies such as FR to counter gang violence and ensure the safety of Londoners is a critical priority which justifies action.

12. Notwithstanding the intrusion (albeit minimised and mitigated where possible), the Equitability Study is therefore necessary (in terms of human rights interferences) and strictly necessary (in terms of data processing) and:

  • It would not be possible to achieve the project without undertaking sensitive processing (this being integral to FR given the use of biometric facial templates).

  • The Equitability Study also meets a substantial public interest but in terms of the public support to use innovative technology to tackle violent and other serious offences, and in terms of how such technology performs. This is evidenced in the MPS LFR DPIA section on public expectations.[4] This is also evidenced in the MPS LFR EIA around the commentary on the potential for bias in

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[4] For example: A report was commissioned by the Information Commissioner's Office in January 2019 which indicated that there is strong public support for the use of LFR for law enforcement purposes:

  • 82% of those surveyed indicated that it was acceptable for the police to use LFR;
  • 72% of those surveyed agreed or strongly agreed that LFR should be used on a permanent basis in areas of high crime;
  • 65% of those surveyed agreed or strongly agreed that LFR is a necessary security measure to prevent low-level crime; and
  • 60% of those surveyed agreed or strongly agreed that it is acceptable to process the faces of everyone in a crowd even if the purpose is to find a single person of interest.

The public's support holds up even if they were to be stopped by the police as a result of LFR matching them (erroneously) to a subject of interest. 58% of those surveyed thought it was acceptable to be stopped by the police in such circumstances, while 30% thought it was unacceptable.

In Q3 FY 20-21, the MOPAC Public Attitudes Survey saw 3,202 Londoners asked to what extent they support or oppose the MPS using technological innovations in a range of situations. It concluded that public support for the MPS's use of innovative technology is high, but varies by age, ethnicity and broader attitudes towards the police. The results continue to be supportive and are further covered in the LFR DPIA.

algorithms and the public interest in ensuring high levels of accuracy and demographic performance. The Equitability Study responds to this public interest, by providing further detail as to performance of FR algorithms, to inform further responsible, effective and ethical use of FR technologies that it is only possible to obtain by testing the operational context.

- The courts have regard to the origin of the PSED, i.e. Section 71 of the Race Relations Act 1976 (as substituted by s.2 of the Race Relations (Amendment) Act 2000) stemming from the findings of the Stephen Lawrence Inquiry Report. This was again recognised in Bridges where the impact on the public means that discharging the PSED is concluded to be important to uphold public trust and confidence in the police and to ensure seemingly neutral policies are fully scrutinised in case they would in fact have a "disproportionate impact on certain sections of the population". As a result, the Equitability Study supports better decision making in line with taking a "rigorous" approach to the public sector equality duty. As the court in 'Bridges' commented:

    "First, good processes are more likely to lead to better informed, and therefore better, decisions. Secondly, whatever the outcome, good processes help to make public authorities accountable to the public. We would add, in the particular context of the PSED, that the duty helps to reassure members of the public, whatever their race or sex, that their interests have been properly taken into account before policies are formulated or brought into effect" *(Para176).*

    The Equitability Study further informs the MPS decision makers as to the results that could be expected in the operational context through the use of a FR algorithm. It will result in better decisions based on having even greater assurance as to accuracy and demographic performance, including the decision to use FR (i.e. will it help or not – would other tools be more suited to the issue) and how to use FR (i.e. which image/technical set up / location is likely to get the best results). The MPS already has high levels of knowledge from its existing use and testing to have confidence in the tool as its utility, but this 'reasonable step' reinforces quality, informed decision making with statistically significant results from the operational context. The results of the Equitability Study will further enhance the MPS's published document on the performance of its algorithm. This responds to the courts points regarding reassuring the members of the public that their interests have been considered when policy and policing tactics are considered.

13. The Equitability Study is therefore evidence of the MPS's commitment to continuing to meet the 'reasonable steps' obligation to be assured that the algorithm will enable the MPS to deliver against its operational use case(s) – to keep Londoner's safe, to inform the use of effective and ethical policing tactics and to enable the MPS to discharge its ongoing legal responsibilities.

D. Overview and objectives of the Equitability Study

Overview of the Equitability Study

1. The MPS (as controller) has commissioned the NPL (as processor) to design and undertake a scientifically-informed, standards-led, professionally rigorous Equitability Study to:
    a. Assess and report on the accuracy and demographic differential performance of current FR algorithms in operational conditions against its LFR, OIFR and RFR use cases – this effectively takes the high level of assurance already gained from the NIST Tests one step further (as possible when using FR operationally) by considering any variation which, although expected to be relatively small, may be found when moved into the operational environment; and
    b. In the absence of suitably realistic data being available to the UK Law Enforcement Community at present, to retain the dataset generated by NPL for its assessments within the MPS TRI to enable the future evaluation of FR algorithms prior to any use by law enforcement and those who work

with/enable law enforcement activity[5] (that dataset then being 'red-circled' away from operational police work). That curated dataset will be available to the UK Law Enforcement Community by way of a licence. This ensures the data remains suitably safeguarded but thereby enables other forces who have the same challenges with an absence of suitable datasets to undertake their own algorithm evaluations without the need to put an algorithm into operational use in order to gain the dataset to do the testing. This will therefore increase the assurance levels available to forces prior to use, reflect the ongoing duties on forces to take 'reasonable steps' to understand their algorithms and reduce potential risks to data subjects.

2. The MPS will partner with SWP in order to increase the application and realism of the operational scenarios and footage covered. SWP will undertake its own operational deployment with NPL as a processor to it. That footage, and the associated volunteer images will be transferred to MPS controllership via a controller-to-controller transfer to allow the NPL to then undertake retrospective analysis of the footage to determine algorithm performance. The structure of this arrangement is covered further in this DPIA and the FRT Equitability Study Process Summary which outlines the additional processing involved in this Equitability Study, the data flows and associated agreements to enable them.

3. Table 2 of the Equitability Study includes a number of further key points in relation to the plan and the following key points also apply:

Data Control for the Equitability Study		
1.	Who has direction and control of the trial?	The trial is under the direction and control of the MPS Commissioner. Lindsey Chiswick (Director of Intelligence) is the senior responsible officer for the Equitability Study for the MPS.
2.	Who is the data controller for the trial?	The Commissioner of the MPS will be the data controller for the Equitability Study for the MPS. The Chief Constable of SWP will be the data controller for the SWP LFR Operational Deployment and associated volunteer data capture (under their own DPIA and associated documentation) prior to undertaking a controller-to-controller transfer to the MPS.
3.	*Third parties involved to deliver the trial and their results (e.g. data processors / joint controllers)*	Processor: The NPL will be a processor to each of SWP and the MPS in a several capacity (i.e. MPS-NPL and SWP-NPL) appointed by way of data processing agreements. Controller – to controller transfer with licence: The dataset retained, subject to the three year review period, will be made available to the UK Law Enforcement Community via a licence agreement to ensure the safeguards in this DPIA remain implemented by wider law enforcement. Other law enforcement bodies face the same issues as the MPS with the need for operationally realistic data. Note - The algorithm / FR vendors (for any purposes relating to technical support) will not have access to the FR system when it is processing personal data and therefore are not processors for the purposes of the Equitability Study. Note - For the avoidance of doubt, the curated dataset to enable future testing will not be provided to FR vendors to train FR algorithms – this risks

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[5] For example, the Home Office and the use of FR capabilities they have available to law enforcement.

		being self-defeating should algorithms be specifically trained to the test data whereby performance may not be replicated in wider operational conditions.
4.	*Part of the DPA 2018 under which the processing will occur.*	The Equitability Study will process personal data under Part III DPA 2018. Law Enforcement Purposes include the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security. Through achieving the Equitability Study objectives, the MPS and law enforcement will be better able to understand its FR capabilities to make more refined necessity and proportionality decisions in pursuit of its legitimate law enforcement aims. Where sensitive processing is required, this will be necessary on the basis of Paragraph 9(b) and (c) of Schedule 8 – for scientific research and statistical purposes.
The arrangements are diagrammatically outlined in the FRT Equitability Study Process Summary (Data Management Arrangements Summary section).

Objectives of the Equitability Study and why those objectives are necessary

Objective	Why the objective is necessary in terms of intrusion and strictly necessary in terms of data processing activity
A   FR algorithms currently used/intended for use in policing
To evaluate the performance of facial recognition technologies in an operational setting in terms of (i) accuracy and (ii) equitability (bias) related to subject demographics	The FRT Equitability Study Plan (Section 1) and this DPIA (Section C) explains why it is critical to understand accuracy and equitability. The evaluation results will enable the UK Law Enforcement Community to: • based on understanding how the algorithm performs decide with greater assurance whether and how best to configure FR technology for effective deployment on operational use cases; • ensure unnecessary data processing, minimising collateral intrusion and ensuring a proportionate approach – for example, including the use of other policing tactics, technologies or algorithms which exhibit a performance profile more honed to a particular use case; • continue to discharge its PSED obligations by continuing to take all reasonable steps to understand the algorithms especially when this study enables testing to be undertaken in the operational environment.
For each Operational Use Case:	
(a) What is the accuracy of the facial recognition algorithms? • LFR accuracy: True Recognition Rate and False Alert Rate as a function of the alert threshold • RFR/OIFR accuracy: True Recognition Rate as a function of the number of top matches returned	Assures policing on: • the accuracy of the FRT algorithms – this supports making (i) necessity decisions (i.e. would the algorithm technically enable the legitimate aim to be achieved) and (ii) a proportionality decision (i.e. managing collateral in the context of algorithm performance), and • provides information on selection of thresholds and other parameters to attune algorithm performance to the operational requirement.

