



<b>Meeting</b>	<b>Authority Meeting</b>
<b>Date</b>	<b>24 August 2023</b>
<b>Location</b>	<b>COSLA, Edinburgh</b>
<b>Title of Paper</b>	<b>Digital Strategy Strategic Outline Business Case</b>
<b>Presented By</b>	<b>Andrew Hendry, Chief Digital Information Officer</b>
<b>Recommendation to Members</b>	<b>For Approval</b>
<b>Appendix Attached</b>	<b>Appendix A - Digital Strategy                  Appendix B - Digital Strategy Strategic Outline Business Case</b>

**PURPOSE**

The purpose of this paper is to present for approval the Police Scotland Digital Strategy, Digital Division Target Operating Model and accompanying Strategic Outline Business Case (SOBC).

It is requested that approval is given for the Police Scotland Digital Strategy, Digital Division Target Operating Model and SOBC.

The Scottish Police Authority is asked to endorse and approve the digital vision and ambition to move from '**Doing Digital to Being Digital**', along with the intended prioritisation of delivery activity across the horizons of 'Now' (1-2 years), 'Next' (3-5 years) and 'Beyond' (5+ years).

In approving these documents members are asked to note the financial implications associated with the Digital Strategy and proposals for a revised Digital Division Operating Model.

Members are invited to approve the Digital Strategy, Digital Division Target Operating Model and associated Strategic Outline Business Case.

## 1. BACKGROUND

- 1.1 On 1<sup>st</sup> March 2022 Change Board approval was provided for Digital Division to undertake Procurement and Invitation to Tender activity in relation to DDICT Strategy Refresh and Digital Division Target Operating Model.
- 1.2 During March and April 2022 the appropriate procurement activity was conducted and concluded, with Ernst and Young (EY) being awarded the DDICT Strategy Refresh contract, and Capgemini being awarded the Digital Division Target Operating Model contract. The rationale for the two pieces of work is that the Digital Strategy focuses on '**what**' will be delivered, and the Target Operating Model on '**how**' the Strategy will be executed.
- 1.3 Both vendors were asked to work closely together to deliver the following core products:
- Digital Strategy
  - Strategic Outline Business Case
  - Digital Division Target Operating Model
- 1.4 A joint Governance structure was established comprising a Steering Group and Delivery Board, chaired by the CDIO. Following appropriate on-boarding activity the two pieces of work commenced in July 2022 and ran until the end of March 2023.

## 2. Digital Strategy

- 2.1 The proposed Digital Strategy is contained within the appendices.
- 2.2 Police Scotland's 2018 Digital, Data, and ICT Strategy (DDICT Strategy) set out a programme of work to invest in digital, data and technology, to meet and support the changing needs of policing.

Financial analysis of the actual budget allocation (Capital, Reform and Revenue) over the 5 year period of DDICT (18/19 to 22/23) indicates that approximately 50% of the total original request has been funded.

Significant progress has been made against the DDICT Strategy, and there is a further need to optimise existing investments, take advantage of new technologies and meet the changing nature of crime.

Without ongoing investment, Police Scotland will lose ground made over the past four years and will fail to provide the digital, data and technology capabilities that officers, staff and partners require.

- 2.3 The Digital Strategy focuses on articulating how digital, data and technology will support Police Scotland to address the increasing digital demands of today. The Digital Strategy consolidates individual project and programme strategies and technology approaches, ensuring alignment of data and digital components, and bringing an architectural and technical cohesion to delivery.

The Digital Strategy aims to support Police Scotland to adapt to changes in an increasingly digital-enabled world, by enabling our officers and staff with the digital technology that will help them build better partnerships with the public and partners, investigate the evolving nature of crime, and bring more offenders to justice. The next phase of our Digital Strategy is about making a shift from **'Doing Digital' to 'Being Digital'**.

- 2.4 The Digital Strategy was developed based on a 5-step model recommended by EY:
- Understand the progress to date against the portfolio and projects with a technology element
  - Focus on future thinking by addressing the mission 'Keeping people safe'
  - Reimagine a Business aligned Technology Strategy and Roadmap
  - Reframe the future of Technology function and establish the governance
  - Deliver Transformation amidst the tension of disruption and delivery

Across these 5 steps the engagement has been significant and has included 32 1-to-1 interviews, 14 operationally focussed workshops and over 160 stakeholders engaged, culminating in a Digital Strategy collaborative event in November 2022 with internal and external/partner stakeholders.

- 2.5 The Digital Strategy is a 5-year plan from 2023 and covers the horizons of 'Now' (1-2 years), 'Next' (3-5 years) and 'Beyond' (5+ years).

It contains a roadmap of current in-flight and new projects and programmes and is based on the following themes:

- Tackle crime through our cyber and intelligence led policing capability
- Modernise and improve access to our services
- Enhance our colleague's experience by providing the right digital tools
- Enable partnership working and secure digital collaboration – for example Blue Light Service Collaboration
- Utilise digital technologies and data to improve the wider Criminal Justice System

2.6 The Digital Strategy delivery is underpinned by six key enablers:

- Data – Recognise Data as an asset
- Data Ethics – Essential for continued public trust and confidence
- Cyber Resilience – Continuous need to invest in protecting our technology landscape
- People – Continue to be at the heart of any change process
- Sustainability – The Digital Strategy aims to deliver sustainable solutions, products and services
- Investment and Prioritisation – Critical to ensure there is a focus on value in the context of a likely challenging financial landscape

2.7 In terms of emerging digital technologies such as, but not limited to, Artificial Intelligence (AI), Machine Learning (ML) and Facial Recognition it is essential that these are only considered for introduction into operational policing **after** the appropriate Data Ethics assessments have taken place. The Digital Strategy references and emphasises this process in order to provide necessary assurance to key stakeholders.

### **3. Digital Division Target Operating Model**

3.1 Alongside the refresh of the DDICT Strategy, Digital Division is taking the opportunity to look at how its digital, technology and data services are delivered through 'Digital Transformed'.

The current Digital Division operating model is not fit for purpose. Since 2018, Digital Division has had limited opportunity to invest in itself, due to funding constraints and project priorities.

We understand that we need to better align with target organisational outcomes, release capacity to meet the emerging needs of Digital Policing, optimise the efficiency of our services, and continue investment in the development of our people.

Through Digital Transformed, the objective was to enable the Digital Strategy, and develop the next generation target operating model (TOM) to help ensure that Digital Division is future-proofed with the right skills, practices and capabilities to become a value-driven digital service.

To deliver and sustain the capabilities we need, we are proposing an investment in Digital Division's organisation design.

- 3.2 The Target Operating Model (TOM) articulates how the strategy will be enabled; creating a Digital Division (DD) that has the skills, capabilities, processes and tools it needs to be successful. Importantly, to enable Police Scotland to being digital, DD's ambition is:

**"To be the trusted advisor & supplier of digital services to policing in Scotland"**. We are an integral part of policing, adapting to changing needs and challenges, and creating high quality digital experiences for officers, staff, and the public."

- 3.3 The design of the proposed operating model has been informed through extensive collaboration and wider engagement and has included 1-to-1 interviews with 25+ stakeholders, multiple design workshops and 2 Accelerated Solutions Environment (ASE) events. We have ensured that colleagues from P&D have been involved from the outset and have also hosted a series of focus groups; across DD, with our change colleagues and colleagues across PS to discuss the product-centric operating model concept.

For Digital Division colleagues there has also been participation in the ASE event(s), regular updates and newsletters from the CDIO, and the establishment of change champions.

- 3.4 To deliver the capabilities, working practices and cultural changes needed; a new organisation design is being proposed.

**Importantly, we are proposing to bring the Chief Data Office (CDO) into Digital Division.** The rationale for this is, as follows:

- **"Secure by Design" and "Privacy by Design"** - Embedding technical and information security throughout digital & data product delivery is part of the Government Cyber Security Strategy (outcome 9) and Transforming for a digital future: 2022 to 2025 roadmap for digital and data (commitment 11). The Cabinet Office is leading this programme to help all public bodies to adopt a common approach for securing digital & data services;

aiming to ensure appropriate and proportionate security and privacy measures are embedded within the delivery of digital & data services from the start, ensure risks are effectively managed at the right level and on an ongoing basis, and security posture is continually assured throughout the digital & data life cycle.

- **Digital, data, technology & security as a unified profession** - Digital, Data and Technology (DDaT) has been created by Scottish Government (and UK Government) as a recognised profession of aligned skills and capabilities, which includes all aspects of security & technical assurance. Importantly, DDaT aims to create of "T-shaped" individuals, whereby data people have broader technology skills, and all data & digital professionals have security and privacy expertise.
- **Data & digital are powerful together** – our refreshed Digital Strategy sees data as a fundamental component of Police Scotland's transformation. Likewise, in England & Wales, the National Policing Digital Strategy describes data as an essential asset to enable digital transformation; recommending the need to bring digital and data capabilities together.

3.5 We are proposing to invest in 54 new permanent roles, alongside making changes to some existing roles. The current permanent establishment within Digital Division (417) and the Chief Data Office (79) equate to 496 FTE (inc. vacancies as at 2022\_23).

These new roles will bring new skills and competencies to the Division, enabling the delivery of the target capabilities and **agile, product-centric working practices**. They will also support us in addressing many of the themes identified within the Current State Assessment and enable us to harmonise spans of controls in alignment with Police Scotland's organisation design standards.

3.6 Digital Division and the CDO's leadership want to drive a programme to transform the operating model. The key objectives of this transformation will be to implement a target operating model that will:

- **Invest in our people & the skills we need** – adopting industry standard roles definitions and development pathways (i.e., "Skills for the Information Age") to improve recruitment and retention, grow and develop our own people, creating an

- attractive workforce offer, in line with other employers - including Scottish Government, the NHS, local authorities
- **Align to the objectives of the business** – orientate everything Digital Division does to the products that officers, staff and the public need, and the platforms that support them, to deliver the Digital Strategy
- **Continuously improve products & platforms** – creating enduring teams analyse & respond to user feedback, directed by Product Owners to prioritise and deliver enhanced user experiences and strengthen our platforms
- **Be faster & more efficient** – enabling our teams to improve products quickly and easily, working within clear guiderails, with all the right expertise working together, automating the way we build/test/deploy changes, and by empowering the right people to make decisions

3.7 In addition to a proposed new operating model and organisational structure Digital Division are proposing introducing a Digital Skills Framework.

The Digital Division Current State Assessment and Capability Maturity Assessment, conducted as part of the DDTOM Discovery phase, identified key skills and competency related challenges faced by the Division. These include:

- Disparate records of employee skills and a lack of adoption of an industry-standard competency or development framework
- Inconsistent technical career and development pathways across areas within the Division
- Many job titles and roles (71%) do not always reflect industry models, making it difficult to recruit as potential applicants may not understand roles and find job adverts that are relevant to them
- High numbers of vacancies, uncompetitive salaries and unsuccessful recruitment cycles resulting in multiple cycles of adverts and a reliance on contractors
- Lack of recruitment programmes, such as apprenticeships and graduate schemes, to target and develop early talent

The implementation of a recognised skills framework, such as Skills for the Information Age (SFIA), provides a common language and structure to assess skills, analyse gaps, develop career pathways, and support recruitment. SFIA was initially developed in the UK before expanding and being recognised globally as the framework for digital skills. It provides flexibility to map both technical and

supporting roles and there are a significant number of resources to support the use of the framework within organisations. SFIA is the most widely recognised digital skills framework and is used extensively across UK public sector organisations.

#### **4. Strategic Outline Business Case**

- 4.1 This document sets out the Strategic Outline Business Case (SOBC) for the delivery of 64 projects within Police Scotland's Digital portfolio and also for the implementation of the fit for the future Target Operating Model for the Digital Division. Options have been considered and all address the strategic objectives for the Joint Strategy for Policing (2023).
- 4.2 The Strategic Outline Business Case focuses on the high-level scoping phase for the work. The purpose of this stage is to establish the strategic context for the work, to make the case for change and to determine the way forward.

The SOBC has been prepared in line with the HM Treasury Green Book five case model and will be subject to the governance arrangements that Police Scotland operates. The Green Book process is designed to provide decision makers and stakeholders with a proven framework for structured thinking and assurance that the work:

- Provides strategic fit and is supported by a compelling case for change
- Will maximise public value to society through the selection of the optimal combination of components, products, and related activities
- Is commercially viable and attractive to the supply side
- Is affordable and fundable over time
- Can be delivered successfully by Police Scotland and our partners

The SOBC is the first in a three-stage process which also covers development of more detailed business cases. The SOBC is presented for options which should be treated on a portfolio basis.

On commission, individual projects and programmes IBCs will be developed, and where required, Full Business Cases (FBC) will be completed. As work progresses through these stages, the comprehensiveness of the case across the Five Case Model increases, and with that, so too does confidence.



4.3 The conclusions from each of the SOBC five-case model are summarised below:

SOBC Case	Conclusion
<b>Strategic</b>	<p>This business case concludes that it is not practical to meet the challenges of Joint Strategy for Policing (2023) without significant improvement and enhancement of the technology, digital and data assets employed by Police Scotland, matched by changes in the Digital Division operating model.</p> <p>The Digital Strategy, Target Operating Model and the Business Case provide a clear digital vision and direction for Policing in Scotland. We must build upon our success in developing and delivering sustainable policing capabilities enabled through fit for the future digital services, to meet the evolving needs of Policing in Scotland. The digitisation of operational and back-office processes and services is fundamental to achieving organisational efficiencies.</p> <p><b>Failure to invest in our critical national infrastructure has significant implications for maintaining operational service delivery, public confidence and trust.</b></p>
<b>Economic</b>	<p><b>Digital Strategy:</b></p> <p>Option 3 'Optimise' is recommended. This option delivers the digital capabilities necessary to enable Policing in Scotland to achieve the stated outcomes of the Joint Strategy for Policing 2023. This approach continues building the digital foundations and prioritises the scope of delivery based on user need, outcomes, and benefit.</p> <p>The risk profile associated with Option 3 'Optimise' is lower than Options 1 &amp; 2 in respect to enabling Strategic Outcomes and delivering Benefits but is higher than Option 1 &amp; 2 in respect of delivery complexity and change adoption.</p> <p><b>Operating Model:</b></p> <p>Evolution is the recommended option – moving to a product-centric operating model</p> <p>To deliver the organisation's ambition, and overcome many of the challenges it faces today, Digital Division needs to reorientate its funding, decision-making, and performance to the products that Policing in Scotland values.</p>

SOBC Case	Conclusion
<p><b>Financial</b></p>	<p>The delivery of the refreshed Digital Strategy and Target Operating Model will require funding of £398.736m across the 5 years. However, it is important to note, £183.847m (including £63.690m of revenue) of these costs relate to pre-approved funding for existing and in-flight projects. The finance governance process allows for pre-approved projects to receive prioritised funding in the annual budgetary cycle and therefore this case does not seek to initiate an approval process for that funding again.</p> <p>The net additional funding requirement is £214.889m, which includes £174.449m of capital investment upfront, along with a revenue impact of £40.440m across the initial 5-year period.</p> <p>The Digital Division will be critical to enable the efficient, safe and timely delivery of the Digital Strategy. The current operating model is not fit for purpose. Since 2018, the Digital Division has had limited opportunity to invest in itself, as the organisations priority has been exclusively to deliver the DDICT Strategy.</p> <p>The proposed net investment in the TOM equates to circa £9.16m (including change management and employee engagement, and new permanent roles), which is less than 2.3% of the total SOBC. The TOM will be critical in enabling the Digital Strategy to be delivered in the most efficient way; maximising automation; reducing the long-term use of high-cost temporary resources; and enabling sustained and continuous improvement in digital and data services to policing.</p>
<p><b>Commercial</b></p>	<p>Police Scotland has been effective in procuring digital, data and technology services since 2018 and is strongly positioned to continue this trend, utilising expertise within Digital Division and Commercial Services.</p> <p>There is a high degree of commonality in the procurement categories identified in 2018, though there have been changes, such as the inclusion of more extensive 'as a service' categories, and additional categories applicable to the delivery and operation of the Target Operating Model. In the latter case, consideration has been given to capabilities which enable agile delivery and operation of modern technologies and platforms.</p>

SOBC Case	Conclusion
	<p>Additionally, the consideration of frameworks to enable pace of delivery, and to provide timely access to scarce and specialised resources has been highlighted.</p> <p>The procurement approach will be refined as projects business cases progress through their development and governance and as funding and requirements are confirmed.</p>
<b>Management</b>	<p>The programme of work set out in this business case is deliverable over a five-year period, delivering a future fit Target Operating Model for Digital Division and implementation of the refreshed Digital Strategy.</p> <p>The business case for, and delivery of the Digital Strategy is significantly enabled and underpinned by the implementation of the Target Operating Model.</p> <p>Whilst the Digital Strategy and the Target Operating Model may be delivered independently, there are significant benefits to coordinating these two recommendations and common governance is proposed to enable this. Failure to implement the proposed Target Operating Model would necessitate the re-evaluation of cost, pace and scale of the Digital Strategy.</p> <p>The governance arrangements proposed centre on the establishment of a Digital Board, with supporting arrangements delivered through the implementation of the Target Operating Model. It will therefore be important to prioritise implementation of elements of the Target Operating Model.</p>

## 5. FINANCIAL IMPLICATIONS

- 5.1 Financial constraint is an economic reality, and it is anticipated that the current challenging public sector financial landscape will continue over the course of the next three to four years. It is essential that Police Scotland continues to invest in digital, data and technology capability, and to do so in ways that address existing and emerging priorities.
- 5.2 From the outset of both pieces of work the challenge has been to articulate the needs, ambition and aspiration of Police Scotland (and partners) in relation to our digital, data and technology capability. It is acknowledged that the financial commitments associated with the Digital Strategy are considerable but provide a basis for further detailed discussion regarding change and transformation funding and future financial settlements.

