MOPAC | MAYOR OF LONDON
OFFICE FOR POLICING AND CRIME

REQUEST FOR DMPC DECISION – DMPCD 2016 86

Title: Next Generation Forensics

Executive Summary:

This paper requests approval for further funding to enable the Full Business Case (FBC) for LabNet (phase 2) to be completed.

Recommendation:

The DMPC is asked to

1. Approve additional funding from the approved capital programme for supplier engagement, technical design and FBC completion.
2. Approve £80k drawdown from the Digital Policing reserves to extend the interim support for LabNet phase 1.

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 Sophie Linden. **Date** 18/11/2016.

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

Decision required – supporting report

1. Introduction and background

1.1. The project will deliver a fully connected and corporately-supported IT infrastructure to manage digital evidence and facilitate its efficient processing. This infrastructure, supporting the Next Generation Digital Forensics Operating Model, is known as LabNet.

1.2. The first phase delivered the LabNet infrastructure for Digital, Cyber and Communications (DCC) labs. This funding request is to complete the FBC for LabNet (phase two).

2. Issues for consideration

2.1. These are discussed in the Part 2.

3. Financial Comments

3.1. Until the FBC is complete it will not be clear what the total cost of the project will be. This additional funding request is caused by the 5 month delay to the project.

3.2. The paper requests the release of £80k from the Digital Policing reserves.

4. Legal Comments

4.1. There are no legal implications arising from this report. the community.

5. Equality Comments

5.1. There are no direct equality or diversity implications arising from this report

6. Background/supporting papers

6.1. None.

Public access to information Information in this form is subject to the Freedom of Information Act 2000 (FOIA) and other legislation. Part 1 of this form will be made available on the MOPAC website within 1 working day of approval. Any facts/advice/recommendations that should not be made automatically available on request should not be included in Part 1 but instead on the separate Part 2 form. Deferment is only applicable where release before that date would compromise the implementation of the decision being approved.
Part 1 Deferral: Is the publication of Part 1 of this approval to be deferred ? NO
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 rational for non-publication. Is there a **part 2** form – Yes If yes, for what reason: EXEMPT under Article 2(2)(c) of the Elected Local Policing Bodies (Specified Information) Order 2011.

ORIGINATING OFFICER DECLARATION:

	Tick to confirm statement (✓)
Head of Unit: The Head of Strategic Finance and Resource Management has reviewed the request and is satisfied it is correct and consistent with the MOPAC's plans and priorities.	√
Legal Advice: The MPS legal team has been consulted on the proposal.	√
Financial Advice: The Head of Strategic Finance and Resource Management has been consulted on this proposal.	√
Equalities Advice: No Equality and Diversity issues identified.	√

OFFICER APPROVAL

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 R. Lawrence **Date** 9/11/16

METROPOLITAN POLICE

TOTAL POLICING

Met Change Programme - Next Generation Forensic Infrastructure

Labnet OBC Update (Stage Gate 3)

Investment Advisory Board 20 October 2016

Freedom of Information Act Publication Scheme	
Protective Marking	[redacted]
Publication Scheme Y/N	N
Title	MetChange Programme - Next Generation Forensic Infrastructure – Labnet OBC Update August 2016
Version	1.10
Summary	Sets out the business case for further investment in the FBC process to support Digital Forensics' 3-tier model
(B)OCU or Unit, Directorate	Forensic Services
Review Date	
Date Issued	28th of September 2016

[redacted]

References

Version	Date	Document Title	Author

Glossary

Term	Description
Labnet	Labnet refers to the DCC infrastructure connecting Central Labs, Digital Hubs, Self Service Equipment and MPS Datacentre. It includes data storage and compute capabilities, a gateway to Aware and Remote Search & Review functionality
DEFS	Digital & Electronic Forensic Services
DCC	Digital & Cyber Crime
ISO 17025	General requirements for the competence of testing and calibration laboratories
WAN	A wide area network (WAN) is a telecommunications network or computer network that extends over a large geographical distance. Wide area networks often are established with leased telecommunication circuits.

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1 Executive Summary

1.1 Background

The project will deliver a fully connected and corporately-supported IT infrastructure to manage digital evidence and facilitate its efficient processing. This infrastructure, supporting the Next Generation Digital Forensics Operating Model, is known as Labnet.

The first phase delivered the Labnet infrastructure to the DCC labs. It has since been moved following the relocation of DCC. In addition, telecommunication supplier has commenced the installation of data links between the data centre and eight forensic hub locations around the MPS estate. To date, the new infrastructure has facilitated easier communication between forensic teams, simplified the management of product licences and lessened reliance on removable media within DCC labs.

