MOPAC MAYOR OF LONDON OFFICE FOR POLICING AND CRIME

DMPC Decision - PCD 1137

Title: Video Analytics CCTV

Executive Summary:

This decision concerns approval to commence a procurement process for a video analytics capability to enable more effective review of CCTV/video footage.

The current processes for reviewing CCTV are archaic and highly labour intensive. The MPS will benefit from a Video Analytics capability to enable more effective review of CCTV/video footage by using search algorithms. Procurement of such a tool will support the investigative process and provide a chance to realise significant benefits in terms of officer time taken to identify and bring suspects to justice.

Recommendation:

The Deputy Mayor for Policing and Crime is recommended to:

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 Approve the commencement of a mini-competition/Request for Proposal (RFP) exercise for the requirement utilising the CDW/Mint Commercial Services LLP (previously EMSCU) ICT Value Added Reseller (VAR) Framework Agreement as the route to market. This will allow the MPS to identify a strategic and scalable solution and establish the total cost of ownership for a Video Analytics CCTV platform.

Deputy Mayor for Policing and Crime

I confirm I have considered whether or not I have any personal or prejudicial interest in this matter and take the proposed decision in compliance with the Code of Conduct. Any such interests are recorded below.

The above request has my approval.

Signature

Date

21/02/2022

PART I - NON-CONFIDENTIAL FACTS AND ADVICE TO THE DMPC

1. Introduction and background

- 1.1. The current investigative process for CCTV/video viewing and analysis is a manual labour-intensive task for officers which incurs a huge amount of overtime claims from CCTV Officers responding to urgent requests for analysis. A proof of concept of a Video Analytics tool was undertaken by Specialist Crime Homicide Command and established the benefits of such a tool to the MPS in terms of time savings and efficiencies in analysing CCTV/video footage and identifying persons of interest.
- 1.2. Video Analytics applications have the capability to rapidly analyse video for any attributes of any objects (based upon shape, size, colour etc.), these objects could be inanimate such as bags, clothing or jewellery or they can be animate such as heads or hands. The mathematical algorithms within the application and the artificial intelligence developed through training of the application enables it to recognize any item that has the same attributes as the one the application is being asked to search for.
- 1.3. The MPS now seeks to undertake a market scan with the main objective for any Video Analytics tool being to assist investigators in locating instances of Persons of Interest appearing in CCTV quickly and efficiently from relevant video footage. This will be done by utilizing all available analytic engines to find all movement, images and objects within the footage and indexing each video to allow for speedy review and search using image and object detection algorithms.
- 1.4. Any images of persons of interest located within the footage will be subject to human review and form part of the normal investigation package. For the avoidance of doubt the Video Analytics CCTV tools do not require a facial recognition algorithm for the purposes of identifying subjects of interest. The tool needed instead will rapidly analyse video for any attributes of any objects (based upon shape, size, colour etc.) to help officers pick out images of relevance in large volumes of CCTV footage.
- 1.5. Whilst the MPS will specifically be looking for capabilities to search video footage for objects and images and return them with precision and accuracy, it is prudent that any market scan reveal the full capabilities of any products offered a number typically feature 'value add capabilities'. One of these capabilities may be 'clustering'. Clustering is where the user can take a face of a person, have it biometrically templated, and ask the tool to locate where else in the video footage that face appears this is a form of facial recognition. The MPS' present requirements under this market scan do not include a need for clustering to be part of any provider's offering. Indeed, should it be so, the MPS would want to confirm it can be switched on/off. However, in order to understand each tool's full offering, they will seek to ask questions that confirm the nature of all capabilities offered, even if they are not central to the MPS's Video Analytics CCTV need.

2. Issues for consideration

- 2.1. A Video Analytics CCTV tool will replace a lot of manual work and will be a key tool for bringing criminals to justice quicker. Such a tool will of course still require 'human inthe-loop' verification so that any analytics are complemented by embedded human decision-making.
- 2.2. Retention of data will follow Criminal Procedure and Investigation Act (CPIA) procedure and Management of Police Information (MoPI) rules.
- 2.3. A fully costed paper will be submitted with recommendations once a suitable product/vendor identified.
- 2.4. A DPIA shall be undertaken before a new Video Analytics tool is deployed.

3. Financial Comments

3.1. This proposal is not seeking funding at this point. If the mini competition is successful the intention is that the service would need to be funded from reprioritising Digital Policing (DP) budgets but it is likely there would need to be additional savings generated from elsewhere within the organization.