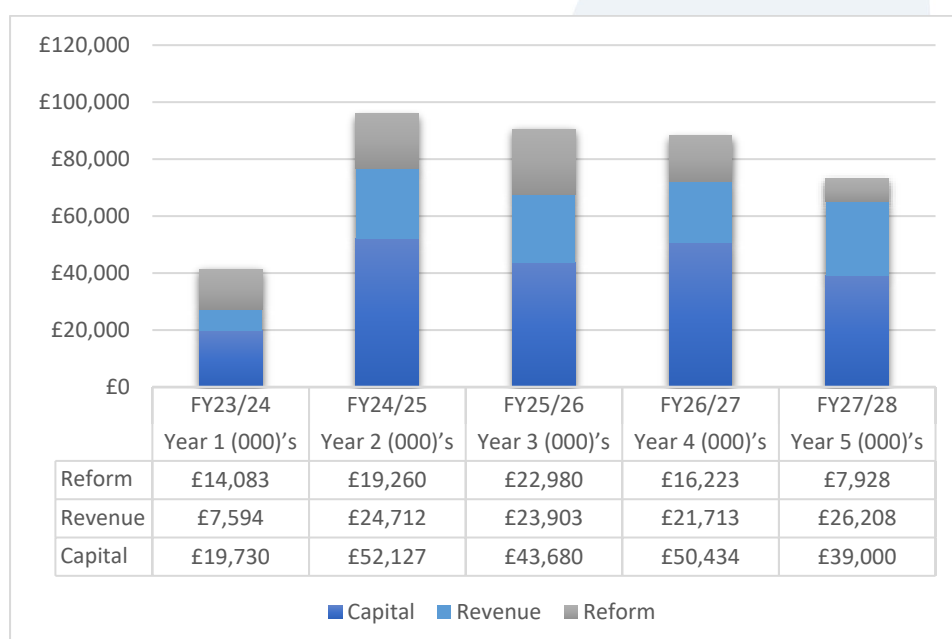
5.3 The delivery of the refreshed Digital Strategy and Target Operating Model will require funding of **£398.736m** across the 5 years.

It is important to note, **£183.847m** of these costs (including **£63.690m** revenue) relate to pre-approved funding for existing and in-flight projects. The finance governance process allows for pre-approved projects to receive prioritised funding in the annual budgetary cycle and therefore this case does not seek to initiate an approval process for that funding again.

The net additional funding requirement is **£214.889m**, which includes **£174.449m** of capital investment upfront, along with a revenue impact of **£40.440m** across the initial 5-year period.

5.4 The resource costs associated with the Digital Division Target Operating Model proposal have been identified and are included. The proposed net investment in the TOM equates to circa £9.16m (including change management and employee engagement, and new permanent roles), which is less than 2.4% of the total SOBC commitment.

### 5.5 Affordability Analysis



## 6. PERSONNEL IMPLICATIONS

6.1 The resources associated with the proposed projects and programmes have been estimated as part of the estimated costs

incorporated into the SOBC. These resource costs will be refined as individual projects and programmes complete their IBC and FBC development.

- 6.2 Notwithstanding the significant collaboration and engagement referenced at sections 2.4 and 3.3 there will be a requirement for formal employee and staff association/trade union engagement should the Digital Division Operating Model proposal be approved.

## **7. LEGAL IMPLICATIONS**

- 7.1 There are no legal implications as a result of this proposal.

## **8. REPUTATIONAL IMPLICATIONS**

- 8.1 There are reputational implications associated with this paper.

Failure to invest in the Digital Strategy and proposed Digital Division Target Operating Model at the required levels will inevitably impact the scope and scale of digital transformation, and in turn will impact the operational efficiency and effectiveness of Police Scotland and the Scottish Police Authority.

This in turn may impact the levels of public trust and confidence in Policing in Scotland.

## **9. SOCIAL IMPLICATIONS**

- 9.1 Investment in and delivery of the Digital Strategy and Digital Division Target Operating Model will enable the service to utilise digital technologies and improve overall operational efficiency and effectiveness.

This will maintain and build trust and confidence in policing.

## **10. COMMUNITY IMPACT**

- 10.1 The Digital Strategy contains a range of digital transformation activities which will positively impact on the public, victims and witnesses of crime and which will enable the service to maintain and build positive relationships with the public and communities of Scotland.

## **11. EQUALITIES IMPLICATIONS**

11.1 An Equality and Human Rights Impact Assessment has been completed and the summary will be published with the final strategy.

## **12. ENVIRONMENT IMPLICATIONS**

12.1 There are no known Environmental and Sustainability implications. Police Scotland seeks to positively impact on its carbon footprint through a more efficient use and deployment of digital technologies.

The Digital Strategy aims to deliver sustainable solutions that rely on:

- Technology that supports the work of our people.
- Products that help to keep communities safe.
- Services that enhance the way Police Scotland respond to crime.
- Communication that allows officers and staff to connect and exchange information effectively across our organisation and with our partners.
- Up to date technology and software to ensure our organisation is operating effectively and in an environmentally conscious manner.

### **RECOMMENDATIONS**

Members are invited to approve the Digital Strategy, Digital Division Target Operating Model and associated Strategic Outline Business Case.



**POLICE  
SCOTLAND**  
Keeping people safe  
**POILEAS ALBA**

# Digital Strategy 2023

April 2023

# Contents

● Strategic Context	2-5
● Changes in Operational Policing	6
● Our Digital Story	7-8
● Our Digital Ambition	9-20
● - Doing Digital to Being Digital	9
● - Delivery Horizon	10
● - Strategic Themes	11-16
● - Design Principles	17
● - Strategic Enablers	18-20
● Delivery of the Digital Strategy	21-24
● Governance	25-29



# Foreword from the Chief Constable

Policing has a duty to respond to the needs of communities and individuals wherever people live their lives and harm arises.

Historically, that meant patrolling public spaces before policing rightly began addressing significant harm occurring in the home and private settings.

The continued rise in cyber-enabled crime illustrates that prevention, education and enforcement are also required in the online realm. At the same time, Police Scotland must ourselves be resilient to digitally-enabled threats.

We no longer keep the people and communities of Scotland safe only through patrolling public spaces.

Along with our Policing in a Digital World programme, this Digital Strategy outlines the technology and capabilities needed to ensure Police Scotland can safeguard people from the threats of today and those of tomorrow.

As we move from doing digital to being digital, we are building new ways for our fellow citizens to contact their police service and to share information so we provide the help they need and deserve.

Police Scotland is playing an important contributory role in modernising criminal justice to benefit the public we serve, through the establishment of a single national crime system, the greater use of video interviews, digital evidence sharing and virtual courts.

We know technology such as mobile working can improve officer and staff safety, wellbeing and service and this strategy sets out our commitment to make Body Worn Video widely available across the service.

Policing in Scotland has a positive duty to make use of new capabilities where they can help keep people safe and hold offenders to account, and we outline the emerging technologies which full implementation of this strategy would deliver.

This is an ambitious strategy and our ability to achieve all the improvements and benefits outlined and the pace of change will depend on appropriate revenue and capital funding.

When policing considers new technologies we consult and engage so we can address any concerns. We will ensure its use is transparent, ethical and aligned with our values of fairness, integrity, respect and commitment to upholding human rights.



**Sir Iain Livingstone QPM**

Chief Constable

# Message from the Chief Digital and Information Officer

Police Scotland's ambition is to move from Doing Digital to Being Digital.

'Being Digital' seeks to embed digital at the centre of the organisation and the way it operates - To enable effective and efficient ways of working through innovative capabilities that support our people and partners in delivery of critical services to the public.

The Digital Strategy has been designed with a focus on outcomes and addresses the challenges Police Scotland faces with the social and economic trends driving this change set to continue, for example:

- **The nature of crime is changing with increasing levels of cyber-crime and criminal sophistication making it the new frontline of policing.** Across Scotland and the rest of the UK, Cyber is the fastest growing crime type. It gives rise to new and evolving crime whilst also enabling traditional crimes such as fraud to be committed in a different and more challenging way in both the physical and virtual space. i.e., fraud can be committed more rapidly and more frequently across a far larger proportion of our communities than ever before. The exponential rise in demand for our services, combined with the prolific and borderless nature of cybercrime, requires a different approach
- **Demand for preventative and early intervention services is increasing.** People are living longer, and as the average age of the population rises, so too does the level of vulnerability within the population. Levels of inequality also continue to grow with the most deprived areas of Scotland disproportionately affected by crime therefore more preventative approaches are required to reduce the potential for harm
- **People's expectations of how they interact with public services has changed.** The Public Contact and Engagement Strategy 2020 highlighted the expectation of more joined up services and a choice of engagement channels which are accessible, inclusive, and personalised. Society is changing too. Communities are becoming increasingly diverse in their makeup, range of languages and cultural norms.

There is a requirement for policing to adapt and find new ways to engage with people and offer a range of ways to interact and deliver services

- **Equipping officers & staff with the appropriate tools.** Our people need and rightly expect to have access to mainstream technology to enable them to discharge their roles in a safe, effective & efficient way
- **Challenging financial position.** We face many external factors affecting the scale and nature of demand for our services, and coupled with the inflationary pressures we are experiencing within a constrained financial environment, we consider 'do nothing' as no longer an option in terms of technology investment

**Police Scotland's purpose is to improve the safety and wellbeing of people, places and communities in Scotland.**

The drivers for change are clear.

Police Scotland must keep up with the criminal organisations who do not have the same financial constraints or capability gaps.

We need to support our people as they seek to mitigate risk, deliver critical services and enable new ways of working alongside partners.

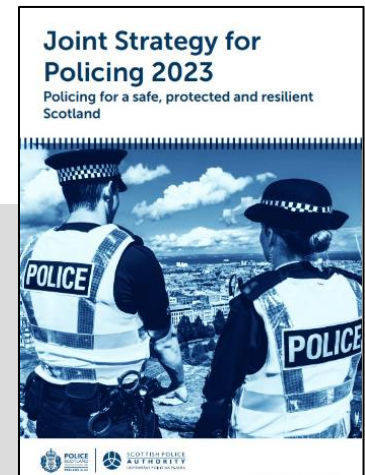
**Andrew Hendry**

Chief Digital and Information Officer



# Joint Strategy for Policing 2023

## Strategic Direction



### Joint Strategy for Policing (2023)

The Joint Strategy for Policing 'Policing for a safe, protected and resilient Scotland' sets the strategic direction for policing in Scotland in accordance with the Police and Fire Reform (Scotland) Act 2012.

The refreshed Digital Strategy aligns to and enables delivery of the agreed strategic outcomes and objectives for policing, setting a clear vision and way forward for the digital development of the service.

#### Our Vision

**Policing for a safe, protected and resilient Scotland**

#### Our Purpose

**The purpose of policing is to improve the safety and wellbeing of people, places and communities in Scotland**



# Aligning the Digital, Data & Technology Strategy to Policing Outcomes

The Digital Strategy has been identified as a key enabler of Joint Strategy for Policing 2023 and its success will be measured by the way in which Policing Outcomes are achieved through the use of technology and data.

## Our Policing Outcomes



## Our Digital Strategy & Objective – 5-year horizon

The Joint Strategy for Policing identifies 11 enabling strategies, of which the Digital Strategy is one and as such has been aligned to the priorities set out in the Joint Strategy for Policing.

This Digital Strategy builds upon and supersedes the 2018 Digital, Data and ICT (DDICT) Strategy. It will deliver the technology elements that are referenced in the enabler strategies and ensures the technology components are appropriately aligned.

The Digital Strategy consolidates individual project and programme strategies and technology approaches, ensuring alignment of data and digital components, bringing an architectural and technical cohesion to delivery.

# Key Facts & Figures

## About Police Scotland

Serves a population of 5.4 million people

16,614 Officers  
5,881 Staff

Annual Budget of £1,178.8 million

We operate in a highly dynamic, challenging environment that requires a multi-faceted approach to digital service provision, delivering targeted, agile capabilities in response to everyday demand, but also building solutions that address longer term strategic goals.

Cybercrime reports rise from 7,240 to

**14,130**

between 2019/20 and 2020/21



**90-95%**

of frauds have an online aspect



**1,262%**

increase in Cyber Dependant crime including cryptocurrency investigations



**17%** increase of fraud was recorded in the last 12 months, with a 68% increase over the last 5 years

**511%**

increase of Online Child Sexual Abuse and Exploitation (OCSAE) referrals from 2015-2021

**650%**

increase of referrals regarding child sexual abuse imagery over a 9-year period

The number of people aged 65 and over is projected to grow by

**30%** by 2045

Inflation up to **10%** in 2022/23, increasing the cost of technology solutions and components



**9 out of 10**

adults use the internet and 97% at home



**85%**

of public said that Body Worn Video would increase their trust in Police Scotland



**82%**

of our people are confident Body Worn Video would increase officer safety



1. Recorded Crime in Scotland, 2020-2021 - gov.scot (www.gov.scot); 2. How we are performing - Police Scotland; 3. 1. Recorded Crime in Scotland, 2020-2021 - gov.scot (www.gov.scot); 8 Apr 2021,p61; 4 - 6. Police Scotland - Extract from PDWP Programme Board Update 9/1/23; 7. Projected Population of Scotland (Interim) 2020-based, Report (nrscotland.gov.uk); 8. Office for Budget Responsibility (OBR) forecasts that RPI inflation for 2023 will be 10.7%; 9. Internet access – households and individuals, Great Britain - Office for National Statistics (ons.gov.uk); 10-11. Police Scotland's Use of Body Worn Video: Public Consultation - Police Scotland - Citizen Space

# Police Scotland's Digital Story

## Building On The Strong Foundations

*We have achieved a great deal since 2018, but there is still much to do*

Police Scotland's 2018 Digital, Data, and ICT (DDICT) Strategy set out an ambitious programme of work to fully refresh its technology and to invest in the capability of the service to support the changing needs of policing.

Since that time significant strides forward have been made to build a 'fit for the future' technology platform. Police Scotland has:

- **Invested in replacing aging, legacy infrastructure** resulting in a significant reduction in the level of technical debt and associated risk
- Progressed with consolidating core operational systems by creating national applications to support standardised ways of working; for example, national crime and case management. This has consolidated many of the datasets held by the organisation making **day to day work simpler and information more accessible to officers** when they need it in the field. This foundation needs to be built upon and sustained over the longer term
- Commenced introduction of a **new digital contact platform that will protect and strengthen critical 999 and non-emergency 101 services** for the future. This has built a foundation on which we will be able to develop further ways for the public to engage, making it easy, convenient, and safe to contact the police
- **Enabled a shift to remote working** with most officers and police staff now equipped with mobile devices and laptops (over 15,000 devices deployed)
- Laid the building blocks for **unlocking the power of the data** held to improve the safety and wellbeing of people, places, and communities in Scotland. We appointed our first Chief Data Officer, and we have started to introduce data focussed technology and tools. Our Data Drives Digital programme is in-flight and will improve workforce efficiency and operational effectiveness, use analytics and better quality data from a wider range of sources to improve decision making
- Introduced a **single national network** to underpin enabling technologies which made it possible to deliver a rapid and comprehensive technology response to the COVID-19 coronavirus pandemic. This played an important role in enabling continued provision of all essential policing services. **Desktop video conferencing and collaboration tools** were rolled out as part of our crisis response and the programme then rolled out nationally, reducing travel and increasing productive hours
- Protected its network and associated data assets through **investment in cyber security and resilience**, defending Police Scotland from digitally enabled threats and contributing to Scotland's drive to be a cyber resilient country
- Collaborated with the Scottish Policing Authority, Crown Office and Procurator Fiscal Service, Scottish Courts and Tribunal Service and other criminal justice partners to introduce remote ways of working. We have worked together to introduce **remote court hearings** and sentencing for criminal cases in the High Court, enabled via video link to accused persons remanded in custody

# Police Scotland's Digital Story

## Building On The Strong Foundations

- Commenced delivery of the new Digital Evidence Sharing Capability (DESC), which contributes to modernisation of the criminal justice system. DESC will change how digital evidence is collected, viewed and shared across the justice system and could allow cases to be resolved faster and improve the experiences of victims and witnesses. This is a cross-cutting initiative which will allow users such as police officers, prosecutors, court staff and defence agents to digitally access evidence in an efficient and user-friendly way
- Equipped armed police officers across Scotland with **body worn video cameras** to better protect the public and police officers, and provide best evidence at court

Delivery of these achievements is remarkable in the context of the unprecedented levels of social and economic disruption which occurred because of the COVID-19 coronavirus pandemic, spanning much of the time covered by the DDICT Strategy, absorbing leadership focus, technical capacity and creating practical challenges to workforce and supply chains.



### DDICT Strategy 2018\*

\*Note: Please click on DDICT Strategy 2018 to access link

During this period Police Scotland also supported events which put the country on the world stage, which placed pressure on the availability and resilience of its digital capability. Police Scotland successfully supported the hosting of four matches in the Euro 2020 football tournament, provided policing and enhanced security during COP26 held in Glasgow in October 2021, and performed a key role in Operation Unicorn helping to ensure significant events relating to the death of Her Majesty Queen Elizabeth II could be held safely, securely and with dignity. Whilst these are specific examples, they demonstrate some of the successful planning, operational delivery and policing of high-profile international events enabled by the investments made to date in Digital and Data technology.

Achievements since 2018 provide an excellent platform on which to build future capabilities, but there is a need to optimise existing investments, take advantage of new technologies and consider the changing nature of crime as we look to develop these capabilities. Police Scotland's ambition is to move from Doing Digital to Being Digital, along with the intended prioritisation of delivery activity across the horizons of 'Now' (1-2 years), 'Next' (3-5 years) and 'Beyond'. Being Digital is not intended to be an ambition for the technologist in Police Scotland, instead it is about embedding digital at the centre of the organisation, enabling significant operational efficiency against a backdrop of fiscal pressure, improving public service, and enabling more effective and quicker investigation of crime. Moreover, this is consistent with the "National Policing Digital Strategy, 2020 – 2030", which makes it clear that Being Digital is an operational imperative for all forces.