(b)	What is the variation in accuracy between the demographic groups?	Identifies the extent of any "demographic bias" when using an algorithm for a realistic FR operational use case. This allows the policing utility, legitimacy and risks of the algorithm to be considered, where possible mitigated, and any decision on use to be made on an informed basis.
(c)	Are the variations in accuracy large enough to be "statistically significant"	
(d)	Are demographic performance variations similar over the three Operational Use Cases (RFR, LFR and OIFR)?	Enables policing to assess potential differences between LFR/OIFR/RFR which may impact on operational deployment of use cases. This is relevant to algorithm selection and the operational design of FR systems to meet policing use cases. The understanding here will best enable police to meet their law enforcement purposes.
(e)	Are variations in accuracy affected by environmental factors (e.g. weather, illumination level, crowd density).	Provides information of environmental factors that could increase/reduce accuracy and bias. This will allow policing to better plan for and use FR technologies – to maximise their effectiveness when used and in so doing, best achieve their law enforcement purposes.
(f)	How is the variation in accuracy affected by system factors (e.g., algorithmic thresholds, composition of Watchlist/reference database)?	Informs on effects of choice of Threshold / Watchlist composition on accuracy and bias. This helps minimise collateral intrusion and allows any impact the composition of Watchlist/reference libraries may have on the performance of a FR system.
(g)	Enable an appreciation of image quality on the performance of algorithms in order to better assess the utility of a FR system to generate a match.	Law enforcement rarely benefits from having 'perfect' images – even in more controlled environments such as custody. Image quality can vary depending on capture device, environmental conditions, means of sharing, compliance of the subject and many other factors. Yet, when submitted to the FR system, understanding the prospects of success (if there is a location/match to be made) is an important factor in making the necessity decision to process the data. This objective will be important to further knowledge in the area – especially when a FR system flags image quality as a consideration on ingestion of an image.
B	**Building capability to evaluate future Policing FR algorithms using representative data**	
	To collect a ground-truth dataset the UK Law Enforcement Community can use for future testing of other FR algorithms using a testing programme based on the retrospective analysis undertaken by the Equitability Study.	At present the UK Law Enforcement Community lacks operationally realistic datasets to bridge between NIST Tests and the operational environment. The Equitability Study addresses allows law enforcement to take the 'reasonable step' now, but the need will continue unless addressed for the MPS and other forces going forwards. Examples include when a new algorithm is issued by a vendor, a use case changes or a further use case arises. Indeed many other forces will be unable to address this issue, as they lack the level of operationally realistic filler data holdings required in order to achieve a statistically significant equivalent to the Equitability Study as has been advised as being required by the National Physical Laboratory.

Therefore, a critical objective of the Equitability Study is to gather a curated operationally realistic dataset (volunteer and filler data), not only to achieve the above objectives but to fill this vital capability gap for the UK Law Enforcement Community for the |

| | future to allow repeats of the retrospective analysis undertaken by the Equitability Study to be undertaken to assess the performance of FR algorithms in the future. | |
| | Retention of the volunteer data, filler data and footage (as further outlined in this DPIA), with a three year review period will: | |

- Reduce/avoid the need to collect further personal data to run similar evaluations, but enable use of operationally realistic data for 'bench testing' going forward. This will increase the assurance available to the MPS and the wider UK Law Enforcement Community (subject to agreeing licence terms) prior to their use of FR technology operationally.
- Provide a means by which other UK law enforcement bodies can undertake an equivalent evaluation of their FR algorithms against their use case. For many forces, without the MPS study and data, this would be an impossibility due to lack of resource, scientific expertise and a lack of the operational data needed to achieve a statistically significant study. This informs the MPS 'strictly necessary' decision in relation to data processing
- Allow 'side by side' comparisons between algorithms – especially over time when a new algorithm version is released. It avoids the need to reprocess the same data many times but instead compare back to existing findings and inform decisions as to when algorithms should be upgraded and the likely benefits that can be expected.
- Will allow more informed procurement decisions. This is relevant not just to ensure the algorithm is high performing, but that it is so against the specific operational use case. It makes it possible to provide this 'real world' performance assurance against operational use cases as part of procurement programmes rather than following them.

Note - For the avoidance of doubt, the curated dataset to enable future testing will not be provided to FR vendors to train FR algorithms – this risks being self-defeating should algorithms be specifically trained to the test data whereby performance may not be replicated in wider operational conditions.

E. Summary of participant personal data to be controlled by the data controller

Ser.	Personal Data Captured	Volunteer data subject(s) (y/n)	Form 3018 derived data (y/n)	Collateral/public passing the camera data subject(s) (y/n)	Why the Personal Data is processed (use Key, maybe multiple entries)	How long is the Personal Data retained for in relation to Objective A.	How long is the Personal Data retained for in relation to Objective B.	Where the personal data is to be held following collection
Summary of data processed in connection with Objective 'A' of the Equitability Plan relating to the NPL report on accuracy and demographic differential performance								
Personal Data: [6]								
1.	Name	Y	Y	N	All	Retained until the Equitability Study Report is issued.	3 years review period	MPS Data Office (and DPO) for the purposes of separating the name and URN.
2.	Unique Reference Number	Y	Y	N	All			MPS Data Office MPS TRI NPL (Objective A only)
3.	Contact Details and associated details on the Consent Form	Y	N	N	All			MPS Data Office
4.	Date of Birth (minimised to year of birth/age for Objective B)	Y	N	N	Study, Data			MPS TRI NPL (Objective A only)
5.	Self-defined gender	Y	Y	N	Study, Data			
6.	Self-defined height	Y	N	N	Study, Data			
7.	Image(s) of volunteer	Y	N	N	Study, Data			
8.	Image of subject approved via Form 3018	N	Y	N	Study, Data			
9.	Video of volunteer	Y	N	N	Study, Data			
10.	Image frames / video footage of all people passing through the Zone of Recognition	Y	N	Y	Study, Data			
May be derived from the footage/image or associated information								
11.	Perceived gender	Y	Y	Y	Study, Data	Retained until the Equitability Study Report is issued.	3 years review period	MPS TRI NPL (Objective A only)
12.	Perceived age	Y	Y	Y	Study, Data			
13.	Perceived height	Y	Y	Y	Study, Data			
14.	Metadata (including location, date and time image/footage was taken)	Y	Y	Y	Study, Data			

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[6] Means any information relating to an identified or identifiable living individual. An identifying characteristic could include a name, ID number or location data. You should treat such information as personal data even if it can only be potentially linked to a living individual.

Ser.	Personal Data Captured	Volunteer data subject(s) (y/n)	Form 3018 derived data (y/n)	Collateral/public passing the camera data subject(s) (y/n)	Why the Personal Data is processed (use Key, maybe multiple entries)	How long is the Personal Data retained for in relation to Objective A.	How long is the Personal Data retained for in relation to Objective B.	Where the personal data is to be held following collection
Special Category Data / Sensitive Processing:[7]								
15.	Self-defined ethnicity and skin tone	Y	Y	N	Study, Data	Retained until the Equitability Study Report is issued.	3 years review period	MPS TRI NPL (Objective A only)
May be derived from the footage/image								
16.	Biometric facial template	Y	Y	Y	Study	See 'Template Retention Period' below.	Not part of Objective B.[8]	MPS TRI NPL (Objective A only)
17.	Perceived ethnicity and skin tone	Y	Y	Y	Study, Data	Retained until the Equitability Study Report is issued.	3 years review period	
May be theoretically possible to derive from the footage/image but will not be subjected to recording or analysis under the Equitability Study								
18.	Examples include perceived religious or philosophical beliefs (e.g. based on the clothing of the person passing), perceived data concerning health and perceived sexual orientation.	Y	Y	Y	Study, Data	The footage/imagery from which the data may be perceived will be retained until the Equitability Study Report is issued.	The footage/imagery from which the data may be perceived will be subject to a 3 year review period.	MPS TRI NPL (Objective A only)

KEY:		
Why personal data is processed in relation to this DPIA Annex		
Study	For the purposes of the Equitability Study, writing the Equitability Study report.	In accordance with Section 35(2)(b) in relation to processing of personal data In accordance with Section 35(5) and Schedule 8, Paragraph 9 (b) and (c) in relation to sensitive processing.
Data	For the purposes of retaining a curated dataset with sufficient operational realism to allow FR algorithms to be evaluated by the UK Law Enforcement Community in the future (that further evaluation to be subject to a licence for non-MPS forces) and a signed-off DPIA and APP that covers the future evaluation.	In accordance with Section 35(2)(b) in relation to processing of personal data In accordance with Section 35(5) and Schedule 8, Paragraph 9 (b) and (c) in relation to sensitive processing.
Indiv	For the purposes of enabling volunteers to exercise their individual rights.	In accordance with Section 35(2) (b) in relation to processing of personal data and Chapter 3 of the DPA 2018.
All	For all the above identified purposes.	

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[7] Means the processing of personal data (i) revealing racial or ethnic origin, political opinions, religious or philosophical beliefs or trade union membership, (ii) the processing of genetic data, or of biometric data, for the purpose of uniquely identifying an individual, (iii) the processing of data concerning health, (iv) the processing of data concerning an individual's sex life or sexual orientation.

