British Transport Police

Integrated Systems Programme (ISP)
FULL PROGRAMME BUSINESS CASE

Force Department:	ACC Crime
Origin/ Author:	Supt. Horton – Programme Lead
Sponsor:	Assistant Chief Constable Mark Newton – Programme Sponsor
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Programme Sponsor	Assistant Chief Constable	ACC Newton	9th July 2014
SIB	Deputy Chief Constable	A/DCC McCall	12th August 2014
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1 EXECUTIVE SUMMARY

1.1 The Integrated Systems Programme

The Integrated Systems Programme will deliver for the British Transport Police (BTP) a new integrated core policing system (Crime, Intelligence, Case and Custody), and a new Command and Control system which will interface with the core system. In order to generate a 'golden nominal' for People, Objects, Location and Events, (POLE). The golden nominal is the unique master record about a Person, Object, Location and Event, where all the information is aggregated.

The golden nominal is the unique master record that identifies a Person, Object, Location and Event, where all the information about a single Person, Object, Location or Event is aggregated and intelligently linked. With the five systems sharing a common database, information integrity, quality and accessibility will be significantly improved, whilst also removing the legacy information silos that impede policing endeavours.

When delivered the integrated system will provide for BTP a solution that will provide the capability to use golden nominal information to provide Police Officers and staff with the information that they need and a single version of the truth, to carry out the new ways of working for stopping crime, problem solving, first fix and offender management.

The system will provide an advanced platform of which BTP can procure and deploy a next generation mobile solution to put improved information from all the core systems (Crime, Intelligence, Case, Custody and Command and Control) into the hands of both Police Officers and staff by a mobile device, to enable them to work remotely in a more agile fashion.

This will dramatically reduce bureaucracy, whilst improving front line visibility and effectiveness. It will also enable officers and staff to have the very latest information at their fingertips to support quality decision making (first fix) and problem solving to stop crime, as well as supporting victims and managing offenders. Improved processes across these functions will provide both cashable and non-cashable efficiencies that can be further invested in the ambitious programme of Force-wide transformation that BTP is undergoing and which the Integrated Systems Programme is a part of. These are described in more detail in APPENDIX E: Benefits.

There is currently no fully integrated system on the market or in development that includes Command and Control, which has been verified through soft market testing. However, this programme will seek to procure and deliver the very best Command and Control system on the market, with the intention of achieving the greatest integration possible with the other systems. And where this is not possible achieve maximum interface with the solution to maximise efficiency and quality of information. The new systems when delivered will provide considerably improved access to information, enabling the Force's new ways of working, reducing bureaucracy, improving management of information and data to meet statutory requirements, and supporting delivery of the Strategic Vision.

The programme is ambitious and will deliver a world class system in a deliberately challenging timeframe, to optimise benefits from the solution and reduce the costs of implementation. Delivery will commence after all approvals have been obtained (SIB, FEB, BTPA Finance Committee, BTPA Full Authority, DfT and Cabinet Office). The recommended option (option 3)

will have a duration of 18 months from point of approval, and the total cost of both implementation and the use of the solution will have a total cost of £6.9m over five years.

A six month project was undertaken prior to this Business Case to gather BTP's requirements of the new integrated core system and Command and Control system, which was called Project 0 and which there are more details of in APPENDIX I: Work Already Carried Out In Project 0.

The strengths of having the core integrated policing system, (Case, Custody, Crime and Intelligence) and the Command and Control system procured and implemented as one piece of work are:

- All the legacy systems of Crime, Intelligence and Command and Control are non-compliant with the PSN mandatory requirement
- It is confirmed by IT that it would not be possible for these legacy systems to be made PSN compliant
- There is a dependency within the PSN project regarding obtaining agreement from the accreditor to a phased plan for achieving PSN compliance for all the Force's other applications as opposed to immediate action, upon there being a funded plan being implemented for the core integrated system and Command and Control systems by the Integrated Systems Programme
- The end-to-end business processes for Criminal Justice Process from incident management to case disposal (court result) can be developed once, as a fully integrated process as possible to maximise efficiencies as the implementation is following one common strategy
- Benefits will not only be maximised across each application of the solution, but also the entire Criminal Justice Process, as each application aligns against one common strategy
- The programme team can be deployed more efficiently to achieve more when procuring and implementing the integrated system and Command and Control system as one combined piece of work. It is estimated that there would be an additional 20% of costs to that being quoted, if the procurement and implementation of the integrated system and Command and Control system were managed as two separate pieces of work
- Implementing the two systems as a combined piece of work reduces the amount of Police Officer/police staff abstraction by an estimated 30-40% compared to there being two separate sets of implementations
- Combining delivery will not only reduce the overall cost and time to implement the solutions, but will also improve the resilience of the programme resources

1.2 Background, Issues and Needs

Project 0 was commissioned early in 2014 to explore the options available to the Force for the core systems and Command and Control system. As well as developing a Requirement Definition for the new systems; determining the appropriate procurement route; carrying out soft market testing and visits to other police forces; it identified the following issues and needs arising from the current systems.

Currently within BTP there are independent IT systems for Crime, Intelligence and Command and Control, which are old technology, end of life legacy systems that are not PSN compliant. Manual processes are currently in place for Custody and Case Management business areas, (except for witness care which uses the JAS system which is also end of life).

As a consequence of these systems the following areas of criticality must be addressed as a matter of urgency for the Force:

- Manual processes within the Custody business area are non-compliant with the Home Office mandatory requirement of being able to undertake Police National Database (PND) uploads regarding offenders. An electronic core solution would provide this via the custody module of the system. Therefore, BTP prisoners are invisible to other police forces which may have intelligence or public safety information. This is currently only remedied by staff having to manually type into separate systems that allow sharing of data under the requirements of the BICHARD report.
- The business area of Case Management is non-compliant with the Home office and Ministry of Justice mandatory requirement to electronically transfer all files directly into the Crown Prosecution Service system, to support digital courts as part of the Governments Transforming Criminal Justice strategy. The deadline for BTP and other Home Office Forces to achieve was by April 2014. BTP is one of the only forces not achieving the electronic transfer of files to CPS. As a consequence, Police Officers in BTP have to handwrite case files, and process them by hand and copy before submission to the Crown Prosecution Service and courts. Electronic case files will be a core function of the new case solution.
- There is weekly loss of paper case files by CPS and the Courts, due to court and CPS staff becoming unfamiliar with handling paper files due to all other police forces providing electronic case files. CPS are currently losing on average 50 case files per week resulting in discontinuances in some cases. As a consequence of this staff are hand photocopying every case file. Electronic case files would be a core function of the new case solution.
- Force systems regarding Crime, Intelligence, Command and Control and paper associated with manual Case and Custody practices are not compliant with the Data Protection Act and MOPI. This exposes the Force to information management security risks and risk of civil claims. The new solutions would have the capability to address this and provide an opportunity to introduce robust information handling protocols in line with Data Protection and ACPO requirements.
- Numerous applications within the force are non-compliant with the mandatory PSN requirement, including the legacy systems of Crime, Intelligence and Command and Control. To obtain PSN compliance the accreditor must see evidence that BTP has an approved and robust replacement plan for the legacy systems outlined above. PSN compliance is dependent upon the Integrated Systems Programme being implemented. Technology have already identified that it is not possible to make the current end-of-life legacy systems PSN compliant. There needs to be PSN compliant Intelligence, Crime and Command and Control systems in place by October 2015, as that is when PNN is switched off and PSN is switched on
- The current state of BTP's legacy IT and manual systems means that data held on subjects has to be entered into different systems causing multiple double entries, creating multiple opportunities for transposition errors. Information cannot readily be recovered to support operational policing delivery, and there are multiple versions of information with no single version of the truth
- The IT legacy systems which are currently in place are a set of silo systems which are not capable of creating a 'golden nominal' for People, Objects, Location and Events, and for which there is different versions of the truth regarding the information and data within them. The 'golden nominal' would allow a suspect's details to be visible to agencies across systems, and would allow for single entry and populate case papers resulting in Police Officers being available and visible. A core system supporting the golden nominal principle is a critical enabler of the new ways of working for the Force. Without this the Force cannot

deliver the envisaged new ways of working. The lack of a core integrated system also prevents BTP from delivering a next generation mobile solution due to the multiple sources of information it currently has. To fail to address this issue would completely remove the capability to deliver the ways of working

- The support contracts for these legacy systems have come to an end, and there are a limited number of times that the contracts can be extended. Most contracts are being renewed on an annual basis, which is not delivering value for money.

1.3 Business Case Approval

The approval required is approval of the business case in order to be able to go to the market based on the indicative costs and procurement route and methods, and to deliver the recommended option based on the implementation approach.

1.4 Collaboration Opportunities

A number of collaboration opportunities have been explored as part of this business case. A combination of inappropriate timing due to a high level of changes and conflicting priorities within other police forces has led to this being excluded. The recommendation is to task the programme when the procured solutions are in place to further explore collaboration opportunities through the products user group, as these will be dependent upon the products chosen through a fair and legal procurement process and BTP's technology direction. Further details are given in APPENDIX J.

1.5 Recommended Procurement Route and Solution Option

It is recommended that the Force procure two core policing software products:

1) Integrated Core Policing Platform (Crime, Intelligence, Custody and Case Preparation)
2) Command and Control

The integrated core policing products and the Command and Control products on the market are sufficiently open source that any suppliers integrated core policing system will interface with any suppliers Command and Control system, and vice versa.

Due to BTP's current situation with the existing systems and the organisational risks identified in section 1.2 above, there is a state of operational risk that enables the Force to utilise the Accelerated Restricted OJEU process to undertake two swift (14 week) parallel procurements of the best available products from the market.

Due to the level of investment that needs to be made, the importance of the use of these core systems in carrying out policing, the level of abstraction of officers and staff during implementation, and the organisational change required to processes and structures within the organisation, it is intended that the solutions will be procured under a 5 year contract. In view of the above factors, a 2 year contract would be too short a time period. However, to reduce contract risk and optimise flexibility for BTP the 5 year contract will be set up as a 1+2+1+1 contract.

In order to ensure effective and timely delivery as part of a predictable, low risk and high quality programme, it is also recommended that an experienced delivery partner be procured with a

proven track record in delivering these types of systems within Police forces. This partner will work with existing internal programme resources to deliver a hybrid programme team that has both the technical and change management experience to deliver a successful programme, whilst providing internal programme governance to drive value for money. This external support has already been scoped and there are a number of credible providers in the market place that can be procured using existing frameworks, such as, ConsultancyOne, in a 4 week timeline.

There are four options considered and outlined within this Business Case, with option 3 being the recommended option. Details of option 3 and all other options considered are described in the "Options Summary, Discounted Options and Recommended Option" section and also in "APPENDIX D: Full Options Analysis" later in the Business Case. The elimination of the other options and the selection of option 3 has been achieved by extensive dialogue and consultation with the operational business and key departments within British Transport Police.

Of the four options described in the business case, option 3 is the recommended option. As a starting point option 3 involves, a software product being competitively procured for the integrated system of Case, Custody, Crime and Intelligence and a Command and Control system against a validated and signed off set of requirements developed in Project 0. The products are installed into existing BTP data centre facilities and other IT infrastructure where available are used, and the new systems are managed by the Force's in-house ICT department.

Currently the Force does not have an agreed hosting strategy, but does have a future desire to externally host force systems in a secure environment. Whilst on face value this recommended option (option 3) does not appear to immediately align with the future vision to outsource many of the IT services to 3rd party providers at a much later date, a design principle included in the procurement process for the solution will ensure it is required to be built so that it can be moved to an external provider at a later date if required.

Option 3 will also include a value added provision to exploit any external hosting opportunities that a potential supplier will provide as part of their bid to provide the integrated system. Therefore, option 3 does not exclude the possibility of externally hosting the integrated system. These additional values offered will be taken into consideration as part of the evaluation process, but always taking into consideration the risk to the future ICT Vision and a future strategic hosting partner.

However, what is clear is from engagement with the business in BTP is that option 3 offers the lowest implementation risk with the greatest flexibility, and fastest delivery timescale allowing the programme to realise benefits to BTP in a more timely manner. The use of a 3rd party to host the solution (option 4) was considered, but was discounted due to the potential conflict such a contract would create when (in the future) ICT progress the delivery of their force-wide external hosting initiative. It is also dependent upon choice of product procured.

1.6 Investment and Benefits for the Recommended Solution Option

The investment profile for recommended option 3 is £6.816M over 5 years (£6.9M capital and £84k revenue reduction). For more details see the section on "Options Summary, Discounted Options and Recommended Option" and APPENDIX D: Full Options Analysis.

The recommended option 3 will deliver nominal, indicative benefits at this stage of a total of 744,594 hours saved, due to improved efficiency and removal of double keying within the current processes and activities associated with the core systems and Command and Control. This represents a nominal, indicative total cashable and non-cashable savings value of £16M, (a combination of end-state and option-specific benefits).

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated system and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into the Force, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

1.7 Summary of Recommended Option 3

The Integrated Systems Programme will transform the way BTP delivers the service to both the travelling public and the rail operators. The recommended option 3 describes a low risk and predictable programme delivery approach that uses proven products and expertise to deliver in a manner that will be consistent with BTP's expectations. The programme will be aggressive with delivery within 18 months from the point of Cabinet Office approval.

Learning which has been captured from other police forces has been built into the approach to be used in the procurement, implementation, configuration, data migration, benefits realisation and change management, and training to be carried out by the programme.

A robust method of programme management will be utilised to deliver and govern the programme and Agile methodology is to be used during implementation, particularly in the areas of solution design, configuration and data migration. During delivery the programme will be overseen by the sponsor (ACC Crime) on a monthly basis. The programme will be driven by the Programme Lead, Superintendent Horton, and daily management by the Programme Manager, John S Steel.

The core software products to be procured will be Commercially Off The Shelf (COTS). This will be a product that is proven and is being successfully deployed and used in at least two other police forces. The development pathway of each product put forward by suppliers will be explored during the bidding process, and a future development pathway being in place is a mandatory requirement of any tender by a supplier in order to future proof the chosen solution.

The technology and innovation of the software products will provide a strategic platform which will enable the Force to achieve the BTP 20:20:10 and beyond objectives. It will enable the new ways of working which reduce operational policing risks; enable the benefits to be delivered by the Offender Management Reform Strategy; enable the delivery and outcomes of the Mobile Solution project; ensure compliance with mandatory requirements that the current combination of manual systems and legacy IT systems cannot; as well as being PSN and Open Standards compliant.

2 PURPOSE OF DOCUMENT, APPROVALS, BUSINESS NEEDS AND ISP DELIVERABLES

2.1 Purpose of Document

The purpose of the document is to identify and establish the business needs for replacing the legacy core systems of Crime, Intelligence, Command and Control, and the manual systems of Case Management and Custody within BTP.

It also confirms the case for procuring, implementing and realising the different benefits of a new integrated system for Case, Custody, Crime and Intelligence in order to create a 'golden nominal' for the POLE entities of People, Objects, Location and Events and a new interfaced Command and Control system, so that all information on an individual is stored in and accessed from one place.

The document then goes on to present and review the different options for procuring and implementing these new systems and the approaches necessary to realise the different benefits and manage the changes associated with them, based on the experience and learning's gained from other police forces who have already implemented, and to recommend the option that BTP should adopt.

2.2 Decisions to be made Regarding the Business Case

The approval required is approval of the business case in order to be able to go to the market based on the indicative costs and procurement route and methods, and to deliver the recommended option based on the implementation approach.

2.3 Business Needs to be Addressed

2.3.1 Business Needs Caused by the Current Legacy and Manual Systems

In BTP there are currently only manual paper processes for the Custody and Case Management business areas.

Currently there is only in place core IT systems for Crime, Intelligence and Command and Control, which are end of life technology, legacy systems. This results in Police Officers spending far too long out of the public eye, and on administrative tasks driven by old technology. The systems require individual searches, and are not compatible with other law enforcement agencies.

Due to the current manual processes of the Custody business area, BTP is non-compliant with meeting the mandatory requirement of being able to undertake Police National Database (PND) uploads. Therefore, BTP prisoners are invisible to other police forces who may have vital intelligence or public safety information. This is only remedied by staff having to manually type into separate systems that allow sharing of data under the requirement of the BICHARD report.

As a result of the business area of Case Management currently only having an electronic process for witness care, the Force is non-compliant with the mandatory requirement to send electronic files to the Crown Prosecution Service and digital courts as part of the Governments Transforming Criminal Justice strategy. The current process in BTP requires Police Officers to

laboriously and repeatedly hand write case files. These then have to be processed by hand and copied before submission to the CPS and courts. This results in files being misplaced as BTP is now one of the few forces in the country unable to transfer files digitally.

The outcome of this is that there is weekly loss of BTP's paper files at court, due to court and CPS staff becoming unfamiliar with handling paper files due to other police forces providing electronic case files. This subsequently leads to court cases being discontinued.

In London alone from 3rd April 2014 to 19th June 2014 CPS lost 58 paper files, and the problem is growing as their staff become more unfamiliar with handling non-electronic case files.

The current state of the legacy systems also result in the Force being non-compliant with the mandatory requirements of MOPI and the Data Protection Act, creating information management security risks.

Numerous applications within the force are non-compliant with the PSN mandatory requirement, including the legacy systems of Crime, Intelligence and Command and Control. There is a dependency within the PSN project where obtaining agreement from the accreditor to having a phased plan for achieving PSN compliance for all the Force's applications as opposed to having to carry this out now, is dependent upon there being a costed plan for the Integrated Systems Programme being implemented.

Should the legacy systems of Crime Intelligence and Command and Control not be replaced, it has been confirmed by BTP's IT department that it would not be possible to enable these legacy systems to be PSN compliant. Which would mean that when the PNN system is switched off in October 2015, BTP would not have PSN compliant systems if these legacy systems were not replaced.

Also the current state of the legacy IT and manual systems means that data held on subjects has to be entered into different systems, causing multiple double entries, with some information being double-keyed as much as 23 times.

This causes duplication of data with multiple opportunities for transposition errors, and in searching methods for information which are time wasting and inefficient. As a result, BTP has a number of staff dedicated to the paper process that would be better used in adding value to policing.

The IT legacy systems which are currently in place are a set of silo systems which are not capable of creating a 'golden nominal' for People, Objects, Location and Events.

There is a lack of an integrated, complete and single version of the truth regarding the information and data within the current, legacy systems, causing officers not to rely on information provided and question its trustworthiness; e.g. within intelligence there is more than one version of the truth for intelligence information.

Attempts to manage the data management inefficiencies of the current five systems involve manual processes to be used to manage even simple data changes by Police Officers.

There is a high dependency upon specific people in the business areas due to the complexity of work that has to be deployed to manage the data management inefficiencies of these systems. These represent a risk of a single-point of failure, as if these individuals are no longer available the data management inefficiencies of these systems would further deteriorate.

Also these data management inefficiencies result in Police Officers and staff at each phase of the criminal justice process – from report to court – not being able to automatically view all records and information which are on the core systems.

The legacy IT and manual systems constrain and limit the achievement of:

- Efficiencies and improvements that can be achieved in operational policing and deployment
- Key strategic themes – strategic references 2 and 4
- 20-20-10 and beyond objectives
- BTP's options to further develop and improve its capabilities in: crime reduction; problem solving; information based decision making; offender management
- New ways of working to support the target operating model

Further details regarding the current systems and the issues and risks that they create are in APPENDIX D: Full Options Analysis; Option 1 – Baseline or 'Do Nothing' option.

2.3.2 Support Contracts for Legacy IT Systems

The support contracts for Crime, Intelligence and Command and Control systems are coming to an end. There are a limited number of times that the contracts can be extended. Annual extensions to support contracts are also not cost efficient, with providers able to charge premium rates for short term support.

Further details regarding the current systems support contracts, the costs and the issues and risks that they create are in APPENDIX D: Full Options Analysis; Option 1 – Baseline or 'Do Nothing' option.

2.4 What the Integrated Systems Programme will Deliver

The Integrated Systems Programme will deliver a new integrated system for core policing systems to generate a 'golden nominal' for People, Objects, Location and Events, (POLE) which will interface with a new Command and Control system, and which together will provide considerably improved management of information and data. The golden nominal is the unique master record about a Person, Object Location and Event, where all the information is aggregated and intelligently linked and stored in one place.

This integration will enable common sharing and analysis of information, with only having to enter the information into one of the systems once. And so will provide a unified, operational policing system that manages and provides common information in relation to the core policing (POLE) entities - and through workflow automating the movement of information within the applications.

The systems procured will meet the Force's detailed and signed-off, output based, functional, non-functional, technical, integration, interface and horizon scanning specifications, which were developed in Project 0, and will be compliant with the mandatory requirements of:

- PND update
- Electronic case file transfer
- PSN compliance
- Data Protection Act requirements
- MOPI compliance of information management across BTP.

Additional modules associated with the procured solution which could be available to purchase at a later date will be identified during the procurement process, which will enable future value add and enable replacement of other BTP legacy systems.