# Our Digital Ambition

## Doing Digital to Being Digital

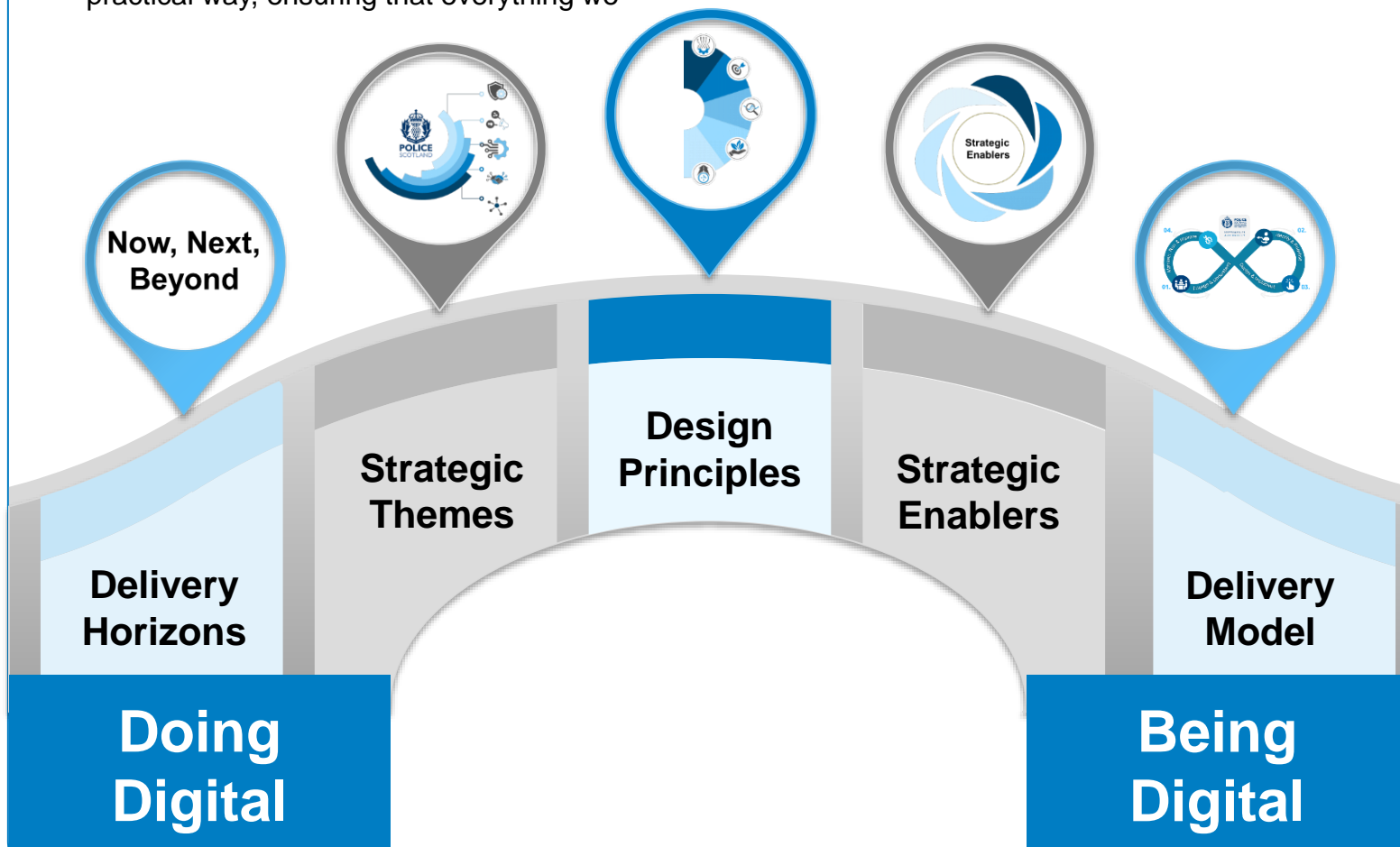
Our Digital Strategy aims to support Police Scotland to adapt to changes in an increasingly digitally-enabled world, by providing our officers and staff with the digital technology that will help them build better partnerships with the public and partners, investigate the evolving nature of crime, and bring more offenders to justice.

In essence, the next phase of our Digital Strategy is about making a shift from 'Doing Digital' to 'Being Digital'. This means that we will progress from a position in which we have modernised and provided officers and staff with technology and tools, to one in which we adopt and exploit digital, data and technology as part of everything we do. This means embedding innovative thinking, and incorporating digital and data assets, in the way we deliver policing services in future.

This shift requires us to 'bridge' the position we are in today to where we desire to be in the future. We will achieve this 'bridge' in a practical way, ensuring that everything we

do in 'Being Digital' is built around *Strategic Themes* which align to *Policing Outcomes*. We will also adopt revised *Design Principles* which will enable us to deliver to a high quality, and to deliver 'fit for the future' solutions. We will also implement policies and working practices which support this, and we call these *Strategic Enablers*.

Finally, we will adopt a practical *Delivery Model*, which means that we will plan and schedule work in a way that delivers to our highest priorities first, seeks to optimise benefits, and is achievable within timescales and budget.





# Delivery Horizons

Police Scotland has developed a 5-year plan across the horizons of 'Now' (1-2 years), 'Next' (3-5 years) and 'Beyond' (5+ years) to achieve the outcomes set out in the Joint Strategy for Policing.

Successful delivery will depend on appropriate funding levels.

The delivery of the plan supports efficiency gains, puts in place new technology capabilities and provides a 'fit for the future' Digital Division able to deliver solutions and services to meet evolving needs.

## Now

1-2 years

Continuing to invest in the projects we have started will enable us to complete the standardisation of frontline systems and data that our officers rely upon to work effectively. We will be able to manage and use data efficiently, and we will help our staff to work in ways that are more effective for the roles they perform.

An efficient and effective police service with digital tools that allow us to work effectively and flexibly, generate insight and focus on the higher level and value adding activities

## Next

3-5 years

Our next stage of investment will extend our ability to be accessible to the public and to collaborate with our partners. We will provide channels for the public to contact us in ways that suit them and will keep them informed of how we are dealing with their needs. In addition, we will establish the means to share data, securely and responsibly, so that we are better able to service communities and individuals.

Improved Public Experience supported by partnership working, allowing the public to interact in a streamlined and digital way, whilst we are able to provide improved service through collaboration with partners

## Beyond 5+ years

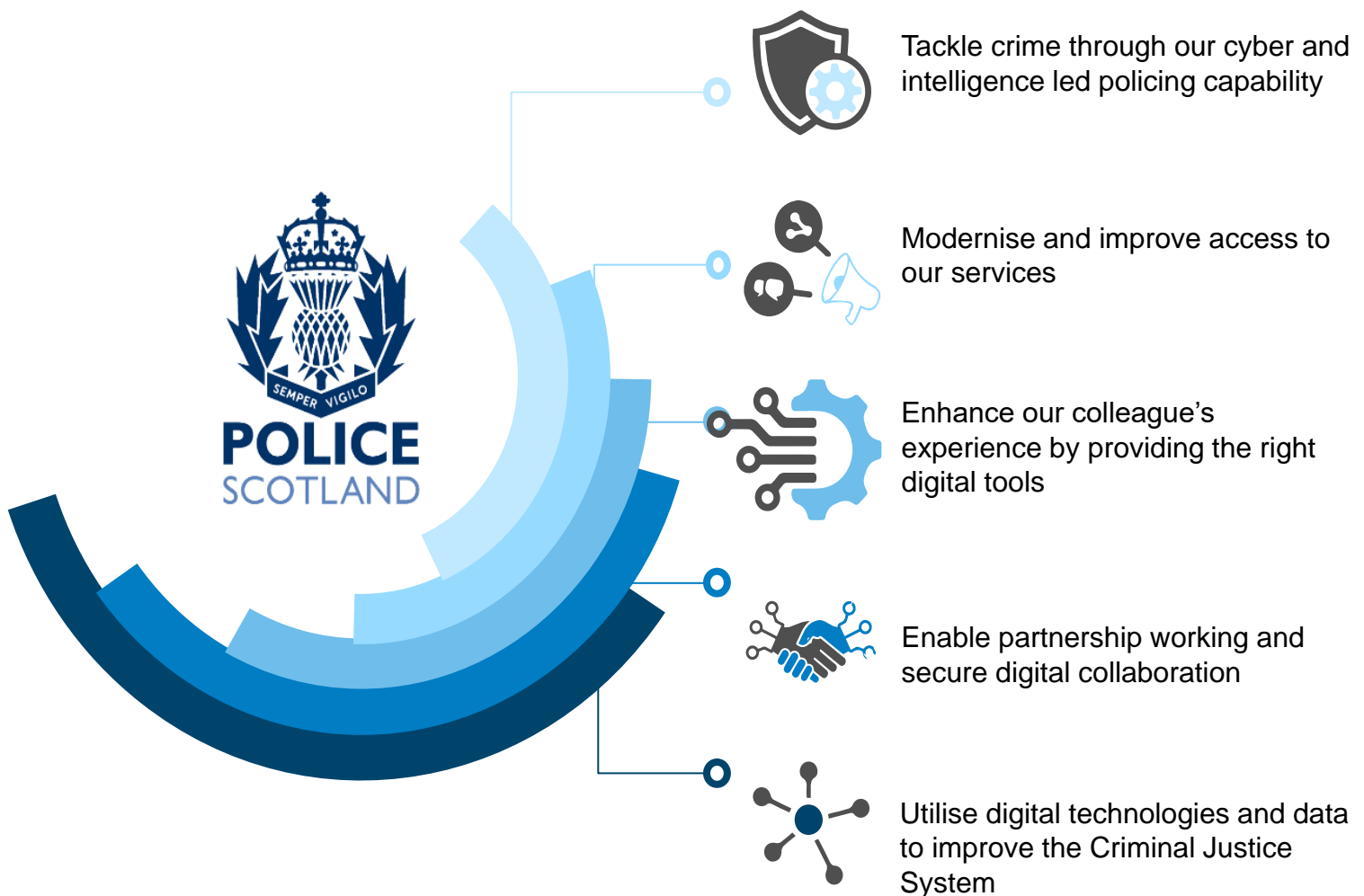
Looking to the longer term, we will seek to sustain and evolve the essential digital, data and technology capabilities we have delivered, but also to innovate and adopt emerging technologies where they have relevance to policing.

This will mean that we will be proactive in exploring technologies and the use of data to counter crime and support Policing Services. It will also mean that we will provide Digital Services differently, adopting an approach in which co-development of solutions with officers and staff becomes common place and we will, by default, 'Become Digital'.

Operating as an agile organisation, at the heart of an eco-system formed with our partners, using insight and intelligence to provide effective policing services, adapting as we need to changes in our environment

# Strategic Themes

We have defined five *Strategic Themes* that will enable us to achieve our Policing Outcomes. Individually, these themes form the basis for delivering better systems, data and technology that align to *Policing Outcomes* and, collectively, they form the basis for achieving persistent and sustainable improvements that will transform the way we deliver services.



Each of these Strategic Themes is described in more detail on the following pages.

# Tackle Crime Through our Cyber and Intelligence Led Policing Capability



We will contribute to crime reduction in a way that ‘uses today’s knowledge’ to ‘shape tomorrow’s policing’.

We will do this by **embedding intelligence-led policing** at the heart of our operations and **building our cyber capability to make Scotland a challenging place for cyber criminals to operate.**

In conjunction with the Cyber Strategy, the Digital Strategy will deliver the technology elements and ensure the technology components are appropriately aligned.

Our vision is to build new capacity to analyse, understand and derive insight from data held by ourselves and our partners in criminal justice, health and social care, and the community to better focus our prevention activities to manage threat, risk, and harm in the public, private and virtual space.

## Priorities

By leveraging technological advances in data collection and analytics we will be able to identify trends and repeat offender activity in order to:

- Intervene early to deter criminality such as domestic incidents and

organised crime, and create the ability to provide officers with relevant information.

- Identify early opportunities to engage relevant partners when dealing with calls relating to vulnerable people and those at risk of harm.

We will use similar analytics to complement and further enhance our preventative activities with a multi-agency approach which focuses on the early identification of individuals who may be recruited into criminal activity.

We will also deploy this capability and partnership working to draw on our enhanced intelligence picture to specifically identify potential perpetrators of cyber-crime and develop world-class policing in a digital world capability.

Recognising that across Scotland and the rest of the UK, Cyber is the fastest growing crime type, we must support our police service in being adaptive and responsive, staying ahead of the changing technological threat.

We will increase our visibility in the physical and virtual world and work with our partners to make Scotland a challenging place for cyber criminals to operate.

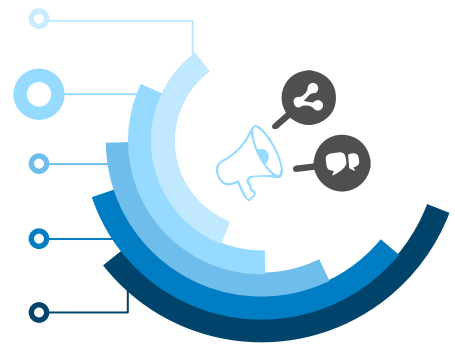
## Key Programmes & Projects

- Intelligence Policing Programme
- Policing in a Digital World
- Single Search
- Data Science Capability
- Force-wide Analytics

# Modernise and Improve Access to our Services

**We will give the public more choice in how they engage with us, using channels, media or devices most relevant to them**, embracing the diversity in all its forms in our flourishing communities.

Our aim is to make it possible for people to interact using the channels that best suit their needs whether this is by telephone, live chat, text or through our digital platform, receiving a high-quality service regardless of the route chosen.



## Priorities

We will improve our digital presence to make it easy for people to find the information they need and to complete contact with us online, where relevant conducting real-time interactions with us. This will include improving the ability of individuals to report low level crimes such as minor offences, enhancing the self-service functionality to make it rapid, user friendly, and with support available if needed.

New channels will be developed as an operational or public driver is identified building on the flexible platform that is being introduced. They will initially be used for sharing of information with the public and, over time, we will seek to extend their capacity for public access to services.

By being more visible in the digital world we want policing to be able to get closer to communities and provide the opportunity for more informal engagement and information sharing.

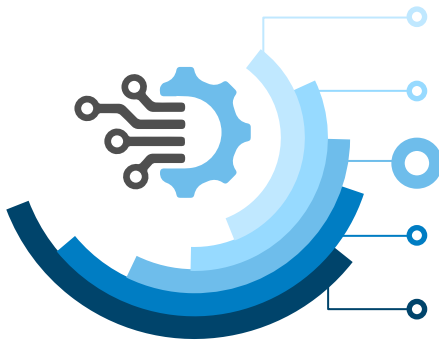
We will also play a role in contributing to the authentication and identity management solutions which aim to improve people's access to public services by providing them with a safe, consistent and easy way to prove who they are or that they are eligible for a public service. This means we will comply with cross-government standards in the way that people authenticate their identity to access our services e.g., a license renewal.

Our public contact and engagement strategy outlines this in more detail.

## Key Programmes & Projects

- Next Generation Command and Control
- Digital Evidence Sharing Capability (DESC)
- Website Upgrade to Public Facing Portal + Authentication and Identity Management

# Enhance our Colleague's Experience by Providing the Right Digital Tools



We will retain and attract people by investing in digital technology which enhances frontline policing capability and improves employee experience.

We will **put operational information at the fingertips of our officers and staff, minimising administrative duties and equipping them with the appropriate tools** to do their job.

## Priorities

We will continue to grow the integration and digital enablement of our corporate functions to further support our people. For example, optimising capability with enterprise resource planning (ERP) by introducing increased automation to the application, notification and/or approval processes around activities such as booking leave, reporting sickness and managing professional development.

Our people will be provided with integrated policing systems where they can enter, re-use and search data from either a mobile or desktop device. Our people will be able to enter case information once and rely on systems to automatically populate and/or update all relevant applications with that information.

Using Streamlined processes will improve efficiencies and reduce administrative load for our staff and officers. The automation of systems and search functions will also reduce the risk of error or omission due to mis-keying of the data.

Whilst undertaking frontline duties, we will make it easier for our people to bring in support from other sector professionals to help prevent the escalation of a situation and facilitate better outcomes for those involved. For example, enabling an officer to seek the advice or attendance of a professional from a partner organisation, or to notify organisations better able to support individuals.

More of our digital capability will be deployed across both mobile and desktop devices so that people are supported to choose where they can work most effectively and efficiently, whether that be from their home, car, their office, or in the community. This is crucial for us to build our reputation as a modern employer, attracting and retaining a diversity of talent and in our ability to achieve Net Zero by removing unnecessary travel.

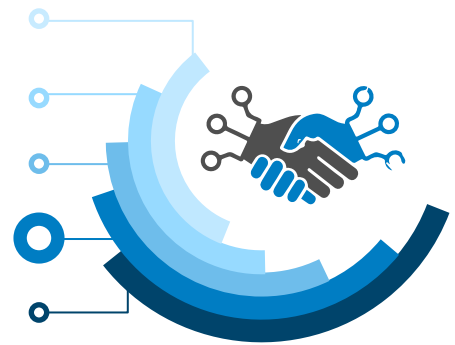
## Key Programmes & Projects

- Enabling Policing for the Future (EPF)
- Mobile Device Management
- Process Automation - Centre of Excellence
- Office365
- Fleet EV Digital Infrastructure

# Enable Partnership Working and Secure Digital Collaboration

We will proactively contribute to the digital and technological agenda for both UK and Scottish Government strategic priorities.

We will strengthen effective Digital Partnerships across criminal justice, local authorities, academia, NHS, and other emergency services and participate in the build of resilient critical national technology infrastructure.