4. Legal Comments

- 4.1. Any use of video analytics technology needs to be in accordance with the law. The legal framework includes the Data Protection Act 2018, the UK GDPR, Human Rights Act 1998, Equality Act 2010 and The Protection of Freedoms Act 2012 (given its relevance to CCTV footage). The process of identifying a suitable vendor will enable diligence to be undertaken as regards matters such as precision and recall so that legal compliance can be determined.
- 4.2. MOPAC is a contracting authority as defined in the Public Contracts Regulations 2015(the Regulations). All awards of public contracts for goods and/or services valued at £189,330 or above shall be procured in accordance with the Regulations. This report confirms the value of the proposed contract exceeds this threshold. The engagement with the market will make it clear that the proposal is presently un-costed and as a result does not guarantee that any bidder, even if successful, will be progressed.
- 4.3. This report confirms the procurement will utilise the CDW/Mint Commercial Services LLP (previously EMSCU) ICT VAR Framework to conduct a request for proposal exercise (RFP) / mini-competition process. The MPS is a named police force on the Framework Agreement and (as confirmed by TLT Solicitors) on this basis the MOPAC's route to market is compliant with the Regulations.
- 4.4. The MOPAC Scheme of Delegation and Consent provides the Deputy Mayor for Policing and Crime (DMPC) has delegated authority to approve:
 - 1. Business cases for revenue or capital expenditure of £500,000 and above (paragraph 4.8); and

- 2. All requests to go out to tender for contracts of £500,000 or above, or where there is a particular public interest (paragraph 4.13).
- 4.5. Paragraph 7.23 of the Scheme provides that the Director of Strategic Procurement has consent for the approval of the award of all contracts, with the exception of those called in through the agreed call in procedure. Paragraph 4.14 of the Scheme provides the DMPC reserves the right to call in any MPS proposal to award a contract for £500,000 or above.

5. Commercial Issues

5.1. This is a request to approve a compliant route to market via the CDW/Mint value added reseller framework. This reflects a need to undertake significant vendor diligence prior to taking any proposal forward. The RFP/mini competition is in place of the direct award option, via the Framework Agreement. The RFP exercise will ensure that the MPS have conducted a fair, open and transparent competition process. The result of the mini competition is not seeking to spend any money at this stage and this will be made clear in the tender documentation. It will also be explained to the bidders that their pricing submissions need to be valid for a period of 6 months, and that this is an unfunded bid.

6. GDPR and Data Privacy

- 6.1. The MPS is subject to the requirements and conditions placed on it as a 'State' body to comply with the European Convention of Human Rights and the Data Protection Act (DPA) 2018. Both legislative requirements place an obligation on the MPS to process personal data fairly and lawfully in order to safeguard the rights and freedoms of individuals.
- 6.2. Under Article 35 of the General Data Protection Regulation (GDPR) and Section 57 of the DPA 2018, Data Protection Impact Assessments (DPIA) become mandatory for organisations with technologies and processes that are likely to result in a high risk to the rights of the data subjects.
- 6.3. The Information Assurance and Information Rights units within MPS will be consulted at all stages to ensure the project meets its compliance requirements.
- 6.4. A DPIA will be required for this project and the selection of the vendor is crucial to the completion of the DPIA. The project will ensure a privacy by design approach, which will allow the MPS to find and fix problems at the early stages of any project, ensuring compliance with UK data protection legislation. DPIAs support the accountability principle, as they will ensure the MPS complies with the requirements of UK data protection legislation and they demonstrate that appropriate measures have been taken to ensure compliance.

7. Equality Comments

7.1. As part of the Request for Proposal process the MPS shall take reasonable steps to satisfy itself that the product selected means the MPS can be satisfied of complying with its Public Sector Equality Duty (PSED) duties and data protection obligations. The MPS will develop policy with regards to the use of Video Analytics for policing needs. As this capability will involve an artificial intelligence (AI) tool all reasonable steps will be taken to understand the algorithms used and to satisfy the MPS that the product selected allows it to use the Video Analytics capability effectively, ethically and lawfully.

8. Background/supporting papers

8.1. Report

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FOIA) and will be made available on the MOPAC website following approval.

If immediate publication risks compromising the implementation of the decision it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary.

Part 1 Deferral:

Is the publication of Part 1 of this approval to be deferred? NO

If yes, for what reason:

Until what date:

Part 2 Confidentiality: Only the facts or advice considered as likely to be exempt from disclosure under the FOIA should be in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a Part 2 form - YES

ORIGINATING OFFICER DECLARATION	Tick to confirm statement (✓)
Financial Advice: The Strategic Finance and Resource Management Team has been consulted on this proposal.	✓
Legal Advice:	
The MPS legal team has been consulted on the proposal.	✓
Equalities Advice: Equality and diversity issues are covered in the body of the report.	√
Commercial Issues The proposal is in keeping with the GLA Group Responsible Procurement Policy.	√
 GDPR/Data Privacy GDPR compliance issues are covered in the body of the report. A DPIA will be completed. 	✓
Drafting Officer Craig James has drafted this report in accordance with MOPAC procedures.	✓
Director/Head of Service: The Chief Finance Officer has reviewed the request and is satisfied it is correct and consistent with the MOPAC's plans and priorities.	✓

Chief Executive Officer

I have been consulted about the proposal and confirm that financial, legal and equalities advice has been taken into account in the preparation of this report. I am satisfied that this is an appropriate request to be submitted to the Deputy Mayor for Policing and Crime.