The new systems will enable the Force to deliver:

- New ways of working and improved capabilities, enabling BTP to deliver an improved service to the travelling public and operators
- Efficient processes to build detailed, up-to-date information, and obtain a comprehensive 'picture' of People, Location, Objects and Events
- The ability to produce key management information outputs that are timely, accurate and capable of transfer to other Force systems, and the ability to exploit data and intelligence
- Achievement of improvements in efficiencies that enable greater visible policing, creating greater passenger confidence and helping to reduce disruption minutes
- Support for mobile policing and access to information from mobile/smart devices and platforms, to be delivered by the Mobile Solution project
- The benefits associated with the new Offender Management Reform Strategy

2.5 Operational & Organisational Benefits that the Integrated Systems will Deliver

The new integrated core system and the Command and Control system will deliver a number of operational and organisational benefits for BTP. These are:

1. Enabling the successful delivery of the Force's long-term Strategic Plan and the delivery of BTP's strategic objectives

2. Reduced operational risk to BTP as information, processes and workflows are automated reducing the likelihood of error which can lead to BTP not meeting their legislative and operational obligations, and which will assist delivery of a high standard of service to passengers

3. Improved service delivery to Train Operating Companies as BTP's information is better managed and available to enable joined up planning and processes, in order to maximise the effectiveness of all resources involved in providing a secure and safe railway

4. Improved service to customers through the use of improved victim and witness care, promoting better understanding of their needs in order to provide better care and protect passengers. Therefore improving confidence in the use of the railway

5. Improved safeguarding of adults and children as intelligence is held centrally and can be more easily shared, allowing more information on priorities and concerns to optimise BTP's plans, strategies and responses to provide the best possible policing service

6. Increased back office resilience through ensuring technology deployed within BTP is future proof and stable to anticipate the impact of new technologies, and enable the optimisation of the service by utilising these new technologies

7. Improved links with external agencies and bodies for information sharing, to assist in joined up planning and processes to ensure BTP and external resources are utilised in the most effective and efficient way

8. Improved police visibility as routine, resource intensive tasks are automated and errors are reduced through better information management. Which in turn improves operational outcomes and a better service to the transport system

9. Improved collaboration with regional police forces as data sharing becomes easier to assist joined up planning and processes and ensures BTP resources are utilised in the most effective and efficient way

10. Reduced litigation against BTP as detainees are not held in custody for longer than allowed, and information and risk assessments for detainees are better held and accessible

11. Better response to emergency and non-emergency calls through improved Command and Control, including better call-scripting, better resource management, quicker data lookups, integration with Duty Management systems and improved mapping interfaces. Which will reduce the time of police related disruptions and improve the service to the transport community

2.6 Contribution of the Programme to BTP's Transformation Agenda

BTP is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, the 20-20-10 strategic objectives, and the Chief Constable's vision "Making a Difference" out to 2019. The BTP transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it.

Evidence-based policing, offender Management, advanced problem solving, and a proactive approach to stopping crime will be underpinned by an enhanced IT infrastructure, mobile solution, and a fundamental overhaul of training and skills.

The Integrated Systems Programme is central to this comprehensive programme of change, and it meets the legislative requirement for BTP to be compliant with MOPI; introduces best practice processes for Case, Custody, Crime, Intelligence and Command and Control; and provides the essential management information framework from which the Force's ambition for a mobile solution to enable modern policing and for location based briefing can be met.

The Integrated Systems Programme is critical to and also has dependencies on other programmes within the force-wide BTP Transformation Agenda, in order that collectively a fundamental improvement in operational capability can be delivered.

3 MARKET SUMMARY, THE FOUR OPTIONS AND RECOMMENDED OPTION

3.1 Market Summary

An earlier six month piece of work was carried out in early 2014, (Project 0) which included reviewing of what products are on the market and soft market testing of potential suppliers.

It was identified that there are a number of Commercially Off The Shelf core interated policing systems and a number of Command and Control systems products, which are specifically designed for Police Force use. As a result the systems are already configured to operate to meet mandatory police requirements and legislation, work to Home Office codes and reporting, and set up for police data sets and data categoried.

Also for the core integrated system for Case, Custody, Crime and Intelligence, integration between these four system is already built into the product.

There are three separate principal suppliers in the market for the core integrated system, and three separate principal suppliers for the Command and Control system most of which are different to those providiing an integrated system.

All of these products are open source, in that one suppliers core integrated system can interface with another suppliers Command and Control system and vice versa. And amongst other police forces there are different combinations of suppliers of the core integrated system and the Command and Control system actually being used.

Procurement of systems that are designed for the policing sector is seen as the preferred approach, as any generic system would first have to be purchased separately for Case, Custody Crime and Intelligence and Command and Control. Although there may be generic Case Management systems, there are not generic Custody or Crime systems. The core integrated policing systems are sold as one combined product of Case, Custody, Crime and Intelligence, and so it would not be possible to just procure the Custody or Crime part of these products.

Secondly if it was possible to be able to procure generic systems for each of Case, Custody, Crime, Intelligence and Command and Control, bespoke work would have to be carried out to develop the integration and automated workflow of data between the systems. Also each one of the systems would have to be bespoked and designed for use by a police force. Having to be developed and configured to operate to meet mandatory police requirements and legislation, work to Home Office codes and reporting, and set up for police data sets and data categoried.

Even a generic system such as SAP has 43 different industry sector versions, because a system has to be able to operate to the requirements of a particular industry.

This development and bespoking which could only take place after procurement has been completed would take longer than the 12 months that exist between now and the critical date of October 2015, when PNN is switched off and PSN is switched on. And as a result there being the need to have PSN compliant core policing systems implmented and live by October 2015 at the latest.

Virtually every other police force have purchased and implemented COTS systems designed for the policing sector. And one of the advantages of this is that they have been able to be part of a user group of forces that work with the supplier to set the development pathway and further develop the solution.

Determination of the appropriate procurement route was also included in the earlier piece of work carried out in the early part of 2014 as described in APPENDIX I. This covered assessing potentially appropriate Crown Commission Sevices Buying Solutions Framework, which included G-Cloud.

The G-Cloud framework specifies 2-year contracts, which because of the amount of investment of time and Police Officer abstraction and training involved is too short a contract time. Because of this investment of time and training and change required to operational processes, a 5 year contract is required.

Also identified during the soft market testing with potential suppliers of a COTS core integrated system, one product in its current version has limitations regarding performance if hosted on G-Cloud. As performance is a key mandatory requirement witihn the Requirement Definition, this would considerably reduce the competition during the procurement process if hosting on G-Cloud was specified as a mandatory requirement. This may be possible to achieve in later developed versions if this particular product was chosen, but not within at least the next 12 months.

So as a result of the soft market testing, the following are the recommended principles regarding the type of solution to be procured:

i. Commercial-Off-The-Shelf products - so that we buy and not build
ii. Proven - whereby other forces across the UK have evidenced that the products are shown to be fit for purpose
iii. Performance and reliability - essential mandatory requirements
iv. Future proof - providing clear alignment to Government initiatives in particular the Digital Criminal Justice Systems Agenda, and meeting mandatory policing requirements and reporting
v. Community support - where there is a comprehensive user group of other forces that can share learnings and further develop the solution

3.2 The Four Options Considered

In this business case, we propose four options for consideration based on the three variables relating to procuring the system, the choice of infrastructure and the service management model, (details of the three variables that make up each of the options are given in APENDIX C).

The four options are as follows.

Option 1 – Do Nothing: manual processes in Case and Custody will continue to be used and the associated inefficiencies, reduced productivity, multiple double entry of data and reduced effectiveness will also continue. The transference of fully electronic case files will not be achieved and BTP will also continue to be non-compliant with a number of mandatory requirements. Existing legacy Crime, Intelligence and Command and Control IT systems will remain in place which will become increasingly less efficient and more expensive to maintain.

Option 2 – Outsource to a Fully Managed Service: a fully managed service provided by a supplier is used to outsource the software, infrastructure and the service management of the technology. Leaving the Force to become a customer of the supplier's technology service required to support the policing outcomes. A single supplier will be responsible for all support to officers. This option can go out to either the private sector where procurement is required, or to another force where a collaboration agreement is required.

Option 3 – Choose and Install a Product and Manage In-house, (recommended option): a software product is chosen and installed into existing data centre facilities and managed by the Force's in-house IT department. This is the traditional option and one still preferred by many forces as a means of managing risk internally until stability is reached, when future options can be considered. An example of this is Leicestershire who have Niche RMS installed in-house and run by the current IT department. This option does not exclude the possibility of leveraging external tactical hosting options that may result from additional value offered by the bidding suppliers, as it will always be the intention to maximise value for money whenever going to market for solutions.

Option 4 – Choose a Product and Have this Externally Hosted but Managed In-house: a software product is chosen and an external infrastructure company is selected to host the software. This 3rd party will ensure that there is sufficient processing capacity in their data centre and that it is configured in a manner that is in line with the Force's requirements for performance, security and availability. The Force's in-house ICT department will retain the responsibility for making sure that the software is working within tolerance, which users are catered for and bugs are addressed.

The detailed descriptions for each option are provided in APPENDIX D: Full Options Analysis.

3.2.1 Cost Benefit Summary of the Four Options

Option	Total 5 Year Cost	Annual Benefits (Cashable & Non-cashable)	Risks
Option 1 – Do Nothing	Capital £0 Revenue £2,890,000 **5-yr total £2,890,000**	None	Transfer of fully electronic case files and other mandatory requirements will not be achieved. Custody will continue with manual processes. No "golden nominal"
Option 2 – A fully managed service (outsourced to a single supplier)	Capital £5,300,000 Revenue £4,716,000 **5-yr total £10,016,000**	Nominal, indicative non-cashable & cashable hours saved of 744,594 hours by efficiencies. Plus cashable option-specific benefits of £850,000, and cashable savings due to legacy systems and maintenance support stopping of £782,000	The supplier market does not view the opportunity as being of suitable value. The supplier does not deliver a system on time The procured service doesn't provide value for money to the Force

Option	Total 5 Year Cost	Annual Benefits (Cashable & Non-cashable)	Risks
Option 3 (Recommended) – a software product is chosen and installed and managed by the in-house IT department	Capital £6,900,000 Revenue -£84,000 **5-yr total £6,816,000**	Nominal, indicative non-cashable & cashable hours saved of 744,594 hours by efficiencies. Plus cashable option-specific benefits of £250,000, and cashable savings due to legacy systems and maintenance support stopping of £782,000	The programme does not deliver a system on time Managers, Police Officers and staff do not fully engage with the changes needed to realise the benefits
Option 4 – a software produced is chosen, hosted externally and managed by the in-house IT department	Capital £7,000,000 Revenue -£84,000 **5-yr total £6,916,000**	Nominal, indicative non-cashable & cashable hours saved of 744,594 hours by efficiencies. Plus cashable option-specific benefits of £200,000, and cashable savings due to legacy systems and maintenance support stopping of £782,000	The supplier does not deliver a system on time The supplier does not provide an adequate service to the Force following the system being put in place The procured service doesn't provide value for money to the Force

The detailed cost breakdowns for each option are provided in APPENDIX D: Full Options Analysis.

3.3 Discounted Options

Option 1 – do nothing; was discounted due to the currently compromised position of the core policing systems and the negative impact it is having on current BTP policing effectiveness. The Force is also currently at operational risk due to the high volume of manual and paper based processes, legacy systems and non-compliance with a number of mandatory requirements. Further details of this option can be found in APPENDIX D: Full Options Analysis; Option 1 – Baseline or 'Do Nothing' option.
Option 2 – adopt a fully managed service; was discounted due to there only being one supplier who provides such a service, and whose system is still in construction (after 3 years) with no track record for successful delivery of this system within another police force. Therefore, there is an operational risk in procuring an untested and not fully developed system, which because of the importance of these systems to BTP would be a considerable risk to take. Previous supplier performance is also a key consideration in discounting this option. Further details of this option can be found in APPENDIX D: Full Options Analysis; Option 2 – A Fully Managed Service (outsourced to a single supplier).

Option 4 – procure the software products and deploy on a hosted service; in this option an external infrastructure company is procured to host the solution which has been chosen. This would involve selecting an external data centre to host the integrated system and the interfaced Command and Control system. The reason for not recommending this option is, at a time well beyond the implementation of the new systems there is an ICT Vision to eventually host all BTP's applications in an external data centre. By hosting the integrated system and Command and

Control system in an external data centre as part of this programme, it would compromise the delivery of the ICT Vision of external hosting by allowing the programme to determine the strategic supplier for the hosting of all BTP IT services. Resulting in a choice which may not later suit the hosting of other IT services, and may ultimately result in having to later move the integrated system and Command and Control system from their initial external data centre to the one that would eventually used as the strategic hosting provider. For this reason, as described earlier it is proposed that the option 3 be adopted and be implemented in-house in such a way as to have the ability to switch to an external hosting supplier as and when it becomes feasible, determined by the delivery of the ICT Vision. Further details of this option can be found in APPENDIX D: Full Options Analysis; Option 4 – A Software Product Is Chosen, Hosted Externally.

3.4 Recommended Option (Option 3)

The recommended option is option 3 - a software product is chosen and procured, installed and managed in-house.

3.4.1 Overview of Recommended Option

A software product is competitively procured for the integrated system of Case, Custody, Crime and Intelligence and a Command and Control system against a validated and signed off set of requirements for BTP developed in Project 0. The products are installed into the existing Force data centre facilities and other IT infrastructure where available are used, and the new systems are managed by the Force's in-house ICT department.

This has been the traditional approach used by other police forces. An example of this is Sussex Police where Niche RMS was installed into the existing data centre and supported by an in-house capability.

This recommended option does not immediately align with the vision to outsource many of the IT services to 3rd party providers at a much later date. However, a design principle will be included in the procurement for the solution chosen to be developed in a manner that leaves it packaged and built so that the solution can be moved to an external provider at a later date after being successfully implemented and hosted in-house. A provider that would be strategically procured as part of separate IT strategy work.

Sussex Police is a good example where this approach was adopted, and the products will soon be moved to their strategic hosting partner, (BT), after being hosted internally for some time and ensuring that the systems were fully embedded before undertaking this move.

This recommended option like all the other options will have a dependency for the new systems to interface with remaining, existing ICT applications. When the old core systems are replaced their interfaces with the broader remaining legacy systems will need to be reinstated. In many cases the new systems will not only replace the main core policing system and Command and Control system, but will also consume other smaller applications resulting in further simplifying of the IT landscape and reducing the number of disparate software packages.

Where possible suppliers will be invited to propose other value adding capabilities, such as, additional modules. Or offering the solution with hosting as an option, where there might be the possibility of leveraging any immediate external tactical hosting options.

As a result, this option does not exclude the possibility of leveraging any immediate external tactical hosting options that may result from additional value offered by the bidding suppliers, as it will always be the intention to maximise value for money whenever going to market for solutions. These additional benefits will be taken into consideration as part of the evaluation process. This approach ensures that BTP does not miss out on innovative bids.

3.4.2 Resourcing of Recommended Option

A significant element of the costs of the programme is the human effort involved in such an undertaking. The key tasks in the programme fall into the following groups

- Programme management covering the complexity and breadth of dependencies
- Designing efficient processes and configuring the software accordingly
- Physically building, securing and testing the infrastructure
- Training and preparing the organisation for the change

In order to determine the most appropriate resourcing model a series of factors have been considered:

- The pace at which the programme needs to be delivered, due to the current state of the legacy systems and manual processes, and the need to be PSN compliant by October 2015. And the Force not being capable of meeting a number of other key mandatory requirements
- The established working assumption that the current ICT resources will be unable to support the procurement and implementation within ISP, as such the programme will be required to resource all the necessary skills. This has been confirmed by the Head of IT. As a result of this deficit in available IT resources, it is going to be necessary to recruit temporary staff for the duration of the project in order to build a technical capability necessary for the implementation phase.
- The impact of failure, should the solution not meet the timeline or the quality requirements. This programme is regarded as significant to BTP, and will deliver a series of critical services that are core to the Force operating within a national policing framework. As well as being a critical enabler for the outputs and benefits to be delivered by other projects and programmes within the overall BTP Transformation Portfolio
- The delivery of this programme must function alongside the normal day to day duties of staff and officers. The programme resources will need to provide geographical coverage and deliver, focused, high efficiency training and engagement

Although the proposed resourcing approach will require that there is little demand placed on BTP ICT staff, this dependency can also be contained and managed through a technical design that considers this risk. It should be noted that this issue is applicable to all the options presented in the paper, but is best mitigated in this recommended option.

The resource pools from which the team will be built is as follows in descending preference:

- The already established in-house BTP Integrated Systems Programme Team
- Internal BTP Police Officers and staff and policing subject matter experts

- External specialist support provider
- External recruitment of specialist roles which cannot be provided by the above sources

The summary resource requirement for this option is listed in the table below, and the costs shown are over two financial years (the two years of programme implementation).

Resource Description for Option 3	Quantity	Duration (Months)
Integrated Systems Existing Programme Resources. £1,400,000		
Programme Manager	1	18
Project Managers	5	18
Business Analysts	4	18
Benefits Manager	1	18
Data Architect	1	18
Project Support Officer	1	18
Existing BTP (Non-Programme) Resources to be Used. £0		
Procurement Manager	1	4
Technical SMEs (WAN, data centre. Mapping, DBA, etc.)	4	18
IT Project Manager (being funded and recruited by IT)	1	18
Specialist External Resources to be Provided through the Assistance of the Specialist Support Provider, and makes up £300,000 of their Fee		
Business Change Specialist (police knowledge)	1	18
User Acceptance Lead	1	6
Process Lead/Design Authority	1	18
Information Management and Data Migration Lead	1	14
Integration and Technical Specialist Lead	1	18
Technical Architecture Review and Assurance (4 people, 1 day per week)	1fte	18
Service Management Review and Assurance (4 people, 1 day per week)	1fte	18
Infrastructure Build	2	1
Network Specialist	1	1
Platform Specialist	2	18
Product Configurator	1	18
ETL Developers	4	9
Interface Support	1	3
Application Specialist	1	18
Test Manager	1	6
Benefits Lead	1	10
Additional External Resources to be Recruited / Procured by BTP. £400,000		
Business Change Specialist (public sector knowledge)	2	18
Business Trainers	10	4
User Acceptance Testers	4	4
Data Management Developers	3	12
Testing (non-functional)	6	4
Security Accreditor (RMADS)	1	4
Penetration and Security Testers	2	2
Systems Integrators	3	6

The use of a consultancy company as a Specialist Support Provider does represent a significant portion of the resourcing costs. However, their support directly contributes to the following:

- The individuals are professionals with careers in delivering large, complex IT enabled change programmes in police forces, and are practiced in managing the risks associated with this type of programme

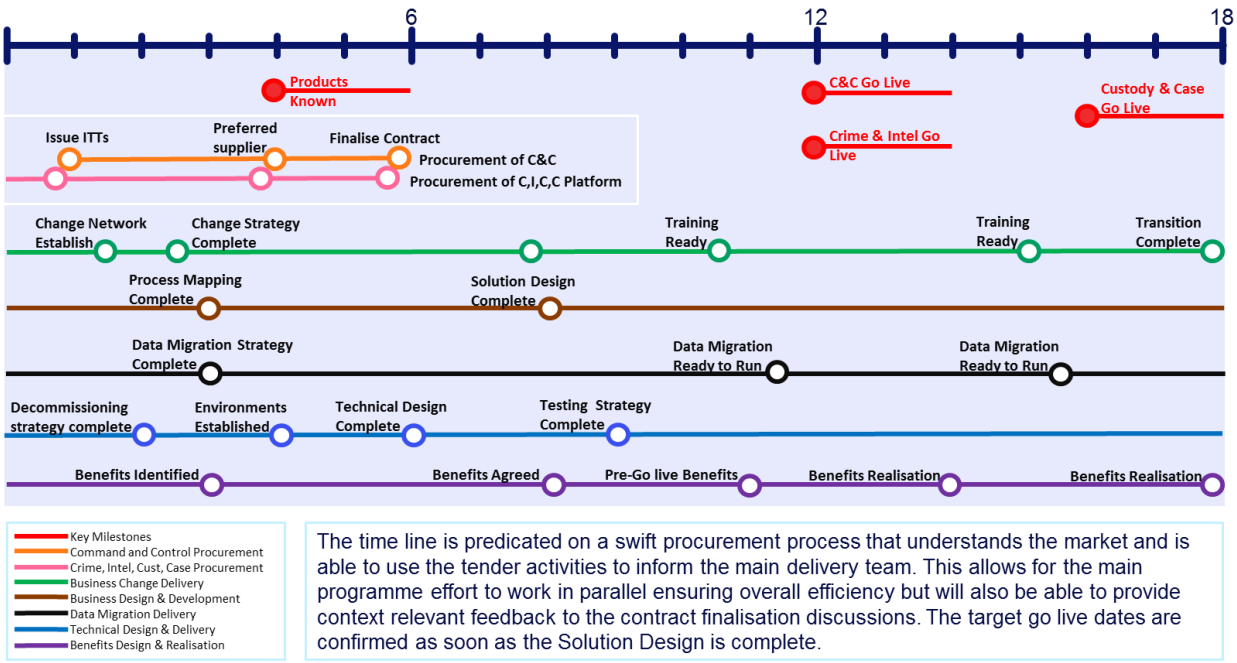
- They will provide previous experience and hindsight of having delivered similar initiatives in other police forces, helping accelerate the programme and de-risking many aspects of the delivery
- They provide access to other police forces and government agencies that will help support the effective delivery of BTP's solution as a national force
- Their programme delivery skills are designed to deliver programmes at pace, on time and to quality, and towards realising benefits
- They provide immediate access to specialist personnel at the time required, ensuring that the momentum in the programme is never lost and that every issue/risk is addressed by an expert and not just someone available

3.4.3 Implementation and Timelines of Recommended Option

The programme is structured such that it has a clearly defined and agreed end date, where all external support has left and the solution is fully implemented and safely supported.

Option 3 offers the fastest route of the four options to go-live. IT programmes are renowned for running into difficulties, the main causes of which are taking too long and over complicating the requirements.

This recommended option contains the programme within the 18 month period from the end of the approval process to implementation completion. Which although ambitious, is a proven time frame that has been achieved in other police forces, and will ensure that the delivered systems meet the defined needs of the Force. The speed also means that the investment is kept at its lowest and the opportunities to realise efficiency benefits is as early as possible.