[8] Note – it is not necessary to retain biometric templates of those within the curated dataset. The templates are algorithm and vendor specific and therefore these would be generated by a future FR algorithm under study at the time (subject to a DPIA for that purpose).

Retention periods where there is a variance from the MPS LFR DPIA	
Retention period	**Rationale**
Retained until the Equitability Study Report is issued.	This period of retention is necessary in order to achieve the objectives as part of the Equitability Study. Once the report has been validated, finalised and issues, the necessity to retain data for this purpose will have ceased.
Template Retention Period • During an LFR deployment, biometric facial templates are immediately and automatically deleted if no Alert is generated. • If an Alert is generated the template is deleted as soon as possible and in any event within 31 days (subject to retention for operational purposes in line with the MPS LFR DPIA). • For retrospective analysis, templates can be generated from the footage/imagery. Templates generated as probes for searches will be deleted at the conclusion of each Test (see section 8.7 of the Equitability Study). All other biometric data (i.e. the research Watchlist against which probes are searched and as specified in the FRT Equitability Study Plan) will be deleted no later than when the Equitability Report is issued.	The LFR time periods align with the MPS LFR DPIA, weeding data where there is no need to retain it. The 31 day period aligns with the MPS LFR DPIA and was selected there to allow time for a post-Deployment review. That review process may provide insight of value to the Equitability Study too in the context of the Alert generated and therefore has been reflected. In relation to the retrospective analysis, this reflects the duration which is necessary in order to achieve the trial objectives as part of the Equitability Study. It also reflects a deletion process prior to this long-stop data wherever possible. Once the report has been validated, finalised and issues, the necessity to retain data for this purpose will have ceased.
3 years review period	At present the UK Law Enforcement Community lacks operationally realistic datasets to bridge between NIST Tests and the operational environment – some public sector datasets are around a decade old and therefore do not provide sufficient operational realism. Much of law enforcement lacks the ability to undertake scientific research of the nature outlined by this Equitability Study yet have operational use cases which could be achieved through the use of FR. The Equitability Study requires developed technical knowledge, legal expertise, and data protection know how – combined with an operational use case and expertise. These skills are in short supply with few forces having access to all the practitioners needed. It also requires data holdings to use for research purposes. In line with a wider industry issue, many forces would not have the data holdings needed of the type, quality and realism needed to undertake the Equitability Study. A critical objective of the Equitability Study is to gather a curated operationally realistic dataset (footage, volunteer and filler/3018 data), not only to achieve the above objectives but to fill this vital capability gap for the UK Law Enforcement Community for the future. The three year period for review has been determined as a necessary and proportionate period for review on the following basis: • Algorithms of relevance to law enforcement use cases are typically released on an 18/24 month cycle. The three year review period allows for a side-by-side comparison between algorithms to compare performance between products (in the context of continuing to minimise any undue impact from the use of the algorithm as part of the proportionality). This minimises repeated data collection and maximises the effective use of the data captured. • Image quality can vary and typically improves over time in terms of camera performance and the ability to mitigate the impact of environmental impacts. • Capital replacement cycles are typically based on a three year cycle – this may see the quality of images and the operational realism and value of the dataset to increase assurance beyond NIST tests potentially reduce beyond the three year period. This three year period provides a well-timed review period as a result as well as reflecting a period where capital spend cycles will inform procurement decisions.

F. Data Protection Principles – Analysis and mitigation of Data Subject Risks
Updates to the MPS LFR DPIA Principles in order to assess any further risks to the rights and interests of the data subjects and mitigate them whilst seeking to achieve the policing purpose.

Principle 1: requirement that processing be lawful and fair

1. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

2. **Legal Risk:** The MPS FR DPIA sets out the basis on which the operational use of LFR is lawful. There is nevertheless additional processing proposed by the FRT Equitability Study Trial Documents – this needs to be lawful too and in its own right will not justify the Deployment of LFR. The additional processing is highlighted in the FRT Equitability Study Process Summary but includes:

    a. Volunteers: The processing of volunteer personal data on passing the LFR system during operational deployments and then during retrospective analysis outlined in the Equitability Study;

    b. The Passing Public: The MPS LFR DPIA already considers the data processing in relation to all those who pass through the Zone of Recognition. However, the Equitability Study entails further processing for a law enforcement research purpose, and retrospective analysis of the footage in order to produce the Equitability Study Report.

    c. Form 3018 data: Merely running retrospective analysis using a Watchlist of volunteer imagery would be unrealistic and fail to achieve the objectives of the Equitability Study. The FR system would only be able to search between a very limited numbers of facial images. Instead, the volunteer images need to be seeded amongst realistic and balanced filler images to ensure accurate and effective representation of an operational system. For this reason, 260,650 custody images have been assessed by NPL Scientific experts to be necessary in order to generate meaningful test results. Further details including a detailed necessity case for use is set out in the Form 3018.

3. **Legal Position – Which part of the DPA 2018 applies?** The Equitability Study will process data under Part III DPA 2018. In reaching this conclusion the MPS has considered (i) the legal position and legislative context (ii) the objectives and outputs of the Equitability Study and how they fit in a law enforcement context and (iii) the rights and freedoms of data subjects, including any impact on such subjects from processing data under Part III DPA 2018 and opposed to UK GDPR – notably the right to objective to processing.

    a. Legal position and legislative context: To process data under Part III DPA 2018, the processing needs to fall within a law enforcement purpose. This term is defined at Section 31 and means:

    'The prevention, investigation detection or prosecution of criminal offences or the execution of criminal penalties, including the safeguarding against and the prevention of threats to public security.'

b. Where sensitive processing occurs to a strict necessity standard, pursuant to Section 35(5) (b) of the DPA 2018, at least one Schedule 8 ground must apply and be made out. These Schedule 8 grounds are essentially explicit sub-sets of the law enforcement purpose, they help shape its wider meaning. It requires a competent authority to justify the need to process more sensitive data for a law enforcement reason with greater specificity than would otherwise be the case for wider processing pursuant 35(2) of the DPA 2018. Paragraph 9 of Schedule 8, is one such ground and provides that sensitive processing for a law enforcement purpose may occur in the following situations:

   Archiving etc

   9 - This condition is met if the processing is necessary—

   (a) for archiving purposes in the public interest,

   *(b) for **scientific** or historical **research purposes**, or*

   (c) for statistical purposes.

c. <u>The objectives and outputs of the Equitability Study and how they fit in a law enforcement context:</u> Taken in the context of Section 31, the objectives of the Equitability Study will enable the MPS to further understand its FR algorithms in terms of accuracy and demographic performance, particularly in the operational context. This directly links through to informing the policing use of FR tools and increased effectiveness when using FR tools to prevent, investigate, detect or prosecute criminal offences or seek to execute criminal penalties. It also ensures officers have a resilient basis, gained from research in the operational context make decisions drawing on how they could expect FR to perform in terms of their policing objectives when seeking to prevent threats to public security. This processing will therefore help shape decisions to Watchlist a subject for location, or run a search in circumstances by allowing greater regard to be had, based on the output of this work, for when law enforcement can expect results should they decide to use FR (or the absence of results can also be understood, and be informative to investigative) This is therefore all about, taking the next 'reasonable step' to informing the section of the most suitable policing tactic to best achieve a legitimate aim, informed (as a result of this Equitability Study) as to how FR can be expected to work for a law enforcement purpose.

d. Whilst the Equitability Study has a clear law enforcement value and purpose to policing, from the perspective of the volunteers, there is no immediate law enforcement consequence to the processing for the Para 9, Schedule 8 DPA 2018 research purpose - were it to do so, other grounds under Schedule 8 would have been used to justify the activity instead. Paragraph 9 of Schedule 8 and Section 31 do not require there to be a law enforcement consequence to the data subjects whose data is processed – this is for a number of reasons:

   i. **The value of Para 9**: Paragraph 9 would be rendered 'pointless' to Competent Authorities where law enforcement purposes be assessed in terms of outcomes to the specific data subjects involved in the research, rather than from the perspective of the

Competent Authority (who is best placed to understand the need for testing and the policing value of its output) and the public benefit.

    ii. **How Section 31 is drafted:** Section 31 – refers to 'criminal offences' in plural as opposed to a specific criminal investigation or offences. This wider preview is supported by the language used in the Law Enforcement Directive. This speaks in the following terms around compatibility with the purpose – for the reasons above the Equitability Study is entirely compatible with and furthers such purpose:

> *'Personal data should be collected for specified, explicit and legitimate purposes within the scope of this Directive and should not be processed for purposes incompatible with the purposes of the prevention, investigation, detection or prosecution of criminal offences or the execution of criminal penalties, including safeguarding against and the prevention of threats to public security.'*

    iii. **The ICO's Guide to Law Enforcement Processing** reinforces this point. It notes in relation to Paragraph 9 of Schedule 8 (MPS emphasis):

> *'You can use this condition if processing is necessary for archiving in the public interest; for scientific or historical research purposes, or for statistical purposes. However, you cannot use it if it will result in decisions being **made that effect a particular individual**, or is likely to cause substantial damage or substantial distress to an individual'.*