Signature

Date 11/02/2022

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Video Analytics CCTV

MOPAC Investment Advisory & Monitoring meeting - 03rd November 2021

Report by John Clarke on behalf of the Chief of Corporate Services

Part 1 – This section of the report will be published by MOPAC. It is classified as OFFICIAL – PUBLIC

EXECUTIVE SUMMARY

The current processes for reviewing CCTV are archaic and highly labour intensive. The MPS will benefit from a Video Analytics capability to enable more effective review of CCTV/video footage by using search algorithms. Procurement of such a tool will support the investigative process and provide a chance to realise significant savings in terms of officer time taken to identify and bring suspects to justice.

Recommendations

The Deputy Mayor for Policing and Crime, via the Investment Advisory and Monitoring meeting (IAM), is asked to:

 Approve the commencement of a mini-competition/Request for Proposal (RFP) exercise for the requirement utilising the CDW/ Mint Commercial Services LLP (previously EMSCU) ICT VAR Framework Agreement as the route to market. This will allow the MPS to identify a strategic and scalable solution and establish the total cost of ownership for a Video Analytics CCTV platform.

Time sensitivity

A decision is required from the Deputy Mayor by 31/12/2021. This is to allow sufficient time to explore the market, find a suitable solution/vendor and return a fully costed paper to enable funding within this financial year. The business groups are seeing unprecedented levels of demand for CCTV investigations with increases in serious violence across London and would need to have a solution in place as soon as possible in order to eliminate manual processes and improve efficiencies.

Non-confidential facts and advice to the Deputy Mayor for Policing and Crime

Introduction and background

1. The current investigative process for CCTV/video viewing and analysis is a

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manual, labour intensive task for officers which incurs a huge amount of overtime claims from CCTV Officers responding to urgent requests for analysis. A proof of concept of a Video Analytics tool was undertaken by Specialist Crime Homicide Command and established the benefits of such a tool to the MPS in terms of time savings and efficiencies in analysing CCTV/video footage and identifying persons of interest.

- Video Analytics applications have the capability to rapidly analyse video for any attributes of any objects (based upon shape, size, colour etc.), these objects could be inanimate such as bags, clothing or jewellery or they can be animate such as heads or hands. The mathematical algorithms within the application and the artificial intelligence developed through training of the application enables it to recognize any item that has the same attributes as the one the application is being asked to search for.
- 3. The MPS now seeks to undertake a market scan with the main objective for any Video Analytics tool being to assist investigators in locating instances of Persons of Interest appearing in CCTV quickly and efficiently from relevant video footage. This will be done by utilizing all available analytic engines to find all movement, images and objects within the footage and indexing each video to allow for speedy review and search using image and object detection algorithms.
- 4. Any images of persons of interest located within the footage will be subject to human review and form part of the normal investigation package. For the avoidance of doubt the Video Analytics CCTV tools do **not** require a facial recognition algorithm for the purposes of identifying subjects of interest. The tool needed instead will rapidly analyse video for any attributes of any objects (based upon shape, size, colour etc.) to help officers pick out images of relevance in large volumes of CCTV footage.
- 5. Whilst the MPS will specifically be looking for capabilities to search video footage for objects and images and return them with precision and accuracy, it is prudent that any market scan reveal the full capabilities of any products offered a number typically feature 'value add capabilities'. One of these capabilities may be 'clustering'. Clustering is where you can take a face of a person, have it biometrically templated, and ask the tool to locate where else in the video footage that face appears this is a form of facial recognition. Our present requirements under this market scan do not include a need for clustering to be part of any provider's offering. Indeed, should it be so, we would want to confirm it can be switched on/off. However, in order to understand each tool's full offering, we will seek to ask questions that confirm the nature of all capabilities offered, even if they are not central to the MPS's Video Analytics CCTV need.

Issues for consideration

- 6. A Video Analytics CCTV tool will replace a lot of manual work and will be a key tool for bringing criminals to justice quicker. Such a tool will of course still require 'human in-the-loop' verification so that any analytics are complimented by embedded human decision-making.
- 7. Retention of data will follow Criminal Procedure and Investigation Act (CPIA)

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- procedure and Management of Police Information (MoPI) rules.
- 8. A fully costed paper will be submitted with recommendations once a suitable product/vendor identified.
- 9. A DPIA shall be undertaken before a new Video Analytics tool is deployed.