During Project 0 carried out in early 2014 visits to and extensive consultations with other police forces who have procured and implemented integrated systems were carried out, in order to

capture the learning from their experience. This captured learning has been built into the approach to be used in the procurement, implementation, configuration, data migration, benefits realisation and change management, and training to be carried out by the programme.

Agile methodology is to be used during implementation, particularly in the areas of solution design, configuration and data migration.

The delivery programme is managed and run in a manner that drives progress towards delivering the business benefits. This ensures that the scope of the programme is all-encompassing with respect to releasing value and not just delivering IT. Through the programme the Force is mobilised to deliver both the technology components and also drive the realisation of the efficiency benefits and the business change. And the programme will engage with Police Officers and staff to help deliver the benefits realisation and business change from within.

3.4.4 Summary of Procurement Route

There are three items that need to be procured:

1) Specialist client side delivery support:
    a. This will leverage the expertise and experience from external specialists that have done this before. They will provide a quick start to the programme and very specific expertise including IT resources that will maintain the programme to time and budget. It will also be expected that their insight will enhance the benefits case and release greater value from the investment
    b. This service can be procured in 4 weeks using an existing framework, such as, ConsultancyOne
2) Core Software Products for Command & Control, and Integrated Core Policing systems, (Case, Custody, Crime and Intelligence):
    a. Soft market testing has indicated that in order to get the best choice that is consistent with buying a Commercially Off The Shelf (COTS) product, it is best to undertake two Accelerated Restricted OJEU procurements run concurrently over a period of 14 elapsed weeks, and staggered in a manner that maximises the procurement effort. The accelerated justification is based on the current state of the legacy core systems, and the Force having had to revert to paper processes that increase the risk to the public and Police Officers
3) Agency contractor resources:
    a. Where more commodity skills and resources are required such as RMADS, testers etc. then existing agency contracts with preferred suppliers will be used or frameworks

The core software products to be procured will be Commercially Off The Shelf Products that are proven products which are being successfully used in at least two other police forces. Soft market testing carried out in Project 0 demonstrated that there are a number of suppliers with these proven products in the market. And that these products are sufficiently open source, that one suppliers core integrated system can interface with another suppliers command and control system and vice versa.

The development pathway of each product put forward by suppliers will be explored during the bidding process, and a development pathway being in place is a mandatory requirement. Soft

market sounding has revealed that all likely participants in the tender process have user development groups already in operation for their products, which it is planned we would eventually join when a product had been procured.

Due to the level of investment that needs to be made, the importance of the use of these core systems in carrying out policing, and the abstraction of officers and staff that will be required in their implementation, the core software products will be procured under a 5 year contract. However, to reduce contract risk the contract will be set up as a 1+2+1+1 contract.

3.4.5 Summary of Lifetime Costs

The lifetime costs of recommended option 3 across the 5 year period can be summarised as follows:

Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Capital expnditure	3,700	3,200	0	0	0	6,900
Revenue expenditure	0	0	-28	-28	-28	-84
Total Expenditure	3,700	3,200	-28	-28	-28	6,816

The total 5 year cost is **£6,816,000** (£6,900,000 capital, £84,000 revenue reduction).

These costs include existing costs, such as Disaster Recovery, and are broken down in detail in APPENDIX D: Full Options Analysis; Option 3 - A Software Product is Chosen, Installed and Managed In-house.

Ongoing Revenue Costs of £550,000 per year in 2016/17 to 2018/19 for the new systems are covered by the existing revenue, and as a result creating a £84,000 revenue reduction over this 3 year period.

Assumption: the financial time frames for these costs are based on the assumption that all BTP and external approvals will have been obtained by October 2014. If this is not the case, there will need to be appropriate adjustments to the finances and the year in which they occur.

3.4.6 Source of funding

The BTP Head of Finance and Procurement has confirmed that the Integrated Systems Programme is affordable through the finance being sourced as follows in the summary table.

	2014/15	2015/16
ISP Capital Funding Requirement	**£3.7m**	**£3.2m**
Funding Options		
Existing ISP Capital Programme Provision	£1.0m	£1.4m
Existing Command and Control Capital Programme Provision	£0.0m	£1.2m
Available to be re-allocated within Capital Programme	£1.6m	£0.0m

Revenue Contribution from AIS Reserve (i.e. total £1.8m in 14/15 and £900k in 15/16)	£0.6m	£0.6m
Draw down from Contingency	£0.5m	£0.0m
Summary of Funding Options	**£3.7m**	**£3.2m**

In the above capital expenditure there is no contingency within the £3.7m in 2014/15. However, within the £3.2 in 2015/16, there is a contingency of £480k tied to risks associated with interfaces with legacy systems; data migration; and decommissioning of legacy systems all of which occur during the implementation phase.

3.4.7 Cashable and Non-Cashable Benefits

The successful implementation of the Integrated Systems Programme will provide efficiencies which create total annual hours saved of 744,594.76, of which 561,046 hours are non-cashable and 183,548.76 hours have the potential of being taken as cashable savings. This represents a value of annual end-state benefits to the value of £16M, (non-cashable and cashable combined), of which £4.3M will be cashable in-year, which include potential savings in hours and savings due to the legacy IT systems maintenance and support stopping. These are described in more detail in APPENDIX E: Benefits. The recommended option 3 will deliver an additional estimated **£250k** of option-specific annual revenue cost savings.

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated Systems and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into the Force, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

In addition, BTP is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, 20-20-10 objectives and the Chief Constable's vision "Making a Difference" out to 2019. BTP's transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it. Evidence based policing, Offender Management, advanced problem solving and a proactive approach to stopping crime will be underpinned by an enhanced IT infrastructure of which the Integrated Systems Programme is a key part of.

The Integrated Systems Programme is central to this comprehensive programme of change, and is one of the early programmes in this Force-wide transformation.

This Business Case just considers the benefits of the Integrated Systems Programme against the current "As Is" model for the Case, Custody, Crime, Intelligence and Command and Control systems. But these benefits must also be seen within this wider programme of change for which

the Integrated Systems Programme is a vital step, and as the later projects and programmes are delivered these benefits may need to be taken up or used by these other programmes.

3.4.8 Return on Investment

The Return on Investment and Payback calculation for the recommended option 3 is based on the assumption that the Force realises all the available nominal, indicative cashable savings which would occur only when the systems are fully embedded (year 3). Based on this scenario the breakeven point for recommended option 3 will occur approximately in quarter 2 of year 5 (2019/20).

Details are in APPENDIX H: Return on Investment Calculation.

3.4.9 Alignment to Strategic Plan

The integrated systems and the interfaced Command and Control system will enable and support the achievement of the following strategic themes in the BTP Strategic Plan:

- Demonstrating improved performance and reduced costs through a range of measures including integration, outsourcing, commissioning and broadening our customer base (Strategic Reference 2)
- Continuously innovating the way we police in order to anticipate the impact of new technologies (Strategic Reference 4)
- Create conditions which embed entrepreneurship, creativity and innovation at all levels of BTP (Strategic Reference 4)

The systems will provide greater support to Police Officers and staff allowing them to focus on the Forces priorities and avoid their time being consumed by inefficient processes for the searching and management of information. With the end-state benefits focusing on creating efficiencies and effectiveness:

- Efficiency will provide greater visible policing creating greater passenger confidence and helping to reduce disruption minutes through visible deterrent.
- Effectiveness is delivered through greater and more effective intelligence, delivered into the hands of officers and staff. This improves outcomes while providing real time information to support officers to drive down crime, solve problems and manage offenders, therefore, reducing demand by disrupting criminal activity.

3.4.10 Inter-Dependencies

The Integrated Systems Programme and the recommended option have interdependencies with specific projects in the IT Programme; Information Management projects; the Transformation Portfolio; the new Offender Management Reform Strategy; and the Mobile Solution Project. These are described below.

The solution provided by the integrated Systems Programme has dependencies with or to the following **Information Technology (IT) Programme projects**.

IT Programme Projects	Nature Of Dependency With The Integrated Systems Programme And The Procured Core Systems
Data Warehouse	The new core systems purchased should be able to have data held on the systems which is not live data extracted to a data warehouse, as the majority of reports will not be run on live data. There is an IT Programme project regarding the relocation and reconfiguring of a Data Warehouse solution, which will need to be able to interface with the procured solution for the new Integrated Systems Project systems. Depending upon the progress of the new Data Warehouse, the core systems will either interface with the current or new Data Warehouse.
Business Objects	The new core systems purchased in the Integrated Systems Programme should be able to have data held to be placed in a business universe, so that reports can be generated. Use of business objects is possibly changing due to the Data Warehouse project, and the Integrated Systems Programme systems will need to be interface with either the new or current business objects solution.
ICCS – Telephony Software and Radio System	The new core systems purchased in the Integrated Systems Programme must have an interface with the new ICCS system. The ICCS project is currently under way, and it will be completed before the core systems in the Integrated Systems Programme go live, enabling these systems to interface with the ICCS system.
Virtual Desktop Integration	An IT Programme project is running for the virtualisation of desk tops, and the new Integrated Systems Programme core systems purchased will be specified to be able to run against any VDI's. The VDI project is currently under way, and it will be completed before the core systems in the Integrated Systems Programme go live, enabling an interface to be put in place.
E-Document system	An IT Programme project is running for the implementation of a Force document management system. The new core systems purchased must be able to save any documents within this system, so this system needs to be able to interface with the new core systems purchased in the Integrated Systems Programme. A requirement for this interface has been included in the Requirement Definition of the new core systems.
Networks	Under the IT Programme there are 4 projects looking at the network environment, which are P2 sites, PSN migration and implementation, Network Optimisation and Data Centralisation. The solutions developed in these projects need to be able to interface with the new core systems purchased in the Integrated Systems Programme. These projects will be completed before the core systems in the Integrated Systems Programme go live, and the interface requirements for these systems are built into the requirement definitions for the new core systems.

The solution provided by the integrated Systems Programme has a dependency with or to the following **Information Management projects**.

Information Management Projects	Nature Of Dependency With The Information Management Project
Project B: Structured Police Information	This Structured Police Information project will focus on the governance and policies and procedures for data work flow and the data nominals. This work aligns with the work that would be carried out in the Integrated Systems Programme when data migration is carried out from the legacy systems to the new systems. Therefore, when the Integrated Systems Programme reaches the Data Migration stage, there will be joint working between the ISP Programme and Project B: Structured Police Information.

The solution provided by the integrated Systems Programme has a dependency with or to the **Transformation Portfolio**.

Transformation Portfolio	Nature Of Dependency With The Transformation Portfolio
Transformation Portfolio	The Transformation Portfolio has the vision of enabling BTP "To be the provider of choice for policing service to the industry regardless of statutory obligation", through developing and implementing an aspirational operating model for 2019. And determining the capabilities that the Force requires to achieve its strategic plan and beyond. The new systems provided by the Integrated Systems Programme will be a critical enabler of organisational capabilities to be delivered by the Transformation Programme, and it will also deliver specific capabilities. The Transformation Portfolio will not be able to realise and deliver its vision and the required improved capabilities without the improved data and information management that will be provided by the Integrated Systems Programme which will enable information based decision making and problem solving; improved processes and workflows; and faster response times. And so will require the Integrated Systems Programme to be in place to be able to deliver its deliver its objectives and outputs.

The solution provided by the integrated Systems Programme has a dependency with or to the new **Offender Management Reform Strategy**.

Offender Management Reform Strategy	Nature Of Dependency With The Offender Management Reform Strategy
Offender Management Reform Strategy	The Offender Management Reform Strategy will deliver an Offender Triage Team; Community Resolution/Restorative Justice; Offender Management Teams; single CJU; single CMU merged with CJU; single CPS; redesign of crime and investigations; single BTP courts; virtual courts and live links. The key deliverables of a single CJU; a single CMU; redesign of crime and investigations; and virtual courts will be enabled by the delivery of the new systems of the Integrated Systems Programme and the cashable and non-cashable benefits that they will deliver. And will require the Integrated Systems Programme to be in place to deliver these. It is intended that the key deliverable time lines for the Offender Management Reform Strategy will be aligned with the key deliverable time lines of the Integrated Systems Programme.

The solution provided by the integrated Systems Programme has a dependency with or to the **Mobile Solution Project**.

Mobile Solution Project	Nature Of Dependency With The Mobile Solution Project
Mobile Solution Project	The Mobile Solution Project is to deliver a next generation 4G mobile solution for all front line police officers that enable them to work remotely and access 100% of the Force systems, providing officers with the information that they need to carry out the new ways of working outlined in the Chief Constable's vision and support modern policing. The Mobile Solution will only be able to enable the new ways of working and support modern policing if full and accurate information can be speedily accessed by Police Officers through the Mobile Solution. Both the C&C and core policing systems would all provide direct access to their information from mobile devices. The outputs and benefits of the Mobile Solution project can only be delivered if the new systems of the Integrated Systems Programme are in place, in order for the Mobile Solution to be able to access the improved data and information management and searching.

3.4.11 Risks

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
The market is unable to provide an off the shelf solution that meets the needs of the force.	The programme will be unable to deliver within the time and cost envelope. An alternative strategy to systems will need to be considered.	Low	Soft market sounding carried out in Project 0 has evidenced that solutions exist.
The ICT department is unable to abstract the necessary skills to support the in-house approach to infrastructure.	The programme will need to recruit additional external resources to build the infrastructure. This may increase the time line and may increase the budget by an estimate of 10%.	Medium	Effectively use the subcontract market that has an abundance of the necessary skills to fill gaps. Use resources efficiently to ensure that value for money is extracted.
The programme does not deliver a system on time	The force will be required to sustain existing systems (see option 1), and there will be a delay in the benefits realisation. The programme team will have to be retained incurring additional costs.	Medium	Enable quick escalation of issues and close monitoring of the programme against milestones to ensure delivery is on schedule.
Managers, Police Officers and staff do not fully engage with the changes needed to realise the benefits.	The large potential benefits of the Integrated Systems Programme will become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits.
Police staff and officers do not have enough sufficient knowledge of how to use the new systems effectively.	Inefficiencies will occur within the new ways of working and new processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits.	High	Training plans in the use of the new systems and new processes will be developed within the Integrated Systems Programme, dependent upon the option and systems chosen.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
Senior Managers and Managers do not reinforce the new ways of working and the following of the new processes.	There will be slippage back to current ways of working and processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits. They will also plan and manage the change communications strategy and plan, including the management of resistance.
Abstraction of Police Officers and staff may be difficult.	May put time pressure on operational staff.	Medium	Training plans to be developed so 95% of staff only require 1 days class room training, and rest of training using an e-learning approach.

3.4.12 Summary of Recommended Option 3

In summary, the recommended option presents the:

- Lowest cost
- Lowest risk in all four of the options
- Is able to draw on previous experience from other police forces that have already chosen this option
- Fastest deployment
- Most flexible implementation approach
- Maximum value

4 APPENDIX A: EVIDENCE FOR MEETING TECHNOLOGY CODE OF PRACTICE

4.1 Codes Of Practice

Code Of Practice: Ensure systems, information and processes are designed around the needs of the service user, providing as simple and as integrated experience as possible

Using requirements elicitation techniques of 1:1 meetings; workshops; observing; shadowing; and surveys the following requirements have been identified for each of the core systems and Command and Control system working with end users and key stakeholders. These have been signed-off by end users and key stakeholders. The types of requirements that have been defined and signed off are: functional, non-functional, technical, information management and security, interface, integration and horizon scanning. The requirements are expressed as output based specifications, based on organisation and user needs.

End users and key stakeholders will be involved in the design of the 'to be' processes, when the chosen products are configured.

Code Of Practice: Demonstrate the value for money in your Business Case and articulate the options considered in a full and objective appraisal

Full details of the four options are considered and their appraisal are described in the Business Case, and the reasons for choosing the recommended option is described and why it demonstrates value for money.

Code Of Practice: Ensure a level-playing field for open source software, demonstrating an active and fair consideration of using open source software

An earlier six month piece of work was carried out in early 2014, which included soft market testing of potential suppliers.

The core software products to be procured will be Commercially Off The Shelf Products that are proven products which are being successfully used in at least two other police forces. Soft market testing carried out in Project 0 demonstrated that there are a number of suppliers with these proven products in the market. And that these products are sufficiently open source, that one suppliers core integrated system can interface with another suppliers command and control system and vice versa.

Code Of Practice: Use open standards

The core integrated policing system and Command and Control system provided by the potential suppliers meet the open standards for data already developed by the Association of Chief Police Officers Open Standards Working Group, and will be upgraded to meet new open standards as they are rolled out.

Code Of Practice: Establish the sensitivity of information held in accordance with the Security Classification Policy

As part of the development, identification and signing off of the Requirement Definition of the core integrated policing system and the Command and Control system, infosec and Information Management requirements were identified and developed. Which includes compliance with Management Of Police Information (MOPI) and the Data Protection Act.

Code Of Practice: Separate commodity from niche needs

Procurement of hardware and specialist external delivery support partner are to be procured through framework agreements.

The more niche core integrated policing system and the Command and Control system are to be procured using the OJEU process.

Capabilities are being procured for the duration of the 18 month programme through procurement of the specialist external delivery support partner.

Code Of Practice: Ensure that any procurement is designed to encourage competition and follows published Government Procurement Policy

Incumbent products, services and suppliers or their brands are not being stipulated, nor are the products to be procured through extensions to existing contracts.

Instead a fair and legal open procurement process is to be carried out, using the OJEU procurement process.

The Requirement Definition developed for the two systems are described as output based specifications, and are expressed as business outcomes and user needs.

The procurement has been broken down into a separate procurement process for the core integrated policing system and a separate procurement for the Command and Control system to enable all potential suppliers to be able to bid.

Code Of Practice: Objectively evaluate potential public clouds solution first – before you consider any other option

Determination of the appropriate procurement route was included in the earlier piece of work carried out in the early part of 2014 as described in the rest of this Business Case. This covered assessing potentially appropriate Crown Commission Sevices Buying Solutions Framework, which included G-Cloud.

The G-Cloud framework specifies 2-year contracts, which because of the amount of investment of time and Police Officer abstraction and training involved is too short a contract time.

Also within the potential suppliers one product would have limitations being hosted on G-Cloud, thereby reducing competition.

Code Of Practice: Any software licence agreements must evidence actual user needs – there should be no default continuation of enterprise licence deals or specification of products or brands

The types of requirements that have been defined and signed off are: functional, non-functional, technical, information management and security, interface, integration and horizon scanning. The requirements expressed in the Requirements Definition are output based specifications, based on organisation and user needs. Brands and products are not specified. This practice will be continued into the software licence agreements.

Code Of Practice: Plan on using an agile process

It is planned to use an agile process during the procurement of the core integrated policing system for Case, Custody, Crime and Intelligence and the Command and Control system, particularly during the areas of solution design, configuration, data migration and the development of 'to be' policing processes to support the new systems.

The internal British Transport Police programme team are being trained up in Agile and Scrum methodology.

Code Of Practice: Demonstrate that adequate capability is available in your organisation – if the necessary capability does not exist in-house, then you need to evidence a plan for developing or recruiting people with the right skills and experience.

The lead team in the Integrated Systems Programme is the in-house British Transport Police Programme Team, consisting of an experienced Programme Manager, 5 experienced Project Managers, 5 experienced Business Analysts, 1 Data Architect and police Subject Matter Experts.

Due to a number of other transformation programmes taking place in the British Transport Police, the proposed resourcing approach requires that there is little demand placed on BTP ICT staff. However this dependency can also be contained and managed through a technical design that considers this risk.

The key tasks in the programme fall into the following groups

- Programme management covering the complexity and breadth of dependencies
- Designing efficient processes and configuring the software accordingly
- Physically building, securing and testing the infrastructure
- Training and preparing the organisation for the change

The resource pools from which the team will be built is as follows in descending preference:

- Already assigned Integrated Systems Programme team
- British transport Police Officers and staff
- Specialist external support delivery partner
- External subcontractors that offer value for money through preferred supplier frameworks, for those resources which cannot be resourced either internally or from the specialist external support delivery partner

Where resources are provided by either the specialist external support delivery partner or through external subcontractors, transfer of capability and knowledge to internal staff is to be followed.

The resourcing model is based around a series of factors that have been considered:

- The pace at which the programme needs to be delivered, due to the current state of the legacy systems and manual processes. And the British Transport Police not being capable of meeting a number of key mandatory requirements
- The impact of failure, should the solution not meet the timeline or the quality requirements. This programme is regarded as significant to the British transport Police, and will deliver a series of critical services that are core to the Force operating within a national policing framework. As well as being a critical enabler for the outputs and benefits to be delivered by other projects and programmes within the overall British Transport Programme Transformation Portfolio
- The delivery of this programme must function alongside the normal day to day duties of staff and officers. The programme resources will need to provide geographical coverage and deliver, focused, high efficiency training and engagement

Code Of Practice: Implement effective procedures for the use and management of information through its entire lifecycle

The programme team during implementation of the integrated core policing systems and the Command and Control system will be working closely and in conjunction with the British Transport Police's Information Management team to ensure that the data in the new systems are MOPI compliant and meet the requirements of the Data Protection Act.

Also they will be working with the British Transport Police Information Management team to ensure that the systems and their configuration and the new 'to be' processes that are developed meet all the required information management and infosec required standards. And that data migration also follows these standards.

5 APPENDIX B: OBJECTIVES FOR THE INTEGRATED SYSTEMS PROGRAMME

Objective 1: To procure and implement a solution for BTP which is capable of supporting a unified, operational policing system that manages and provides common information in relation to the core policing (POLE) entities - People, Objects, Locations, and Events - and through workflow automating the movement of information within the core applications of Custody, Case, Crime, Intelligence and Command and Control.