Where possible we will collaborate with partners to achieve shared objectives, maximising return on investment and developing shared architectural standards that will enable a joint transition from *Doing Digital to Being Digital*.

## Priorities

The strategic priorities include, but not limited to:

- Scotland's Digital Future Scottish Government National Outcomes/ Strategic Priorities
- HMICS Recommendations
- National Police Chiefs' Council (NPCC) Contact and Digital Strategies
- SPA Forensic Services Strategy
- Justice Strategy

## SPA Forensics

The Digital Strategy supports SPA Forensic Services and is cognisant of the operational demands and strategic objectives, which has led to the co-development of the future vision and priorities. When defining the 'Now' planning horizon agreed priorities were placed upon the need for systems that are flexible and fully integrated, enabling links with networked equipment that aligns to the Forensic Services Strategy.

In defining the Now horizon, a key consideration has been the need to establish flexible, integrated technology environments that encompass all aspects of the Forensics Service Strategy, from crime scene to court hearings including Crown Office and Procurator Fiscal Services.

## Key Programmes & Projects

- Authentication + Authorisation - National Identity and access management
- Modernising Remote Secure Access
- Forensic Services - Deployment of Scene Examination
- National Law Enforcement Data Service (NLEDS)

# Utilise Digital Technologies and Data to Improve the Criminal Justice System



We will contribute to the creation of an integrated digital process for the provision of criminal justice services across Scotland.

Ultimately enabling a 'whole system' approach across the sector.

We will create a service which is connected and designed around people and outcomes rather than just organisational needs. From the moment that a case is opened we will create a seamless experience for all those who are connected to the case from victims, to witnesses, the accused, and criminal justice stakeholders.

## Priorities

Our focus will start on joining up the experience across activities that fall within Police Scotland's control. In parallel we continue to work with our partners in the criminal justice eco-system to make progress with integrating processes and digital evidence sharing across the full range of pathways that a case can take to reach its end point.

This joined up working should also expedite the progress of cases through the criminal justice system and enhance the ability of Police Scotland and our partners to forecast demand.

We will focus change on points in service delivery where we consider technology to have the greatest potential to improve the experience of those involved in receiving and/or providing that service:

- the taking of statements and ongoing contact management
- court appearances
- evidence management

We will dramatically extend the use of digital evidence in policing, with it becoming common place for digital forensics to be gathered from a full range of sources and devices.

We will also make Body Worn Video widely available to inform our investigations and to act as a deterrent against violence, protecting our officers from verbal abuse and physical harm.

Increased use of digital evidence, for example video imagery of the perpetration of crime, is expected to enable our people to build even stronger cases against criminals, and for those cases to be progressed at pace. As evidenced by other UK Forces, we will target an increase in guilty pleas, reducing time spent in trial and increasing conviction rates.

## Key Programmes and Projects

- Digital Evidence Sharing Capability
- Body-Worn Video National
- Officer Remote Evidence Giving Suites
- Virtual Courts (Custodies)

# Key Considerations in Delivery

## Technology Design Principles

Effective delivery of this strategy will be underpinned by practical principles which will inform our approach to designing and implementing products, services and solutions.

Police Scotland's technology principles are:

### Enterprise by Design

We seek to simplify and standardise our approach to enterprise architecture, and will adopt industry standards to enable secure, integrated and resilient solutions leveraging cloud services where appropriate

### People, Service & Values Focused

We will be people and service focused, with our values and accessibility at the heart of the design and delivery of ethical digital solutions, building on the trust and confidence of the public and our communities

### Data-Driven

We ensure that data is correct, consistent, connected and available to officers and staff when they need it, to inform better policing outcomes

### Sustainability

We aim to deliver sustainable solutions, products and services which consider their environmental impact and prioritise our investment based on a balance of value, cost, quality and risk

### Future Ready

We will be innovative and harness technology to remain adaptable and prepared for future challenges, making it quicker and easier for people to engage with us



# How We Will Achieve Our Ambition

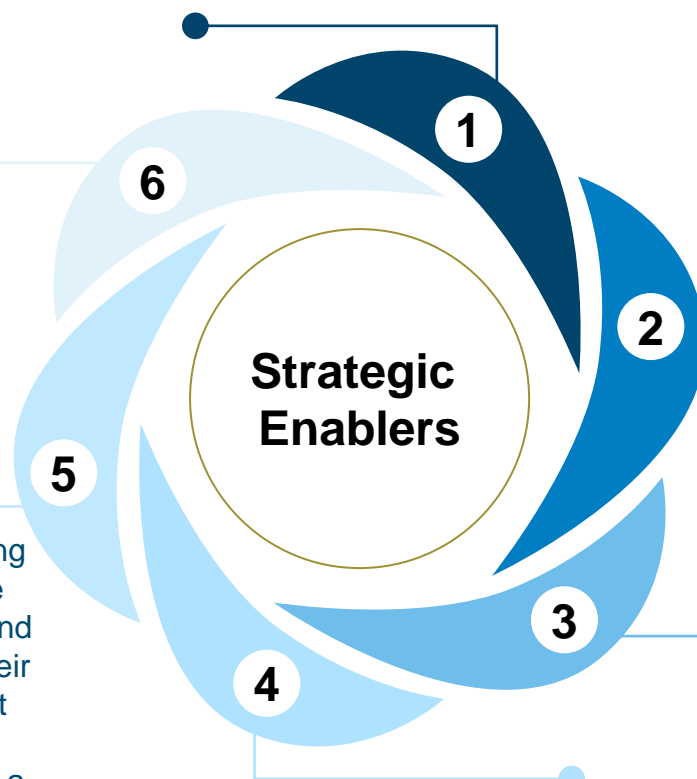
Our ambition of making the shift from *Doing Digital to Being Digital* will require a fundamental shift in the way we view and use technology and by engaging, involving and supporting the public and communities. We will deliver services more effectively and with greater impact.

## Investment and Prioritisation;

combining technology and policing roadmaps to ensure focus on organisation wide objectives and proactively seeking opportunities to improve the financial landscape

**Data;** recognising data as an asset, acquiring, processing, and analysing to gain actionable insights for policing and our partners, driving the right behaviour to ensure quality, accuracy, completeness, and compliance

**Data Ethics;** continuing engagement and consultation on the potential introduction of data-centric digital solutions to enable safe, reliable, and ethical use of information and intelligence



**Sustainability;** aiming to deliver sustainable solutions, products and services, consider their environmental impact and prioritise our investment based on a balance of value, cost, quality, and risk

**People;** recognising that people are at the heart of any change process, primarily public consultation and a rights-based approach. In addition to support, develop, and train the existing and future talent to exploit our technology capabilities

**Cyber Resilience;** identifying and eliminating vulnerabilities, proactively protecting our technology landscape by preparing for and responding effectively to any security incident

# Data is at the Heart of Policing

Data and information have always been at the heart of policing and the Digital Strategy. It informs the decisions we make and actions we subsequently take and is applied in contexts ranging from policy through to risk assessments as our officers attend incidents. It has relevance in operational contexts, but also when we are taking steps to identify causes and sources of crime and preventing harm.

In an age dominated by an ever-increasing volume and complexity of data, it is essential that Police Scotland enhances the capabilities, tools and techniques available to exploit the value that data provides.

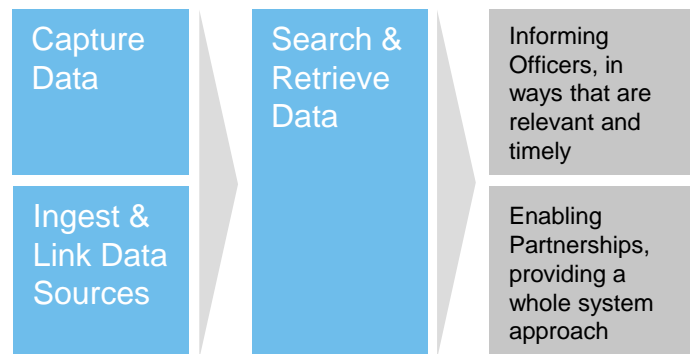
Whilst the value of data is widely accepted, the challenges of managing, using, and exploiting data become greater each day. Data sources are more expansive, more complex to manage, and require advanced skills and technology to address. Moreover, we have seen a ‘tilt’ in the profile of crime with an increase in cybercrime, further driving the need to be expert in the use of data.

Working with partner organisations is a priority that we are committed to pursuing, and, again, data will be the critical assets that enable us to do this better in future.

We have made progress in responding to this challenge but must recognise that scale, complexity, and diversity of sources will rise. Much of what we do (when handling data) requires common skills and techniques – therefore we will benefit from developing our ‘data’ skills so that they may be applied at the points where demand dictates.

**Exponential growth of data, by 10 times in the 10 years up to 2025**

The common ‘data skills’ are as summarised



**Capture Data:** Officers and staff identify and enter data into systems every day, and it takes time to do it. However, it is an important activity directly impacting all types of incident and cannot be shortcut.

We will deliver the capability for Officers and Staff to **streamline the entry of data**, enhancing validation (improving quality) and using automation to **eliminate the need for re-keying**, ensuring data is automatically transferred to all systems that utilise it.

**Ingest & Link Data Sources:** Many of our Officers, such as those in SCD, are critically dependent upon assembling, linking, and analysing large volumes of data from multiple sources (including sources external to Police Scotland). This is an essential task needed to support investigations.

## Data is at the Heart of Policing



We will deliver the capability to enable improvements in data handling so that data can be **assembled from multiple sources**, matched, linked, and aggregated in an efficient and timely manner.

**Search & Retrieve Data:** Searching and retrieving data quickly is possibly the most important capability required. It is used in investigations, live risk assessments, protecting the public from harm, crime prevention, and for compliance purposes.

We will deliver the capability for Officers and Staff to **access data when and where they need it**, building upon the foundations of our Data Drives Digital initiative. Common search facilities will be made available to local policing, investigators, staff coordinating responses to incidents, and to analysts supporting policing operations.

**Insight Delivery & Alerting:** The capabilities described earlier may be described as basic and essential, and they will need to be sustained and enhanced over time. However, whilst the needs may be necessary, collectively they provide opportunities for Police Scotland to benefit from additional high value capabilities. It becomes possible to use changes in data to trigger alerts which may be relevant to investigation, operations, and any other activity which relies upon accurate and current information. Real-time decision making becomes a possibility, enabling more flexible and responsive deployment of Officers and resources.

We will enhance the capability that will be delivered within Data Drives Digital initiative to provide the facility to deliver context sensitive alerts to Officers and Staff, again using proven and established tools and technologies to do this.

Data and information will continue to be essential assets to Police Scotland and there is a risk that, without appropriate advancement of our skills and investment in tools and technology, we will be challenged to simply use data as we do today.

Tools, techniques and skills which will assist our Officers and Staff are established and we have proved the value of these in pilot projects that we have delivered within Police Scotland. Importantly, aside from demonstrating that the technology works for us, we have concluded that we have common requirements for using data across Police Scotland.

We have therefore incorporated data, the tools and technologies that enable it to be used and exploited, and the skills required as resources that should exist in common in all aspects of our future operation.

# Delivery Model

## Digital Division Operating Model

The **Digital Division Target Operating Model** has been designed to enable the delivery of the **Digital Strategy** and to achieve the following ambition for the Organisation:

Digital Division's ambition is to be the **trusted advisor & supplier** of digital services to policing in Scotland.

We are an integral part of front-line policing, enabling operational improvement and creating high quality experiences for officers, staff and the public.

To deliver the Strategic ambition, and overcome many of the challenges it faces today, we need to reorientate our funding, decision making, and performance to the products that policing in Scotland values. This “product-centric” approach has become increasingly common across the UK public sector over the past 10 years. It is also aligned to wider changes in the digital and technology industry (e.g., software as a service, platforms as a service, infrastructure as a service).

Outlined below is an illustration of how we aim to deliver continuous value, through adoption of a product-centric operating model as our long-term ambition:

Deliver Value at Pace and Scale



### New & Enhanced Capabilities

In designing the new operating model, we are focusing on **developing new and enhancing existing capabilities for Digital Division**:



Key

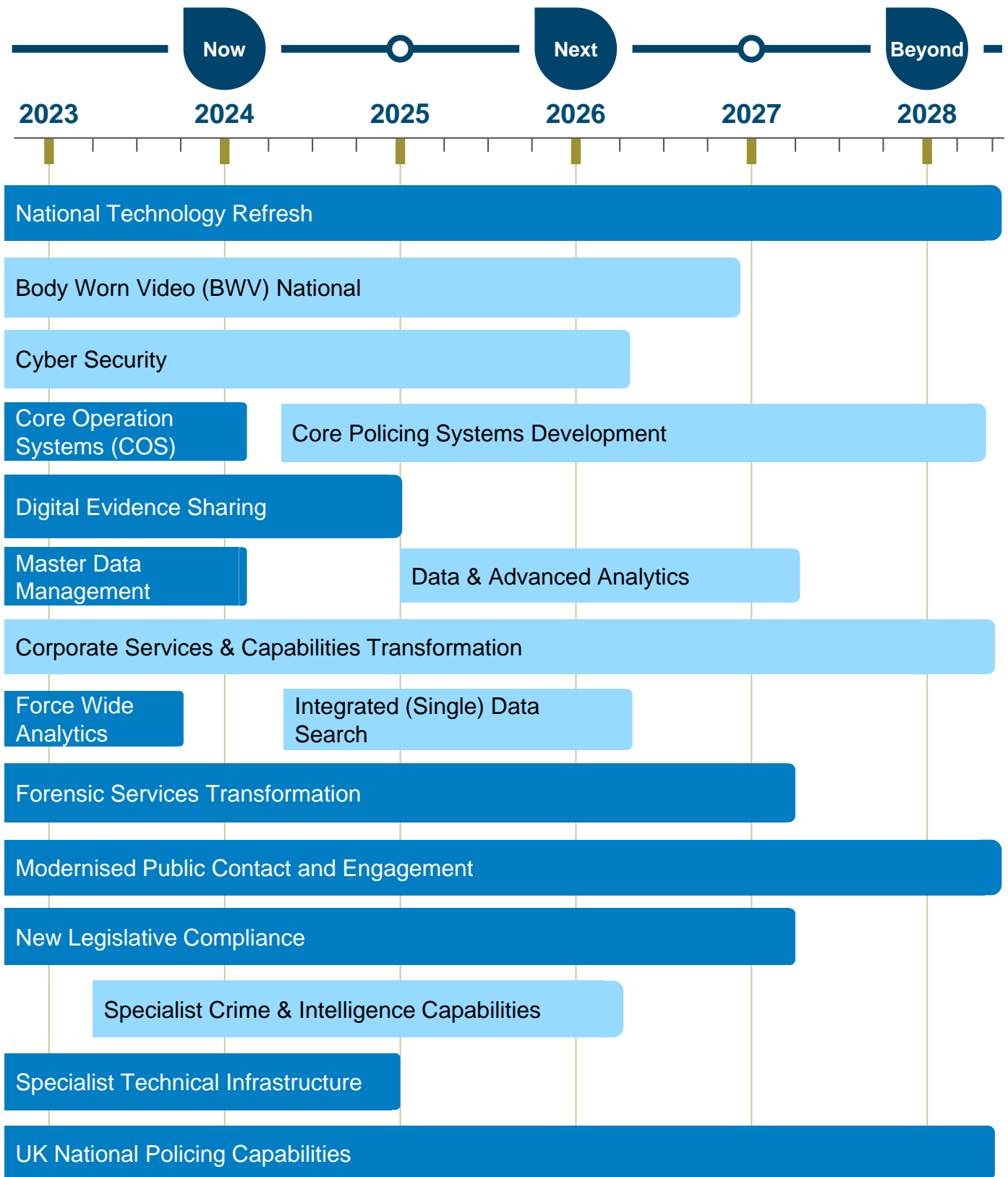
New

Existing

# Digital Strategy Roadmap

## Now, Next and Beyond

In order to achieve the long-term strategic plan and deliver against the Strategic Themes, the following capabilities are included in our Digital Strategy:



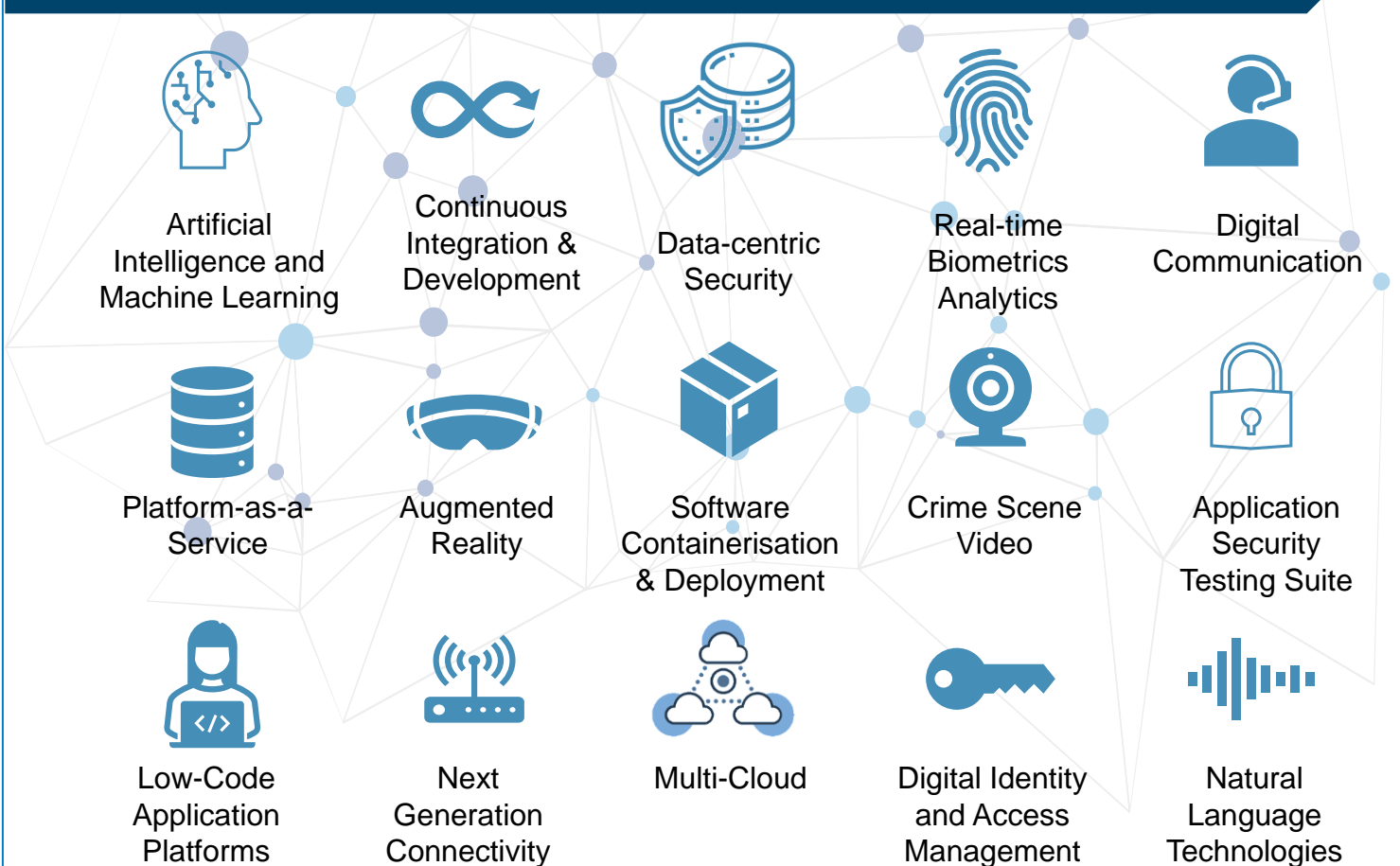
All projects and programmes to support these capabilities will continue to be subject to established governance and approval of their own detailed Initial and Full Business Cases via Portfolio Management Group, Change Board and SPA.