1.2 Purpose of Document

This paper is to request further funding to complete the Full Business Case (FBC) for Labnet (phase two). We have experienced delays in completing the infrastructure design and implementation plans, along with delays in selecting and procuring the search and review software, meaning that funds have been depleted. If granted, the new funding will cover design work, software selection for the new Remote Search & Review capability, project team costs for the completion of the FBC, and support for the first phase of Labnet already in operation.

The second phase, following approval of the FBC, will deliver the following components:

- A Digital Evidence Store (DES) within the MPS data centre to store data extracted from mobile phones, computers and other digital devices
- A Remote Search & Review tool to enable officers to examine data from confiscated devices without intervention from either MPS forensic technicians or external service providers - saving time and money
- Completion of the data link installation and associated technology to provide accessibility to Labnet from locations across the MPS estate

1.3 Decision Required by Board

The Investment Advisory Board is requested to approve the release of:

- **Additional capital from the approved 2016/17 capital programme for supplier engagement, technical design and FBC completion. This is more than the original request in the OBC**
- **£80k revenue drawdown from the budgeted DP reserves to extend the interim support for Labnet phase one which has been built into the project's current revenue budgets.**

The key issues the board needs to take account of are:

- The delays in this project means anticipated savings will not be achieved in 2016/17, but delayed to 2017/18. However these savings have not been built into Forensics 2016/17 budget so represent a lost opportunity rather than a budget pressure.
- These costs were not included in the original estimates for the production of the FBC as the original OBC did not account for additional costs following transition to new suppliers, including the need to pay for proposals and extended project team costs following delays.
- Total project spend on Phases 1 and 2 of Labnet is now projected to be ~£6.1m.
- The project has delivered change for Labnet phase one and commenced the installation of the Labnet WAN.

- The revenue budget for the current programme is projected to have a £40k shortfall in 2017/18 it is anticipated that this will be funded from cashable savings.
- Connection of forensic hubs and kiosks to Labnet requires phase two to proceed. We will have no benefit from the prior investment in WAN links without phase two, and will remain reliant on removable media.

2 The Strategic Case

This section has been taken from the previous OBC and is included for context and reference. Minor changes have been made to bring it up to date with completed project tasks. This OBC extension does not change the overall strategic case for the project.

2.1 Introduction

In July 2015, JIB formally approved an OBC to deliver the first phase of Labnet. This phase replaced a number of failing networks with a single, robust and greatly expanded platform. An additional amount was also awarded to undertake analysis and design for the second phase, which would expand Labnet to connect digital forensic facilities across the Met. It is this connectivity that will release the full benefits of the new infrastructure.

An OBC was presented to PIB in November 2015 to deliver WAN connectivity to forensics hubs, prepare the FBC and support Labnet (phase one). There are to be eight forensic hubs across the MPS estate; on completion of Labnet phase two, each will have its own dedicated staff resource and 1Gb/sec network link (procured through the existing MOPAC contract). Additionally, there will be 80 kiosk facilities, each of which requires a link to Labnet. This will facilitate remote upload of data from seized devices to Labnet by front line officers and avoid the ongoing use of removable media and associated time delays. However, for the realisation of any discernable benefit from these facilities, the MPS requires a centralised store for digital evidential data, together with a means for officers to review this data from locations across the estate.

This OBC Extension is for the further funding to cover design work, Remote Search & Review supplier engagement, Labnet support beyond December 2016 and project team costs to complete the FBC following substantial engagement with suppliers.

Part A: the strategic context

2.2 National context

"Flows of data are becoming a torrent. Ensuring the Met is organisationally ready not only to handle the torrent but to harness its energy is a strategy necessity"

RSA report – Safer Together – Policing a Global City in 2020

As outlined in the OBC, policing is facing what has been referred to as "Digital Tidal Wave". The profile of digital crime is changing at a faster rate than other types of crime and represents a growth area of business for the MPS. Even non-digital crimes involve the seizure of digital devices from offenders as part of the custody and investigation process, meaning that the demands on digital forensics services are far higher than indicated by e-Crime or similar figures. Requirements to capture all relevant intelligence from offenders to provide police with a holistic view of offending necessitate a new, more flexible and cost effective Forensic Services Model.