Therefore, the Equitability Study is not a criminal investigation, nor does it have the grounds or need to be one - such outcomes would fundamentality undermine the study by deterring volunteer participation. It is for this reason the Equitability Study has been segregated from operation policing – by location and team, through the separation of the FR system itself from operational police systems, as well as through the segregation of data holdings within the FR system through the use of dedicated watch lists for research purposes only (as described in this DPIA Annex).

e. <u>The rights and freedoms of data subjects, including any impact on such subjects from processing data under Part III DPA 2018 and opposed to UK GDPR – notably the right to objective to processing.</u> The police, as a competent authority benefit from a dedicated regime for processing data under Part III. It has a number of differences to UK GDPR and the impact of selecting Part III as the appropriate regime has been considered and made out for reasons which include the following grounds:

    i. **Protecting the public**: Part III differs from UK GDPR in terms of its transparency requirements and therefore in the way it enables police to protect policing work from the risks of tactics and investigations being compromised, and the public exploited. Policing need to be mindful of this when processing data and considering which regime applies to it. Whilst the MPS has gone to great lengths to ensure the purpose and data processing involved in the Equitability Study is transparent – including publishing this DPIA Annex and other documentation, it is mindful that there are potential risks to data subjects given criminals have the wherewithal to exploit knowledge of police tactics. This is especially relevant when considering topics covered by the Equitability Study include the FR performance in the context of age. With issues such as children being exploited by 'County Lines' criminality Part III provides an appropriate law enforcement regime to protect the public and ensure the effectiveness of law enforcement activity.

    ii. **Public expectation:** As the ICO's Guide to Law Enforcement Processing notes:

"Even if you are a competent authority, in some circumstances, you may also process data for general purposes, such as for your own HR purposes. If processing is not for the law enforcement purposes, it will fall into the general processing regime in the UK GDPR read with and Part 2 of the DPA 2018 you should refer to our Guide to the UK GDPR."

As noted above, the Equitability Study is scientific research being undertaken by policing, to understand the value of FR in the operational context, to inform the effectiveness and efficiency of FR tools to achieve a law enforcement purpose. This is not general processing, and indeed the operational context, and law enforcement output, means that a body who could only process under UK GDPR would likely lack the legal power or need for this scientific research. Given the clear nature of Part III and requirement for a 'law enforcement purpose', the public would expect policing to use this regime for its law enforcement processing activity – especially where this helps ensure the public and the tactics are protected in order to keep Londoners safe.

iii. **The right to object**: UK GDPR does offer further rights to individuals, and these have been considered, notably the right to object – a right not found within Part III. The MPS has been mindful of this and considered it in relation to 'fairness' below. The awareness measures ensure data subjects are made aware and lead to the ability to exercise a choice about their involvement and how their data is processed.

    1. Those passing the FR system**:** Signage, the MPS webpages and MPS social media act to flag to those passing the FR system that data processing for the purposes of the Equitability Study is taking place. It is not an offence not to pass the FR system and there, individuals have a genuine choice whether to do so or not. Individual rights are flagged, and may be exercised to reinforce this position after data capture.

    2. Those on the filler dataset: The awareness raising measures represent a reasonable approach in the circumstances (having regard to the numbers used and that it would be unviable to make individual contact) to making those who have had a custody image taken aware that that data may be used as part of the filler dataset for research purposes. This is coupled with the right of access and the URN system to ensure that these data subjects can understand if their data has been processed for the purposes of the Equitability Study. They may then seek to exercise their individual rights as regards the processing of these personal data.

    3. The volunteers are made aware through the use of information details – written in a style appropriate to the volunteer, and consent forms. Whilst consent, is not a legal basis for the processing of data (as described in this DPIA, strict necessity is) this reflects that the volunteer nature of their role and is a further measure to ensure proportionality – if the volunteers do not wish to, they do not have to participate. The fee will not be clawed back should they decide to withdraw from the Equitability Study.

Legal Risk	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Legal basis	L	H		L	

If the processing lacks a legal basis there is a risk that data subjects will be subject to unlawful interference and data processing.			• The MPS FR Team has benefited from specific legal advice to understand and mitigate this risk to ensure a lawful basis for processing data and the wider activity involved in the Equitability Study.
			• Section C paras 5 - 10 of this DPIA Annex outlines the legal basis for the Equitability Study:
			    o the effective use of FR to best discharge common law policing powers;
			    o the necessity and proportionality to undertake interference from a Human Rights Act 1998 perspective to best achieve a policing legitimate aim;
			    o the considerations of fairness and accuracy in data processing;
			    o and the discharge of the PSED – especially in the context of the 'reasonable steps' test,
			These legal provisions not only provide policing with a legal basis, but go further and impose legal obligations which are discharged by undertaking the Equitability Study.
			• The use of images taken under section 64A of the Police and Criminal Evidence Act 1984 benefit from a specific power at Section 64A(4) to use them for 'any purposes related to the prevention or detection of crime, the investigation or an offence or the conduct of a prosecution or to the enforcement of a sentence'. This DPIA Annex explains how the Equitability Study better enables the MPS and other policing forces to achieve their law enforcement purposes though the informed use of FR backed by the scientific operational analysis of its performance including at Sections D and F. The Equitability Study will enable the MPS to further understand its FR algorithms in terms of accuracy and demographic performance, particularly in the operational context. This directly links through to informing the policing use of FR tools and increased effectiveness when using FR tools to prevent, investigate, detect or prosecute criminal offences or seek to execute criminal penalties. It also ensures officers have a resilient basis, gained from research in the operational context make decisions drawing on how they could expect FR to perform in terms of their policing objectives when seeking to prevent threats to public security. This processing will therefore help shape decisions to Watchlist a subject for location, or run a search in circumstances by allowing greater regard to be had, based on the output of this work, for when law enforcement can expect results should they decide to use FR (or the absence of results can also be understood, and be informative to investigative) This is therefore all about, taking the next 'reasonable step' to informing the section of the most suitable policing tactic to best achieve a legitimate aim, informed (as a result of this Equitability Study) as to how FR can be expected to work for a law enforcement purpose.
					Lindsey Chiswick

Accessibility & Foreseeability
Data subjects should be able to find out the framework which governs the processing of data and predict how it applies to them. Without this, there is a risk that the activity may not be 'in accordance with law'. This risks the public not being able to exercise their rights, impact on trust and confidence in the project and policing. This is important to retain the high levels of public support the MPS LFR DPIA shows for the use of FR technology by law enforcement.
	M	M	• The Equitability Study benefits from (i) published statutory legislation and (ii) a Court of Appeal judgement from the Bridges case. Additionally to support accessibility and foreseeability the MPS has published its legal mandate for LFR and will publish this DPIA Annex which sets out the legal position that supports the Equitability Study.
			• To increase accessibility and to ensure the public can read and understand that legal framework in a way which is applied to the Equitability Study so they can foresee how it may be relevant to them:
			    o The MPS FR Webpages will include this DPIA Annex and publish other FRT Equitability Study Trial Documents.
			    o The MPS LFR Deployments will include specific signage and leaflets which provides details on the additional data processing associated with the Equitability Study.
				L	Lindsey Chiswick

			From MPS analysis, traffic to the webpages and engagement substantially increases during a deployment.		
			o The use of the NPL and the greater independence, scientific and technical rigour this brings to the study, in conjunction with the MPS TRI unit's support helps ensure the project is foreseeable and officer discretion limited. This approach isolates the technical analysis and research data processing from mainstream policing, ensures a trial plan has been produced and will be followed with scientific rigour.		
			o To ensure consistency in how the dataset is managed by law enforcement for future analysis a licence mirroring the standards reflected in this DPIA Annex for MPS use will be a pre-condition to any sharing.		
			o SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		

4. **Fairness Risk:** The MPS LFR DPIA sets out the basis on which the Operational Use of LFR is fair to data subjects. However, the Equitability Study involves further processing of LFR operational data for a new, law enforcement research purpose. The fairness of this activity needs to be considered, and mitigated in the context of data subjects.

Fairness Risk	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Fairness – data processing Processing data in a way that is unfair – i.e. unduly detrimental, unexpected to data subjects concerned would breach the 'fairness principle'. There is a risk that should the Equitability Study exceed expectations (and these are new purposes), the action may be more intrusive than it needs to be or is otherwise disproportionate. It is notable that Part III does not have an individual right to object (unlike UK GDPR) and therefore the impact of processing on fairness may be more pronounced in these circumstances.	M	H	• The Equitability Study falls within obligations on policing to understand the technology it uses and to ensure best practice use when policing the community. To ensure fairness a number of mitigation and best practice points have been adopted in addition to those in the MPS LFR DPIA (which specifies this testing as part of a ten-point action plan for operational delivery and covers existing assurances regarding algorithm performance): • Equitability Study Design: The Equitability Study is governed by a FRT Equitability Study Plan which sets out up front the testing to be undertaken. This has been designed and informed by the NPL, a body with recognised expertise for testing in the area. This ensures a rigorous, justified, predictable and expert-led approach is adopted. As a result, the data processing to be undertaken remains bounded to what is really needed and proportionate. • Adherence to ISO standards: The evaluation will be conducted in accordance with international standards for testing and reporting the performance of biometric recognition systems: ISO/IEC 19795-1 and ISO/IEC 19795-2. In the terminology of the standards for biometric performance testing and reporting, the performance will be evaluated as a "technology evaluation". • Awareness measures: These are outlined above in relation to 'legal risk' - they are extensive, reflect a transparent and open approach and equally apply here to ensure that unexpected data processing is mitigated in so far as possible. The public passing the LFR system will benefit from prior awareness measures and are not obliged to pass the LFR system. The public also benefit from substantial published primary legislation and case-law in the area of relevance to the Equitability Study.	L	Lindsey Chiswick