# Technology Landscape

## Current Technology



## Technology Being Delivered by the Strategy



# Digital Capabilities

Enabled by Delivery of the Digital Strategy



# Governance

## Structure and Reporting

A Digital Board has been established, Chaired by the Chief Digital and Information Officer (CDIO), to provide a formal governance structure for oversight of the Digital Strategy and associated Technology Roadmap. The Digital Board will comprise of representation from Policing Portfolios, Corporate Services, Change and Digital Division.

The Digital Board will report into existing governance structures including Portfolio Management Group (PMG), Change Board and SPA. The Corporate Management Board will maintain an oversight of the Digital Board. Maintain an overview of delivery of the Digital Strategy, Technology Roadmap, Funding and Prioritisation. Delivery of Projects and Programmes will continue via individual Project and Programme Boards but matters which impact the overall delivery of the Digital Strategy will be referred to the Digital Board.

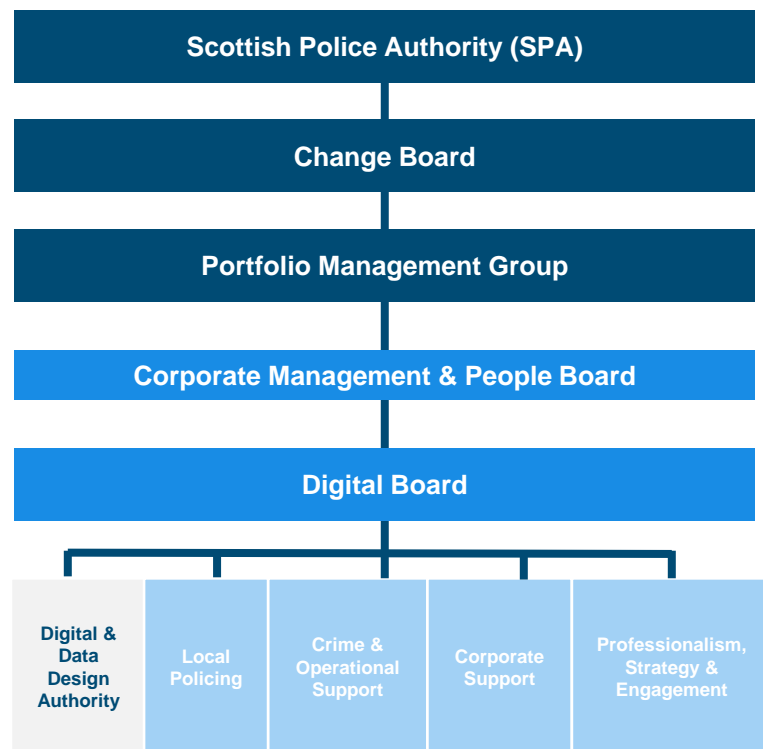
In addition to the Digital Board, a Digital and Data Design Authority consists of technical experts accustomed to the complex technology landscape within Police Scotland who govern decisions relating to services, solutions and products.

As we progress the implementation of the Digital Strategy we will make decisions about the timing and sequencing of new capabilities being introduced.

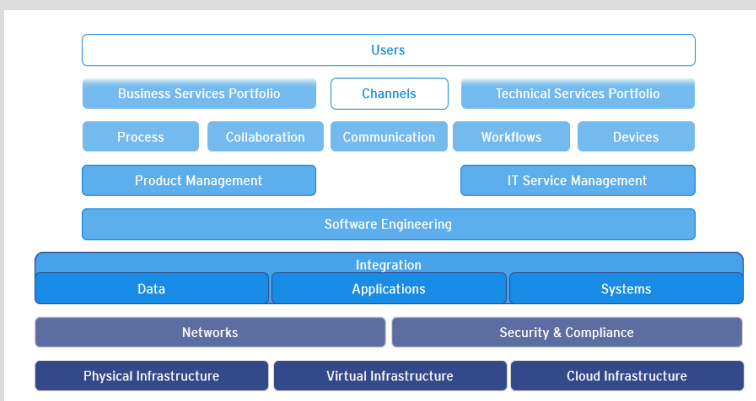
The Digital and Data Design Authority will be responsible for the enterprise architecture including approval and maintenance of the reference architecture.

This forum will enable us remain focused on the end state, so that we do not miss opportunities to better service Police Scotland through the use of technology.

The overarching authority in delivering the Digital Strategy is governed according to the following structure:



## Reference Architecture



Detailed Reference Architecture and definitions are available in the Appendix

A key component of our new Digital Strategy is a revised reference architecture. It sets out, in business and technology terms, the landscape of solutions that we will deliver and operate.

The refreshed reference architecture model supports our ambition to drive standards, architecture, reusable design and enables agility, flexibility and ultimately best value to the organisation.



## Performance Framework

The arrangements for managing the implementation of the Digital Strategy are as follows:

- All new projects and programmes will continue to be subject to established governance and approval of their own detailed Initial and Full Business Cases via Portfolio Management Group, Change Board and SPA
  - A **Digital Board** has been established, Chaired by the Chief Digital and Information Officer (CDIO), to provide a formal governance structure for oversight of the Digital Strategy and associated Technology Roadmap. The Digital Board will comprise representation from Policing Portfolios, Corporate Services, Change and Digital Division
  - The Digital Board will maintain an **overview of delivery of the Digital Strategy, Technology Roadmap, Funding and Prioritisation**. Delivery of Projects and Programmes will continue via individual Project and Programme Boards but matters which impact the overall delivery of the Digital Strategy will be referred to the Digital Board
  - The Digital Board will manage a Risk Register associated with the execution of the Digital Strategy
  - The Digital Board will report into existing governance structures including Portfolio Management Group (PMG), Change Board and SPA
- The Digital Board will produce bi-annual reviews of progress made in relation to the Digital Strategy and Technology Roadmap. These reports will be submitted for approval via PS and SPA formal governance
  - The Digital Board will meet monthly
  - All projects and programmes contained within the Digital Strategy will continue to be subject to Police Scotland and SPA Scrutiny via existing arrangements, including but not limited to formal Business Case approval, PMG and Change Board Updates, Project and Programme Change Control, PMO Scrutiny, Internal Audit Review and Scottish Government Technical Assurance Framework (TAF) Reviews
  - The Digital Strategy and Technology Roadmap products will be reviewed on an annual basis and will most likely be subject to formal revision between years 4 and 5

## Investment

### Capital funding

The capital budget is used to invest in routine replacement of assets and in capital change projects. Capital funding includes Scottish Government capital grant and reform funding, and receipts from the sale of assets.

### Financial planning

Developing sound plans to improve and change Scottish policing is critical to the successful achievement of this strategy. These must be underpinned by robust decision making regarding finance and investment. Police Scotland will continue to build its capability in these areas to enable proper scrutiny and accountability by the Authority.

In line with Green Book guidance, Police Scotland has developed a Strategic Outline Business Case to support this strategy, which includes a Financial Case providing an assessment on the affordability of the preferred option and the expected total programme's investments impact on the Balance Sheet and P&L over the next 5 years.

## Prioritisation

The robust governance structure ensures alignment to the Joint Strategy for Policing and organisation wide benefits framework which are recognised by the SPA Corporate Governance Framework.

The Digital Board will maintain an overview of delivery of the Digital Strategy, Technology Roadmap, Funding and Prioritisation. Delivery of Projects and Programmes will continue via individual Project and Programme Boards but matters which impact the overall delivery of the Digital Strategy will be referred to the Digital Board.

## Digital Sustainability

The Digital Strategy identifies sustainability as both an enabler and a technology design principle.

As outlined in our Environmental Strategy, we rely on technology to support our work to keep people safe, respond to crime, communicate effectively with each other and work effectively with our partners. By using up to date technology and software we can ensure we are operating effectively and in an environmentally conscious manner.

We need to continue to deliver green solutions (e.g., Circular Economy, Energy Efficiency, Waste Management, etc.), allowing us to build sustainability into our strategies and plans. Consequently, we will have a framework of decision making that will always consider sustainable practices, including our procurement practices.

The Digital Strategy aims to deliver sustainable solutions that rely on:

- Technology that supports the work of our people
- Products that help to keep communities safe
- Services that enhance the way Police Scotland respond to crime
- Communication that allows officers and staff to connect and exchange information effectively across our organisation and with our partners
- Up to date technology and software to ensure our organisation is operating effectively and in an environmentally conscious manner

## Digital Sustainability (continued)

The advantages of the Digital Strategy are diverse and focus not only on economic gain but aim to improve our peoples' work experience and their wellbeing. This Strategy also promotes sustainable behaviours and allows for broader cooperation with other key partners, consequently encouraging and inspiring other public bodies to evaluate and examine their approach, and ultimately to undertake appropriate measures that are in line with Governmental Net Zero efforts.

There are number of actions that will help to accelerate digital progression whilst simultaneously tackling the environmental impact of this transition. Consequently, we will:

- Support our Estates function in their structural transformation towards energy efficiency and more sustainable working space
- Propose solutions that are in conjunction with the objectives proposed in other strategies
- Consider how modern technology could support energy efficiency

- Support our Estates function by implementing new technological solutions to monitor utilities.
- Follow WEEE Regulations and implement circular economy principles
- Support our Fleet function in the use of EV and the newly installed EV infrastructure
- Explore how new technologies could improve our peoples' wellbeing
- Consider the impacts of climate change and implement measures in line with our core design principles - to deliver sustainable solutions, products and services which consider their environmental impact and prioritise our investment based on a balance of value, cost, quality and risk



[Environmental Strategy 2021\\_2645\\_T4\\_21\\_AR \(6\).pdf \(spnet.local\)](#)

In a circular economy, resources are kept in use for as long as possible, the maximum value is extracted from them whilst in use and then products and materials are recovered and regenerated at the end of each product's viable life cycle. One simple way to express the concept of a circular economy is that it is designed to reduce the demand for raw materials in products; to encourage reuse, repair and manufacture by designing and selling products and materials to last as long as possible; and to recycle waste and energy to maximise the value of any waste that is generated. e.g. WEEE Regulations or Plastic bottles return scheme

# Ethical Use of Data-Driven Technology

Policing is undergoing a major shift driven by the need to ensure public confidence while deploying emerging digital technologies

The majority of the Digital Strategy investment in technology is in the 'Now' and the 'Next' primarily due to alignment with policing priorities. Investment in maturing, emerging and future technologies have been explored and see Police Scotland as a pragmatic adopter, in comparison to other UK Forces.

Horizon scanning and development of specific services, solutions and products may see some of these technologies deployed in the 'Now' and the 'Next'.

The development of the new Target Operating Model looks at expanding and formalising capabilities within Digital Division focusing on Digital and Data Innovation.

The Digital and Data Innovation capability will facilitate and support the exploration and development of technology-enabled innovations that will support operational policing to deliver better outcomes for those that they serve.

## Ethical Use of Data-Driven Technology

Police Scotland aims to become “an organisation driven by effective and efficient use of data, in an ethical way.”

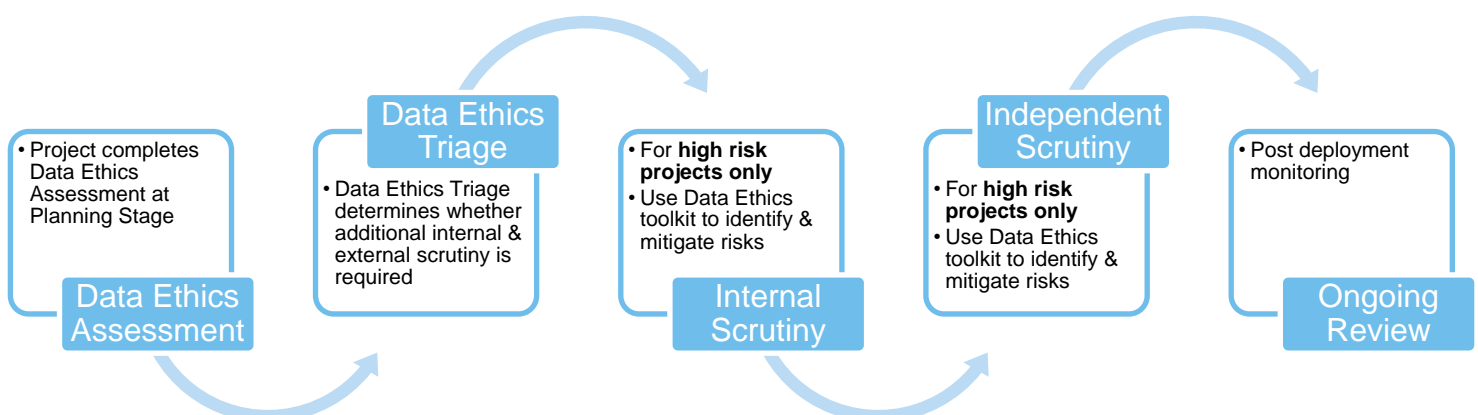
To achieve this, Police Scotland has developed a Data Ethics Governance Framework in order to identify and address the ethical considerations posed by the use of data and data-driven technology.

The Data Ethics Framework was developed in collaboration with the Centre for Data Ethics and Innovation (CDEI) and through engagement across the police service and externally, with academics, civil society and Scottish Government.

Consent and legitimacy in the eyes of the public is at the core of policing in the UK. Practically applying these principles should ensure that Police Scotland take a trustworthy approach to the use of data-driven technology as the service looks to innovate.

Underpinning this trustworthy approach must be a commitment to asking the right questions and developing robust, evidence-based and acceptable responses to them, which are open to internal and external scrutiny and challenge.