Objective 2: To procure and implement a solution for BTP which provides a 'golden nominal' for the integrated system of Custody, Case, Crime and Intelligence, and also a Command and Control system which can interface with the integrated system. Therefore, providing a system that enables the capability for officers to make instant information based decisions that positively impact delivery against the strategic plan and core policing responsibilities.

Objective 3: To ensure that the solution which is procured and implemented enables BTP Police Officers and staff at each phase of the criminal justice process – from report to court – to be able to view all required information and data on the five core systems of Custody, Case, Crime, Intelligence and Command and Control.

Objective 4: To manage the procurement process so that the procured solution contains the following key requirements:

- Is a proven off-the-shelf solution which is currently operating effectively within at least two other police forces
- Allows the creation of a "golden nominal" for POLE entities, and supports MOPI and Data Protection Act compliance
- Meets the Force's detailed and signed-off output based functional, non-functional, technical, integration, interface and horizon scanning specifications for each of the core systems of Custody, Case, Crime, Intelligence and Command and Control
- An availability of alternative options for hosting of the systems
- A development pathway for the chosen product to be implemented as the procured solution
- Ability to be configured to support BTP's requirements and support improved business processes
- Options to purchase additional modules associated with the procured solution at a later date. These will enable future value add and enable replacement of other BTP legacy systems
- Capability to interface with other internal IT systems and applications, and also national IT systems, e.g. PNC; PND; Libra
- The integrated system and the Command and Control system are PND compliant
- Capability to support mobile policing and access to information from mobile/smart devices and platforms, and being mobile device and platform agnostic
- Ability to produce key management information outputs that are timely, accurate and capable of transfer to other Force systems
- Ability to exploit data and intelligence
- Provision of single sign-on for users
- Flexibility and agility to incorporate future changes arising from the BTP policing environment, and provide scalability.

Objective 5: To enable the realisation and embedding of benefits arising from the implementation of the integrated solution and Command and Control system within BTP, and which have been identified and analysed through:

- Ensuring the identified cashable and non-cashable benefits are provided by the procured solution
- Identifying the transformation that needs to be taken in business areas in order to fully realise and embed the benefits of the solution
- Leading the structural and process changes required in business areas to ensure the realisation and embedding of benefits.

6 APPENDIX C: THE THREE ELEMENTS WHICH MAKE UP THE SOLUTION

6.1 The Three Elements Which Make Up The Solution

The solution is based on three distinct elements, which are:

1) The **system** (or software) that delivers the functionality required by the officers

2) The **infrastructure** (or hosting) that delivers the non-functional requirements needed for the system to operate with speed and resilience

3) The **service management** that ensures the system is maintained and kept operational for all officers and staff, at all times

These elements can be delivered in different manners each one yielding a different overall option, and is the basis for the four options described and assessed in APPENDIX D: Full Options Analysis.

7 APPENDIX D: FULL OPTIONS ANALYSIS

7.1 Option 1 – Baseline or 'Do Nothing' option

7.1.1 Option Description

The status quo is maintained in this option through renewal of legacy systems currently in use in the Force. Beyond this no other activities are undertaken to change business processes and operational behaviours. In this option contracts for Crime, Intelligence and Command and Control systems are extended for as long as possible. Case and Custody systems are kept operating as manual processes.

7.1.2 Baseline Summary

The baseline summary as follows demonstrates the consequences for BTP of taking the "do nothing" option.

Case and Custody business areas are currently using manual processes, and without a new system will continue to do so. There is a mandatory legislative requirement to be able to carry out PND uploads; continued use of manual processes makes the Custody business area non-compliant with this mandatory requirements.

The business area of Case Management cannot meet the mandatory requirement to transfer files electronically to the Crown Prosecution Service and digital courts. The deadline for achieving this was April 2014, and will continue to be missed in this option. BTP's continued inability to transfer fully electronic case files as effectively as other police forces will become increasingly obvious in the "do nothing" option, with continued weekly loss of paper files at courts which is subsequently leading to discontinuation of cases. In London alone from the 3rd April 2014 to 19th June 2014 CPS lost 58 paper files, as their staff become unfamiliar with handling non-electronic case files.

The electronic Witness Care system being used is over 7 years old, and is no longer supported by the supplier. Support and administration is vulnerable as it relies on one internal staff, with the potential to call on a freelance contractor who was involved in its initial development.

If it is decided to adopt the 'do nothing option' these manual and partially electronic options in Custody and Case will continue to be used. The associated inefficiencies, non-compliance, reduced productivity, double entry of data and reduced effectiveness will also continue.

The existing or 'legacy' Crime, Intelligence and Command and Control IT systems will become increasingly less efficient and expensive to maintain, and are currently more expensive to maintain than will be the maintenance and support of the five new systems in option 3. They are based on old technology with no development pathway and so will continue to become more outdated.

The current state of the legacy systems also result in the Force being non-compliant with the mandatory requirements of MOPI and the Data Protection Act, creating information management security risks. As well as these systems being non-compliant with the PSN-P mandatory requirement.

None of these legacy systems are integrated and are not capable of being so, and so in the "do nothing" option there will be no ability to satisfy the Integrated Systems Programme objective to create a 'golden nominal' for People, Location and Events. Similarly the lack of integration will continue to make searching for related data in each of the systems by Police Officers and staff time consuming and inefficient

7.1.3 Legacy Support Contracts due to end

In addition to the above the support contracts for the current Crime, Intelligence and Command and Control systems are due to come to an end as follows.

Legacy Command And Control System Item	Renewal Date
DS2000 Annual Support and Maintenance (Command & Control)	29/11/2014
Software Support Framework - NSPIS Command & Control Software (Service Level 1)	22/06/2014
Command and Control Additional Support Extension & Maintenance Renewal Software: Software Support Framework - NSPIS Command & Control Software (Service Level 1)	22/06/2014
Command and Control Additional Support Extension & Maintenance Renewal Software: 3rd Party Framework	22/06/2014
BTP C&C Support and Maintenance Contract Renewal 2013 to 2014	22/06/2014

Force Intelligence System (FIS) Item	Renewal Date
FIS Annual Maintenance Fee: SPARC Enterprise T5220 Server	16/08/2014
FIS Annual Support & Maintenance: Software	03/12/2014
FIS Escrow Agreement	13/05/2014

Crime System Item	Renewal Date
Crime Annual Support & Maintenance Framework Agreement	30/11/2014

During the Integrated Systems Programme in order to maintain operational core policing systems whilst the procurement and implementation of the new integrated solutions is carried out, 2 year plus optional 1 year extensions to the contracts of these legacy systems are being negotiated.

Having negotiated one extension of contract for these legacy systems it will be difficult to negotiate further extension of contracts. In addition, the suppliers of these current legacy systems have newly developed products on the market or in development. Therefore, there will come a time when the suppliers are no longer interested in supporting them, or will ask much higher support and maintenance contract fees to do so.

7.1.4 Strategic Fit

The 'do nothing option' does not align to the strategic aims of the Force. It will maintain the inefficiencies of data management across the core policing systems; continue the time wasting in searching for data associated with nominals and the using of information at incidents; double keying of data; and maintains the reduced productivity due to continued use of manual and semi-manual processes.

As a result it will constrain and limit the achievement of the following strategic themes in the BTP Strategic Plan:

- Demonstrating improved performance and reduced costs through a range of measures including integration, outsourcing, commissioning and broadening our customer base (Strategic Reference 2)
- Continuously innovating the way we police in order to anticipate the impact of new technologies (Strategic Reference 4)
- Create conditions which embed entrepreneurship, creativity and innovation at all levels of BTP (Strategic Reference 4)
- Deliver value for money, reduce crime and reduce disruption

It will also constrain and limit the achievement of the 20-20-10 and beyond strategic objectives, (i.e. reduction of crime by 20%, reduction in police-related disruption minutes by 20% and increase in passenger confidence by 10%).

In addition, the 'do nothing option' will limit BTP's options to further develop and improve its capabilities in:

- Crime reduction
- Problem solving
- Offender management

7.1.5 Benefits

With the 'do nothing option' there are no benefits, only dis-benefits and risks.

Type	Description	When realised (estimate, if applicable)	Strategic Alignment (indicate which SF it is aligned to and how)
Dis-benefits	The 'do nothing option' will maintain the non-compliance with a number of mandatory requirements; the inefficiencies of data management across the core policing systems; continue the time wasting in searching for data associated with nominals and using information at incidents; double keying of data; and maintains the reduced productivity due to continued use of manual processes in Custody and Case Management.	These dis-benefits are in place now, and will continue if the 'do nothing option' is adopted.	The 'do nothing option' constrains and prevents the full achievement of the strategic themes in the BTP Strategic Plan, including the 20-20-10 and beyond objectives and improving capabilities in crime reduction, problem solving and offender management.

The table above displays the dis-benefits of doing nothing. This clearly indicates that the force has to do something otherwise it will continue to retain the operational risk, non-compliance with

specific mandatory requirements, ineffectiveness of procedures and inefficiencies in processes that it currently has.

7.1.6 Costs

The estimated costs below are based on the ongoing maintenance and support costs that were incurred in the financial year of 2013/14 for the core IT systems of Crime, Intelligence and Command and Control of £561,000, plus a 3% uplift based on the industry standards index (BEAMA) for 2014/15 to £578,000.

Extension of contracts for the legacy core systems of Crime, Intelligence and Command and Control in 2014 will only be for 2 years + 1 year extension (+ 1 year extension for comparison).

Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Capital expnditure						
Revenue expenditure	578	578	578	578	578	2,890
Total Expenditure	578	578	578	578	578	2,890

* These numbers are provided for comparison, however, a further 1 year extension is unlikely.
** Ongoing revenue costs include supplier maintenance resource costs, but not internal IT resources currently in place to support the systems.

7.1.7 Timelines

There would be no specific timelines, but continuation of business as usual.

7.1.8 Resources

The resources required would be as currently exists, including the resources currently used to support and maintain the legacy systems.

7.1.9 Risks

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
Transfer of fully electronic case files to the CPS and courts and other mandatory requirements will not be achieved.	BTP will continue to not be able to meet CPS and other mandatory requirements, whilst other police forces demonstrate that they are capable of meeting these. With continued damage to reputation, loss of paper files by CPS, and subsequent discontinuation of cases.	High	An interim solution is in place which sends case files by e-mail until the integrated systems can be implemented, but these are not considered electronic.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
Witness care will continue to be supported by an electronic Witness Care system which is over 7 years old, and no longer supported by the supplier.	Maintenance and administration is dependent upon an internal staff member and potential support from a freelance contractor, which is subject to labour turnover and availability of contractor.	High	Additional staff need to be trained to administer and support.
Custody will continue to use manual processes.	Efficiencies due to better data management, removal of double keying and better search facilities will not be able to be achieved to support operational policing.	High	Identify ways of improving and making the manual processes more efficient.
There is no capability to create a 'golden nominal' for People, Location and Events.	Inefficiencies, lower productivity, creation of duplicates and double keying of data would be maintained, and efficient data management would not able to be achieved to support operational policing.	High	Identify ways of improving data management across the current systems of Crime, Intelligence and Command and Control. And also in the partial electronic and manual systems of Case and Custody.
Further extensions of supplier support, beyond those currently being negotiated for legacy systems may not be possible.	Systems will move out of support by suppliers and so become more outdated. Systems may be unable to be modified internally to meet the force's future needs or be corrected in incidences of technical failures.	High	New Crime, Intelligence and Command and Control IT systems will need to be sourced in the immediate future, if not addressed now.
The improvements in efficiencies, time saving and productivity that will enable the achievement of key strategic themes, the 20-20-10 and beyond objectives and improvement of Force capabilities will not be delivered.	The large amount of efficiencies that modern IT systems can enable to support operational policing, will not be available or achieved.	High	Efficiencies that are able to be achieved within the constraints of the legacy systems will need to be maximised.
The Intelligence Business Area is at risk of having more than one 'version of the truth' across multiple systems. And as the size of the data set increases, the risk to the integrity of intelligence data will increase.	Integrity of the Force's intelligence data will continue to decrease.	High	Time and manual effort would be needed to try and maintain the integrity of the intelligence data as much as is possible with the current systems.

7.1.10 Option 1 Conclusion

Option 1 – do nothing; has been discounted because this isn't a viable option. The Force is seeking substantial benefits, many of which result from a current suboptimal situation with some of its Custody and Case systems. It is also considered that the Force is currently at operational risk due to the high volume of manual and paper based processes, and non-compliance with a number of mandatory requirements. Therefore, option 1 does neither reduce risk nor contribute to any of the Force's strategic aims and the 20-20-10 and beyond objectives.

7.2 Option 2 – A Fully Managed Service (outsourced to a single supplier)

7.2.1 Option Description

The end state solution is achieved by procuring a fully managed service that provides the core policing functionality, hosted and supported by an external supplier. In this option the Force will be required to articulate its detailed requirements in terms of outputs, with little or no input as to how the service is to be delivered. This also means that BTP will not be required to state the software platform used.

7.2.2 Strategic Fit

This option is aligned to the IT vision for a utility based cost model and outsourced IT to 3rd party professionals who specialise in IT service provisioning where they are able to create scales that the Force can take advantage of.

It would also support a number of the Force's key strategic themes within Strategic References 2 and 4, and the 20-20-10 objectives and beyond.

7.2.3 Implementation Approach

The outsourcing of the core policing systems will need to form a combination of procuring the right solution and service management combination, along with the delivery of the service such that BTP is able to consume it in the model normally associated with this approach.

A fully managed service can be provided in three ways:

1) An **existing framework** available to all UK Police forces. This approach requires no formal procurement process providing an accelerated route to a core platform. This exists today in the form of the Athena Management Organisation, however, this carries a high level of uncertainly in both timescales, costs and nature of service.

2) A **3rd party building a bespoke service** specifically for BTP, this would require a complex procurement route, possibly negotiated as it would be the first example of it being done. There is no provider doing this today. This also carries a very high risk in terms of cost, time and quality, and is considered unsuitable for a single police force to consider.

3) **Another force** providing the service to BTP, although theoretically possible, carries a very low probability due to the current strategy sweeping across forces to outsource as much IT as possible to 3rd party organisations.

Of the 3 ways, reaching out to another Force may be feasible through collaboration. There are currently 4 possible scenarios available for this:

- Sussex Police already provide such a service to their neighbouring force, Surrey Police. They currently provide a single instance and version of the platform. However, their ability

to offer the service was predicated on the existence of numerous other collaboration initiatives with Surrey Police.

- South Wales already provides such a service to their neighbouring force, Gwent Police. To provide a single instance and version of the platform and their ability to offer the service was predicated on the existence of numerous other collaboration initiatives and Gwent's flexibility on business processes.
- South Yorkshire does not currently provide this as a service, however, they do have an infrastructure in place that is able to accommodate other forces. This is currently untested and many aspects of how this option would operate are unknown, even to South Yorkshire.
- Lincolnshire Police have a managed service arrangement in place with G4S who are currently adopting all of Lincs' ICT including core policing platforms. Lincs is also in the process of reaching agreement with Leicestershire, Nottinghamshire and Northamptonshire to provide them with hosted and managed core systems. The service from Lincs is only possible due to their geographical proximity and having already standardised on many business processes across the region. Although feasible this option is unlikely to be possible within acceptable timeframes and will be subject to agreement from 4 other forces.

As a result of discussions with and visits to regional police forces during Project 0, we have established that these scenarios are highly unlikely due to the differences in policing priorities and criminality addressed by BTP and other forces, and ongoing changes taking place within other police forces.

7.2.4 Benefits

The following benefits are the cashable and non-cashable benefits that are specific to the delivery of this option.

Cashable Benefit 1: Datacentre: Server equipment refresh and maintenance, including infrastructure software components. £600,000 annual revenue cost saving including capital depreciation
With a service totally managed externally there will be no need to retain any of the existing hardware and software that is currently hosted internally.

Cashable Benefit 2: Datacentre: In-house solution support, maintenance and running effort no longer required. £250,000 annual revenue cost saving
With all the service management outsourced to the provider there is no longer a need to have an in-house maintenance capability supporting equipment and application.

Non-Cashable Benefit 3: IT Efficiency: The provider will avoid Hardware and Software wastage ensuring BTP pays only for consumption of services. £100,000 annual revenue cost saving
The virtualisation technology used by managed service providers will allow for commercial models that allow a pay-as-you-go utility payment method which tracks officer head count and requires no further investment in equipment. One less tangible benefit that is unique to this option is that the vast majority of the risk is shifted to the supplier; they are responsible for all aspects of the solution. They also take on the risk of any capital expenditure such as with the equipment and licences.

Option 2 will deliver all the end-state benefits of a total of 744,594 hours, (non-cashable and cashable combined) saved due to efficiencies, and the cashable savings due to the legacy systems maintenance and support stopping as detailed in APPENDIX E: Benefits. There is also an additional **£850,000** of option-2-specific annual revenue cost savings, as detailed above. The figures are nett.

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated Systems and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into the Force, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

In addition, the Force is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, 202-20-10 objectives and the Chief Constable's vision "Making a Difference" out to 2019. BTP's transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it. Evidence based policing, Offender Management, advanced problem solving and a proactive approach to stopping crime will underpinned by an enhanced IT infrastructure of which the Integrated Systems Programme is a part of, mobile technology and a fundamental overhaul of training and skills.

The Integrated Systems Programme is central to this comprehensive programme of change, and is one of the early programmes in this Force-wide transformation.

This Business Case just considers the benefits of the Integrated Systems Programme against the current "As Is" model for the Case, Custody, Crime, Intelligence and Command and Control systems. But these benefits must also be seen within this wider programme of change for which the Integrated Systems Programme is a vital step, and as the later projects and programmes are delivered these benefits may need to be taken up or used by these other programmes.

7.2.5 Costs

The following costs are those attributed to the delivery and the revenue costs associated with running the service.

These have been split into Capital and Revenue costs and displayed in the tables below as how they might be expected to fall across the five years considered by the business case.

Table 1: Table showing Capital costs of Option 2 across the next five years

Description	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Establishing/standing up the service	1,000	1,000				2,000
ISP programme management team	700	700				1,400
Additional resources to be recruited for programme	200	200				400
Specialist support provider service to support procurement and implementation and inc provision of specific resources)	1,000	500				1,500
Total capital requirement	**2,900**	**2,400**				**5,300**

Table 2: Table showing Revenue costs of Option 2 across the next five years

Description	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
One off revenue costs						
Running the service			1,800	1,800	1,800	5,400
Sub total one off revenue costs	0	0	1,800	1,800	1,800	5,400
Ongoing revenue costs						
BTP running the service from year 3/existing costs	578	578	350	350	350	2,206
Core Systems licencing						
Sub total ongoing revenue costs	578	578	350	350	350	2,206
Total revenue costs	578	578	2,150	2,150	2,150	7,606
Existing reveneue costs	578	578	578	578	578	2,890
Net revenue costs	**0**	**0**	**1,572**	**1,572**	**1,572**	**4,716**

This can be further summarised across the 5 year period as follows:

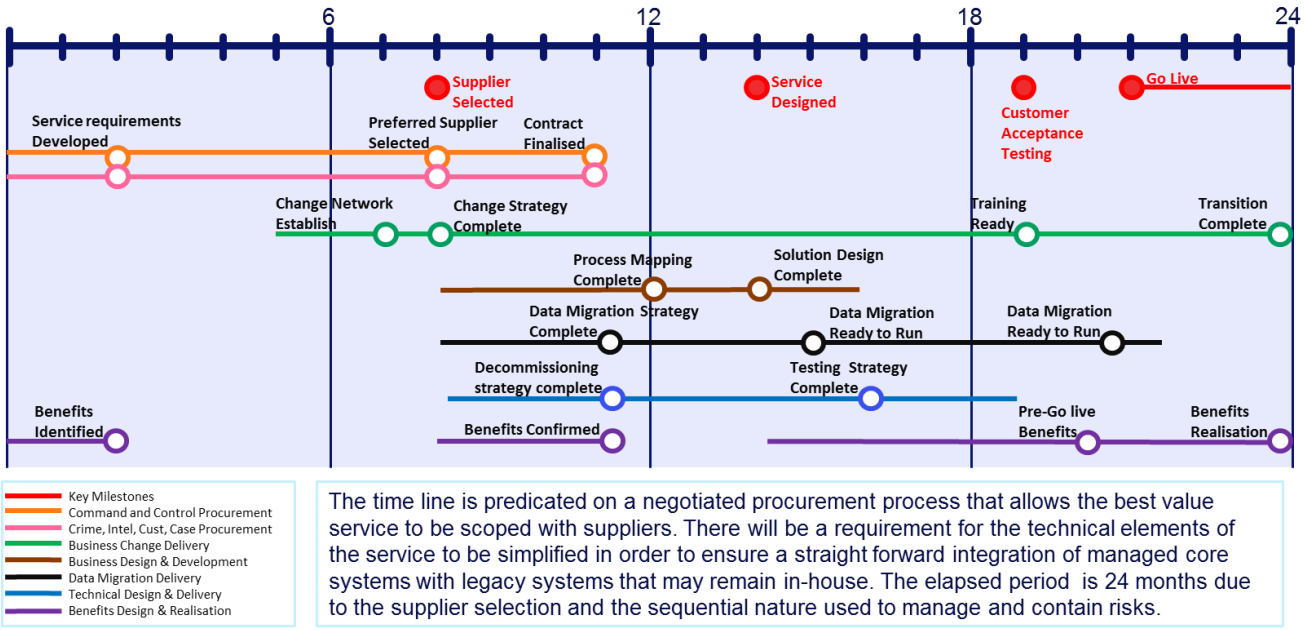
Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Capital expenditure	2,900	2,400	0	0	0	5,300
Revenue expenditure	0	0	1,572	1,572	1,572	4,716
Total Expenditure	2,900	2,400	1,572	1,572	1,572	10,016

The total 5 Year cost is **£10,016,000** (£5,300,000 capital, £4,716,000 revenue). The above costs do not include an exit fee circa £500,000.