- **Fairness in relation to volunteer probe images**: Whilst the processing of data is strictly necessary, all volunteers will be provided with detailed information about the Equitability Study and how their data is used. Their agreement to participation, consistent with their volunteer status will be sought and they will have the ability to withdraw participation should they wish to do so.
- In relation to the police cadets – whilst their participation is critical to understand if there is any operational performance differential relating to age, their parents/guardians will receive participation/consent information. Age-appropriate information will be provided to the cadets and their adult staff. Again, there remains the ability to withdraw participation.
- **Fairness in relation to Form 3018 derived data**: It is recognised that those who have their image taken under Section 64A of the Police and Criminal Evidence Act 1984 will primarily expect their image to be used in connection to any investigation of their potential criminality. However, the power at Section 64A(4) is drafted widely and includes the 'any purposes' language outlined in the legal risk mitigation points above and it is critical to use this data for the Equitability Study to have sufficient realism and valid findings. To further mitigate the risk of unfairness as far as possible:
    - The retrospective analysis for which the filler data is required means this data will not be placed onto live LFR Watchlist for the purposes of Equitability Study;
    - The use of the URN system and segregation from operational policing (i.e. by (i) team within the MPS/use of the NPL, (ii) location of the retrospective processing, (iii) system – through air gapping at the retrospective stage) ensures the critical research purpose can be met without the risk of 'seepage' – see below under 'mitigating against unexpected processing.
    - The data proposed for use of filler will be subject to more limited processing (compared to volunteer images) – i.e. if a false alert is generated. Where this occurs, this can be quickly validated given the curated dataset of volunteer probe images. There is no policing consequence to the individual from a false alert.
- **Mitigating against unexpected processing**: To avoid the risk of 'seepage' into operational policing or adverse impact of using a person's name – two mitigations apply which reflect a data protection by design approach. The use of the NPL and MPS TRI ensures the Equitability Study is separated from operational policing with the output purely focused on the objectives of the study. This is reinforced by the use of URNs as opposed to names. The ability to reconcile a name to a URN will rest with the MPS Data Office under the stewardship of the DPO and this is there to enable individual rights rather than any operational activity.
- **Wider fairness when using the data set**: To mitigate the risk that wider law enforcement may not observe the same high standards as the MPS seeks to adopt, those who make use of the data set will be required to enter into a binding licence to use the data set, which will mirror the conditions in this DPIA Annex. Further FR analysis using the data set within the review period will also be subject to an approved DPIA to such testing.
- SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.

Principle 2: requirement that purposes of processing be specified, explicit and legitimate

5. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

6. The Equitability Study involves:
   a. <u>New data being processed for a law enforcement research purpose:</u> This is reflective of the volunteers' participation, both in terms of providing probe images, and passing through the Zone of Recognition in order to create footage which may be subject to retrospective analysis for the purposes in line with the FRT Equitability Study Plan.
   b. <u>Existing data being processed for a further, law enforcement research purpose:</u> This is reflective of the public passing through the Zone of Recognition for the purposes of the Equitability Study in addition to the MPS conducting an operational LFR Deployment. This is also reflective of the filler data via the Form 3018 where the law enforcement research purpose will also arise in order to deliver the Equitability Study.

7. Whilst the Equitability Study therefore reflects additional purposes for processing, in accordance with this Principle, there is also a need to ensure that processing in line with the FRT Equitability Study Plan remains specific, explicit and legitimate and is not subject to further, unauthorised or illegitimate purpose creep.

Purpose limitation	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Processing for additional purposes to achieve the objectives of the Equitability Study The public passing the LFR system, and those who comprise the filler data via the Form 3018 process will have their data additionally processed for a law enforcement research purpose in line with the FRT Equitability Study Plan. There is a risk to data subjects that this further purpose may fall outside the public's expectation of privacy and therefore the intrusion and impact may be different on data subjects as a result of the further purpose. A failure to consider, mitigate and assess this impact may result in unwarranted and disproportionate impact on data subjects.	H	L	• The following observations and risk mitigation points combine to ensure that the MPS processes data which is compatible with the original purpose and responds to a legal obligation. • <u>Compatibility with original purpose:</u> In relation to the passing public, the Equitability Study is complimentary to the LFR deployment purposes – i.e. seeking to use LFR to keep Londoners safe by preventing and detecting crime, bringing people to justice and ensuring public safety, whilst minimising and mitigating the impact on the passing public. Both purposes will apply at the same time to the passing public – there is no retrospective 'purpose creep'. The Equitability Study is reflected in the MPS LFR DPIA as part of the action plan on fairness, is a planned next 'reasonable step' and ensures FR algorithms can assessed in an operational context as to accuracy and bias. The additional awareness measures described in this DPIA Annex reinforce public understanding. • In relation to Form 3018 filler data, it is notable that it is the same power (i.e. Section 64A) which provides the legal basis for the Equitability Study, the original capture, and the use of FR system to search with that image as a probe and image reference library. In this respect the 'any' in the drafting at Section 64A(4) is instructive – it is not an 'a' purpose and this reflects the enabling nature of this power when used to seek to prevent and detect crime etc. • Whilst this processing is undertaken in a Part III context, it is instructive that UK GDPR (Recital 50) says that compatible purposes to an original purpose include scientific research and statistical purposes and in a para 9, Schedule 8 DPA context, these are the grounds cited to	L	Lindsey Chiswick

			justify the sensitive processing.		
			• Responds to a legal obligation: Section C paras 5 - 10 of this DPIA outlines the legal basis for the Equitability Study and how legal obligations arise on the MPS to continue to take 'reasonable steps' in relation to ascertaining algorithm performance in an operational context for:		
			○ the effective use of FR to discharge common law policing powers;		
			○ the necessity and proportionality to undertake interference from a Human Rights Act 1998 perspective to achieve a policing legitimate aim;		
			○ the considerations of fairness and accuracy in data processing;		
			○ and the discharge of the PSED – especially in the context of the 'reasonable steps' test,		
			These legal obligations not only provide policing with a legal basis, but go further and impose legal obligations which are discharged by undertaking the Equitability Study and justify its purposes for processing data. The nature of the PSED, to improve public body decisions, to reinforce trust and confidence in policing and its pervasive nature reinforce the public interest in undertaking this processing activity.		
			• SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		
Processing for additional purposes to achieve the objectives of the Equitability Study There is a risk of 'purpose creep' where data and policing action taken for one purpose may subsequently appear relevant to a new project. If the new purpose is incompatible with the original purpose, the public's expectations of privacy and the impact of this repurposing may be different, it may rely on a different legal basis and may need different types of risk mitigation and governance measures. A failure to consider, mitigate and assess if there is such an impact may result in unwarranted and disproportionate impact on data subjects.	M	M	• The following observations and risk mitigation points combine to ensure that the MPS will continue to process data which is compatible with the original purpose and responds to a legal obligation. • The FRT Equitability Study Plan: The creation and use of this document brings professional and scientific rigour to the testing process. Its publication (and other awareness raising measures outlined in this document) ensures that the MPS is clear and transparent from the outset what data will be captured or otherwise processed, how it will be processed and why it will be processed. It ensures the study is bounded and implements a 'Data Protection by Design and Default' approach. • Licence and future use: The retention for the dataset for future FR analysis is limited in a number of ways (i) a need for a future approved DPIA (ii) an organisation limit – for UK law enforcement bodies, (iii) a legal limit – where the body is not the MPS a licence agreement will be required to ensure legal obligations are imposed to mirror and uphold the safeguards in this DPIA. • Watchlists during an operational LFR Deployment: During an operational Deployment, where volunteers are passing the LFR system, their images will be technically segregated from any operational Watchlist. Likewise, the operational Watchlist is not retained following the Deployment (per the MPS LFR Documents) and therefore will not be subject to retrospective analysis with imagery from the Equitability Study. This implements a 'Data Protection by Design and Default' approach. • Research images: The retrospective analysis will be undertaken using dedicated images (comprising volunteer and Form 3018 derived data) via the NPL and MPS TRI. This key 'Data Protection by Design and Default' point ensures segregation from operational policing and means there are no operational consequences to those subject to retrospective analysis – its purpose being purely research in connection with the Equitability Study. The team and processing is located away from operational investigations and uses dedicated IT resource to reinforce this position.	L	Lindsey Chiswick

			• Regular review and purpose limitation: The Equitability Study will be subject to regular review to ensure it is in compliance with the FRT Equitability Study Plan and that remains necessary, proportionate and effective in achieving its objectives. Should any further processing purposes be identified, these will need to be articulated, authorised by the SRO in consultation with the DPO. • SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		

Principle 3: requirement that personal data be adequate, relevant and not excessive

8. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Data minimisation	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off