All new projects will go through a Data Ethics Assessment as part of the business case development approach. The Data Ethics Governance Process is outline below:





OFFICIAL

Portfolio  
Management  
Office



**POLICE  
SCOTLAND**  
Keeping people safe

Police Scotland  
*Digital Strategy (2023)*  
Strategic Outline Business Case (SOBC)

28<sup>th</sup> April 2023

OFFICIAL

## Table of Contents

Glossary.....	4
Executive Summary.....	6
1. Introduction.....	12
2. Strategic Case .....	15
3. Economic Case .....	26
4. Financial Case.....	42
5. Commercial Case.....	51
6. Management Case.....	62
7. Appendices.....	68

### Appendices

A	Portfolio Risk Assessment
---	---------------------------

### List of Tables

1	Summary Affordability Analysis – TOM
2	Summary Affordability Analysis – OVERALL
3	Procurement categorisation
4	Digital Strategy Themes & Outcomes
5	What is expected of modern policing
6	Lessons Learned
7	Options Definition – Digital Strategy
8	Strategy Options Evaluation Summary
9	Economic Options Evaluation – Commentary - Strategy
10	TOM Options Evaluation Summary
11	Overall Affordability Analysis - Strategy
12	Disaggregated Affordability Analysis
13	Financial Case - Digital Strategy Assumptions
14	Net Impact of Costs - Target Operating Model
15	Managing commercial risks
16	Contract management factors
17	Programme Delivery Structure
18	Risk mitigation and controls (Appendix A)

**List of Figures**

1	Programme Plan
2	Digital Strategy - Rational for Change
3	Doing the right things, doing things right
4	Options evaluation process – Digital Strategy
5	Options Scoring Framework - Digital Strategy
6	TOM Options Definition
7	Target Operating Model – Variations in costs
8	Overall Affordability analysis
9	Disaggregated Affordability analysis – Digital Strategy
10	Procurement Options
11	Programme Plan

Version	Purpose	Author	Reviewers	Date
1.0	Issue for Review	EY – Multiple Authors	EY Internal	19 <sup>th</sup> December 2022
2.0	Issue for 2 <sup>nd</sup> Review	EY – Multiple Authors	Digital Division SLT	11 <sup>th</sup> January 2023
3.0	Issue for 3 <sup>rd</sup> Review	EY – Multiple Authors, Capgemini – Multiple Authors	Digital Division SLT, Finance	30 <sup>th</sup> January 2023
4.0	Final for Programme external review	EY – Multiple Authors, Capgemini – Multiple Authors	Digital Division SLT	10 <sup>th</sup> February 2023
5.0	Final, incorporating external review	EY – Multiple Authors, Capgemini – Multiple Authors	Strategy & Policy, PMO	24 <sup>th</sup> March 2023
5.1	Final, incorporating Capgemini updates	Capgemini – Multiple Authors	SMT	19 <sup>th</sup> April 2023
5.2	SMT Final Review	Digital Division SMT – multiple Authors	SMT	28 <sup>th</sup> April 2023



## Glossary

Abbreviation	Definition
<b>BAU</b>	Business as Usual
<b>BJC</b>	Business Justification Case
<b>CDIO</b>	Chief Digital and Information Officer
<b>DDICT</b>	Digital and Data Information Communications Technology (Strategy)
<b>ERP</b>	Enterprise Resource Planning
<b>FBC</b>	Full Business Case
<b>ICT</b>	Information and Communications Technology
<b>IBC</b>	Initial Business Case
<b>NPV</b>	Net Present Value
<b>OBC</b>	Outline Business Case
<b>PMO</b>	Portfolio Management Office
<b>PMG</b>	Portfolio Management Group
<b>RAID</b>	Risks, Actions, Issues and Decision
<b>SOBC</b>	Strategic Outline Business Case
<b>SPA</b>	Scottish Police Authority
<b>TOM</b>	Target Operating Model

**OFFICIAL**

<p>Primary Driver for Change</p>	<p>Police Scotland’s 2018 Digital, Data, and ICT Strategy (DDICT Strategy) set out a programme of work to invest in digital, data and technology, to meet and support the changing needs of policing.</p> <p>Significant progress has been made against the DDICT Strategy, and there is a further need to optimise existing investments, take advantage of new technologies and meet the changing nature of crime.</p> <p>Without ongoing investment, Police Scotland will lose ground made over the past four years and will fail to provide the digital, data and technology capabilities that officers, staff and partners require.</p>
----------------------------------	---

Strategic Objectives of the Joint Strategy for Policing (2023)	Does the proposed investment have the potential to meet the Outcomes of the Joint Strategy for Policing (2023)?	Please provide details of how the proposed investment meets the outcome (if applicable).
Threats to public safety and wellbeing are resolved by a proactive and responsive police service	Yes	<p>This document sets out the Strategic Outline Business Case for the delivery of 64 projects within Police Scotland’s Digital portfolio and also for the implementation of the a fit for the future Target Operating Model for the Digital Division.</p> <p>Options have been considered and all address the strategic objectives for the Joint Strategy for Policing (2023). The extent to which option supports the strategic objectives varies according to the portfolio scope set out within the option, and this is set out within the Economic Case contained within this document.</p>
The needs of local communities are addressed through effective service delivery	Yes	
The public, communities and partners are engaged, involved and have confidence in policing	Yes	
Our people are supported through a positive working environment, enabling them to serve the public	Yes	
Police Scotland is sustainable, adaptable and prepared for future challenges	Yes	

## Executive Summary

### 1.1 Strategic Case

Police Scotland's 2018 Digital, Data, and ICT Strategy (DDICT Strategy) set out an ambitious programme of work to refresh our technology and to invest in the capability of the service to support the changing needs of policing.

Significant progress has been made against the DDICT Strategy, however there is a further need to optimise existing investments, take advantage of new technologies and meet the changing nature of crime.

Without ongoing investment, we will lose the momentum and progress we have made over the past four years and will fail to provide the digital, data and technology capabilities that our officers, staff and partners require.

The next phase of our Digital Strategy is about making a shift from 'Doing Digital' to 'Being Digital'.

This means that we will progress from a position in which we have modernised and provided officers and staff with technology and tools, to one in which we adopt and exploit digital, data and technology as part of everything we do. This means embedding innovative thinking, and incorporating digital and data assets, in the way we deliver policing services in future.

This shift requires us to 'bridge' the position we are in today to where we desire to be in the future. We will achieve this 'bridge' in a practical way, ensuring that everything we do in 'Being Digital' is built around *Strategic Themes* which align to *Policing Outcomes*. We will also adopt revised *Design Principles* which will enable us to deliver to a high quality, and to deliver 'fit for the future' solutions. We will also implement policies and working practices which support this.

Finally, to support "Being Digital" we will adopt a fit for the future *Digital Target Operating Model*. This operating model will enable us to continuously improve digital and data services, reducing the cost and time to deliver improvements, and creating greater value to policing at greater speed. This operating model will introduce new ways of working, to manage and prioritise digital enhancements while also supporting major projects to deliver to budget and plan.

### 1.2 Economic Case – Digital Strategy and Target Operating Model

#### 1.2.1 Digital Strategy

The world in which we live and work is constantly changing with the shifting demographic of Scotland having a major influence on how public services must work together to protect the most vulnerable people in our communities. The nature of crime is changing, with traditional crimes increasingly involving a digital element and the increased use of technology by criminals. Police Scotland's response to this situation has to include the more effective use of digital, data and technology.

**OFFICIAL**

Four options were considered to achieve the above:

<i>Option 1: Do minimum Investment, £233m</i>	This option presents the lowest possible investment, including completion of in-flight projects and mandated requirements.
<i>Option 2: Mitigate Risks, Investment, £365m</i>	This option builds upon option 1, incorporating scope to mitigate risks associated with future legislative requirements and operational risks related to compliance
<i>Option 3: Optimise Investment, £389m</i>	This option seeks to optimise benefits, cost, and risk mitigation. It assumes that projects will be delivered based on a Minimum Viable Product (i.e., scope will be defined and constrained to minimise costs without compromising target benefits)
<i>Option 4: Optimise + Investment, £428m – 506m</i>	This option builds upon option 3 and is constructed on the basis that incremental investment in projects may yield additional benefits.

The economic evaluation was based on two dimensions, each of which were supported by relevant criteria.

<i>Strategic Alignment</i>	This dimension of the analysis considers the extent to which each option aligns to the outcomes set out in the Joint Policing Strategy, 2020.
<i>Benefits Contribution</i>	This dimension provides an analysis of the extent to which each option delivers benefits defined with the Benefits Delivery Framework <sup>1</sup> .

As part of the options appraisal we considered what investment was required, the potential for benefits and the risk to the approach, this then derived a score for each option (essentially, an indicator of risk adjusted value for money), concluding that option 3, *Optimise*, was ranked first.

Option 3 is recommended, although a variant of this may be considered. This variant could be considered as a hybrid of Options 3 and 4, in which an additional level of funding is made available for application to individual projects where there is potential to amplify or increase benefits by extending scope beyond the Minimum Viable Product.

---

<sup>1</sup> Standard framework used to evaluate projects and programmes within Police Scotland's Change Portfolio. This framework is administered by the Change Portfolio PMO.

### 1.2.2 Target Operating Model

The current Digital Division operating model is not fit for purpose. Since 2018, **Digital Division has had limited opportunity to invest in itself**, due to funding constraints and project priorities.

To deliver and sustain the capabilities we need, we are proposing an investment in Digital Division’s organisation design.

We are proposing to **invest in 54 new permanent roles**, alongside making changes to some existing roles. The current permanent establishment within Digital Division (417) and the Chief Data Office (79) equate to 496 FTE (inc. vacancies).

These new roles will bring new skills and competencies to the Division, enabling the delivery of the target capabilities and agile, product-centric working practices. They will also support us in addressing many of the themes identified within the Current State Assessment, and enable us to harmonise spans of controls in alignment with Police Scotland’s organisation design standards.

The Digital Strategy Outline Business Case (SOBC) proposes an investment of £398m, over a 5 year period, to enable Police Scotland to keep pace with the rapidly changing environment facing modern policing. **We are seeking an investment of £9.2m over the coming 5 years** to transform our Division, which is 2% of the £398m, phased below:

	FY23	FY24	FY25	FY26	FY27	Total
Net organisation design cost	£0	£1,700,000	£3,230,000	£2,230,000	£0	£7,160,000
Support to implementation	£750,000	£1,000,000	£250,000	£0	£0	£2,000,000
<b>Total</b>	<b>£750,000</b>	<b>£2,700,000</b>	<b>£3,480,000</b>	<b>£2,230,000</b>	<b>£0</b>	<b>£9,160,000</b>

*Table 1: Summary Affordability Analysis- TOM*

Without this investment, the execution of the proposed Digital Strategy will become increasingly challenging, with on-going challenges of capacity, recruitment and resource retention.

### 1.3 Financial Case

The total programme investment is estimated to be c.£389m over the next five years, which includes the cost of delivering projects and the enabling solutions, and an additional £9m to support the implementation and operation of the Digital Division target operating model over the same period.

Funding required for existing and in-flight projects is £184m and the funding required for new projects is £198m.

The funding requirement is summarised below.

**OFFICIAL**

	Year 1 (000)'s	Year 2 (000)'s	Year 3 (000)'s	Year 4 (000)'s	Year 5 (000)'s	Total
	23/24	24/25	25/26	26/27	27/28	
Digital Strategy Capital	£19,730	£52,127	£43,680	£50,434	£39,000	£204,972
Digital Strategy Revenue	£7,594	£24,712	£23,903	£21,713	£26,208	£104,130
Digital Strategy Reform	£14,083	£19,260	£22,980	£16,223	£7,928	£80,474
Digital Strategy Total	£41,407	£96,099	£90,563	£88,370	£73,136	£389,576
Digital Transformed Revenue						
Digital Transformed Reform						
Digital Transformed Total	£750	£2,700	£3,480	£2,230	0	£9,160
Overall Capital						
Overall Revenue						
Overall Reform						
<b>TOTAL OVERALL</b>	<b>£42,157</b>	<b>£98,799</b>	<b>£94,043</b>	<b>£91,600</b>	<b>£73,136</b>	<b>£398,736</b>

Table 2: Summary Affordability Analysis - Overall

## 1.4 Commercial Case

Police Scotland has been effective in procuring digital, data and technology services since 2018 and is strongly positioned to continue this trend, utilising expertise within the Digital Division and Commercial Services Team.

There is a high degree of commonality in the procurement categories identified in 2018, though there have been changes, such as the inclusion of more extensive 'as a service' categories, and additional categories applicable to the delivery and operation of the Target Operating Model. The applicable procurement categories are summarised below, with reference to illustrative services.

Procurement Categories	Illustrative Services
Technology Solutions	Compute and storage infrastructure; networking infrastructure; end user devices; and software applications.
Implementation and Support Services	Programme & Project Management; Commercial Management & Procurement; User Research; Business Analysis Software Development; Systems Integration; Application Configuration; Data Engineering; Data Analysis & Visualisation; Quality Assurance & Testing; Platform Engineering; Cyber Security; Business Change Management; and Business Architecture and Management

Enabling Tooling	IT Service Management; Code Management; Backlog Management; Continuous Integration/Continuous Deployment automation; Test automation; Containerisation; Hybrid Cloud Management; API Management; Security Management; Observed Performance.
------------------	---

Table 3: Procurement Categorisation

All procurement activity and contract management will be undertaken in consultation with Commercial Services, following established policies, standards and working practices utilised within Police Scotland.

### 1.5 Management Case

The implementation of the Digital Strategy and the associated Target Operating Model will be managed in accordance with an integrated Programme Plan, illustrated below, comprising both in-flight and new projects.

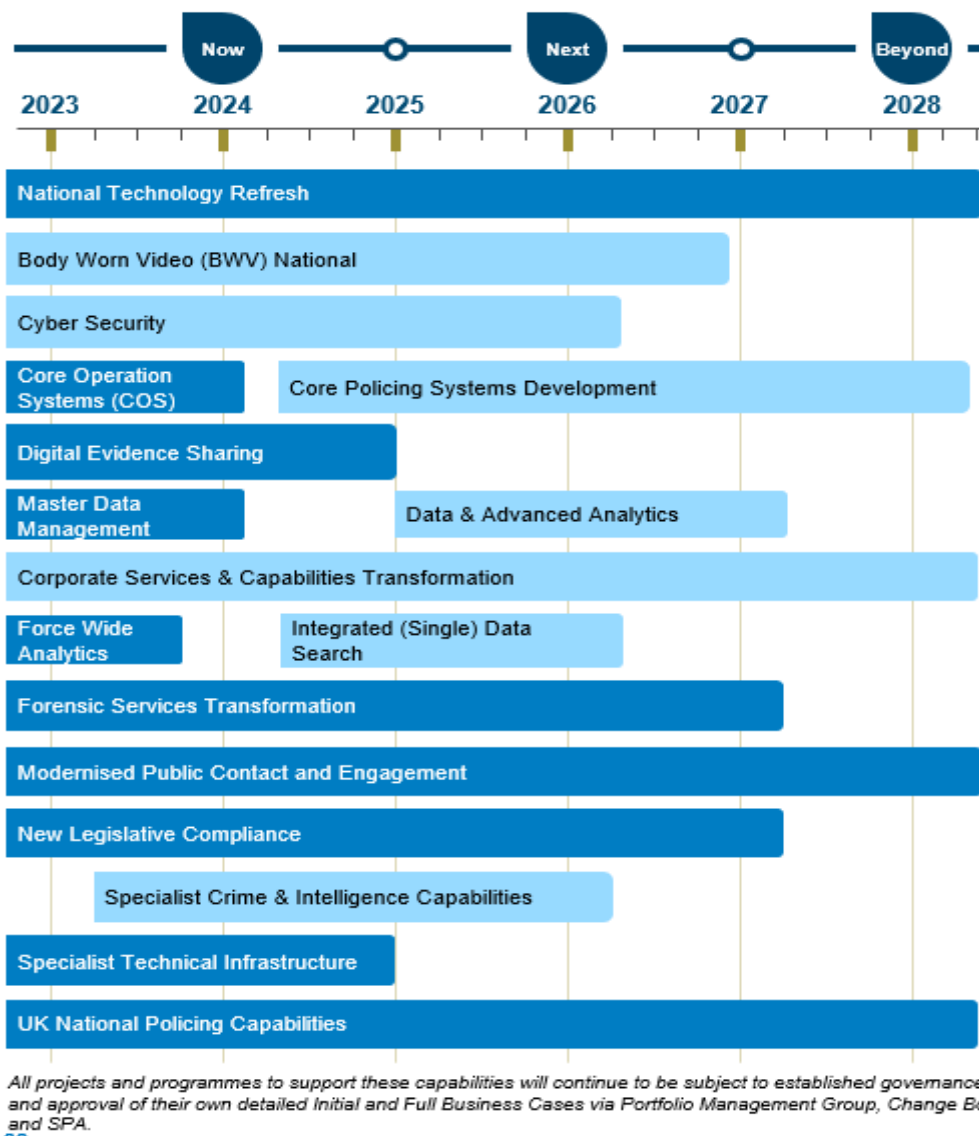


Figure 1: Programme Plan

## OFFICIAL

The Digital Strategy will be subject to established governance, which is provided by, and on behalf of, the SPA and Police Scotland. It is proposed to create and operate a *Digital Board* which will be accountable to the *Police Scotland Change Board*, and this board will oversee and provide direction and control for the delivery of the Digital Strategy and Target Operating Model.

The resource requirements for each of the programmes and projects described in this portfolio will be set out in each of the business cases developed for them, this will also detail of resourcing options, including in-house, interim, third party and solution provider. Notwithstanding this, Police Scotland will need to provide critical resources to oversee, direct and assure the delivery of programmes and projects.

The Target Operating Model has been designed to support comprehensive change enabled by digital, data and technology and introduces dedicated capabilities to support this. Digital Division will own and define the technology strategy, roadmap and target architecture, which will be crucial in facilitating the transition to the new Target Operating Model and delivery of the Digital Strategy. A high level high-level overview of this capability has been noted below.

Delivery of the Digital Strategy and the Target Operating Model will be undertaken in conformance with Police Scotland standard programme, project management and organisational change practices.



## 2. Introduction

### 2.1 Background

This Digital Strategy builds upon and supersedes the 2018 Digital, Data, and ICT (DDICT) Strategy, and has been commissioned by the Chief Digital and Information Officer (CDIO), to recognise the progress made to date, to continue to build on the firm foundations now in place and to set the direction for future investment, and prioritisation of technology development.

To accelerate the creation of this new Digital Strategy, the following activities were completed:

1. Review of progress against the DDICT Strategy 2018 to establish a baseline for defining the future state of technology
2. An organisation-wide stakeholder engagement exercise to understand the challenges and requirements for consideration
3. A review of projects and programmes containing a digital, data and technology component that are already being delivered
4. Market analysis across UK Policing and private sector organisations to derive insights that could inform the digital strategy
5. Co-creation of the digital strategy with colleagues and partner organisations including criminal justice, local authorities, academia, NHS, and other emergency services, to define the future vision and direction of the Digital Strategy – Now, Next, and Beyond. There is potential to sustain this collaboration throughout implementation, thus realising a broader set of benefits.

In conjunction with the Strategy development we have worked to develop a new Target Operating Model. The Development of the Digital Strategy focuses on the **what**, whilst the Target Operating Model (TOM) focuses on the **how**.

The Design of the Digital Division Target Operating Model has been informed through extensive collaboration and engagement

1. To identify present challenges and capture aspirations a number of 1:1 interviews were conducted to develop an As-Is analysis. This was further brought to life at an Accelerated Solutions Event (ASE) to inform the TOM ambition.
2. A series of design workshops were held with the Digital Division SMT and Chief Data Officer, where product centric operating models were explored. This allowed options to be identified and shortlisted.
3. Further design workshops explored our transition model with a focus on developing the new organisational design as well as new and innovative capabilities.
4. Further collaboration through a second ASE event, where the direction of travel for the new TOM was presented. brought this to life.