Assumption: the financial time frames for these costs are based on the assumption that all BTP and external approvals will have been obtained by October 2014. If this is not the case, there will need to be appropriate adjustments to the finances and the year in which they occur.

7.2.6 Timelines

The following time line has been based on the Lincolnshire Police model and the Sussex Police deployment approach that are good examples of both procurement of service and deployment of a system. The start of the time line is when approval by all required governance bodies has been completed.



The time line is predicated on a negotiated procurement process that allows the best value service to be scoped with suppliers. There will be a requirement for the technical elements of the service to be simplified in order to ensure a straight forward integration of managed core systems with legacy systems that may remain in-house. The elapsed period is 24 months due to the supplier selection and the sequential nature used to manage and contain risks.

7.2.7 Resourcing and governance structure

The approach to resourcing the programme will be based on ensuring that the right skills are understood and the level of capability is recognised for the roles, with this in mind the right person at the right time and price is chosen and brought into the team. The resource pools from which the team will be built is as follows in descending preference:

- Already assigned Integrated Systems Programme team
- Force staff and officers
- External specialist delivery support partner that mitigates risk
- External subcontractors that offer value for money through preferred supplier framework

The resourcing demands of this option is biased towards managed service design and outsourcing, and as such is very analytical in nature. There will be a need for high quality analysts with prior experience in this type of work. This is required due to the very competitive and low margin nature of this type of business which leads the market to squeeze as much as possible from these types of contracts.

As a large portion of IT will be outsourced, there will be a need for ICT to facilitate with the integration and migration of services across to the supplier. Although this is similar to other options, in this case it will have to be very structured and disciplined in order to ensure that BTP is not found at fault if disruptions to service occur.

An ongoing service management team will need to be deployed; they will manage the contract and ensure that BTP receives a high quality service. It will also be important to consider a longer term ICT strategy that described how the improved service will be achieved.

In terms of governance the programme will follow Managing Successful Programmes (MSP) methodology, and all the programme management processes and documents will be managed through Project In A Box (PIAB). There will be a Programme Sponsor, ACC Newton, and a

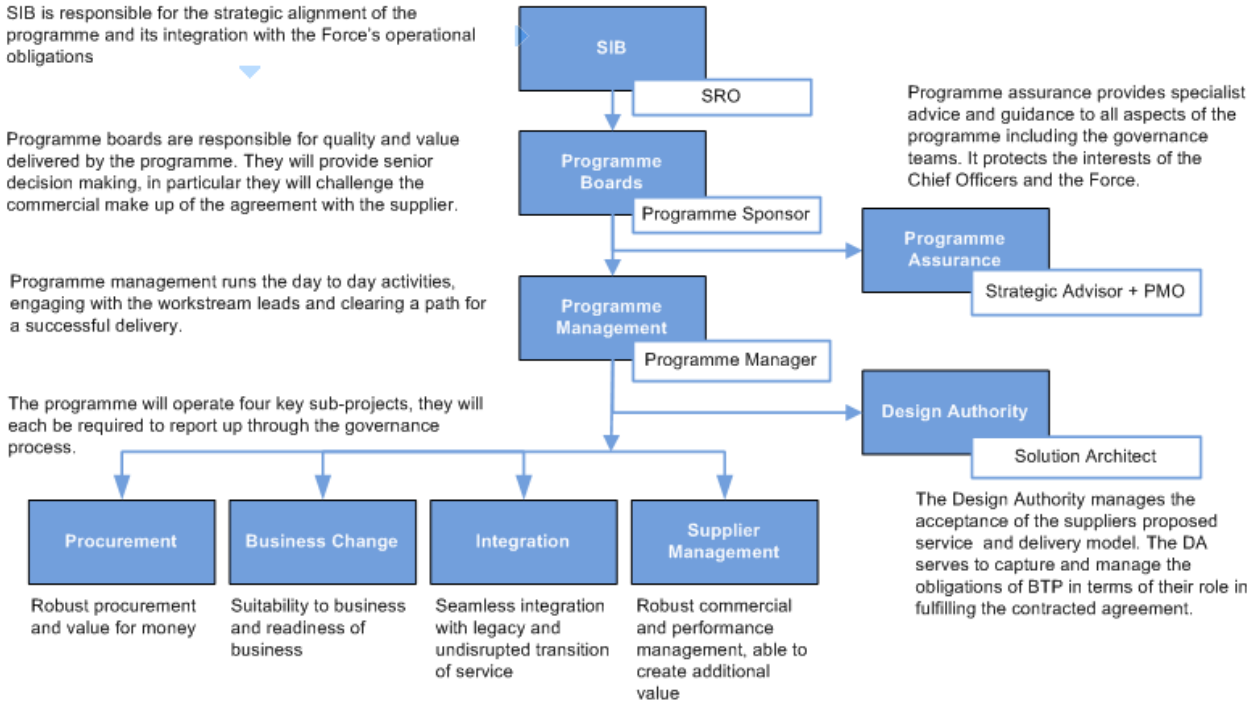
Business Programme Lead, Supt. Chris Horton. The programme will be overseen and managed by a Programme Manager, John Steel and each one of the five systems workstreams will have a lead Project Manager and Business Analyst. As part of the programme team there will be two senior transformational Change Managers, to drive the change needed to realise the benefits in the business areas. The programme team will also carry out supplier management to minimise scope creep.

The Integrated Systems Programme will have its own Programme Board chaired by the Programme Sponsor and Programme Lead, for which there will be agreed terms of reference. This board will report into the Information Portfolio Board and the Service Improvement Board, providing regular Highlight Reports.

Programme and Project Plans using MS Project, Active Risk, Issues and Assumption logs will be developed and managed for the programme and the workstream projects, and maintained and updated within PIAB.

Programme quality assurance will be provided by the PMO. Also prior to a key stage gateway in the programme being achieved, a pre-assurance review will be carried out by the internal programme team using the OGC Gateway Review checklists.

The key elements of the Governance process and structure are demonstrated in the diagram as follows.



An indicative resource requirement for option 2 is listed below, and the costs shown are over two financial years, (the two years of programme implementation):

Resource Description for Option 2	Quantity	Duration (Months)
Integrated Systems Existing Programme Resources. £1,400,000		
Programme Manager	1	18
Project Managers	5	18
Business Analysts	4	18
Benefits Manager	1	18
Data Architect	1	18
Project Support Officer	1	18
Existing BTP (Non-Programme) Resources to be Used £0		
Procurement Manager	1	10
Procurement Analyst	1	10
Technical SMEs (WAN, data centre. Mapping, DBA, etc.)	3	10
IT Project Manager (being funded and recruited by IT)	1	18
Resources to be Provided by the Specialist Support Provider. Part of the overall service fee		
Managed Service Procurement Specialist Lead	1	11
Business Change Specialist (police knowledge)	1	17
Customer Acceptance Lead	1	7
Process Lead/Design Authority	1	9
Information Management and Data Migration Lead	1	12
Integration and Technical Specialist Lead	1	10
Benefits Lead	1	6
Additional Resources to be Recruited / Procured. £400,000		
Business Change Specialist (public sector knowledge)	2	16
Business Trainers	10	4
Customer Acceptance Testers	4	4
Process Analysts	5	9
Data Management Developers	3	10
Test Manager	1	6
Testers (non-functional)	6	4
Security Accreditor	1	4
Penetration and Security Testers	2	2
Systems Integrators	3	6

7.2.8 Risks

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
The supplier market does not view the opportunity as being of suitable value.	BTP will have lost 4 months, although 50% of sunk costs will be reusable pursuing other options.	High	Soft market test with suppliers early on in the process to determine necessary critical mass. Begin discussions with other forces to gain critical mass if BTP on its own is not significant enough.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
The supplier does not deliver a system on time.	The force will be required to sustain existing systems (see option 1), and there will be a delay in the benefits realisation. The programme team will have to be retained incurring additional costs.	Medium	Work closely with the supplier and integrate them into the programme management structure, to give visibility of issues they are facing. Write penalties into the managed service build contract.
The supplier does not provide an adequate service to the Force following the system being put in place.	The force will experience a back-lash from users and may introduce operational policing risk.	Low	Mitigated through rigorous Customer Acceptance Testing and a high level of penalty levy on the contract.
The procured service doesn't provide value for money to the Force.	The contract will have certain performance targets to achieve, if these are not satisfied the supplier will be subject to penalties that economically rectify this. If the Force does not realise the benefits, then this is down to the Force to address.	Medium	The contract will be designed to deliver a service, value for money is a design feature of this and the Force's desire to realise benefits.
Abstraction of Police Officers and staff may be difficult.	May put time pressure on operational staff.	Medium	Training plans to be developed so 95% of staff only require 1 days class room training, and rest of training using an e-learning approach.
Managers, Police Officers and staff do not fully engage with the changes needed to realise the benefits.	The large potential benefits of the Integrated Systems Programme will become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
Senior Managers and Managers do not reinforce the new ways of working and the following of the new processes.	There will be slippage back to current ways of working and processes. This will cause the large potential benefits of the Integrated Systems Programme to dissipate and the full benefits that exist will not be realised and embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits. They will also plan and manage the change communications strategy and plan, including the management of resistance.
Police Officers and staff do not have enough sufficient knowledge of how to use the new systems effectively.	Inefficiencies will occur within the new ways of working and new processes. This will cause the large potential benefits of the Integrated Systems Programme to dissipate, and the full benefits will not be realised and permanently embedded, losing potential cashable and non-cashable benefits.	High	Training plans in the use of the new systems and new processes will be developed within the Integrated Systems Programme, dependent upon the option and systems chosen.

7.2.9 Option 2 Conclusion

Option 2 – was discounted due to there only being one such service which is still under construction (after 3 years) with no track record for successful delivery, therefore, the risk of this option is significantly greater due to the unknowns. Additionally, this one service is already fully committed to 7 other police forces throughout the country, with little realistic capacity (if any) for further forces to join.

7.3 Option 3 (Recommended) – Software Product Chosen, Installed & Managed In-house

7.3.1 Option Description **(recommended option)**

A software product is competitively procured against a proven and signed off set of requirements. BTP's existing IT capability and access to any existing contracts are used to develop and build the hosting components, this requires that the current data centre and IT resources where available are used to deliver the solution with additional support from a 3rd party supplier if available. This has been the traditional approach used by forces. An example of this is Sussex Police where Niche RMS was installed into the existing data centre and supported by an in-house capability. An assumption has been made based on discussions with IT that most of the IT resources will need to be provided by an external specialist delivery support partner, and is reflected in their costs. This option does not exclude the possibility of leveraging external tactical hosting options that may result from additional value offered by the bidding suppliers, as it will always be the intention to maximise value for money whenever going to market for solutions.

7.3.2 Strategic Fit

This option does not immediately align with the vision to outsource many of the IT services to 3rd party providers. However, a design principle will be for the solution to be developed in a manner that leaves it packaged so that it can be moved to an external provider at a later date. A provider that is strategically procured as part of separate IT strategy work. Again, Sussex Police is a good example where this approach was adopted, where the platforms will soon be moved to their strategic hosting partner, BT.

It does support the Force's key strategic themes in Strategic References 2 and 4, and the 20-20-10 objectives and beyond.

7.3.3 Implementation Approach

The software product is procured in a manner that exploits all possible market offerings. The main preferences will focus on meeting the functional needs whilst also providing the lowest risk route to achieving the desired outcomes. Where possible suppliers will be invited to propose other value adding capabilities, such as, offering the solution with tactical hosting as an option. These additional value adds will be taken into consideration as part of the evaluation process. This approach ensures that BTP does not miss out on innovative bids.

The force is mobilised to deliver both the technology components and also the business change, where necessary, and possible support from the suppliers will also be sought in order to minimise delivery risks. The programme leverages all available resources, suppliers will be tasked with achieving outcomes, and resources from across BTP will be called upon to help drive change from within.

The delivery programme is managed and run in a manner that drives rapid progress towards delivering the business benefits; this ensures that the scope of the programme is all-encompassing with respect to releasing value and not just delivering IT.

The programme is structured such that it has a clearly defined and agreed end date, where all external support has left and the solution is safely supported and in place.

7.3.4 Benefits

The following benefits are the cashable and non-cashable benefits that are specific to the delivery of this option.

Cashable Benefit 1: BTP will be able to incrementally simplify the IT estate, est. £100k annual revenue cost savings
By installing and managing the Command and Control along with the core policing platform, BTP's ICT will have the opportunity of further simplifying the current application landscape, reducing licencing and hosting costs and reducing the overall burden on ICT resources in relation to support and maintenance. The simplification of the ICT estate also allows for the later simpler and cheaper transition of IT services to an external provider, which is aligned to the IT Vision.

Cashable Benefit 2: Fewer applications will reduce information duplication est. £150k annual revenue cost savings
With fewer applications, improved data-sharing and integration between them and with streamlined and joined-up front-line and back-office processes, there will be less information duplication.

Non-Cashable Benefit 3: Greater control that allows greater exploitation of benefits
This option provides BTP with the greatest opportunity to adjust the scope and priorities of the design, such that the benefits can be maximised. The programme's design and benefits activities will drive out new and better ways of working, taking advantage of the technology and legacy systems.

Non-Cashable Benefit 4: Will drive down costs before exploiting external hosting options
Although the Force's IT vision is to use an external managed hosting provider for the IT systems, this option provides BTP with the opportunity of stabilising the new systems, driving down the internal costs and therefore positioning BTP in the best possible light for a low cost external hosting arrangement at a later date.

Option 3 will deliver all the end-state benefits arising from a total of 744,594 hours (Non-Cashable and Cashable combined) saved due to efficiencies, and also the cashable savings of £782,000 due to legacy systems maintenance and support stopping as described in APPENDIX E: Benefits. In addition, option 3 will deliver an additional estimated **£250k** of option-3-specific annual revenue cost savings, as detailed above.

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated Systems and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into BTP, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

In addition, BTP is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, 202-20-10 objectives and the Chief Constable's vision "Making a Difference" out to 2019. BTP's transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it. Evidence based policing, Offender Management, advanced problem solving and a proactive approach to stopping crime will underpinned by an enhanced IT infrastructure of which the Integrated Systems Programme is a part of, mobile technology and a fundamental overhaul of training and skills.

The Integrated Systems Programme is central to this comprehensive programme of change, and is one of the early programmes in this Force-wide transformation.

This Business Case just considers the benefits of the Integrated Systems Programme against the current "As Is" model for the Case, Custody, Crime, Intelligence and Command and Control systems. But these benefits must also be seen within this wider programme of change for which the Integrated Systems Programme is a vital step, and as the later projects and programmes are delivered these benefits may need to be taken up or used by these other programmes.

7.3.5 Costs

The following costs are those attributed to the delivery and ongoing activities that specifically relate to the systems outlined in this business case.

These have been split into Capital and Revenue costs and displayed in the tables below as how they might be expected to fall across the five years considered by the business case.

Table 3: Table showing Capital costs of Option 3 across the next five years

Description	2014/15 £000's	2015/16 £000's	2016/17 £000's	2017/18 £000's	2018/19 £000's	Total £000's
Hardware	500					500
ISP programme management team	700	700				1,400
Additional resources to be recruited for programme	200	200				400
Specialist support provider service to support procurement and implementation and inc provision of specific resources)	1,500	500				2,000
C&C product licencing	800					800
Core Systems licencing		1,800				1,800
Total capital requirement	**3,700**	**3,200**				**6,900**

Table 4: Table showing Revenue costs of Option 3 across the next five years

Description	2014/15 £000's	2015/16 £000's	2016/17 £000's	2017/18 £000's	2018/19 £000's	Total £000's
One off revenue costs						
C&C product licencing						0
Sub total one off revenue costs	0	0				0
Ongoing revenue costs						
C&C and core systems support & maintenance	578	578	550	550	550	2,806
Core Systems licencing						
Sub total ongoing revenue costs	578	578	550	550	550	2,806
Total revenue costs	578	578	550	550	550	2,806
Existing reveneue costs	578	578	578	578	578	2,890
Net revenue costs	**0**	**0**	**-28**	**-28**	**-28**	**-84**

This can be further summarised across the 5 year period as follows:

Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Capital expenditure	3,700	3,200	0	0	0	6,900
Revenue expenditure	0	0	-28	-28	-28	-84
Total Expenditure	3,700	3,200	-28	-28	-28	6,816

The total 5 Year cost is **£6,816,000** (£6,900,000 capital, £84,000 revenue reduction).

These costs include existing costs, such as, Disaster Recovery.

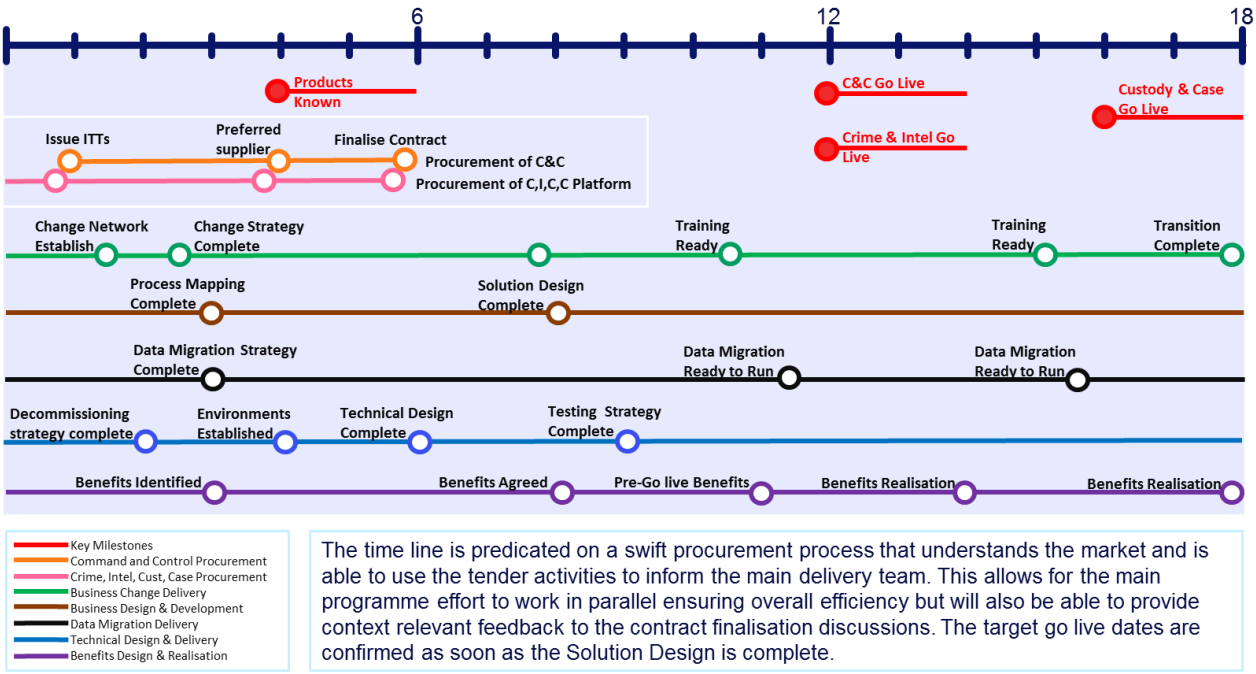
Assumption 1: the financial time frames for these costs are based on the assumption that all BTP and external approvals will have been obtained by October 2014. If this is not the case, there may be a need to make appropriate adjustments to the finances and the year in which they occur.

Assumption 2: where suppliers are able to provide additional value, such as, tactical hosting, these will fall within the original cost envelope as they will be targeted at addressing requirements still within the scope of this business case, delivering the benefit of reducing delivery risks.

In the above capital expenditure there is no contingency within the £3.7m in 2014/15. However, within the £3.2 in 2015/16, there is a contingency of £480k tied to risks associated with interfaces with legacy systems; data migration; and decommissioning of legacy systems all of which occur during the implementation phase.

7.3.6 Timelines

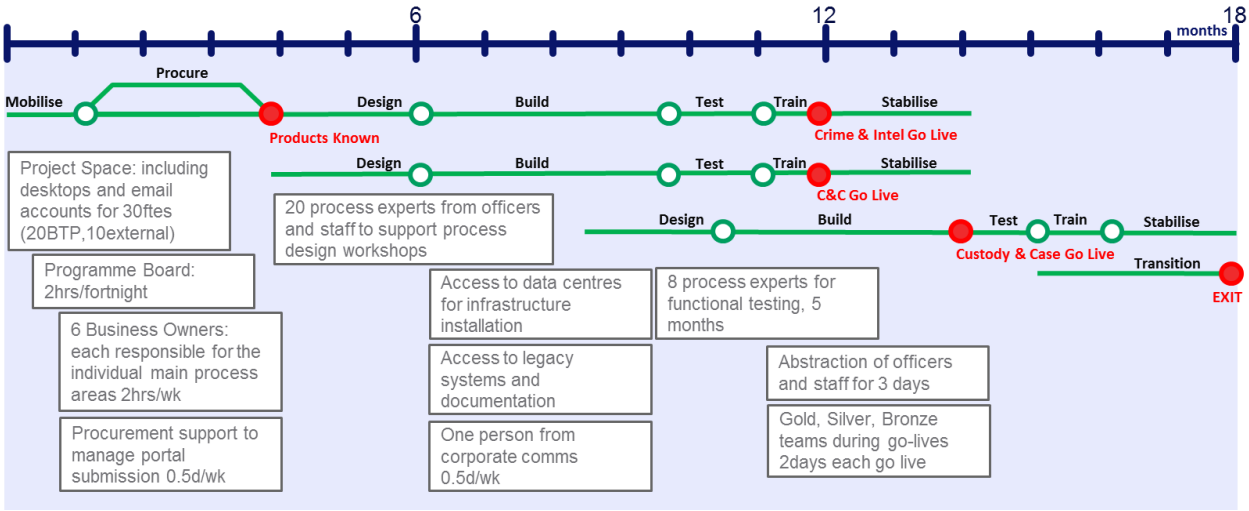
The following time line is based on prior examples of similar deliveries, and describes what is possible with a high functioning team and daily support from senior officers. The duration of the programme is set at about 18 months and reflects the dispersed nature of the Force. The start of the timeline is when approvals required by all governance bodies is completed.