Too little / inadequate data processing
If the Equitability Study lacks the minimum level or quality of operationally realistic data needed for the planned processing, there is a risk that the objectives will not be achieved. Given the importance of bias testing in relation to:
• maintaining trust and confidence in FR
• ensuring that decisions on use are reasoned, necessary and proportionate – with safeguards (as needed) to reflect algorithm performance that decisions reflect an understanding of the prospects of success at a technical level,
a failure to process the data needed to achieve the objectives may place the further use of LFR as an operational tactic to keep Londoners safe at risk.
	M	H	• The following observations and risk mitigation points combine to ensure that the MPS has sufficient, suitable, but not too much data in order to achieve the objectives of the Equitability Study.
			• Study design: The NPL has been carefully selected as a data processor and industry-respected advisor on the design of the study (adopting a data protection by design and default approach) – their expertise has informed the design of the Equitability Study. Notably sections 5 and 6 of the FRT Equitability Study Plan sets out in detail, numbers of data subjects needed – including volunteers, the passing public and Form 3018 data and a demographic breakdown thereof. This is further reflected in the Form 3018 approval sanctioned by the DPO. The Equitability Study at Section 5 also covers need for the use of crowd data and why the passing public need to be involved. These decisions have been subject to challenge and scrutiny and now adopted as strictly necessary in order to generate sufficient transactions to:
			    o have the potential to detect any variance in performance – such is the assessed baseline quality of the algorithms being assessed
			    o deliver results of statistical significance.
			• The Equitability Study has also been designed to gain data with operational realism – this being key to take the 'reasonable steps' beyond the NIST Tests as the Equitability Study is focused on if performance varies as a result of such conditions beyond the high levels of performance shown in the NIST Tests. This sees the use of:
				L	Lindsey Chiswick

Too much data processing	M	M		L	

If the Equitability Study uses more data than it really needs to achieve its aim, this would intrude into people's private lives where there wasn't a need to do so and it risks undermining participant and public trust and confidence in the MPS. Similarly, if sensitive processing takes place where less sensitive personal data (or even depersonalised) data could be used, there is a risk that the data processed is excessive and not really needed to deliver the objectives.			- o operational LFR Deployments where there is to be a confirmation of their suitability for the Equitability Study; - o use of Form 3018 data which by its nature accounts for the variance in how custody images (a key use case) are taken – environmental, camera quality, pose of the subject etc.; - o ensuring volunteer images are similarly captured in representative conditions. - System design: There are a number of points within the way the FR systems assessed work, which uphold Principle 3 by taking a data protection by design and default approach: - o Deletion of biometric data where an LFR system does not generate an Alert – this being consistent with the 'Bridges' decision and designed into the system, - o For retrospective analysis biometric probe data will be deleted at the conclusion of each Test (see section 8.7 of the Equitability Study). All other biometric data (i.e. the Research Watchlist against which probes are searched) will be deleted no later than when the Equitability Report is issued. This process has been designed into how the systems are used and returned by NPL and reflected in the NPL Processing Agreement. - Regular review: The Equitability Study will be subject to regular review to ensure it is in compliance with the FRT Equitability Study Plan and that remains necessary, proportionate and effective in achieving its objectives. Should it become apparent that the objectives will not be achieved, NPL will notify the Operational Lead for FR at the MPS who has been empowered by the SRO to pause the Study. - SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		Lindsey Chiswick
Irrelevant data processing The data processed needs to have a rational link to the Equitability Study. If the data is not really linked and could be removed from the project without undermining its delivery, there is a danger of unjustified collateral intrusion. There is also a risk that the less strong the rationale link to the project is, the less likely it is that the public will anticipate their data being used in this way.	M	M	- The following observations and risk mitigation points combine to ensure that the MPS has relevant data for its purposes, and has minimised unnecessary data processing in so far as it can do so such that any remaining collateral intrusion is proportionate given the importance of the objective. - Study design: The NPL has been carefully selected as a data processor and advisor on the design of the study (adopting a data protection by design and default approach) – their expertise has helped design the Equitability Study. - o Notably sections 5 and 6 of the FRT Equitability Study Plan sets out in detail the data subjects to be used in the study and why they are needed to achieve the objectives. There is a direct link between the objectives and all categories of data subject that fall within this this Equitability Study. - o Section 5 also addressed the need for crowd subjects to pass the LFR system and why this needs to occur on an operational LFR deployment – therefore using members of the public – Section 5.5.3 on realism underpins this position and supports the judgment that the objectives could not be achieved by actors, or not involving the public. To mitigate the risk of processing more crowd data than needed, the study provides reference to monitoring the flow count of the passing public at Section 5.5.3. - o In considering the impact and data risk to the crowd data subject, it is notable that 'Bridges' in that case recognised the intrusion as 'negligible'. The court noted: *"An impact that has very little weight cannot become weightier simply because other people were also affected. It is not a question of simple*	L	Lindsey Chiswick

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multiplication. The balancing exercise which the principle of proportionality requires is not a mathematical one; it is an exercise which calls for judgement."

- <u>System design</u>: The FR systems to be evaluated undertake checks on ingestion to flag images of poor quality. The NPL will ensure that those which do not match the quality needed for use are therefore weeded out to avoid irrelevant data processing.
- <u>Regular review</u>: The Equitability Study will be subject to regular review to ensure it is in compliance with the FRT Equitability Study Plan and that remains necessary, proportionate and effective in achieving its objectives. Should it become apparent that irrelevant data processing is occurring, NPL will notify the Operational Lead for FR at the MPS who has been empowered by the SRO to pause the Study.
- SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.

Principle 4: requirement that personal data be accurate and kept up to date

9. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Data accuracy	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Inaccuracies in the data itself The data should be accurate, and where necessary, kept up to date with systems in place to erase or correct errors as needed. The Equitability Study is based on the need to test in operationally realistic circumstances and therefore if the data did not mirror this through inaccurate data processing, the objectives and results therefrom may be undermined.	M	M	• The following observations and risk mitigation points combine to ensure that the MPS has data with the necessary accuracy for its purposes without unduly impacting on the data subjects. • <u>The need for realism in the data used:</u> The Equitability Study relies on the operational realism of the data to reach valid findings – this includes the data used. Therefore points such as Subject and Environmental Variables are necessary and important in order to assess any difference in performance between NIST Tests and operational conditions. • <u>Quality of Watchlist Images:</u> When an image is ingested into the FR system, the system assesses image quality and suitability for matching, in order to allow MPS personnel to consider and manage the risk that poor quality images might generate False Alerts and therefore the realism and suitability to include it for the purposes of the Equitability Study. • <u>Distinguishing Data Subjects:</u> During an operational Deployment, where volunteers are passing the LFR system, their images will be segregated from any operational Watchlist. Likewise the operational Watchlist is not retained following the Deployment and therefore will not be subject to retrospective analysis of comingled with imagery from the Equitability Study. This implements a 'Data Protection by Design and Default' approach. • <u>NPL performance:</u> NPL are responsible for the accuracy of volunteer data capture, the curated data set and the conduct of the test in accordance with the Equitability Study. NPL	L	Lindsey Chiswick

			similarly have obligations to identify and flag to the MPS incidences of inaccurate data processing where a data breach results. NPL performance is subject to audit and oversight by the MPS – including MPS Data Office, MPS FR and MPS TRI from data and technical perspectives. • Individual rights: This DPIA further considers and explains how individual rights are upheld (below). • SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		
Inaccuracies in algorithms used for the Equitability Study If the algorithm is inaccurate – this may adversely impact on the data subject in a number of ways including: • unnecessary data processing where the algorithm could be assessed upfront to be an unviable proposition to policing. • potential impact on the individual especially in the context of False Alerts, especially if they have adverse consequences to the data subject.	L	L	• The following observations and risk mitigation points combine to ensure that the MPS has data with the necessary accuracy for its purposes without unduly impacting on the data subjects. • Prior due diligence: The ICO has provided helpful guidance on their expectations for statistical accuracy. They note that the accuracy principle "does not mean that [the LFR] system needs to be 100% statistically accurate to comply with the accuracy principle." The ICO does however recognise the importance of considering the accuracy of the LFR system at the outset, including evaluating claims made by the vendor. In this respect the MPS has paid close regard to the NIST findings. The MPS has published a paper entitled 'Understanding the Metropolitan Police Service LFR System's Accuracy and Bias Position'. This explains the steps the MPS has taken to quantify the statistical accuracy and demographic performance of its LFR algorithm. In relation to NIST, this paper notes: *"The Met's facial recognition system uses an algorithm from a leading vendor, NEC. The NIST Test report published in 2018 evaluated over 200 algorithms for their accuracy. Its findings state that:* *"NEC, which had produced broadly the most accurate algorithms in 2010, 2013, submitted algorithms that are substantially more accurate than their June 2018 versions and on many measures are now the most accurate"."* *"In March 2017, NIST also published a Face In Video Evaluation (FIVE) report. Unlike the other NIST Tests, the FIVE test involved the use of video footage as opposed to static images. This is of particular interest to the Met because this aligns more closely to the Met's use of facial recognition in a 'live' - video context. The NEC algorithm was found to be the most accurate across the different measures with a True Positive Identification rate of 82% at a corresponding False Positive Identification Rate of 0.4%."* • As a result of this detailed due diligence and further analysis by MPS TRI in relation to the NEC retrospective algorithm (which more closely aligns to the NIST tests still) the MPS is content that the algorithms used are already 'best of breed' and capable of meeting operational use cases in the way in which they perform. This 'Equitability Study' is therefore only processing data using algorithms where prior due diligence indicates suitability/sufficient accuracy and that is then appropriate to test of any variations in performance when moving from NIST Tests to operationally realistic data. This approach will	L	Lindsey Chiswick

be reflected (as part of the 'reasonable steps' test to future algorithm selection and testing using the data gathered and retained from this project.		
• Segregation from operational policing activity: To avoid the risk of any inaccuracy in the algorithm under review having law enforcement consequences to a data subject during the retrospective analysis phase – two mitigations apply which reflect a data protection by design approach. The use of the NPL and MPS TRI ensures the Equitability Study is separated from operational policing with the output purely focused on the objectives of the study. This is reinforced by the use of URNs as opposed to names. The ability to reconcile a name to a URN will rest with the MPS Data Office under the stewardship of the DPO and this is there to enable individual rights rather than any operational activity.		
• SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.		