The combination of electronic devices becoming more pervasive and the cost and size of digital storage decreasing has led to significant increases in the quantity of storage being seized, forensically imaged and investigated. This information plays an increasingly important role in demonstrating a suspect's involvement with a wide range of criminal offences including volume crime, organised crime and terrorism.

Standard approaches rely on a digital forensic examiner interacting with the seized exhibits, providing information to an investigator and then acting on the investigator's requests for additional information. Both the examiner and investigator have relevant skills and knowledge to bring to bear on the investigation but they are often applied independently and sequentially in a time consuming, back-and-forth process.

Efficient and timely extraction, transportation and storage of this data, along with the ability to automate some aspects of the analysis are fundamental to the future of digital forensics.

2.3 MPS context

A 3-tier model for DCC has been approved. This model:

1. Recognises the increase in demand for digital forensics and its value in crime investigation and seeks to make best use of available technology to introduce efficiencies both in terms of resource levels and turn around times.
2. Provides front line officers and investigators from across the organisation access to local Self Service Equipment where digital data and information may be extracted from devices by the officers at the front line.
3. Complements the Self Service Equipment by area supported Digital Hubs where officers can use equipment or seek the assistance of technicians in the extraction of data from more complex devices.
4. Reduces the submission into a team of digital experts enabling them to focus on complex casework thus reducing the external forensic spend.

The relocation and centralisation of Forensics capabilities and the installation of self-service kiosks across the MPS have now been completed. However, these elements are reliant on the Labnet infrastructure to enable officers and staff to operate more efficiently. The transition to the SIAM towers model has proved challenging: Our service provider, is responsible for liaising with multiple suppliers to evaluate solutions and costs. The Towers are now in a position to engage and develop proposals, but there is a cost for these proposals. The project is therefore requesting further funding to cover these costs.

Part B: the case for change

2.4 MPS business need for this investment

Within the Met Change Programme, Forensic Services was set the target of delivering cost reduction and efficiency improvements without a reduction in levels of service or quality of service. In order to do so, transformational change in the way forensics has been delivered is required, making use of process automation and efficiencies only possible through a total overhaul of existing IT.

DCC are too reliant on external Forensic Service Providers (FSPs). Currently, 5% of audio-visual and 70% of computer and phone examinations are done by FSPs. Work is allocated through a framework, but the process is cumbersome.

This investment in Labnet is therefore required in order to:

- Respond to expected growth in digital data
- Take advantage of latest technologies
- Bring infrastructure under support and gain accreditation
- Improve efficiency

2.5 Potential Business Scope and key service requirements

As described in the original OBC, which was approved by JIB on 27th July 2015 and in order to satisfy the objectives listed in the previous section, the next generation forensics model depends on the provision of adequate network connectivity between MPS Datacentre and:

1. Self Service Equipment
2. Digital Forensic Hubs
3. Central DCC Labs

This connectivity forms the backbone of Labnet.

2.6 Main Benefits Criteria

The main benefits for the project delivery following FBC approval are:

1. Increased accessibility of digital forensic tools for front line officers supported by regional digital hubs to deliver real time extraction of digital information to speed up investigations
2. An increased focus on proportionate and adequate practitioner resource levels to meet demand for each service area.
3. Reduced reliance on burning and transporting DVDs and other physical media to transport digital forensic assets between the place of extraction and the investigator
4. A reduction in the need to move between locations to view specific types of data, allowing users to work across different types of digital data at a single location
5. Reduction in the number of suspects in custody 'bailed to return'
6. To support MPS data Review, Retention and Disposal (RRD) policies for digital forensic data
7. To support accreditation of digital forensic infrastructure and systems

2.7 Key Risks and Assumptions

Below is a summary of the risks used throughout the OBC Extension:

Description	Mitigations	Impact
Long procurement timescales delay implementation	Early engagement with suppliers and selection of most effective procurement routes	
Inbound dependency on NGFS Systems Project	Risk to be managed with the relevant project	
Outbound dependency on the rollout of Digital Forensic Hubs (i.e. links not in place to support these)	Risk to be managed with the relevant project	
Self Service Equipment capabilities/functionality/technical design developed in isolation and do not support project objectives	Risk to be managed with the relevant project	

2.8 Assumptions

Description
Current funding allocated to the NGFI will remain allocated on the Capital Plan
The model for the growth of digital data growth model used to define the volumetrics is accurate
The MPS remain committed to implementing the Next generation Forensics Model

3 The Economic Case

3.1 Overview

As the options for delivering the Forensic infrastructure were already given in the original OBC, this paper will not repeat these. The context has already been given in the strategic case.