The time line is predicated on a swift procurement process that understands the market and is able to use the tender activities to inform the main delivery team. This allows for the main programme effort to work in parallel ensuring overall efficiency but will also be able to provide context relevant feedback to the contract finalisation discussions. The target go live dates are confirmed as soon as the Solution Design is complete.

7.3.7 BTP Commitments

For this type of programme to succeed BTP will be required to make certain commitments, the diagram below illustrates the overall programme with a summary of the types of commitments necessary.



Senior Command Support: the content of the ISP will impact on every aspect of operational policing, from front line officers to policing staff. For the full potential of the programme to be realised and for it to be delivered in a predictable and efficient manner, it will be necessary for the Senior Command Team to be engaged and be able to support swift decision making in all aspects of the programme. In other examples across the UK this commitment has taken the form of the ACC chairing the Programme Board, and there being timely access to senior officers and staff which will be infrequent but can consume an hour each week.

Process Experts (Design): as part of ensuring that the solution functions in a manner that is fit for purpose and where opportunity is fully exploited, operational expertise will be called upon. In previous programmes this has normally required operational officers and staff to attend a series of design workshops that are run throughout the programme. These workshops fall into 3 discrete blocks each over an elapsed period of about 2 months. This level of extraction can be estimated as 20 officers and staff for 2d/wk over a period of 2-3 months.

Process Experts (Testing): the technology solutions will require testing. The non-functional testing is included in the programme team and costs, however, ensuing that the solutions function in a manner that is consistent with the design will require specific officers and staff to develop and run tests. This will normally demand the abstraction of 8 operational staff/officers from across the process areas for a period of 5 months full time. This effort starts about 9 months into the programme.

Abstraction of Force for Training: the breadth and scope of the ISP will impact the entire Force, and everyone affected by the new systems will be required to undergo some form of training. One of the challenges the programme team will face is to design a solution that is intuitive so as to reduce training and to also develop a training programme/schedule that minimises the impact to the Force. By way of managing expectations it is estimated that all officers and policing staff will undergo 1 day of mandatory classroom training, this will be further supported with other more innovative training aids such as self-learning, video, help screens, intranet sites, buddies etc. Some specialist users may require an additional days training, but these individuals will be few, (20 to 40). This training will be delivered over a period of several months, ensuring that the operational impact is kept to a minimum.

IT resources have been addressed through the provision of contractors and specialist support in the fee for the specialist external delivery support partner. Project Managers and business analyst support will be drawn from the existing personnel in the Integrated Systems Programme team.

7.3.8 Resourcing and governance structure

A significant element of the costs of the programme is the human effort involved in such an undertaking. The key tasks in the programme fall into the following groups

- Programme management covering the complexity and breadth of dependencies
- Designing efficient processes and configuring the software accordingly
- Physically building, securing and testing the infrastructure
- Training and preparing the organisation for the change

In order to determine the most appropriate resourcing model a series of factors have been considered:

- The pace at which the programme needs to be delivered, due to the current state of the legacy systems and manual processes, and the need to be PSN compliant by October 2015. And the Force not being capable of meeting a number of other key mandatory requirements
- The established working assumption that the current ICT resources will be unable to support the procurement and implementation within ISP, as such the programme will be required to resource all the necessary skills. This has been confirmed by the Head of IT. As a result of this deficit in available IT resources, it is going to be necessary to recruit

temporary staff for the duration of the project in order to build a technical capability necessary for the implementation phase.

- The impact of failure, should the solution not meet the timeline or the quality requirements. This programme is regarded as significant to BTP, and will deliver a series of critical services that are core to the Force operating within a national policing framework. As well as being a critical enabler for the outputs and benefits to be delivered by other projects and programmes within the overall BTP Transformation Portfolio
- The delivery of this programme must function alongside the normal day to day duties of staff and officers. The programme resources will need to provide geographical coverage and deliver, focused, high efficiency training and engagement

Although the proposed resourcing approach will require that there is little demand placed on BTP ICT staff, this dependency can also be contained and managed through a technical design that considers this risk. It should be noted that this issue is applicable to all the options presented in the paper, but is best mitigated in this recommended option.

The resource pools from which the team will be built is as follows in descending preference:

- The already established in-house BTP Integrated Systems Programme Team
- Internal BTP Police Officers and staff and policing subject matter experts
- External specialist support provider
- External recruitment of specialist roles which cannot be provided by the above sources

The summary resource requirement for this option is listed in the table below, and the costs shown are over two financial years (the two years of programme implementation).

Resource Description for Option 3	Quantity	Duration (Months)
Integrated Systems Existing Programme Resources. £1,400,000		
Programme Manager	1	18
Project Managers	5	18
Business Analysts	4	18
Benefits Manager	1	18
Data Architect	1	18
Project Support Officer	1	18
Existing BTP (Non-Programme) Resources to be Used. £0		
Procurement Manager	1	4
Technical SMEs (WAN, data centre. Mapping, DBA, etc.)	4	18
IT Project Manager (being funded and recruited by IT)	1	18
Resources to be Provided by the Specialist Support Provider. Part of the overall service fee		
Business Change Specialist (police knowledge)	1	18
User Acceptance Lead	1	6
Process Lead/Design Authority	1	18
Information Management and Data Migration Lead	1	14
Integration and Technical Specialist Lead	1	18
Technical Architecture Review and Assurance (4 people, 1 day per week)	1fte	18
Service Management Review and Assurance (4 people, 1 day per week)	1fte	18
Infrastructure Build	2	1
Network Specialist	1	1
Platform Specialist	2	18
Product Configurator	1	18
ETL Developers	4	9
Interface Support	1	3

Resource Description for Option 3	Quantity	Duration (Months)
Application Specialist	1	18
Test Manager	1	6
Benefits Lead	1	10
Additional Resources to be Recruited / Procured. £400,000		
Business Change Specialist (public sector knowledge)	2	18
Business Trainers	10	4
User Acceptance Testers	4	4
Data Management Developers	3	12
Testing (non-functional)	6	4
Security Accreditor (RMADS)	1	4
Penetration and Security Testers	2	2
Systems Integrators	3	6

Should it be possible to exploit a tactical hosting alternative within option 3, this will be delivered within the above resource profile resulting in no additional resources.

The use of a consultancy company as a Specialist Support Provider does represent a significant portion of the resourcing costs. However, their support directly contributes to the following:

- The individuals are professionals with careers in delivering large, complex IT enabled change programmes in police forces, and are practiced in managing the risks associated with this type of programme
- They will provide previous experience and hindsight of having delivered similar initiatives in other police forces, helping accelerate the programme and de-risking many aspects of the delivery
- They provide access to other police forces and government agencies that will help support the effective delivery of BTP's solution as a national force
- Their programme delivery skills are designed to deliver programmes at pace, on time and to quality, and towards realising benefits
- They provide immediate access to specialist personnel at the time required, ensuring that the momentum in the programme is never lost and that every issue/risk is addressed by an expert and not just someone available

In terms of governance the programme will follow Managing Successful Programmes (MSP) methodology, and all the programme management processes and documents will be managed through Project In A Box (PIAB). There will be a Programme Sponsor, ACC Newton, and a business Programme Lead, Supt. Chris Horton. The programme will be overseen and managed by a Programme Manager, John Steel and each one of the five systems workstreams will have a lead Project Manager and Business Analyst. As part of the programme team there will be two senior transformational Change Managers, to drive the change needed to realise the benefits in the business areas. The programme team will also carry out supplier management to minimise scope creep.

The Integrated Systems Programme will have its own Programme Board chaired by the Programme Sponsor and Programme Lead, for which there will be agreed terms of reference. This board will report into the Information Portfolio Board and the Service Improvement Board, providing regular Highlight Reports.

Programme and Project Plans using MS Project, Active Risk, Issues and Assumption logs will be developed and managed for the programme and the workstream projects, and maintained and updated within PIAB.

Programme quality assurance will be provided by the PMO. Also prior to a key stage gateway in the programme being achieved, a pre-assurance review will be carried out by the internal programme team using the OGC Gateway Review checklists.

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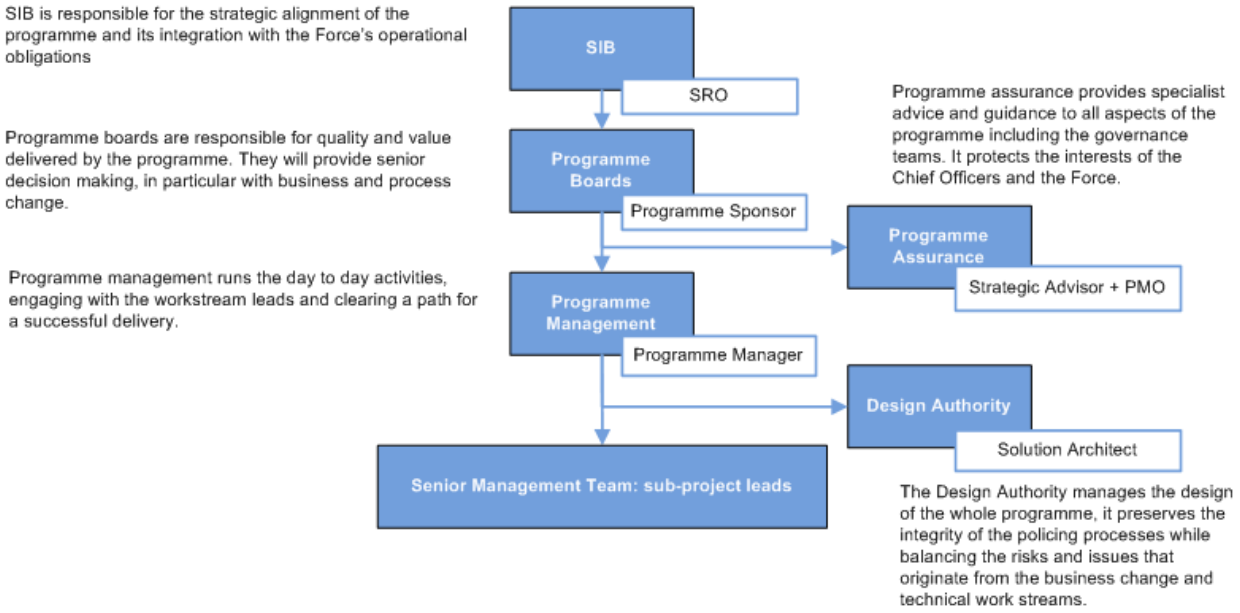


7.3.9 Risks

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
The market is unable to provide an off the shelf solution that meets the needs of the force.	The programme will be unable to deliver within the time and cost envelope. An alternative strategy to systems will need to be considered.	Low	Soft market sounding carried out in Project 0 has evidenced that solutions exist.
The ICT department is unable to abstract the necessary skills to support the in-house approach to infrastructure.	The programme will need to recruit additional external resources to build the infrastructure. This may increase the time line and may increase the budget by an estimate of 10%.	Medium	Effectively use the external specialist delivery support partner to fill resource gaps. Use resources efficiently to ensure that value for money is extracted.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
The programme does not deliver a system on time	The force will be required to sustain existing systems (see option 1), and there will be a delay in the benefits realisation. The programme team will have to be retained incurring additional costs.	Medium	Enable quick escalation of issues and close monitoring of the programme against milestones to ensure delivery is on schedule.
Managers, Police Officers and staff do not fully engage with the changes needed to realise the benefits.	The large potential benefits of the Integrated Systems Programme will become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits.
Police staff and officers do not have enough sufficient knowledge of how to use the new systems effectively.	Inefficiencies will occur within the new ways of working and new processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits.	High	Training plans in the use of the new systems and new processes will be developed within the Integrated Systems Programme, dependent upon the option and systems chosen.
Senior Managers and Managers do not reinforce the new ways of working and the following of the new processes.	There will be slippage back to current ways of working and processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits. They will also plan and manage the change communications strategy and plan, including the management of resistance.

Risk	Impact (describe)	Urgency (H, M, L)	Mitigating Actions
Abstraction of Police Officers and staff may be difficult.	May put time pressure on operational staff.	Medium	Training plans to be developed so 95% of staff only require 1 days class room training, and rest of training using an e-learning approach.

7.3.10 Option 3 Conclusion

The business case recommends option 3 is adopted, where a software product is competitively procured, installed and managed by the in-house IT department.

This option presents the lowest risks and is able to draw on previous experience from other forces that have chosen this option. It also offers the fastest route to go-live. Although this option is not perfectly aligned to BTP's ICT Vision whereby commodity services such as hosting are externally hosted, this option does include the design and development of the solution such that it is ready for moving to a 3rd party provider in the future. In addition, this option does not exclude the possibility of leveraging external tactical hosting options that may result from additional value offered by the bidding suppliers, as it will always be the intention to maximise value for money whenever going to market for solutions.

In summary, the recommended option presents the lowest cost, lowest risk, fastest deployment, is the most flexible and offers maximum value to the Force.

7.4 Option 4 – A Software Product is Chosen, Hosted Externally and Managed In-house

7.4.1 Option Description

A software product is chosen and an external infrastructure company is selected to host the software. The 3rd party will ensure that there is sufficient processing capacity in their data centre and that it is configured in a manner that is in line with the Force's requirements for performance, security and availability. The in-house IT department will retain the responsibility for making sure the software is working within tolerance that users are catered for and bugs are addressed.

7.4.2 Strategic Fit

This option does align with the vision to outsource many of the IT services to 3rd party providers. There will be a dependency on the delivery of the IT strategy in the selection of a preferred strategic IT hosting provider, which could introduce significant delays into the programme.

It should also be noted that some of the technology options for core policing and Command & Control have not been specifically designed in a manner that favours external hosting approach, and as such this may limit the number of systems available.

It would also support a number of the Force's key strategic themes in Strategic References 2 and 4, and the 20-20-10 objectives and beyond.

7.4.3 Implementation Approach

The software product is procured in a manner that exploits all possible market offerings. The main preferences will focus on meeting the functional needs whilst also providing the lowest risk route to achieving a known outcome.

Once a preferred supplier is known for both the Command and Control system and the core integrated system then a specification is drawn up that can be used with the Force's preferred hosting supplier, or used as part of a procurement for a specific provider for only these systems. Wherever possible there will always be a preference for commodity computing services.

The working assumption is that this option will be required to procure its own hosting services.

The force is mobilised to deliver both the technology components and also the business change. The programme leverages existing resources and also reaches out to the organisation in order to drive change from within.

The delivery programme is managed and run in a manner that drives rapid progress towards delivering the business benefits; this ensures that the scope of the programme is all-encompassing with respect to releasing value and not just delivering IT.

The programme is structured such that it has a clearly defined and agreed end date, where all external support has left and the solution is implemented.

The final stage is to deploy the system into live and transition over to a service management team enabling the programme to come to a close.

7.4.4 Benefits

The following benefits are the cashable and non-cashable benefits that are specific to the delivery of this option.

Cashable Benefit 1: Datacentre: Server equipment refresh and maintenance, including infrastructure software components. £200,000 annual revenue cost saving including capital depreciation
With a service hosted externally there will be no need to retain any of the existing hardware and software that is currently related to internal hosting. Thereby, removing need for in-house maintenance and support.

Non-Cashable Benefit 2: IT Efficiency: The provider will take on the risk of hosting the solution.
The vast majority of the risk associated with hosting the solution will be shifted to the supplier. The supplier will be responsible for all aspects of hosting, availability, security and resilience and they will take on the risk of any issues associated with system downtime.

Non-Cashable Benefit 3: BTP will retain day-to-day control managing the Force IT
By managing the future IT estate by in-house staff / contractors, BTP will retain full and sole decision-making over managing the IT system, except for hosting. This option will provide BTP with the flexibility around how to improve, drive and shape the IT systems in the future.

Option 4 will deliver all the end-state benefits detailed in APPENDIX E: Benefits, as well as an additional **£200k** of option-4-specific annual revenue cost savings, as detailed above.

Option 4 will deliver the total end-state benefits of 744,594 hours (Non-Cashable and Cashable combined) saved due to efficiencies, and the cashable savings of £782,000 due to the legacy systems maintenance and support stopping. Also, option 4 will provide an additional **£200k** of option-4-specific annual revenue cost savings, as detailed above.

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated Systems and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into the Force, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

In addition, the Force is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, 202-20-10 objectives and the Chief Constable's vision "Making a Difference" out to 2019. BTP's transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it. Evidence based policing, Offender Management, advanced problem solving and a proactive approach to stopping crime will underpinned by an enhanced IT infrastructure of which the Integrated Systems Programme is a part of, mobile technology and a fundamental overhaul of training and skills.

The Integrated Systems Programme is central to this comprehensive programme of change, and is one of the early programmes in this Force-wide transformation.

This Business Case just considers the benefits of the Integrated Systems Programme against the current "As Is" model for the Case, Custody, Crime, Intelligence and Command and Control systems. But these benefits must also be seen within this wider programme of change for which the Integrated Systems Programme is a vital step, and as the later projects and programmes are delivered these benefits may need to be taken up or used by these other programmes.

7.4.5 Costs

The following costs are those attributed to the delivery and ongoing activities that specifically relate to the systems outlined in this business case.

These have been split into Capital and Revenue costs and displayed in the tables below as how they might be expected to fall across the five years considered by the business case.

Table 5: Table showing Capital costs of Option 4 across the next five years

Description	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Hardware	100		200	200	200	700
ISP programme management team	700	700				1,400
Additional resources to be recruited for programme	200	100				300
Specialist support provider service to support procurement and implementation and inc provision of specific resources)	1,500	500				2,000
C&C product licencing	800					800
Core Systems licencing		1,800				1,800
Total capital requirement	**3,300**	**3,100**	**200**	**200**	**200**	**7,000**

Table 6: Table showing Revenue costs of Option 4 across the next five years

Description	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
One off revenue costs						
C&C product licencing						-
Sub total one off revenue costs	-	-				-
Ongoing revenue costs						
C&C and core systems support & maintenance	578	578	550	550	550	2,806
Core Systems licencing						
Sub total ongoing revenue costs	578	578	550	550	550	2,806
Total revenue costs	578	578	550	550	550	2,806
Existing reveneue costs	578	578	578	578	578	2,890
Net revenue costs	**0**	**0**	**-28**	**-28**	**-28**	**-84**

These two tables can be further summarised across the 5 year period as follows:

Financial Year	2014/15	2015/16	2016/17	2017/18	2018/19	Total
	£000's	£000's	£000's	£000's	£000's	£000's
Capital expenditure	3,300	3,100	200	200	200	7,000
Revenue expenditure	0	0	-28	-28	-28	-84
Total Expenditure	3,300	3,100	172	172	172	6,916

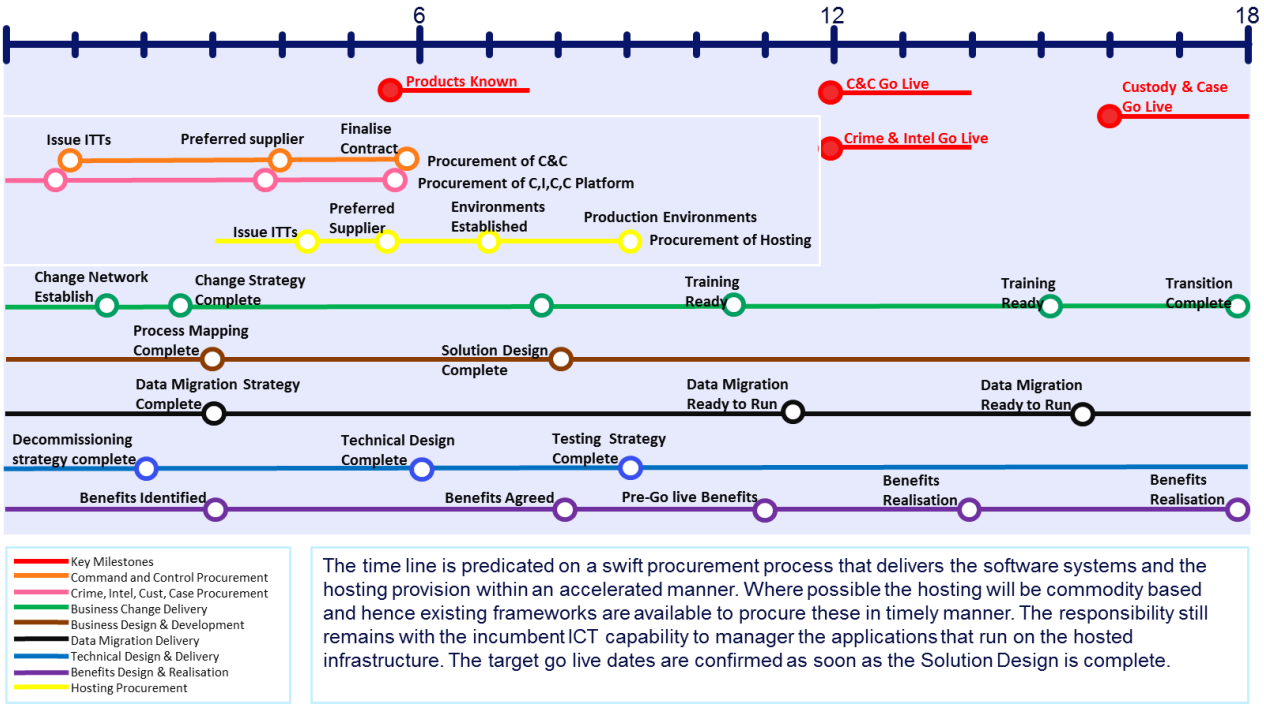
The total 5 Year cost is **£6,916,000** (£7,000,000 capital, £84,000 revenue reduction). The above costs do not include an exit fee circa £200,000.