Principle 5: requirement that personal data be kept for no longer than is necessary

10. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Record review, retention and deletion	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off

Data retention
 	
 There is a risk that if the retention periods in the Equitability Study are not applied and the data is not subject to meaningful review, it is retained where there is no need to do so. This impacts on data subjects with undue processing, and the trust and confidence of the public in the MPS. It may impact on those having confidence to come forward with information in the future.
	M	M	• The following observations and risk mitigation points combine to ensure that the MPS has balanced its need for retention of data with the risks and impacts of doing so.
			 • Explicit and justified retention periods: Data, by type will be retained for periods in accordance with the tables at Section E (above). This is based on necessity for the specific law enforcement purpose. The approach taken reflects granular consideration against different data types and different Equitability Study objectives and justifies the strict necessity / necessity (as applicable) for retention. This embeds a proportionate data protection by design and default approach – ensuring that data which is not needed for a purpose is weeded as soon as it viable to do so.
			 • System design: There are a number of points within the way the FR systems assessed work which uphold Principle 5:
			     ○ Deletion of biometric data where an LFR system does not generate an Alert – this being consistent with the 'Bridges' decision and designed into the system,
			     ○ For retrospective analysis biometric probe data will be deleted at the conclusion of each Test (see section 8.7 of the Equitability Study). All other biometric data (i.e. the research images against which probes are searched – and as specified by the FRT Equitability Study Plan) will be deleted no later than when the Equitability Report is issued. This process has been designed into how the systems are used and returned by NPL and reflected in the NPL Processing Agreement.
				L	Lindsey Chiswick

	• Licence and future use: The retention for the dataset for future FR analysis is limited in a number of ways (i) a need for a future approved DPIA (ii) an organisation limit – for UK law enforcement bodies, (iii) a legal limit – where the body is not the MPS a licence agreement will be required to ensure legal obligations are imposed to mirror and uphold the safeguards in this DPIA. • Actions carried out within the FR systems are audited and logged in accordance with S.62 DPA. • SWP will undertake similar measures for their LFR Deployment prior to transferring data to the MPS on a controller-to-controller basis.	

Principle 6: requirement that personal data should be processed in a secure manner

11. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Data compromise	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Data security People's lives, their property and their wellbeing can be put at risk if their personal data is not protected by adequate technical and security measures from both internal and external risks.	L	H	• The following observations and risk mitigation points combine to ensure that the MPS has mitigated the risks regarding Data Security. • Password security: NPL will be following the password guidance policy set by the National Cyber Security Centre on all hardware and software used for the processing of STAR data. This includes advice and guidance for system owners responsible for determining password policies and identity management within their organisations. This guidance will be applied to the security of the standalone hardware with the NEC FR software installed. • Role access: NPL access to the Equitability Study data will be limited to Dr Tony Mansfield and his assistant. • System Security: The system, and algorithms have been assessed for meeting security standards and risk of compromise, and is air gapped from other networks. Data (such as imagery) will be transferred into the FR system via a USB device using an AES-CBC 256-bit full disk hardware encryption engine and securely deleted at the conclusion of activity. • Physical Security: The system itself is secured in a locked room, with key access through a central security office with full audit history.	L	Lindsey Chiswick
Data loss	L	H		L	

The Equitability Study explains the necessity case for this project and why it is important that it can be delivered. If data is not accessible or otherwise corrupted (through unlawful action or accident) it can delay the project or here, may cause it to be cancelled as there is only a limited opportunity to do it.			- The following observations and risk mitigation points combine to ensure that the MPS has mitigated the risks which arise from potential data loss in order to ensure the Equitability Study objectives could be achieved. - Business Continuity Plan: The MPS and NPL have business continuity plans to provide for continued activity and these would apply in this instance. - Back up: The MPS has in place back up arrangements for its data on the Aware system. In relation to data gained from the LFR Deployments (Video Footage and Volunteer Data), the NPL will have one copy for their retrospective testing. MPS TRI will maintain a backup copy stored in a secure vault.		Lindsey Chiswick

G. Individual Rights – Analysis and mitigation of Data Subject Risks

Updates to the MPS LFR DPIA in relation to Individual Rights in order to assess any further risks to the rights and interests of the data subjects and mitigate them whilst seeking to achieve the policing purpose.

A. Individual Right – Right to be informed

1. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Individual right	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Right to be informed Unless there is an exemption to disclosure, individuals have a <u>general</u> right to be informed in a clear, understandable way about how the MPS generally collects and uses their personal data as part of the privacy information provided to them. Unless there is an exemption to disclosure, individuals have a <u>specific</u> right to know the legal basis for any data processed about them. They should also know how long that data is to be held for or the criteria used to decide this, any recipient or categories of recipients for the personal data, and anything else they might reasonably need to exercise their rights (e.g. if the data was collected without their knowledge). Unless an exemption applies, if this does not occur, there is a risk that the public will not be able to ask questions about how their data is used. This may mean they cannot exercise their legal rights. They also may lose confidence in the Met.	M	M	• The following observations and risk mitigation points combine to ensure that the MPS has mitigated the risks which arise from any impact • MPS Governance: The MPS has a mature Information Governance Strategy and Structure in place. It incorporates the requirements of the MPS to be open and transparent (wherever appropriate and possible) about how data is processed. • Volunteer Information: All volunteers will be provided with detailed information about the Equitability Study and how their data is used. In relation to the police cadets – whilst their participation is critical to understand if there is any operational performance differential relating to age, their parents/guardians will receive participation/consent information. Age-appropriate information will be provided to the cadets and their adult staff. Again, there remains the ability to withdraw participation. • Signage and social media for those passing the FR system: The overt nature of the LFR Deployments is already highlighted through social media and the use of signage on the day, which will be prominently placed on the approach to the LFR cameras, outside the Zone of Recognition. The social media and signage for deployments where the Equitability Study is overlaid will flag this further purpose and link to the MPS website where further documents and information is published. The MPS has reviewed activity on its website in connection with LFR deployment to date and increased traffic demonstrates the effectiveness of this method. • Filler data: The awareness raising measures (including signage at the location, MPS website, MPS social media, published documents) represent a reasonable approach in the circumstances to making those who have had a custody image taken aware that that data may be used as part of the filler dataset for research purposes. It would not be viable to individually notify such large numbers – and current data to do so may not be held and could actually place the subjects at risk where subjects have subsequently moved from a place of residence known to the MPS. The extensive awareness measures taken are coupled with the right of access and the URN system to ensure that these data subjects can understand if their data has been processed for the purposes of the Equitability Study. They may then seek to exercise their individual rights as regards the processing of these personal data.	L	Lindsey Chiswick

- Publication: Whilst the MPS is not required to publish a number of the Equitability Study documents, it has elected to do so in line with its commitment to transparency. This is to help an important measure to inform Londoners as to how the MPS plans to undertake the Equitability Study, including the public passing an LFR system and those who may have their data processed as part of the retrospective analysis in order to understand the standards the MPS, as a public body, operates to. In this way, the MPS's use of FR for the Equitability Study is both foreseeable and assessable. The published documents provide information as set out in the table below:

Key documents available to the public	Information included
MPS Privacy Notice:	- Data Controller identity and contact details - Data Protection Officer details - The scope and purposes for processing personal data by the MPS - Data retention periods - Data sharing arrangements - Data security - Rights as a data subject (including access, rectification and erasure) - Complaints (including the right to make a complaint to the ICO and contact details).
MPS policy on protecting special category and criminal convictions	- The MPS approach in relation to protecting and processing special category and criminal convictions data in relation to the data protection principles - The responsibilities of the Data Controller - Information relating to erasure and retention - How further information may be sought.
Existing MPS LFR Documents – already published	
MPS LFR Legal Mandate	- The lawful basis for processing data in relation to LFR. Including in relation to: - Common law policing powers - Police and Criminal Evidence Act 1984 - Human Rights Act 1998 - Equality Act 2010 - Protection of Freedoms Act 2012 - Data Protection Act 2018 - Freedom of Information Act 2000
MPS Policy Document	- An outline, strategic intent and objectives for the use of LFR and how personal data will be used by the LFR system - Key terms used across the MPS LFR Documents - Data retention periods applicable to LFR

			MPS LFR Standard Operating Procedure Processes	- Outlines measures relevant to considering where LFR can be Deployed by the MPS. - Watchlist considerations including the basis on which images may be added to a Watchlist and considerations relevant to the sources of non-police originated imagery. - Provides that during any policing operation where LFR is Deployed officers will be available to assist member of the public with queries, and: - signs publicising the use of the technology must be prominently placed in advance (outside) of the Zone of Recognition; and - any member of the public who is Engaged as part of an LFR Deployment should, in the normal course of events, also be offered an information leaflet about the technology. - Both of these measures will be easy to read and together will ensure those passing the LFR system/who are Engaged by it will have the opportunity to seek further information. Both the signs and leaflets will typically provide an accessible QR code and website link to the MPS website for more information.		
			MPS LFR DPIA	- Describes the nature, scope, context and purposes of the processing. - Assesses necessity, proportionality and compliance measures. - Identifies and assesses risk to individuals. - Identifies any additional measures to mitigate those risks.		
			MPS LFR Appropriate Policy Document	- Explains how the processing of sensitive personal data is compliant with the requirements of Part 3, section 42 of the DPA 2018. - Explains how the MPS complies with the Law Enforcement data protection principles. Outlines policies as regards the retention and erasures of personal data.		
			Understanding The Metropolitan Police Service LFR System's Accuracy and Bias Position	- Explains in a public-facing summary: - how to understand LFR system accuracy; - what the MPS have done to understand its algorithm within an operational context.		
			MPS LFR EIA	Explains the MPS's approach to its responsibilities in relation to the Public Sector Equality Duty.		
			Further FRT Equitability Study Trial Documents – to be published			
			FRT Equitability Study Plan	- Describes the test objectives and necessity case for them. - Outlines the testing methodology and the purposes of each stage of the test methodology.		