The economic case will describe the options for completing this project following delays. The Labnet project has now been delayed following two issues: delays to the Labnet infrastructure design, and delays to the initiation of supplier engagement for the Remote Search & Review tool. The root cause of the ongoing problems with the Labnet development has been issues with supplier engagement and capability. The transition to the SIAM towers model has proved challenging: Our service provider, is responsible for liaising with multiple suppliers to evaluate solutions and costs. Towers are now in a position to engage and develop proposals, but there is a cost for these proposals. The project is therefore requesting further funding to cover these costs.

The Labnet project has also been impacted by delays to the initiation of supplier engagement for the Remote Search & Review tool. Remote Search and Review is an entirely new concept for the MPS and the team have deliberately avoided trying to compile precise business requirements, instead preferring to focus on what may be both realistic and possible to achieve. In June 2016 we went to market with an ITT for the remote search & review work. However, our rejection of a prescriptive approach - with detailed information about data volumes and usage patterns - in favour of something more investigative in nature has left suppliers reluctant to engage with us and provide the fixed price quotation requested. Three of the seven companies we approached signalled their explicit intent not to bid for the work. Given the likelihood that no responses would be received ahead of the deadline, the decision was made to pause the Procurement process to allow us to take stock and consider options for a more constructive supplier engagement. Unfortunately this means that we have still received no cost indications for this work and are unlikely to do so until **December 2016** at the earliest. The potential impact of this is that the project will not return to PIB with an FBC until January 2017, although the team are exploring opportunities to accelerate this.

As a result of the delays, the project team and the interim support arrangements for Labnet1 need to be extended for five months. The project is therefore requesting additional funding for FY16/17

As a result of the delays, the benefits will now not be achievable in 2016/17 but will be achievable in 2017/18 following project delivery and successful implementation of business process change. These savings were not built into the Forensics 2016/17 budget so represent a lost opportunity rather than a budget pressure.

4 The Commercial Case

4.1 Overview

This is not changing from the original OBC. Software procurement is through Insight and the SIAM towers will provide the IT delivery though the existing contract.

The provisional timetable for software selection is:

Month	Duration	Task
August	3 weeks	Plan procurement process Review ITT documentation
	1 week	Restart Procurement Process Redistribute ITT/Supplier documentation
September	2 weeks	Supplier evaluation time
	1 day	Supplier engagement day
	1 week	Clarification phone calls with suppliers
	3 weeks	Supplier response time
October	2 weeks	MPS scoring/evaluation exercises
	1 day	Identify and inform top 3 bidders
	1 week	Supplier preparation time
November	3 weeks	Proof of concept engagement phase
	1 week	MPS re-scoring and evaluation
December	1 day	Notify winning bidder

The initial design work will be completed by an external agency procured through Insight, the MPS VAR. This forms part of the work from the previous monies allocated to the project.

The integration and execution of the design will be completed by the SIAM towers through the MPS ICT contracts. The installation of the selected software will be completed by the application SIAM tower.

5 The Financial Case

5.1 Summary

This section of the OBC Extension sets out the updated request for funding of this project alongside the previous request to show a complete financial approach. Until the FBC is complete it will not be clear what the total cost of the project will be. This additional funding request is caused by the 5 month delay to the project

Revenue Impact:

The paper requests the release of £80k from DP reserves. Any further expenditure above this will need to follow relevant governance processes.

6 The Management Case

6.1 Introduction

This section of the OBC Extension addresses the 'achievability' of the scheme. Its purpose, therefore, is to set out in more detail the actions that will be required to ensure the successful delivery of the scheme in accordance with best practice.

This OBC Extension relates only to the provision of software selection and infrastructure and service design aspects required to deliver the OBC

This is required to support the introduction of the NGFS but will in itself introduce no business change.

6.2 Immediate next steps

Subject to Management Board and MOPAC approval, the next step will be to commence formal engagement with the supplier to allow due diligence to be undertaken. The high-level next steps are outlined below:

- Re start the software selection via Insight VAR
- Deliver the first stage infrastructure design
- Prepare and implement final designs
- Plan and resource implementation team
- Prepare implementation and Test Plans
- Prepare Service Transition Pack/Plan

6.3 Overall management of the project

This will follow the standard waterfall approach as was laid out in the previous OBC. The key change is that this project now forms part of the overall One Met Model *Transforming Investigation and Prosecution* strand and reports into that programme board.