Assumption: the financial time frames for these costs are based on the assumption that all BTP and external approvals will have been obtained by October 2014. If this is not the case, there will need to be appropriate adjustments to the finances and the year in which they occur.

7.4.6 Timelines

The following time line has been based on prior examples of similar deliveries. It describes what is possible with a high functioning team and most importantly the daily support from senior officers. The duration of the programme is set at about 18 months and reflects the dispersed nature of the Force.

There is significant dependency on a hosting provider that under circumstances (if WAN connectivity and/or physical infrastructure is required) will require significant lead times. The management of the software does not form part of the hosting agreement and hence the internal ICT function will be required to retain this responsibility. The start of the timeline is when approvals required by all governance bodies is completed.



7.4.7 Resourcing and governance structure

The approach to resourcing the programme will be based on ensuring the right skills are understood and the level of capability is recognised for the roles, with this in mind the right person at the right time and price is chosen and brought into the team. The resource pools from which the team will be built is as follows in descending preference:

- Already assigned programme team
- Force staff and officers

- External specialist delivery support partner that mitigates risk
- Subcontractors that offer value for money, and recruited through preferred supplier frameworks

The resourcing demands of this option will contain a strong element of managed hosting service design, and as such is very analytical in nature. There will be a need for high quality analysts with prior experience in this type of work. This is required due to the very competitive and low margin nature of this type of business which leads the market to squeeze as much as possible from these types of contracts.

Most of the IT resources will be provided by the client side delivery support provider, and is reflected in their costs. Also demand on ICT staff can be further contained and managed through a technical design that considers this risk.

The change network will be made up of a group of people who are recruited from across the police officers and key staff, although they will not be required full-time a level of commitment will be required that can be described as an average of half a day a week for the duration.

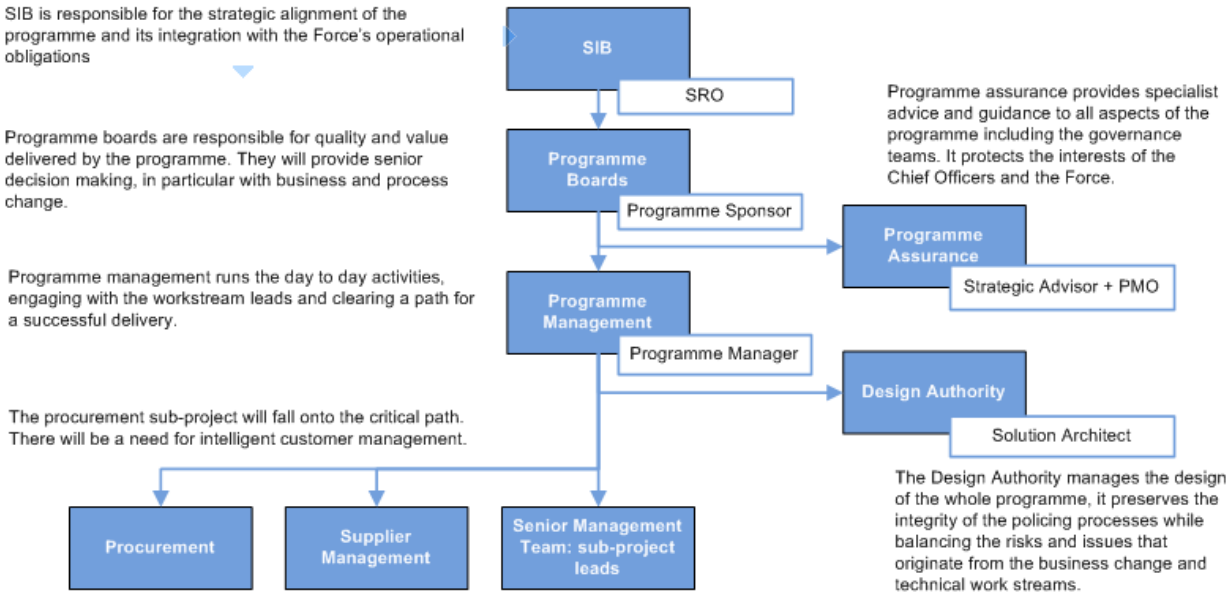
In terms of governance the programme will follow Managing Successful Programmes (MSP) methodology, and all the programme management processes and documents will be managed through Project In A Box (PIAB). There will be a Programme Sponsor, ACC Newton, and a business Programme Lead, Supt. Chris Horton. The programme will be overseen and managed by a Programme Manager, John Steel and each one of the five systems workstreams will have a lead Project Manager and Business Analyst. As part of the programme team there will be two senior transformational Change Managers, to drive the change needed to realise the benefits in the business areas. The programme team will also carry out supplier management to minimise scope creep.

The Integrated Systems Programme will have its own Programme Board chaired by the Programme Sponsor and Programme Lead, for which there will be agreed terms of reference. This board will report into the Information Portfolio Board and the Service Improvement Board, providing regular Highlight Reports.

Programme and Project Plans using MS Project, Active Risk, Issues and Assumption logs will be developed and managed for the programme and the workstream projects, and maintained and updated within PIAB.

Programme quality assurance will be provided by the PMO. Also prior to a key stage gateway in the programme being achieved, a pre-assurance review will be carried out by the internal programme team using the OGC Gateway Review checklists.

The key elements of the Governance process and structure are demonstrated in the diagram as follows.



An indicative resource requirement for this option is listed below, and the costs shown are over two financial years (the two years of programme implementation):

Resource Description for Option 4	Quantity	Duration (Months)
Integrated Systems Existing Programme Resources. £1,400,000		
Programme Manager	1	18
Project Managers	5	18
Business Analysts	4	18
Benefits Manager	1	18
Data Architect	1	18
Project Support Officer	1	18
Existing BTP (Non-Programme) Resources to be Used. £0		
Procurement Manager	1	10
Procurement Analyst	1	10
Technical SMEs (WAN, data centre. Mapping, DBA, etc.)	3	18
IT Project Manager (being funded and recruited by IT)	1	18
Resources to be Provided by the Specialist Support Provider. Part of the overall service fee		
OJEU Procurement Specialist Lead	1	10
Business Change Specialist (police knowledge)	1	16
User Acceptance Lead	1	6
Process Lead/Design Authority	1	16
Information Management and Data Migration Lead	1	14
Integration and Technical Specialist Lead	1	16
Product Configurator	1	16
Test Manager	1	6
Benefits Lead	1	8
Additional Resources to be Recruited / Procured. £300,000		
Business Change Specialist (public sector knowledge)	2	12
Business Trainers	9	4
User Acceptance Testers	4	4
Data Management Developers	3	9

Resource Description for Option 4	Quantity	Duration (Months)
Testing (non-functional)	6	4
Security Accreditor	1	4
Penetration and Security Testers	2	2
Systems Integrators	3	5

7.4.8 Risks

Risk	Impact	Urgency (H, M, L)	Mitigating Actions
The market is unable to provide an off the shelf solution that meets the needs of the force.	The programme will be unable to deliver within the time and cost envelope. An alternative strategy to systems will need to be considered.	Low	Carry soft market testing to sound out the market to evidence that solutions exist.
The supplier does not deliver a system on time.	The force will be required to sustain existing systems (see option 1), and there will be a delay in the benefits realisation. The programme team will have to be retained incurring additional costs.	Medium	Work closely with the supplier and integrate them into the programme management structure to give visibility of issues they are facing. Write penalties into the managed service build contract.
The supplier does not provide an adequate service to the Force following the system being put in place.	The force will experience a back-lash from users, and may introduce operational policing risk.	Low	Mitigated through rigorous Customer Acceptance Testing and a high level of penalty levy on the contract.
The procured service doesn't provide value for money to the Force.	The contract will have certain performance targets to achieve, if these are not satisfied the supplier will be subject to penalties that economically rectify this. If the Force does not realise the benefits then this is down to the Force to address.	Medium	The contract will be designed to deliver a service, value for money is a design feature of this and the Force's desire to realise benefits
Managers, Police Officers and staff do not fully engage with the changes needed to realise the benefits.	The large potential benefits of the Integrated Systems Programme will become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits.

Risk	Impact	Urgency (H, M, L)	Mitigating Actions
Senior Managers and Managers do not reinforce the new ways of working and the following of the new processes.	There will be slippage back to current ways of working and processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits. Also the new systems will not achieve their full potential for enabling delivery of BTP's strategic aims.	High	Two senior Transformational, Business Change Managers are to be included within the Integrated Systems Programme team, in order to drive and lead the business changes needed to realise and embed the benefits. They will also plan and manage the change communications strategy and plan, including the management of resistance.
Police staff and officers do not have enough sufficient knowledge of how to use the new systems effectively.	Inefficiencies will occur within the new ways of working and new processes. This will cause the large potential benefits of the Integrated Systems Programme to become dissipated and the full benefits that exist will not be realised and permanently embedded, losing potential cashable and non-cashable benefits.	High	Training plans in the use of the new systems and new processes will be developed within the Integrated Systems Programme dependent upon the option and systems chosen.
If there are insufficient IT resources within BTP's IT Department for supporting data migration, testing and implementation, then the time taken to implement the systems will take longer than could be achieved with the correct IT support.	If the time taken to implement the systems takes longer than could be achieved with the correct IT support, this would affect the interdependencies that exist with the IT Programme and take longer to implement new policing practices.	Medium	The programme and Business Case will define the IT resources needed to support a fast but successful implementation, and recommend recruitment where they cannot currently be provided.

7.4.9 Option 4 Conclusion

Option 4 is not totally discounted as it shares many similarities with the recommendation. However, it is proposed in this business case that option 3 be adopted (hosting in-house) with the ability to switch to an external hosting supplier after implementation as and when it becomes feasible at a later date, determined by the delivery of the ICT Vision and further developments in the available software products. The reason for not recommending this option is to avoid compromising the delivery of the ICT Vision and allowing the programme to determine the strategic supplier for hosting of all services include the Command and Control system and the integrated core policing system.

8 APPENDIX E: BENEFITS

The successful implementation of the Integrated Systems Programme will provide efficiencies which create total annual hours saved of 744,594.76, of which 561,046 hours are non-cashable and 183,548.76 hours have the potential of being taken as cashable savings. This represents a value of annual end-state benefits to the value of £16M, (non-cashable and cashable combined), of which £4.3M will be cashable in-year which include potential savings in hours and savings due to the legacy IT systems maintenance and support stopping.

These benefits are the first assessment of the potential benefits available from the implementation of the core integrated Systems and the Command and Control system, and although these potential benefits have gone through detailed confidence, sensitivity testing, verification and benchmarking against other police forces by an external consultancy it should be noted that these are only **notional, indicative benefits** at this stage.

After the integrated systems and Command and Control system have been implemented and embedded into the Force, a further benefit assessment will be carried out which will be done in the context that the systems are live in operation and, therefore, will have the value of the wider context.

In addition, the Force is undergoing an ambitious programme of Force-wide transformation, which is outlined in the BTPA Strategic Plan, 202-20-10 objectives and the Chief Constable's vision "Making a Difference" out to 2019. BTP's transformation will provide a step change in how the Force delivers policing and the capabilities that underpin it. Evidence based policing, Offender Management, advanced problem solving and a proactive approach to stopping crime will underpinned by an enhanced IT infrastructure of which the Integrated Systems Programme is a part of, mobile technology and a fundamental overhaul of training and skills.

The Integrated Systems Programme is central to this comprehensive programme of change, and is one of the early programmes in this Force-wide transformation.

This Business Case just considers the benefits of the Integrated Systems Programme against the current "As Is" model for the Case, Custody, Crime, Intelligence and Command and Control systems. But these benefits must also be seen within this wider programme of change for which the Integrated Systems Programme is a vital step, and as the later projects and programmes are delivered these benefits may need to be taken up or used by these other programmes.

All of the options (except for option 1: Do Nothing) have the following notional, indicative end-state annual benefits in the table below (in addition to option-specific benefits already previously outlined in APPENDIX: D) on implementation and embedding of the new integrated IT systems at BTP.

No.	Benefit	Business Area	Full Amount Of No. Of Hours Saved	Benefit Of Full No. Of Hours Saved Expressed As Cashable & Non-Cashable Savings	No. Of Hours Saved Which Are Cashable	Value of No. Of Hours Saved Which Are Cashable (£)	No. Of Hours Saved Which Are Non-Cashable	Value of No. Of Hours Saved Which Are Non-Cashable (£)
1	Golden Nominal	Force-Wide	575,000.00	£11,845,575	52, 427.18	£1,080,000	522,572.82	£10,765,575
2	Efficiency of Capturing Intelligence	Intelligence	44,000.00	£937,640	22,524.63	£480,000	21,475.37	£457,640
3	Efficiency of Crime Investigation and Reporting	Intelligence	25,000.00	£532,750	13,139.37	£280,000	11,860.63	£252,750
4	Increased Intelligence Bureau Efficiencies	Intelligence	5,000.00	£106,550	5,000.00	£106,550	0.00	£0
5	Efficient File Management & Less Rework	Case	32,871.34	£609,765	32,258.06	£600,000	613.28	£9,765
6	Efficient File Preparation for CPS and Courts	Case	21,666.36	£401,917	21,563.34	£400,000	103.02	£1,917
7	Efficient Creation of Incidents	C&C	17,726.00	£301,664	17,726.00	£301,664	0.00	£0
8	Assigning and Despatching Resources	C&C	4,949.00	£98,264	4,949.00	£98, 264	0.00	£0
9	Efficient Processes within Custody Suites	Custody	1,397.50	£100,000	559.44	£40,000	838.06	£60,000
10	Improved Management of Crime Information	Crime	5,972.30	£100,000	2,389.48	£40,000	3,582.82	£60,000
11	Efficient Recording of Crime Details	Crime	11,012.26	£184,389	11,012.26	£184,389	0.00	£0
12	Legacy Systems Maintenance and Support Stops	Force-Wide		£782,000	N/A	£782,000	N/A	£0
		Total	**744,594.76**	**£16,000,514**	**183,548.76**	**£4,392,867**	**561,046.00**	**£11,607,647**

Detailed evidence and metrics supporting all of the above notional, indicative benefits are held with the Business Analysts and Project Managers in the Integrated Systems Programme.

8.1 End-State Benefits

Below are brief descriptions for each of the main benefits described in the table above.

1. Benefit 1: Force-wide Benefit: The Golden Nominal
   Introducing the 'golden nominal' principle within BTP will enable significant time-savings throughout the whole Force as data relating to People, Location and Events will be held in a single system, be easily searchable and much better linked. Keying in the same information several times across multiple systems will be significantly reduced, searching across multiple systems will be eliminated and so will the need to manually link records in the back office. This benefit single-handedly delivers the largest non-cashable and cashable savings to BTP through the significant process efficiencies and time savings it introduces.

2. Benefit 2: Intelligence: Efficiency of Capturing Intelligence
   Through introducing clear guidelines around how intelligence should be submitted and improving the efficiency of how submitted intelligence is handled and significantly reducing the time taken to evaluate intelligence, there will be a time saving of approximately 30 minutes per intelligence log.

3. Benefit 3: Intelligence: Efficiency of Crime Investigation and Reporting
   Providing investigators with full location details in one search will save considerable time compared to the current position of having to perform multiple searches. There will be quicker and easier linking of locations and addresses with crime and crime analysis, and reporting will be significantly improved. Data on suspects will be held in one system and easily retrieved.

4. Benefit 4: Intelligence: Increased Intelligence Bureau Efficiencies
   Through introducing automated workflow management within the Intelligence Bureau and automated monitoring of actions, this will increase efficiencies within Intelligence Bureaus and ensure quicker production and dissemination of intelligence.

5. Benefit 5: Case File Administration: Efficient File Management & Less Rework
   Case file administration will benefit from significant efficiency improvements through reducing and eliminating the current manual processes relating to checking files, sending files for rework or cancellation, creating Unique Reference Numbers, listing files at court, faxing, filing and photocopying and ensuring more efficient file allocation to Witness Care Officers through an electronic Witness Care system.

6. Benefit 6: Case File Administration: Efficient File Preparation for CPS and Courts
   File preparation for CPS and Courts will benefit from a much more efficient workflow. Which will result in significant efficiency savings through enabling the transfer of fully electronic case files to the CPS, efficient management of exhibit lists, quicker file quality checks, reducing the need to search and print from Libra, quicker updating of JAS and PNC, and significant time savings for filing, photocopying, archiving and maintaining files.

7. Benefit 7: Command and Control: Efficient Creation of Incidents
   The Integrated Systems Programme will deliver a more efficient Command and Control system which will enable incidents to be created quicker, faster location searching, additional information to be better captured and automated transfer of data in to Crime systems.

8. Benefit 8: Command and Control: Assigning and Despatching Resources
   The improved Command and Control system will enable faster and more efficient booking in of resources, quicker assignment of deployable resources and faster dispatch by the control room operator.

9. Benefit 9: Custody: Efficient Processes within Custody Suites
   There is a small benefit to custody suites through creating electronic custody records. This will improve the efficiency of booking in of detainees, ensure property is properly recorded, risk assessments are carried out efficiently and details recorded, vital information is recorded as well as notes regarding care and treatment of detainees. Additionally, preparation of charges and population of bail forms will be quicker through auto-population of information already held on the system.

10. Benefit 10: Crime Management: Improved Management of Crime Information
    Improvements to crime management will include more efficient updating of crimes, improved auditing, improvements to workflow and work scheduling, better links with CCTV and forensics, more efficient transfer of crime to other forces and improvements to victim care.

11. Benefit 11: Crime Recording: Efficient Recording of Crime Details
    Crime recording will benefit from improved interfaces to PNC, improved searching, reduced duplication, improved allocation of Home Office crime codes and improvements in generating investigation plans.

12. Benefit 12: Legacy Systems Maintenance and Support Stops
    Average of £782,000 revenue cost saving (£2,346,000 over a three year period) due to the avoidance of ongoing maintenance and support costs for existing core IT systems of Crime, Intelligence and Command and Control.

9 APPENDIX F: CORE SOLUTION PROCUREMENT OPTIONS

9.1 Core Solution Procurement Approach For The New Systems

The procurement approach adopted needs to be able to procure the following elements of an integrated Custody, Case, Crime and Intelligence system, and the Command and Control system that interfaces with the integrated system:

- Services
- Hardware
- Software

The chosen procurement route also needs to be able to procure a solution that aligns with the guiding principles set out earlier in the document. Therefore the solution would favour **proven technology** that is well established and utilises **commercially off the shelf** products. It should aim to be a solution that is **simple** and can be **delivered quickly.**

The scope of the procured solution that the recommended route needs to deliver includes:

- A solution which meets the Force's Requirement Definition
- Specialised off-the-shelf product which will be pre-configured to support core business processes, and which will enable future business process changes
- Implementation support, to include configuration of the product, hardware & specification
- Application maintenance and support services, (such as, bug fixing; application-related incident and problem management;, change management; release management; configuration management)
- Integration services - to integrate the new systems into the wider police systems
- Hardware and infrastructure platforms that will be used to run and operate the solution

Therefore, a procurement route will be required to buy a solution based on off-the shelf specialised products, which are integrated, up and running and are effective and have proven use in other police forces in the UK to minimise implementation and operational risk.

9.1.1 Process Used To Determine Recommended Procurement Route

The process used to arrive at the procurement options and recommendation started with the reviewing of the Requirements Definitions that were being developed for each of the core systems and the integration of these, to determine that the requirements were specific and detailed. This included the Integrated Systems Programme team working with a legal adviser throughout Project 0 to review potential procurement routes, their viability, risks, pros and cons. The programme team also contacted other police forces who had procured an integrated system to identify the lessons learned, and build them into the review.

9.1.2 Method Used To Determine Procurement Route Options

During the review various procurement routes were considered, including potential risks to the Force, strengths and weaknesses of the different options, EU Procurement Rules and BTP Procurement Policy.

The guiding principles used in assessing potential procurement options were to provide the most appropriate and effective contracts and purchasing arrangements to ensure that sourcing of the products and services is undertaken in accordance with relevant legislation, whilst delivering best value and enabling open and fair competition. Also to deliver value for money, have a robust and ethical approach and support the BTP Policing Strategy and Plan.

In carrying out the review it took into account the Force's detailed output based requirements for the five core systems and their integration, which have been developed and signed off in Project 0.

9.1.3 Procurement Route Options

9.1.4 Procurement Route Option 1 – Crown Commission Services (CCS) Buying Solutions Frameworks

The simplest approach for purchasing software is to utilise a pre-existing framework. The Government Procurement Service offers a series of framework agreements. The products under the frameworks fall under four broad categories, Hardware, Software, Infrastructure, and Services.

The strengths of this procurement route are that frameworks provide full compliance with EU procurement legislation; a simplified procurement process as the framework terms and conditions are already in place; speed of being able to call off individual contracts; and full cost transparency with open book.

The minimum length of time for this procurement process is 13 weeks.

A review of all the CCS Buying Frameworks was carried out, and it was determined that there was only three frameworks which had the potential to enable the procurement of the required solution and as a result needed further investigation which was carried out.

These frameworks were rm721 Commoditised Hardware and Software, rm713 Software Application Solutions and G-Cloud.

