

## PFCC Decision Report

Please ensure all sections below are completed

<b>Report reference number:</b> <i>PFCC/25/18</i>
<b>Classification – OFFICIAL SENSITIVE (COMMERCIAL)</b>
<b>Title of report: IT INFRASTRUCTURE MODERNISATION PROGRAMME – PHASE 3</b>
<b>Area of County/Stakeholders affected: All force police officers &amp; staff</b>
<b>Report by :</b> Brian Jaggs, Head of IT Service Delivery <b>Date of report:</b> 22 <sup>nd</sup> March 2018 <b>Enquiries to:</b> Jules Donald, Head of IT Services

### 1. Purpose of report

To summarise the requirement to approve the necessary investment in Essex Police IT infrastructure for 2018/19 to 2022/23 as agreed in the Strategic Board on 22<sup>nd</sup> March 2018.

### 2. Recommendations

For the PFCC to formally approve the 2018/19 to 2022/23 IT Infrastructure Modernisation investment business case

### 3. Benefits of Proposal

After some years of under-investment in the Essex Police IT infrastructure platform (due to previous savings requirements of various tranches of CSRs), IT Services were reviewed by a third party technology consultancy in 2014 (Methods Advisory). This review stressed the urgency of appropriate year on year investment in Essex Police's IT infrastructure. This is the third phase of

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critical investment, but the rolling refresh will still be required in future years to maintain a risk reduced in-force infrastructure platform. This is required for multiple reasons, including:

- *Instant access with minimal down-time to over 160 operational Police IT systems*
- *Resilient and robust access, storage and back-up of operational policing data (much of it needed evidentially for court cases)*
- *Increased protection against cyber security attacks, by refreshing un-patched and out of support servers*
- *Reduction of risk in continuing the work required to have ongoing PSN accreditation and national accreditor sign-off for EP continuing in the O365 pilot/NEP*
- *To economise on the volume of infrastructure and reduce complexity, via technologies such as server virtualisation*
- *Replacement of critical infrastructure which is either too old and in danger of not working, or where products are out of contract*
- *Replacement of old end user computing devices (ranging from computers and laptops to mobile phones)*

*The detail of the investment is outlined in detail in the FIM business case (attached at the end of this decision sheet), and follows on from last year's IM business case in further improving the force's infrastructure platform – in summary:*

*This business case requests continued investment in:*

1. *Server Replacement Programme*
2. *Increased security to protect against cyber-attack and misuse*
3. *Tiered storage growth*
4. *Network Replacement Programme (including Firewall replacement).*
5. *End User Device Replacement Programme (also supports increased Agile Working).*
6. *Consolidation of the network and server infrastructure within N Block data centre room*

The consequences of not proceeding would mean that the infrastructure platform would continue to erode, not maintaining operational IT systems reliably, with real potential of losing critical evidential police data, slow performance of systems, faulty IT devices with no replacement and a number of other issues outlined in the business case. This would also include failure of our accreditation to the PSN network (which is dependent on the improvements we are making in the infrastructure), and refusal by the National Accreditors to be able to access force email on the Office 365 cloud.

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### 4. Background and proposal

- a. This proposal is to build on the progress made through previous business cases to implement and maintain a robust and resilient IT estate for both forces. This enables business continuity for the force's vital operational supporting technology, as well as enabling the adoption of new efficiency enabling systems and devices along with providing access to reliable technology when and where it is needed. The below proposal combines the separate infrastructure replacement budgets for End User Computing [EUC] Devices, Servers and Storage Infrastructure and Network Infrastructure along with the final year of the 3 year Infrastructure Modernisation Programme [FIM]. This proposal (Section 7) sets out the spend profile for the next 5 years to demonstrate the ongoing investment requirement to better effect, including costs pressures affected by the value of the GBP pound.

**CAPITAL 18/19: ESSEX - £2,865k (after approval to Body Worn Video business case)**

**REVENUE 18/19: ESSEX - £491k**

- b. To remove current capacity limitations, return the wider IT Infrastructure to a position where it is fit for purpose and more able to meet continued demand for growth, performance and functionality and improve our security position by addressing significant security issues identified in recent PSN Health Checks.
- c. Windows 10 will improve staff effectiveness by reducing the log-on times to EUC devices from an average of 10 minutes to no more than 2 minutes. Additional storage will provide storage for new functionality such as drones and Dashcams. The move to more 'agile' devices from conventional desktops, will support a more agile work force, enable new working practices and maximise the use of valuable office space. The replacement of some aging infrastructure, will remove considerable instances of not just equipment failure but also complete system failure and potentially data loss. It will also facilitate some new functionality such as enhanced Wi-Fi coverage in buildings, improved application performance etc.
- d. This year (2017/18) included a considerable amount of planning and preparation for 2018/19 and the final year of FIM, as evidenced by the large spend since November. There is now a very clear technical platform identified to meet the IT strategic direction and this will deliver by December 2018. The normal replacement programme will continue across all strands, phased throughout the financial year.
- e. The main force dependency for Essex is data centre capacity within the county but this is being addressed with Estates Services. Going forward, the new IT infrastructure will enable Agile Working, Mobile First, Office 365, Body Worn Video and every other project on the current IT Programme of Work.
- f. A Parallel workstream is underway to review the future solution for BWV across both Forces. However, it has been identified, that in the event that a decision is taken to replace the current BWV solution with a cloud based storage solution, and there would be no reduction in the storage requirements specified in this Business Case. The cost of replacement BWV devices have been removed from the business case as they were included in the full BWV business case approved by the Board (£396,660 capital).