5. A product-centric operating model provides a way of organising resources and delivery to align more closely with business outcomes rather than project outputs. It aligns the business strategy (Policing Plans) to product development and execution, empowering multi-disciplinary product teams to determine the best way to deliver the outcome users and policing want. Importantly, product teams are led by the business (Product Owner) with business SMEs, working with a mix of designers, developers, engineers, architects, security specialists, testers, etc.
6. Option 3, Evolution, is considered the preferred option. It balances the benefits, scale and pace of change, with cost and risk. While “Evolution” will see a fundamental shift in the operating model, it will be phased over time. The pace of change is largely limited by our current IT estate, which will be modernized over the next 5 years.

## 2.2 The purpose of the Strategic Outline Business Case

The SOBC will, by definition, seek to evaluate options and set out a recommended course of action which is ‘economically most advantageous’. This includes a practical five-year product and technology roadmap demonstrating how progress will be made towards delivering that vision, building capability in digital products, services, and solutions, and contributing to wider policing outcomes.

The Scottish Police Authority is asked to endorse and approve the digital vision and ambition to move from **Doing Digital to Being Digital**, along with the intended prioritisation of delivery activity across the horizons of ‘Now’ (1-2 years), ‘Next’ (3-5 years) and ‘Beyond’ (5+ years).

On this basis Police Scotland would then propose to move ahead with developing project level business case documents at Initial Business Case (IBC) and / or Full Business Case (FBC) level for projects included on the roadmap, and to establish the internal transformation capability and governance to deliver the portfolio.

## 2.3 Approach to developing the Strategic Outline Business Case

The Strategic Outline Business Case has been prepared in line with the HM Treasury Green Book five case model and will be subject to the governance arrangements that Police Scotland operates. The Green Book process is designed to provide decision makers and stakeholders with a proven framework for structured thinking and assurance that the work:

- Provides strategic fit and is supported by a compelling case for change
- Will maximise public value to society through the selection of the optimal combination of components, products, and related activities
- Is commercially viable and attractive to the supply side
- Is affordable and fundable over time
- Can be delivered successfully by Police Scotland and our partners

The SOBC is the first in a three-stage process which also covers development of more detailed business cases. The SOBC is presented for options which should be treated on a portfolio basis.

## **OFFICIAL**

On commission, individual projects and programmes IBCs will be developed, and where required, Full Business Cases (FBC) will be completed. FBCs are generally required when commissioning third parties to deliver programmes and projects and are required to support approvals. As work progresses through these stages, the comprehensiveness of the case across the Five Case Model increases, and with that, so too does confidence.

The SOBC focuses on the high level scoping phase for the work. The purpose of this stage is to establish the strategic context for the work, to make the case for change and to determine the way forward. Identifying the preferred way forward is achieved first by appraising and taking into consideration financial and non-financial factors. This is intended to reduce optimism bias and maintain a focus on ensuring the correct decision making takes place at each stage.

### 3. Strategic Case

The Strategic Case demonstrates that the spending proposal makes sound business sense and fits with the organisation's strategic objectives.

#### 3.1 Introduction to the Strategic Case

The purpose of the strategic dimension of the business case is to make the case for change and to demonstrate strategic fit. This document presents a case for a portfolio investment in technology for Police Scotland and has been developed in line with Treasury Green Book principles.

Police Scotland has made remarkable progress against the first phase of delivery of an ambitious technology strategy, but continued progress will require a long-term commitment that needs to be sustained. Despite the progress thus far, factors remain which constrain effective delivery of technology-based projects and programmes:

- Forecasting and planning applicable to the short and medium terms. The nature of the Digital Strategy requires long-term planning so that multi-year and/or phased initiatives can be undertaken.
- Access to funding for multi-year initiatives and affordability related concerns.
- Capability (skills and experience) and capacity to handle a high number of complex initiatives concurrently; and
- Agility and streamlining of portfolio management and governance, enabling optimisation of cost/benefit delivery.

These factors, except for access to funding and affordability are dealt with in the Management Case.

Police Scotland has typically funded multi-year initiatives on a rolling 'year to year' basis, which has resulted in annual reviews of scope and re-planning to meet affordability constraints. This represents good financial management but often results in sub-optimal delivery of initiatives, resulting in adverse outcomes including:

- Prioritising delivery against Portfolio or functional objectives at the cost of cross organisational objectives (often referred to as 'siloes delivery').
- Scoping solutions which are deliverable and affordable but result in lower overall benefits due to a failure to assess the impact of changes properly or deferring scope in the expectation that 'it may be delivered later'.
- Waste resulting from the need to discard or re-prioritise previous work which may, with some amendment, have had a longer-term focus and benefit.
- Limited opportunities to engage with vendors and suppliers on a long-term strategic partnership basis to support implementation and integration of technology enabled change.

Financial constraint is an economic reality, and it is anticipated that it will continue over the course of the next three to four years, nevertheless it is essential that Police Scotland continues to invest in digital, data and technology capability, and to do so in ways that address existing and emerging priorities. To address the challenge of meeting overall, and in-year affordability constraints whilst preserving the achievement of target benefits, proposals have been made for the incorporation of portfolio management practices (refer to Management Case for detail).

### **3.2 Strategic Objectives – Why Police Scotland Needs a New Digital Strategy**

As noted previously, the demands that face Police Scotland evolve over time and, as such, the digital, data and technology capabilities provided need to evolve in line with these challenges.

We have defined five Strategic Themes that will enable us to achieve our desired Policing Outcomes, which reflect the challenges and priorities facing the Service today. Individually, these themes form the basis for delivering better systems, data and technology that align to Policing Outcomes and, collectively, they form the basis for achieving persistent and sustainable improvements that will transform the way we deliver services.

Theme	Outcomes
Tackle crime through our cyber and intelligence led policing capability	We will contribute crime reduction in a way that ‘uses today’s knowledge’ to shape tomorrow’s policing’. We will do this by <b>embedding intelligence-led policing</b> at the heart of our operations and <b>building our cyber capability to make Scotland a challenging place for cyber criminals to operate.</b>
Modernise and improve access to our services	<b>We will give the public more choice in how they engage with us, using channels, media or devices most relevant to them</b> , embracing the diversity in all its forms in our flourishing communities. Our aim is to make it possible for people to interact using the channels that best suit their needs whether this is by telephone, live chat, text or through our digital platform, receiving a high-quality service regardless of the route chosen.
Enhance our colleague’s experience by providing the right digital tools	We will retain and attract people by investing in digital technology which enhances frontline policing capability and improves employee experience. We will <b>put operational information at the fingertips of our officers and staff, minimising administrative duties and equipping them with the appropriate tools</b> to do their job.

Theme	Outcomes
Enable partnership working and secure digital collaboration	We will proactively contribute to the digital and technological agenda for both UK and Scottish Government strategic priorities. In doing so, <b>we will strengthen effective Digital Partnerships across criminal justice, local authorities, academia, NHS, and other emergency services</b> and participate in the build of resilient critical national technology infrastructure.
Utilise digital technologies and data to improve the Criminal Justice System	<b>We will contribute to the creation of an integrated digital process for the provision of criminal justice services across Scotland.</b>

*Table 4: Digital Strategy Themes & Outcomes*

### 3.3 Current State

Policing priorities continually change, and technology evolves at an exponential rate, and although significant steps have been taken since 2018, the environment in which Police Scotland polices has moved on and continuing to pursue the previously declared strategy without change, will not enable Police Scotland to apply relevant technologies to best effect. For example, the changes in operational policing, driven by factors such as increasing levels of cyber-crime and criminal sophistication, have a direct impact on the way in which officers can perform their roles. These changes in operational priorities are further complicated by a challenging financial position which, combined with increases in the demand for our services, create heightened difficulty and complexity in sustaining and enhancing our digital, data and technology capabilities.

#### **Building on the strong foundations**

Police Scotland’s 2018 Digital, Data, and ICT (DDICT) Strategy set out an ambitious programme of work to fully refresh our technology and to invest in the capability of the service to support the changing needs of policing.

Since that time significant progress has been made to building the technology platforms set out in the 2018 Strategy, though there is still much to do. The work that needs to be completed was predicted (a roadmap which included overlaps of the initial and subsequent phase was presented) but, as noted previously, changes in the environment in which Police Scotland operates means that the capability delivered to date needs to be revised and enhanced.

## OFFICIAL

Notwithstanding the need to refresh and sustain delivered technology capabilities, Police Scotland has made significant progress since 2018, including:

- **invested in replacing aging, legacy infrastructure** resulting in a significant reduction in the level of technical debt and associated risk.
- progressed with consolidating core operational systems by creating national applications to support standardised ways of working; for example, national crime and case management. This has consolidated many of the datasets held by the organisation making **day to day work simpler and information more accessible to officers** when they need it in the field. This foundation needs to be built upon and sustained over the longer term.
- commenced introduction of a **new digital contact platform that will protect and strengthen critical 999 and non-emergency 101 services** for the future. This has built a foundation on which we will be able to develop further ways for the public to engage, making it easy, convenient, and safe to contact the police.
- **enabled a shift to remote working** with most officers and police staff now equipped with mobile devices and laptops (over 15,000 devices deployed).
- laid the building blocks for **unlocking the power of the data** held to improve the safety and wellbeing of people, places, and communities in Scotland. We appointed our first Chief Data Officer, and we have started to introduce data focussed technology and tools. Our Data Drives Digital programme is in-flight and will improve workforce efficiency and operational effectiveness, use analytics and better quality data from a wider range of sources to improve decision making.
- introduced a **single national network** to underpin enabling technologies which made it possible to deliver a rapid and comprehensive technology response to the COVID-19 coronavirus pandemic. This played an important role in enabling continued provision of all essential policing services. **Desktop video conferencing and collaboration tools** were rolled out as part of our crisis response and the programme then rolled out nationally, reducing travel and increasing productive hours.
- protected its network and associated data assets through **investment in cyber security and resilience**, defending Police Scotland from digitally enabled threats and contributing to Scotland's drive to be a cyber resilient country.
- collaborated with the Scottish Policing Authority, Crown Office and Procurator Fiscal Service, Scottish Courts and Tribunal Service and other criminal justice partners to introduce remote ways of working. We have worked together to introduce **remote court hearings** and sentencing for criminal cases in the High Court, enabled via video link to accused persons remanded in custody.
- Commenced delivery of the new Digital Evidence Sharing Capability (DESC), which contributes to **modernisation of the criminal justice system**. DESC will change how digital evidence is collected, viewed and shared across the justice system and could allow cases to be resolved faster and improve the experiences of victims and witnesses. This is a cross-cutting initiative which will allow users such as police officers, prosecutors, court staff and defence agents to digitally access evidence in an efficient and user-friendly way.

**OFFICIAL**

- equipped armed police officers across Scotland with **body worn video cameras** to better protect the public and police officers, and provide best evidence at court

Of the 60+ projects contained in the DDICT Strategy 2018, approximately two thirds are either completed and operational or in delivery as part of the Change Transformation or Digital Division portfolios. A high level summary of what was, and wasn't, delivered from the 2018 Strategy is provided below:

<b>Completed / In-Flight</b>	<b>Not Delivered</b>
DEPP COS – Crime and Case	C3 - but No CAD and CRM Replacement
Mobile	Transactional Website / Citizen Portal
Digital Evidence Platform (now DESC)	Operational Integration Platform (ServiceBus). Now API Framework.
Workforce Monitoring Solution	External Integration Platform
National Network	Corporate Solutions – Initially TCSS, now EPF Programme
Data – Data Drives Digital	BWV Enterprise
Transforming Public Contact – Via UCCP	
Cyber Security – Continuous investment required.	
C3 Technology – Yes UCCP and NICCS	
Decommissioning	
BWV Armed Policing	

*Table 5 – DDICT summary of completion*

Financial analysis of the actual budget allocation (Capital, Reform and Revenue) over the 5 year period of DDICT (18/19 to 22/23) indicates that approximately 50% of the total original request has been funded.

### **3.4 Case for Change**

The proposal set out within this business case and detailed within the Digital Strategy defines three investment horizons which are timebound but, in practical terms, will overlap in parts. We describe these as “Now, Next, and Beyond”. Police Scotland’s ambition is to move from **Doing Digital to Being Digital**, along with the intended prioritisation of delivery activity across the horizons of ‘Now’ (1-2 years), ‘Next’ (3-5 years) and ‘Beyond’ (5+ years). Being Digital is not intended to be an ambition for the technologist in Police Scotland, but rather is about embedding digital at the heart of the organisation and the way it operates.

The core investment case which underpins this SOBC seeks to enable Police Scotland’s priorities through the use of digital, data and technology and, in doing so, delivering tangible outcomes such as efficiency, effectiveness, improved public experience and agility. This is illustrated in the diagram shown below.



Core Investment Case

Police Scotland must continue to invest in digital, data and technology so that it can sustain technology deployed which provides essential support to today's policing operations and supports efficiency gains; put in place new technology capabilities, necessary replacements; and provide a 'fit for the future' Digital Division able to deliver solutions and services to meet future needs.

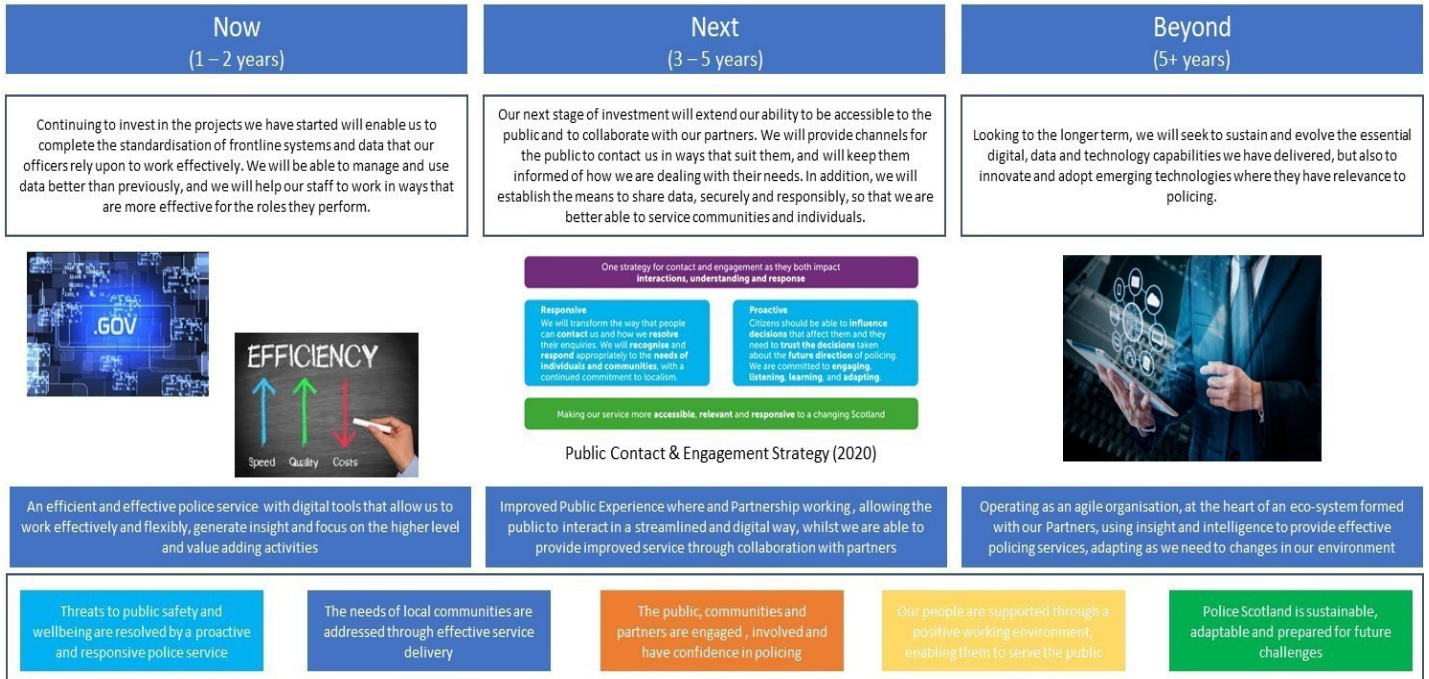


Figure 2: Digital Strategy – Rationale for Change

The rationale for implementing this proposal is threefold:

- The priorities set out in the Joint Strategy for Policing (2023) identify digital, data and technology as critical enablers, and the outcomes within it provide a clear imperative for investment.
- The capabilities we have delivered over the past four years have enabled significant improvements in our ability to deliver digital services across the organisation. However, technology obsolescence is a recurring inhibiting factor which left unchecked will constrain our ability to further evolve and improve our services. Addressing this will require ongoing organisational focus and investment; and
- We need to create the digital, data and technology capabilities which will enable Police Scotland to be a more agile organisation, able to respond more rapidly to changes in our operating environment, to work more effectively with partners, and to adapt our working practices to align with the needs of our staff, creating a 'fit for the future' Digital Division.

This proposal addresses business needs and challenges which have been identified and evaluated during development of the Digital Strategy which accompanies this business case.

### 3.5 Expectations & Needs for Digital, Data and Technology

The proposal set out within this business case and detailed within the Digital Strategy defines three investment horizons: **Now, Next, and Beyond**. Whilst there is a degree of overlap between these horizons, commencing in FY23/24, they broadly correspond to periods as follows: 1-2 years; 3-5 years and 5 years and beyond.