9.1.5 Procurement Route Option 2 – OJEU Procurement

Within the OJEU Procurement Route there are four main types of procedure: Open; Restricted; Accelerated Restricted and Competitive Dialogue

1. **Open OJEU Procurement Procedure**

With OJEU Open procedure, all those who are interested may respond to the advertisement in the OJEU by tendering for the contract, no matter how relevant their product is.

There is no short-listing or pre-qualification of tenderers. Negotiations are not permitted, although discussions are permitted prior to selecting the winning tender for the purpose of clarifying and confirming the content of tenders or the requirements of the contracting authority. Provided that this does not involve or create any discrimination, i.e. there must be equal treatment afforded to all bidders.

The minimum time frame for the open procedure is 17 weeks.

The strengths of this OJEU procedure is that it provides full compliance with EU procurement legislation; a clear legal basis; is a relatively simple procurement process (as there is no pre-qualification stage); and enables full competition as all and any interested parties may respond to the tender and therefore can offer best value for money.

The weaknesses are that an OJEU process is complex; the timeline would be longer than through some other routes, (e.g. frameworks). Because of the open nature of the procedure there is a risk of a large number of tender responses, (as there is no pre-qualification stage), which can significantly extend the timeline and effort required through the selection process and as a result additional costs.

Under the LEAN procurement agenda, there is a UK Government commitment to greater use of the open procedure.

2. Restricted OJEU Procurement Procedure

The restricted procedure allows for the short-listing/pre-qualification of a minimum of five candidates, unless fewer suitable candidates have applied and these are sufficient to ensure genuine competition; which is likely to be the case in this procurement exercise.

With the OJEU Restricted procedure, selection is made using a pre-qualification process of those who respond to the advertisement, on the basis of technical capability and financial viability. Only those invited after prequalification can submit a tender for the contract. This allows us to avoid having to deal with an overwhelmingly large number of tenders from suppliers.

This approach requires us to have a Requirements Definition for the systems we wish to purchase, which has already been developed in Project 0. This is because the approach mandates the use of detailed requirements which may not be substantially varied.

The minimum time frame for the restricted procedure is 19 weeks.

Certain process steps have minimum time limit compliance set by EU rules. For example the expression of interest period should take minimum 37 calendar days – or 30 where the OJEU notice is dispatched electronically; suppliers should be allowed minimum 40 calendar days for preparation of the tender response – or 35 days if electronic.

The strengths of the OJEU restricted procedure is that it provides full compliance with EU procurement legislation and a clear legal basis. It also allows pre-selection, so that a large range of suppliers do not have to be dealt with unlike the open OJEU. It also enables full competition and, therefore, can offer best value for money.

The weaknesses are that the process is complex like all the other OJEU procedures; timeline would be longer than through some other routes (e.g. framework or potentially OJEU open procedure - if there are not a large number of responses).

3. Accelerated Restricted OJEU Procurement Procedure (Recommended Option)

Where compliance with the minimum time limit for the expression of interest of 37 days or 30 days referred to above is rendered impractical for reasons of urgency, (which needs to be justified and needs to meet certain specific criteria), it is possible to shorten the time limit of these steps. E.g. expression of interest period could be reduced from 30 or 22 days to 10 calendar days where the OJEU notice is dispatched electronically. Similarly, supplier's tender preparation period could be reduced to a minimum 10 calendar days from the original 40 days or 35 days if electronic.

The strengths of the Accelerated Restricted OJEU procedure is that there is compliance with EU procurement legislation; it enables competition; allows pre-selection and so avoids having to deal with an overwhelmingly large number of tenders; it has relative speed compared with other OJEU procurement routes.

The weaknesses of the Accelerated Restricted procedure are that like all OJEU procedures, it is complex and requires significant resources.

A number of other police forces have successfully used the Accelerated Restricted OJEU Procurement procedure. Legally the Accelerated Restricted procedure is to be used exceptionally, and the contracting authority must indicate its reasons in the notice to the OJEU. There is no guidance in the legislation on the circumstances in which the procedure can be invoked. Gwent Police used this route, and part of their justification was based on an urgent need to replace failing systems as an operational reason.

In BTP's case it will be possible to use operational reasons to justify this route as the Force has had to withdraw electronic systems that were being used for Case and Custody, and revert to manual processes in Custody and only using an electronic system for the witness care part of Case Management.

4. Competitive Dialogue OJEU Procurement Procedure

Under this procedure, the contracting authority enters into dialogue with participants following the placing of an OJEU Contract Notice and a selection process, to develop one or more suitable solutions to meet its requirements before dialogue ends and participants are asked to submit their final tenders.

The minimum time for the Competitive Dialogue procedure is 23 weeks.

The strengths of the Competitive Dialogue procedure are that there is compliance with EU procurement legislation; it enables competition; and allows pre-selection so that we do not have to deal with an overwhelmingly large number of tenders.

The weaknesses of the Competitive Dialogue procedure are that this is the most complex of the OJEU procedures; and has a much longer time frame than the other OJEU procedures.

This type of OJEU procedure applies where a contracting authority wishes to award a particularly complex contract and considers that the use of the OJEU Open or Restricted procedures will not allow the award of the contract, for the following reasons. Either the Force is not objectively able

to define the technical means capable of satisfying its needs or objectives; and/or not able to specify the legal or financial make-up of the programme or both.

The Competitive Dialogue procedure is used in the award of "complex contracts" where the contracting authority needs to discuss aspects of the proposed contract (e.g. technical requirements, legal and/or financial aspects) with participants. Such dialogue would not be possible under either the Open or Restricted procedures.

This procedure is only available for particularly complex contracts and its use must be justified and documented.

This doesn't apply in the Forces circumstances, as the Force's requirements have been defined in Project 0 as well as there being potential off the shelf solutions being available in the market.

Therefore the Competitive Dialogue OJEU Procurement is an option that can be discounted.

9.2 Recommended Procurement Strategy For The New Systems

The three potential CCS Buying Solutions Frameworks were assessed first. All three failed to meet two of the mandatory criteria in the procurement requirements, and only partially achieved another mandatory criteria. Previous experience within the UK policing sector has demonstrated that the CCS Buying Solutions are not the most appropriate route for this type of procurement. If a procurement was undertaken through the CCS Buying Solutions Framework and failed, this would add significant additional time and cost to the overall successful delivery of the programme and successful realisation of benefits. So the Buying Solutions Frameworks were decided to not be an appropriate procurement route. Leaving Open, Restricted and Accelerated Restricted.

The three potential OJEU procedures were then assessed, and only one of the procedures (Open OJEU) failed to be able to achieve one of the criteria, which was a high criteria. Although this is only a high criteria, the need to evaluate all interested bidders would add extra time to the procurement process. Therefore the outcome is that it is recommended that the Accelerated Restricted OJEU Procurement procedure is used, as there will only be a need to evaluate the bids of suppliers who will be capable of delivering the functional and non-functional requirements.

Also **it is recommended that two separate Accelerated Restricted OJEU procurements are run in parallel**. One procurement for the integrated systems for Custody, Case, Crime and Intelligence, and one for Command and Control, instead of having one procurement process for all of the five core systems.

The reason for this being that it will enable each one of the two procurements to only have to evaluate bids from suppliers who are capable of delivering the functional and non-functional requirements for each of the two types of systems. As opposed to a procurement process to procure all five systems in the same procurement, where there will be a need to evaluate bids from consortiums. As not all providers of the four integrated systems also sell a Command and Control system, and there is a potential anyway that there will need to be a minimum of two suppliers for the five new systems.

Having two separate Accelerated Restricted OJEU procurements run in parallel, enables a quicker procurement process which aids the need to implement the systems as early as possible.

10 APPENDIX G: BUSINESS CHANGE IMPACT AND REALISATION OF BENEFITS

To ensure full realisation of all the identified benefits can be achieved by BTP, a number of key business changes will be required. The sections below identify examples of the business changes which will be required.

Learning gained from other police forces is that it is important to chase down and drive the realisation of benefits, and also to implement the changes within the business areas to enable these benefits.

It is, therefore, intended that a pro-active approach will be taken to drive and lead the changes needed within the business areas to fully realise the benefits that will be delivered by the Integrated Systems Programme, by having two senior transformational Change Managers in the programme team. Who will engage with and work with the managers in the relevant business areas, to enable the managers and staff to deliver the different business changes needed to fully realise and embed the identified benefits.

The following sections consider examples of the business changes required in the following areas to realise the identified benefits:

10.1 Crime Business Area

1. The implementation of new integrated systems will cause large business change for the Crime business area, mainly through the replacement of the current Source Input Document (SID) process and the change to the interaction between the Command and Control system and the Crime system.

2. The change to the SID process will mean introducing a new process for entering details of arrested persons from the Crime system on to the Police National Computer (PNC) and Criminal History System (CHS- Scottish equivalent to PNC), and retraining users and officers on this process.

3. The change to the interaction between Command and Control and Crime systems may cause the need to redesign quite a number of processes, especially around the queuing of incident logs to be assessed for criming by the Crime Recording Centre. And the notification of the incident closure details passed to Force Control room supervisors. This is likely to cause the redesign of a number of job roles in those departments.

4. There will be additional small process changes or adjustments regarding task management for crime investigation and also victim care management. These will result in the redesign of processes to improve their efficiency and have respective training.

10.2 Intelligence Business Area

1. The introduction of the 'Golden Nominal' will significantly improve the method of recording intelligence and searching for individuals. This will improve the quality of data held on the Intelligence system and ensure that more records are actionable. This will free up a large amount of time within Bureaus, and will free up staff for in-depth analysis rather than records management.

2. Currently Force Intelligence are involved in a manual process of 'back record conversion' to facilitate the daily PND upload. This requires 2 members of staff full-time, and they would not be required with the introduction of an integrated system and data weeding exercise. These roles could be removed and this process redesigned.

3. Real Time Intelligence are currently stretched by their workload which involves labour intensive data interrogation and multi-keying. An integrated system would save a significant amount of time for this activity, and could allow RTI to take on a more prominent role thus freeing up DIB for more in depth analysis work.

4. The access control model and system administrative functions are likely to be broadened in the new environment. This will change the nature of the work of the current system administrators and improve procedures for access requests / password resets.

5. Introduction of mobile devices and geographical mapping will change the work of Operational Officers who currently either phone RTI / DIB for details or report back to station. This will lead to a change in working practices which should free up officers time.

6. The implementation of integrated systems with integrated MOPI functionality will cause a transformational business change within BTP. A central process for information management for the five business areas will need to be designed, implemented and resourced by the force. This is dependent on the chosen solution.

10.3 Case Business Area

1. As the current legacy system is bespoke, there will be a requirement with a new system to restructure the entire Central Justice Units on B and C Division.

2. There will be a business change in how the Performance team obtains court results. Having the solution integrate with court systems will eliminate a lengthy manual process. Which would lead to significant reduction in staff or relocation to other departments

3. Working towards paper light case files means completing the MG documents into the system, and not having to manually handwrite them for the Officer In Charge. This will lead to more time savings for case workers, as they do not have to re-enter the information into the system and they can concentrate just on the witness/victim care side.

4. As the case files will be electronic they will be distributed electronically, so that there will be no need for staff to manually distribute, and check in and out the paper files.

5. Having the files electronically and having the facility to be able to produce reports, means the manual work of checking all the paper files and noting down figures on a spreadsheet that the Area Team Manager carries out in allocating the case files to case workers will be significantly reduced.

6. Likelihood is that the system will have alerts set/flags set up, and so the case worker will no longer need to manually keep track of tasks, which will introduce further time savings.

7. Carrying out file quality and compliance checks on the case files will not require manual checking of each file, but they will be able to produce reports to show the information and this will impact on the levels of managers required.

8. Performance and auditing will no longer be a manual task.

9. Due to having automation in updating PNC, the Performance team will no longer need to create and record warrant ID's in a spreadsheet and warrant book in order to just keep a track of the warrants. This will lead to organisational change and process change.

10. URN will be created by the Officer In Charge and so they will no longer need to call the CJU to fill out details in JAS to obtain a URN.

10.4 Custody Business Area

1. The Custody Sergeant will be providing the police officer with an AS number instead of having to contact Crime and waiting for the number to be obtained via PNC. The automation of retrieving from and updating PNC will cause changes to the current process and procedures, and a major change in all business areas affected by the Integrated Systems Programme and PNC Bureau. As there will be a saving of time through the reduction of double keying, with the possible removal of SID system.

2. By automating the retrieval and updating of PNC, certain roles and responsibilities to update PNC will no longer be required, as the work load in certain departments will be significantly reduced. There will be changes to job descriptions as PNC responsibilities are taken away.

3. The entire Custody process is currently conducted manually. An automated system will significantly reduce the time spent in creating custody records, and dealing with detainees and providing them with the care they need. It will also significantly reduce the time wasted endured through trying to understand people's handwriting. There will also be changes in terms of process alignment and training of staff.

4. Custody is heavily governed by legislation. An automated system will guide the staff throughout the process ensuring that the legislation is abided to. As a result staff will require less legislative training, since the system will be guiding and ensuring the procedure is carried out as required.

10.5 Command and Control Business Area

1. There will be a need for structural and process changes for control staff.

2. Performance Analysts will be able to access the historical rather than live universe, resulting in lower risk to the organisation as well as less slowdown of the live system.

3. Better integration with the CCTV request architecture will be allowed for. This will allow the CCTV team to rationalise their processes.

4. There are currently dedicated resources that manually type Met Police CAD records into NSPIS logs and vice versa. The Met Police CAD and NSPIS systems do not talk to each other. If an auto exchange is procured with the new system this will mean that these resources will no longer be needed to carry out this activity.

11 APPENDIX H: RETURN ON INVESTMENT CALCULATION

The Return on Investment and Payback calculation for the recommended option 3 and based on the assumption that BTP realises all the available nominal, indicative cashable savings described in APPENDIX E: Benefits for this option, which would occur only when the systems are fully embedded (year 3), is shown in the Discounted Net Spend table below.

Year		Capital Spend	Revenue Spend	Total Annual Spend	Discount rate at 3.5% (Treasury Test Discount	Discounted Net Annual Spend	Annual Cashable Benefits	Annual Return on Investment	Cumulative Return on Investment
0	2014/15	£3,700,000	£578,000	£4,278,000	1.0000	£4,278,000	£0	-£4,278,000	-£4,278,000
1	2015/16	£3,200,000	£578,000	£3,778,000	0.9662	£3,650,304	£0	-£3,650,304	-£7,928,304
2	2016/17	£0	£550,000	£550,000	0.9335	£513,425	£0	-£513,425	-£8,441,729
3	2017/18	£0	£550,000	£550,000	0.9019	£496,045	£4,392,867	£3,896,822	-£4,544,907
4	2018/19	£0	£550,000	£550,000	0.8714	£479,270	£4,392,867	£3,913,597	-£631,310

Based on this scenario the breakeven point for recommended option 3 will occur approximately in quarter 2 of year 5 (2019/20).

12 APPENDIX I: WORK ALREADY CARRIED OUT IN PROJECT 0

A significant amount of preparatory work has been undertaken to ensure that the ISP programme strategically fits with the vision for BTP. Authorisation for Project 0 was given at December 4th 2013 FEB meeting, to achieve the following objectives:

- To produce a Requirements Definition Document able to be used during the procurement process of the Integrated Systems Programme, and which includes capabilities, functional & business requirements, technical requirements, migration requirements and non-functional requirements, (service and integration specific).
- To identify and produce a procurement process and plan which identifies an appropriate route to market which is legally and ethically compliant for the integrated systems of Case, Custody, Intelligence, Crime and Command & Control.
- To develop and produce a Business Case encompassing the rest of the projects in the programme for the procuring, implementing and rolling out of candidate products and options and realisation of target benefits, and for obtaining authorisation of the SIB.

To achieve these objectives the following work has been carried out once the full programme team was in place at the end of March 2014.

In carrying out this work there has been active engagement and working with the end users and key stakeholders in all the relevant areas. Also a specialist legal adviser has been working with the Project 0 team, to ensure that the procurement process and plan developed is legally compliant and ethical and the work carried out did not prejudice the future procurement process. In addition, the project team have been continuously working with the BTP Procurement Manager. Continual and frequent interaction has also taken place with the BTP IT team in the development of the technical requirements, and interdependencies with the AIS Programme projects.

In all of the work carried out the lessons learned from previous BTP integration programmes have been incorporated. Lessons learned have also been actively sought out and identified from other police forces that have already procured and implemented integrated systems. This has been achieved by carrying out on-site visits to five police forces that have an integrated system. And circulation of a set of questions to the remaining forces with an integrated system, of which we received nine completed responses. In addition to this, there has also been a discussion with some of the police forces on potential areas of collaboration and options have been explored.

Soft market sounding has been carried out with potential suppliers to get an understanding of the capacity of the market in order to meet the Force's requirements, and this was confirmed to be the case.

The following individual pieces of work have been carried out.

Using requirements elicitation techniques of 1:1 meetings; workshops; observing; shadowing; and surveys the following requirements have been identified for each of the core systems, their integration and the impacted business areas, and been signed-off by end users and key stakeholders. The types of requirements that have been defined and signed off are: functional, non-functional, technical, information management and security, interface, integration and horizon scanning.

Risks, issues and assumptions that the Integrated Systems Programme needs to take account of have been identified and signed-off. Dependencies with other applications, Force programmes and projects have been identified, explored with the owners, documented and included in the development of the Requirements Definition document. Work has also been carried out to look at what other force applications could be provided as a result of the integrated solution and a future road map to the best possible solution.

As the Requirements Definition was being developed, benefits arising from the implementation of the new systems and the Integrated Systems Programme were identified, analysed, defined and documented. As have the business changes that will need to occur to enable the realisation of these benefits.

The various options for migrating data from the legacy systems to the procured systems have been identified, analysed and approaches discussed with the Business Areas. The learning from other police forces that have already migrated data has also been used.

The procurement options available for procuring the new five core systems have been reviewed, and the learning of other police forces have been included in this review. A recommended option has been made regarding the procurement route, by agreeing the critical criteria that the chosen route needed to cover and using a Decision Making Matrix to decide upon the recommended route.

In this way the objectives of producing a Requirements Definition which meets the Force's requirements and recommending an appropriate procurement route and process was achieved. This culminated in the production of the Business Case.

13 APPENDIX J: INVESTIGATION OF COLLABORATION OPPORTUNITIES

As part of this business case relevant opportunities for collaboration with other forces have been explored. There have been four specific opportunities that have been discussed.

1) Lincolnshire Police have a mature integrated system supporting their officers which is deployed in a manner that is both scalable and flexible. They have outsourced their ICT capability to a private sector contractor who, to date, provides a high quality and good value for money service. Lincolnshire is currently about to commence with a four-force deployment of a single integrated system across the East Midlands. The timing of this would mean that BTP would be unable to participate in the process until 2016. As such this has been discounted.
2) Sussex Police, who were also consulted, have a scalable integrated system in place and are providing it as a service to Surrey Police. In this case Sussex police felt that they would not be in a position to support a further force as their infrastructure and ICT capability was never established to provide this additional scale of support. This option has been discounted.
3) Cambridgeshire was also considered, however, their focus at the moment is on the deployment of their new integrated system from Athena. As such this has been discounted.
4) There is an existing collaboration amongst 15 forces that is centred around the Niche RMS software product, this offers a significant opportunity to work closely with a large number of Home Office police forces across the country. Although this presents the most attractive collaboration opportunity it is predicated on the selection of the NicheRMS product as a solution that BTP is yet to commit to, as the decision is dependent on the outcome of an open and fair competition and procurement process.

The initial examination of collaboration opportunities has shown some possibilities that merited consideration after the systems have been procured and implemented, as the solution procured through a fair and legal procurement process will strongly influence this. However, the main obstacles are predominantly around timings, where other Forces are engaged in their own significant change programmes. As part of ISP it is proposed that there be a more detailed evaluation of collaboration opportunities regarding data sharing once a solution has been procured and implemented, allowing for ISP to progress at pace whilst also keeping options open to the Force.

14 APPENDIX K: GLOSSARY

Acronym	Full Description
ACC	Assistant Chief Constable
CAD records	Computer Aided Despatch records
C&C	Command and Control
CCS	Crown Commission Services
CCTV	Closed Circuit Television
CHS	Criminal History System – Scottish equivalent to PNC
CJS	Criminal Justice System
CJU	Criminal Justice Unit
CMU	Crime Management Unit
COTS	Commercial Off the Shelf product
CPS	Crown Prosecution Service
DBA	Data Base Administrator
DCC	Deputy Chief Constable
DIB	Divisional Intelligence Bureau
ETL Developers	Extract Transform and Load (interface systems) Developers
FEB	Force Executive Board
FIS	Force Intelligence System
'Golden nominal'	Data management principle; (capture key information in a single place once only)
ISP	Integrated Systems Programme
JAS	Justice Administration System
LAN	Local Area Network
Libra	National magistrate court case management system (England & Wales) - interface to Case & Custody
MDT	Mobile Data Terminal
MG documents	National Standard Forms (for prosecution file contents)
MOPI	Management of Police Information
NSPIS	National Standard for Police Information Systems
NWNJ	No Witness, No Justice
OGC	Office of Government Commerce
OJEU	Official Journal of the European Community
PMO	Portfolio Management Office
PNC	Police National Computer
PND	Police National Database
PNLD	Police National Legal Database
RMADS	Risk Management Accreditation Document Set
RMS	Records Management System
RTI analyst	Real Time Intelligence analyst
SIB	Service Improvement Board
SID	System Input Document
SIRO	Senior Information Risk Owner
SME	Subject Matter Expert
URN	Unique Reference Number
VCoP	Voluntary Code of Practice
WAN	Wireless Area Network