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### 5. Police and Crime Plan

In order to meet the Police and Crime Plan Priorities (investing in new technologies to enhance the way we work) - one of the highest priorities across the past three years for IT Services, has been to stabilise and improve the IT joint infrastructure landscape, which was ageing, historically under-invested and in some cases not fit for purpose for the demands of two high volume police forces in terms of technology choices. This legacy situation had culminated in causing failing technology performance, a frustrating user experience, operational workflow impact and ultimately various areas of organisational risk. A large tranche of work has also been undertaken to improve our infrastructure to be accredited for the national PSN network.

We are currently in a period of swift and visible progress, as within the next 12 months we are proposing to finalise resilient scalable in-house storage servers, a flexible wide area network that enables the force to meet new demands and the innovation of new emerging data technology, a move to cloud based Microsoft Office 365 email and SharePoint and a new Windows 10 computer build. These projects together will provide the long-awaited stable, low maintenance infrastructure platform that is the critical foundation to implement the enabling IT solutions that will transform the Kent Police and Essex Police operational policing over the next five years.

### 6. Police Operational Implications

**Agile Working** - The requirement to change the way that officers work using new technologies (such as Mobile First, Athena, Digital Asset Management, Body Worn Video etc.) and reduce the Force Estate by agile technology, requires the IT infrastructure platform to be resilient, robust and scalable for organisational demand – including improvements to our ability to be able to retrieve stored data in the event of system failure. Historically, investment in new servers for data storage has been reduced over the years of CSR focus and back-up solutions have been ad hoc, based on individual systems. There is a requirement and expectation for critical operational systems in both forces to have an enterprise standard data recovery and back-up solution, which supports all our storage platforms in a standard way, so that data can be easily retrieved. These backup and Business continuity provisions rely heavily on a continued investment in our Server estate.

The procurement of wider cloud storage services has been purposefully delayed until developments at a National level have been fully scoped. However it is vital in the meantime that the on-premise storage is up-scaled and upgraded to avoid further risk to the IT infrastructure. Investment requirements for continued implementation of our on-premise tiered storage provision have been costed and detailed in this Business Case.

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**Data Growth** – There has been an exponential growth in the volumes of data requiring resilient storage in recent years with the advent of multi-media evidence. Technologies such as Digital Suspect Interviews etc., continue to increase storage requirements of 300TB per annum. Add to this, the demand for storage for Drones, Dashcams and the move to greater resolution for video footage, requirements for unstructured data storage will increase and not decrease.

**7. Financial Implications**

	2018/19	2019/20	2020/21	2021/22	2022/23	Total
	£000	£000	£000	£000	£000	£000
<b>FIM#</b>						
<b>Capital</b>						
Stage 1	2,837	1,882	1,871	1,812	2,404	10,807
Stage 2	2,865	2,033	1,871	1,812	2,404	10,986
<b>Variance</b>	<b>28</b>	<b>151</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>178</b>
<b>Revenue - One Off</b>						
Stage 1	100	0	0	0	0	100
Stage 2	150	0	0	0	0	150
<b>Variance</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>
<b>Revenue - Recurring</b>						
Stage 1	256	257	258	159	100	1,031
Stage 2	341	377	378	279	220	1,595
<b>Variance</b>	<b>85</b>	<b>120</b>	<b>120</b>	<b>120</b>	<b>120</b>	<b>564</b>

**Capital –**

**Stage 1:** Forecast spend included in MTFs. Additional cost of £28k (Stage 2) to be funded from forecast capital reserves in 2018/19. 2019/20 forecast spend to be funded in line with proposed external borrowing process.

**Revenue –**

**Stage 1:** Forecast spend included in MTFs. Additional costs for 2018/19 (Stage 2) will be funded from the Transformation Reserve. For 2019/20 onwards will be factored into the MTFs.

**8. Legal Implications**

*Not applicable at this stage*

**9. Staffing and other resource implications**

Staffing/resource requirements will be managed using existing IT Services staff and consultant upskilling/implementation where required, within the budget price of each product/service

**10. Equality and Diversity implications**

*Not applicable*

**11. Background papers**

**IT Infrastructure Modernisation stage 2 business case attached:**



Item 12. FIM 1819  
Detailed Business C.

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Report Approval

The report will be signed off by the OPFCC Chief Executive and Treasurer, prior to review and sign off by the PFCC / DPFCC .

Chief Executive/M.O

Sign:

Print:

DAVID LAWSON

Date:

11 APRIL 2018

Chief Financial Officer/Treasurer

Sign:

Print:

Abbey Gould

Date:

13.4.18

Publication

Is the report for publication?

YES

*but not business case*

NO

If 'NO', please give reasons for non-publication (state 'None' if applicable)

If the report is not for publication, the Chief Executive will decide if and how the public can be informed of the decision.

Redaction

If the report is for publication, is redaction required:

1. Of Decision Sheet

YES

2. Of Appendix

YES

NO

NO

If 'YES', please provide details of required redaction:

*Commercially sensitive*

Date redaction carried out: .....

Treasurer / Chief Executive Sign Off – for Redactions only

If redaction is required, Treasurer or Chief Executive are to sign off that redaction has been completed.

Sign: .....


Print: .....

Chief Executive/Treasurer

Date signed: .....

**Decision and Final Sign Off**

I agree the recommendations to this report;

Sign: ..... 

Print: ..... R. C. HIRST

PFCC/Deputy PFCC

Date signed: ..... 7/4/18

I do not agree the recommendations to this report because;

.....  
.....  
.....

Sign: .....

Print: .....

PFCC/Deputy PFCC

Date signed: .....