				FRT Equitability Study DPIA Annex	• Outlines the process and strategy in relation to demographic testing, data subject numbers and breakdown, images and footage to be captured / processed and the rationale for the numbers and sources selected. • Outlines the retrospective test strategy, tests to be undertaken and rationale for them. • Explains the performance analytic metrics selected, the process for completion and the ongoing need for the retention of the curated dataset for future FR evaluation.		
				FRT Equitability Study DPIA Annex	• Describes the nature, scope, context and purposes of the processing over and above the MPS LFR DPIA (and as visually shown in the FRT Equitability Study Process Summary). • Assesses necessity, proportionality and compliance measures. • Identifies and assesses risk to individuals. • Identifies any additional measures to mitigate those risks.		
				FRT Equitability Study Process Summary	• Outlines the processing activities for the Equitability Study and places them in the context of an operational LFR Deployment. • Outlines the documentation and relationship between MPS, SWP, and NPL in the context of controllership and processors and the associated documentation to support this.		
				FRT Equitability Study Appropriate Policy Annex	• Explains how the processing of sensitive personal data for the purposes of the Equitability Study is compliant with the requirements of Part 3, section 42 of the DPA 2018. • Explains how the MPS complies with the Law Enforcement data protection principles. Outlines policies as regards the retention and erasures of personal data.		

B. Other Individual Rights

2. Having regard to the specific context of the Equitability Study as outlined in box D (above) and the FRT Equitability Study Trial Documents, the following additional updated points are made by way of this Annex to the consideration of the principles set out in the MPS LFR DPIA.

Individual Rights	Likelihood	Impact	Mitigations	Residual Risk	MPS SRO
	L/M/H	L/M/H		L/M/H	Sign Off
Right of Access Unless there is an exemption, not only do individuals have a right to be aware of the data held and being processed about them, in normal circumstances they have a right to verify this too by seeking access to the data the MPS holds on them. When designing the project there is a need to think about how it will enable people to access their data – from having systems to ensure the Data Office come to those responsible for the Project with requests to how data is extracted from the Project to be shared with the individual.	M	L	• The following observations and risk mitigation points (in addition to those which are already in place from the operational use of LFR) combine to ensure that the MPS has facilitated the exercise of individual rights and mitigated the risks which arise from any impact from a failure to do so. • Volunteer Information: All volunteers will be provided with detailed information about the Equitability Study, how their data is used and how they may exercise their individual rights and/or contact the MPS for further details. • Approach to Volunteers to uphold individual rights: Where volunteers have received payment to recompense subjects for their participation, the exercise of individual rights will not result in the claw-back of any payment – this reflects the genuine choice volunteers have to participate and agree to their processing of data. • The URN system: Volunteers will be issued with a URN. The ability to reconcile a name to a URN will rest with the MPS Data Office under the stewardship of the DPO and this is there to enable individual rights rather than any operational activity.	L	Lindsey Chiswick
Right of Rectification If data is not up to date, there is a risk that decisions are being made on the basis of inaccurate information. If inaccuracy becomes apparent, or, if an individual requests correction, systems need to be in place to update (or add to incomplete) information.	L	L	• Awareness measures: These are outlined above in relation to 'legal risk' - they are extensive, reflect a transparent and open approach and equally apply here to ensure that individuals are aware that data is being processed for the purpose of the Equitability Study such that they may consider seeking to access it. The public passing the LFR system will benefit from prior awareness measures which link to the MPS website and privacy information. • Systems used: The FR systems used are capable of responding to updated data requests/deletion requests should a request be made to do so. • Form 3018 processes: Data provided to Equitability Study via the Form 3018 process also	L	Lindsey Chiswick
Right of Erasure and Restriction Individuals have a right to request the deletion or removal of their personal data. They also have a right to block or restrict processing their data going forwards. This request is subject to exemptions to ensure it cannot be used to frustrate policing purposes, or where the request is manifestly unfounded or excessive. However, the Project team does need to ensure there are systems in place to be able to delete data on request and to restrict its further processing. A failure to have systems in place risks individuals losing confidence in the MPS holding only the data it needs and being unresponsive to their lawful requests.	L	M	benefits from a URN. This means if the underlying record is deleted, the URN reference will be used to flag to the Equitability Study that a corresponding deletion of the probe image and meta-data is also required. • Designed in deletion: During an LFR deployment biometric facial templates are immediately and automatically deleted if no Alert is generated. This minimises the need to erase data by deleting data where there is no ongoing purpose for retention. • MPS Privacy Notice: This provides that requests for data erasure or restriction may be provided to the Information Rights Unit at: SARenquiries@met.police.uk or via post to PS Information Rights Unit, PO Box 313, Sidcup, DA15 0HH. • MPS website: This provides the public with a copy of the MPS Privacy Notice that details how the right to erasure or restriction may be exercised. • MPS LFR Documents / FRT Equitability Study Trial Documents: These provide detailed safeguards around the use of data and how it will be held and managed. This is further supported by the processing agreement with NPL to ensure individual rights requests can be facilitated. • MPS policy: and guidance is provided by the MPS's Information Rights Unit to ensure the MPS complies with this legal obligation. • The DPO Role: The MPS DPO is an integral role to the processing of personal data and the upholding of individual rights, providing scrutiny, challenge, advice to do so.	M	Lindsey Chiswick

3. Whilst Part III does not include a right to object to data processing in the terms found in UK GDPR, the MPS has nevertheless considered the ability to raise an objection in the context of ensuring proportionality to its activity. The awareness measures ensure data subjects are made aware and lead to the ability to exercise a choice about their involvement and how their data is processed.

   a. **Those passing the FR system**: Signage, the MPS webpages and MPS social media act to flag to those passing the FR system that data processing for the purposes of the Equitability Study is taking place. It is not an offence not to pass the FR system and there, individuals have a genuine choice whether to do so or no. Individual rights are flagged, and may be exercised to reinforce this position after data capture.

   b. **Those on the filler dataset**: The awareness raising measures represent a reasonable approach in the circumstances (having regard to the numbers used and that it would be unviable to make individual contact) to making those who have had a custody image taken aware that that data may be used as part of the filler dataset for research purposes. This is coupled with the right of access and the URN system to ensure that these data subjects can understand if their data has been processed for the purposes of the Equitability Study. They may then seek to exercise their individual rights as regards the processing of these personal data.

   c. **The volunteers are made aware through the use of information details** - written in a style appropriate to the volunteer, and consent forms. Whilst consent, is not a legal basis for the processing of data (as described in this DPIA, strict necessity is) this reflects that the volunteer nature of their role and is a further measure to ensure proportionality – if the volunteers do not wish to, they do not have to participate. The fee will not be clawed back should they decide to withdraw from the Equitability Study.

Data Protection Impact Assessment Annex Sign-off

DPIA Annex Signature

1.	**Project Sponsor**
	Sign Below: As SRO for this Equitability Study, I confirm that I am satisfied with the law enforcement purpose and value to policing it will deliver. The necessity and proportionality of the data processing has been carefully considered. Careful attention has been paid to the rights and freedoms of those individuals involved and considered safeguards have been put in place to mitigate outstanding risks. Lindsey Chiswick
	Name: Lindsey Chiswick
	Position: Director of Intelligence
	Date: 5th July 2022
2.	**Data Protection Officer**
	I have reviewed this document and otherwise have been involved throughout the lifecycle of the development of the core DPIA to which this DPIA Annex forms an integral part. This has ensured that observations and their responses have been incorporated dynamically within the drafting. The documents taken together provide a comprehensive analysis of the privacy issues and appropriate mitigations. The arguments for conducting an equitability study are persuasive, building upon NIST testing to deliver the capability to analyse performance in real world use under the stewardship of the NPL a world leading 'standards' laboratory. I note in particular steps to ensure a justifiable balance between transparency and foreseeability alongside measure to ensure that individual rights may be upheld. Likewise the design which separates operational function from research and testing is an important measure to eradicate the potential for mission creep. The MPS approach towards the use and testing of facial recognition technologies appears to me to be measured and incremental under solid senior arrangements for oversight and governance. This ensures that learning is always factored into the design of each new step. Having considered this Annex, I am content that mitigation is such that no residual high risks to the rights and freedoms of individuals remain and therefore this processing may commence. *Darren Curtis*
	Name: Darren Curtis

	Position: DPO
	Date: 04.07.2022

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