Contributes to the MOPAC Police & Crime Plan 2017-2021¹

10. This proposal supports making our communities safer by helping the MPS to bring suspects to justice quicker. Video Analytics will reduce the time taken to identify offenders and as such will support the delivery of improved criminal justice outcomes.

Financial, Commercial and Procurement Comments

- 11. This proposal is not seeking funding at this point. If the mini competition was to be successful the intention is that the service would need to be funded from reprioritising DP budgets but it is likely there would need to be additional savings generated from elsewhere within the organization.
- 12. This is a request to approve a compliant route to market via the CDW/MINT value added reseller framework. This reflects a need to undertake significant vendor diligence prior to taking any proposal forward. The RFP/mini competition is in place of the direct award option, via the Framework Agreement, it will reduce external/internal challenges and risks at Board level or from unsuccessful Framework Agreement supplier/s etc. The RFP exercise will ensure that we have conducted a fair, open and transparent competition process. The result of the mini competition is not seeking to spend any money at this stage and will be made clear in the tender documentation. It will also be explained to the bidders that their pricing submissions need to be valid for a period of 6 months, and that this is an unfunded bid.

Legal Comments

- 13. Any use of video analytics technology needs to be in accordance with the law. The legal framework includes the Data Protection Act 2018, the UK GDPR, Human Rights Act 1998, Equality Act 2010 and The Protection of Freedoms Act 2012 (given its relevance to CCTV footage). The process of identifying a suitable vendor will enable diligence to be undertaken as regards matters such as precision and recall so that legal compliance can be determined.
- 14. MOPAC is a contracting authority as defined in the Public Contracts Regulations 2015 (the Regulations). All awards of public contracts for goods and/or services valued at £189,330 or above shall be procured in accordance with the Regulations. This report confirms the value of the proposed contract exceeds this threshold. The engagement with the market will make it clear that the proposal is presently un-costed and as a result does not guarantee that any bidder, even if successful, will be progressed.

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¹ Police and crime plan: a safer city for all Londoners | London City Hall

- 15. This report confirms the procurement will utilise the CDW/Mint Commercial Services LLP (previously EMSCU) ICT VAR Framework to conduct a request for proposal exercise (RFP) / mini-competition process. The MPS is a named police force on the Framework Agreement and (as confirmed by TLT Solicitors).
- 16. On this basis the MOPAC's route to market is compliant with the Regulations.

Equality Comments

17. As part of the Request for Proposal process the MPS shall take reasonable steps to satisfy itself that the product selected means the MPS can be satisfied of complying with its Public Sector Equality Duty (PSED) duties and data protection obligations. The MPS will develop policy with regards to the use of Video Analytics for policing needs. As we are looking at an artificial intelligence (AI) tool all reasonable steps will be taken to understand the algorithms used and to satisfy the MPS that the product selected allows it to use the Video Analytics capability effectively, ethically and lawfully.

Privacy Comments

- 18. The MPS is subject to the requirements and conditions placed on it as a 'State' body to comply with the European Convention of Human Rights and the Data Protection Act (DPA) 2018. Both legislative requirements place an obligation on the MPS to process personal data fairly and lawfully in order to safeguard the rights and freedoms of individuals.
- 19. Under Article 35 of the General Data Protection Regulation (GDPR) and Section 64 of the DPA 2018, Data Protection Impact Assessments (DPIA) are mandatory where the relevant proposed processing activity is likely to result in a high risk to the rights and freedoms of the data subjects.
- 20. The Information Assurance and Information Rights units within MPS will be consulted at all stages to ensure the project meets its compliance requirements.
- 21. A DPIA will be required for this project and the selection of the vendor is crucial to the completion of the DPIA. The project will ensure a privacy by design approach, which will allow the MPS to find and fix problems at the early stages of any project, ensuring compliance with UK data protection legislation. DPIAs support the accountability principle, as they will ensure the MPS complies with the requirements of UK data protection legislation and they demonstrate that appropriate measures have been taken to ensure compliance.

Real Estate Implications

22. No implications.

Environmental Implications

23. No implications.

Background/supporting papers

24. Nil.

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Report author: Simon Clarke, Business Engagement Manager.

<u>Part 2 – This section refers to the details of the Part 2 business case which is</u> NOT SUITABLE for MOPAC Publication.

The Government Security Classification marking for Part 2 is: OFFICIAL-SENSITIVE [COMMERCIAL]

Part 2 of **Video Analytics CCTV** is exempt from publication for the following reasons:

- Exempt under Article 2(2)(a) of the Elected Local Policing Bodies (Specified Information) Order 2011
- Exempt under Section 43 (Commercial Interests) of the Freedom of Information Act 2000.

The paper will continue to be exempt until after any contract has been awarded.