#### Business Needs

In developing the business case we engaged extensively with key stakeholders, including Chief Officers, Force Executive, front line officers and representatives from each business area, as well as with the Scottish Policing Authority and Forensic Services. We also ran a collaboration event with over 70 attendees across our wider Criminal Justice partners. This work has highlighted several key findings which have been identified as barriers to delivering the Joint Strategy for Policing (2023), and recommendations have been developed to address these, which in turn have been incorporated into the programme roadmap (presented in the Management Case). This proposal addresses the following needs of Police Scotland as we move into the future:

What is expected of modern policing		What we have today	
✓	Joined up systems, single data input and single search capabilities, enabling collaborative working with Police Scotland colleagues and partner organisations	✗	Duplicate data entry, limited scope of data available to frontline officers and limited data sharing with partners
✓	'Single source of truth' provided through data management and common search capabilities	✗	Data duplication, inconsistencies, and variable data quality, with manually intensive processes required to search and obtain data
✓	Prioritised demand for solutions and services, enabling Police Scotland to deliver and obtain optimal returns on investment in digital, data and technology	✗	Unconstrained demand for services, exceeding capacity of Digital Division, and diluting and/or deferring investment in strategic initiatives
✓	Dedicated Digital workforce with the right tools, capabilities, and skills to meet demand, adopting a product centric mode of operation	✗	Significant difficulties in recruiting suitable experienced and skilled staff, combined with limited use of tools to support professional staff
✓	Pervasive, ethical use of data, agreed in consultation with the public, engendering support for, and trust in, Police Scotland	✗	Constraints in use of data to protect the public, resulting from concerns for adverse public reaction
✓	Sustainable technology (and suppliers) used by default reducing carbon footprint	✗	Carbon inefficient estate and (some) unnecessary travel constraining Police Scotland's ability to optimise our carbon footprint.
✓	Ease of public access to policing services, through multiple channels, keeping people informed and connected to Police Scotland	✗	Simple access through portals and telephone channels, but absence of single view of services

*Table 6: What is expected of modern policing*

### 3.6 Target Operating Model – Why Digital Division Needs to Evolve

**The current operating model is outdated and does not reflect the needs of Police Scotland.** It inhibits the ability of DD and the CDO to respond to changing requirements. Time and effort are wasted by the friction generated by technical silos, hand-offs between teams, slow decision making, manual processes and a complex technology landscape.

Furthermore, Police Scotland is struggling to recruit, retain and develop the digital, data and technical talent, due to practices and frameworks that have fallen behind other public sector and commercial employers. Moreover, the current operating model does not provide the capability to drive digital innovation and orchestrate collaboration with partners.

Police Scotland's Digital Strategy defines the next stage of the organisation's journey, building on our achievements since 2018. It articulates a clear vision of what the organisation will achieve with digital over the coming 5 years, and how this will support the transformation of policing. An important aspect of the Strategy is a cultural and operational transformation; **"From Doing Digital to Being Digital"**.

The Target Operating Model (TOM) articulates how the strategy will be enabled; creating a Digital Division (DD) that has the skills, capabilities, processes and tools it needs to be successful. Importantly, to enable Police Scotland to being digital, DD's ambition is:

**"To be the trusted advisor & supplier of digital services to policing in Scotland"**. We are an integral part of policing, adapting to changing needs and challenges, and creating high quality digital experiences for officers, staff, and the public."

DD and the Chief Data Office (CDO) have delivered several successful programmes and projects since 2018, whilst also modernising and rationalising the technology & data landscape. However, as the scale of digital services being used by policing has grown, with new services being implemented (e.g., mobile, COS, etc), DD and the CDO need to change. They are struggling to deliver and safely sustain the level of change required.

Digital Division and the CDO's leadership want to drive a programme to transform the operating model. The key objectives of this transformation will be to implement a target operating model that will:

- **Invest in our people & the skills we need** – adopting industry standard roles definitions and development pathways (i.e., "Skills for the Information Age") to improve recruitment and retention, creating an attractive workforce offer, in line with other employers - including Scottish Government, the NHS, local authorities
- **Align to the objectives of the business** – orientate everything Digital Division does to the products that officers, staff and the public need, and the platforms that support them, to deliver the Digital Strategy
- **Continuously improve products & platforms** – creating enduring teams analyse & respond to user feedback, directed by Product Owners to prioritise and deliver enhanced user experiences and strengthen our platforms
- **Be faster & more efficient** – enabling our teams to improve products quickly and easily, working within clear guiderails, with all the right expertise working together, automating the way we build/test/deploy changes, and by empowering the right people to make decisions

- **Deliver excellence** – adopting a performance culture, underpinned by data about the services it provides, to improve business value, user experience, service quality, change velocity, operational resilience and security.

### 3.7 Lessons Learned – What We Do Well

In 2018, Police Scotland was dealing with the challenges of legacy systems and applications relating to the formation of a single national force and was aiming to transform systems for core operational policing. This was at a time when there had been multiple failed programmes across the Scottish and UK public sector and Police Scotland was challenged to demonstrate that it had learned the lessons of these programmes and that measures would be put in place to avoid future failures.

The table below summarises the findings of reviews published by Police Scotland, Audit Scotland, National Audit Office, and others to provide an update on how Police Scotland has dealt with these findings and to summarise current state. In 2018, the emphasis was largely on risk mitigation, and it is worthy of note that actions taken by Police Scotland since then have been effective in achieving outcomes set out in the strategy.

Audit Scotland Lessons Learned	Police Scotland Lessons Learned	Current Status
<p><b>Comprehensive Planning</b> what you want to achieve and how you want to achieve it should be clearly articulated.</p>	<p>Detailed requirements need to be fully explained and understood by supplier. Ensure appropriate time spent developing, mapping, and understanding interdependencies.</p>	<p>Police Scotland has adopted industry accepted practices for project management and control.  Status: GREEN</p>
<p><b>Active governance</b> appropriate oversight and control should be provided.</p>	<p>Police Scotland should ensure that all business areas take ownership of their processes. Ensure Senior Manager buy-in and scrutiny exists throughout the project.</p>	<p>Police Scotland has ensured that all initiatives commence with senior level ownership and that governance arrangements provide appropriate scrutiny.  Status: GREEN</p>
<p><b>Put users at the heart of the project</b> identify all stakeholders, understand their needs, and help enable change.</p>	<p>Major projects should identify SPOCs and host stakeholder groups from the outset. Establish a process for ensuring supplier understands requirements.</p>	<p>Police Scotland has adopted comprehensive stakeholder engagement and user-centric design techniques.  Status: GREEN</p>

Audit Scotland Lessons Learned	Police Scotland Lessons Learned	Current Status
<p><b>Clear Leadership</b></p> <p>set tone and culture that provides accountability.</p>	<p>SPOCs who are senior enough to make decisions for divisions/departments should be identified.</p>	<p>Leadership initiatives promoting accountability have been (and continue to be) delivered within Police Scotland.</p> <p>Status: GREEN</p>
<p><b>Strategic Oversight and Assurance</b></p> <p>work within a central assurance framework and recognise strategic oversight adds value.</p>	<p>Establish a Business Transition Group to ensure business leads are briefed on project developments, governance and how output will impact their business area.</p>	<p>A Change Board has been established and operates effectively, providing oversight and governance across programmes and initiatives.</p> <p>Programme and Project governance has been strengthened and is administered by a corporate PMO.</p> <p>Status: GREEN</p>
<p><b>Right level of resources</b></p> <p>there is a need for dedicated specialists to be in place to support delivery.</p>	<p>Provide dedicated resources from ICT, commercial, legal, procurement and other disciplines in support of delivery.</p>	<p>Digital Division has made progress with recruiting to key roles but remains under resourced for the level of demand experienced. Specific recommendations and actions are set out within TOM.</p> <p>Status: AMBER</p>

*Table 7: Lessons Learned*

### 3.8 Conclusion

This business case concludes that it is not practical to meet the challenges of Joint Strategy for Policing (2023) without significant improvement and enhancement of the technology, digital and data assets employed by Police Scotland, matched by changes in the Digital Division operating model.

The Digital Strategy, Target Operating Model and this Business Case provide a clear digital vision and direction for Policing in Scotland. We must build upon our success in developing and delivering sustainable policing capabilities enabled through fit for the future digital services, to meet the evolving needs of Policing in Scotland. The digitisation of operational and back office processes and services is fundamental to achieving organisational efficiencies.

**OFFICIAL**

Failure to invest in our critical national infrastructure has significant implications for maintaining operational service delivery, public confidence and trust.

The next section therefore considers the options for building upon what has been delivered so far, as well as addressing the need for new investment.

## 4. Economic Case

The main purpose of the Economic Case is to demonstrate that the spending proposal optimises public value.

### 4.1 Economic Case Overview

The purpose of the Economic Case at SOBC stage is to set out the realistic options for delivering the business need and to appraise these options against defined criteria to identify a short-list of options.

This document sets out two proposals for investment, which are closely related, but are evaluated independently. The two proposals are:

- Delivery of the Digital Strategy; and
- Implementation of a Target Operating Model.

In simple terms, the *Digital Strategy* defines what needs to be delivered and the *Target Operating Model* describes how this should be achieved, and clearly these two aspects need to be considered jointly, as illustrated below.

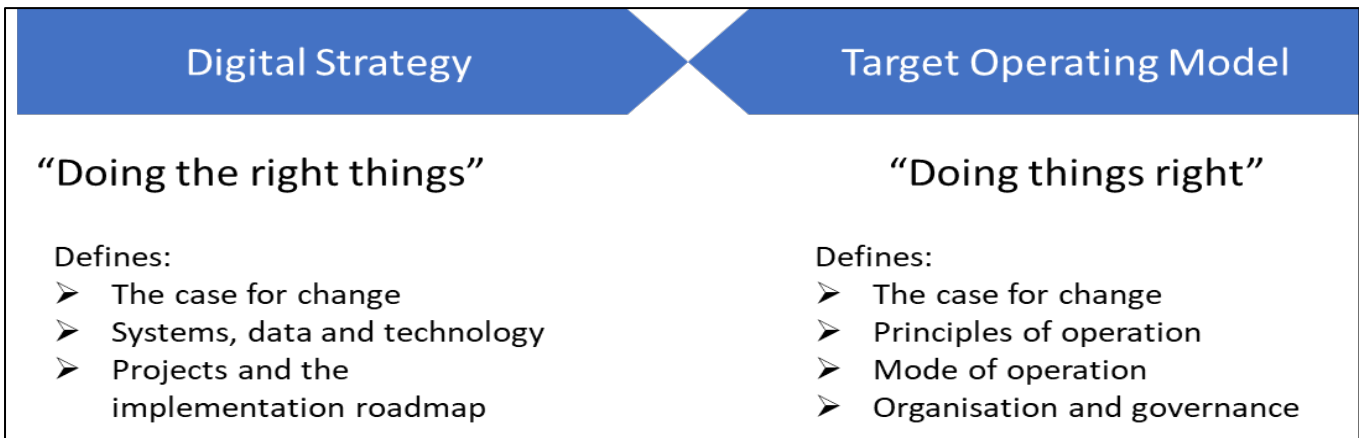


Figure 3: *Doing the right things, doing things right*

The Economic Case is presented in two parts: the first provides the Economic evaluation of the Digital Strategy and the second addresses the Target Operating Model.

## 4.2 Economic Case 1 – Digital Strategy

### 4.2.1 Introduction

The world in which we live and work is constantly changing with the shifting demographic of Scotland having a major influence on how public services must work together to protect the most vulnerable people in our communities. The nature of crime is changing, with traditional crimes increasingly involving a digital element and the increased use of technology by criminals.

Police Scotland's response to this situation has to include the more effective use of digital, data and technology, which in turn means that regular review and amendment of digital strategies is an essential element of providing high quality policing services. There is no single way to construct a response to the impact of technological advances, though there is a great deal of merit in evaluating what works well, seeking to improve upon this, and maintaining a clear focus on what leading police forces are doing. In constructing the Economic Case for the Digital Strategy, consideration has been given to these factors, and options have been constructed accordingly.

### 4.2.2 Evaluation Criteria

Defined criteria have been used to evaluate identified options and have been based on factors of relevance to the successful delivery of the Digital Strategy.

These criteria were determined by Police Scotland and advisors as follows:

- Strategic alignment: provides demonstrable fit to the Joint Strategy for Policing outcomes as set out in the case for change.
- Benefits delivered: defines the contribution made to benefits as defined within Police Scotland's benefits framework (administered and managed by the Portfolio Management Office);
- Risks: taking account of risk factors that have the potential to impact successful delivery of the outcomes of the Digital Strategy.
- Costs: addressing full lifecycle costs (with an assumed 5-year planning horizon), and addressing sources of funding (Capital, Revenue, and Reform). Costs comprise future funding required for in-flight projects (but exclude costs incurred to date), and costs associated with future projects.

Note: Sources and availability of funding are not considered within the evaluation, but are important when considering affordability of the portfolio over the planning horizon.



### 4.2.3 The Options Evaluation Framework

In line with HMT Green Book Guidance, an Options Framework was developed for the purposes of objectively evaluating options, providing a structured approach to identifying and filtering a broad range of options across several dimensions. The process was developed to support a structured and objective evaluation of viable options. It was applied on an iterative basis, taking account of conclusions and findings emerging from each dimension of analysis. The reason for adopting this iterative approach was to enable refinement of options so that they could be improved; for example, for deliverability and benefits realisation. The process adopted is summarised in the diagram shown below.

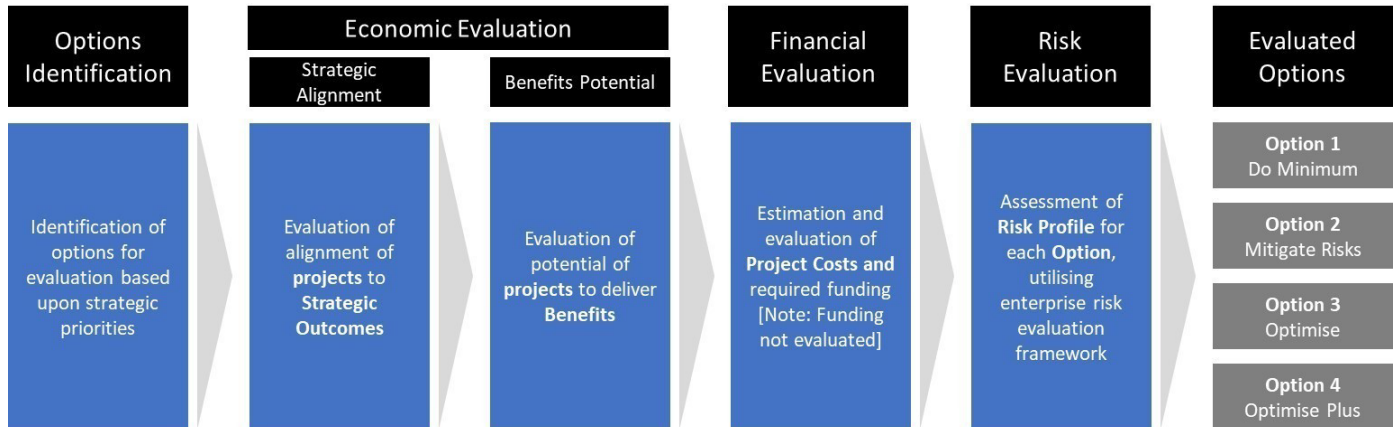


Figure 4: Options Evaluation Process – Digital Strategy

The following sections describe the steps shown in the above process.

### 4.2.4 Options Identification

Identification of options was undertaken through a series of working sessions, utilising inputs from a broad cross section of stakeholder discussions, insights from industry case studies, and experienced input from the Digital Division SMT. Key points considered in developing the options were as follows:

<p>A 'brown field' starting point</p>	<p>The Digital Strategy that has been developed takes into account the 'brown field' nature of the digital and technology landscape (i.e. it is required to build upon existing and established technologies, and cannot simply adopt a strategy of replacement). It represents a 'refresh' of the existing strategy and throughout its development, consideration has been given to long term planning horizons, building on what has been delivered previously.</p>
<p>'Fast follower' principles</p>	<p>Police Scotland has a track record of innovating, of applying digital technologies effectively and has adopted a practical, pragmatic approach to this. The underlying approach to innovation may be described as 'fast follower', that is, an organisation which maintains awareness of technology trends and emerging technology within a policing context, and adopts these rapidly, learning from other organisations. An example</p>

	of this has been the roll out of mobile to operational officers, achieved at one of the fastest rates within UK & Ireland.
Bridging short to long term planning horizons	Police Scotland is acutely aware of the need to invest prudently and to optimise investments in digital, data and technology, maximising benefits for available funding. The approach to options identification therefore incorporated consideration of staged investment and the ability to build common solutions which may be matured and improved upon over time. Specifically, the options development sought to avoid and/or minimise duplicate, tactical or 'throw away' investment.
Managing for affordability	It is recognised that funding will be challenging for the foreseeable future and that it is prudent to plan on this basis. The identification of options took this into account and included consideration of options which may be adapted in response to funding constraints.

#### 4.2.4.1 Options Definition

Four options were identified as shown below.

<i>Option 1: Do minimum</i>	This option presents the lowest possible investment, including completion of in-flight projects and mandated requirements.
<i>Option 2: Mitigate Risks</i>	This option builds upon option 1, incorporating scope to mitigate risks associated with future legislative requirements and operational risks related to compliance
<i>Option 3: Optimise</i>	This option seeks to optimise benefits, cost, and risk mitigation. It assumes that projects will be delivered based on a Minimum Viable Product (i.e., scope will be defined and constrained to minimise costs without compromising target benefits)
<i>Option 4: Optimise +</i>	This option builds upon option 3 and is constructed on the basis that incremental investment in projects may yield additional benefits. In practice, the scope of projects included in this option will be similar to Option 3, but a provision will be made for incremental investment, which may be drawn down for projects that demonstrate additional benefits and meet cost/benefit criteria

*Table 7: Options Definition*

#### 4.2.5 Economic Evaluation

## OFFICIAL

Evaluation of each option was conducted 'bottom up', with each of the economic evaluation criteria being applied to individual projects within the scope of each option. This approach involves a more detailed analysis of options than is typically required at the SOBC stage but was chosen as:

- Sufficient knowledge and information exist within Police Scotland to make this meaningful; and
- The level of analysis enables an enhanced level of understanding of uncertainty within the portfolio (i.e., relating to risks, dependencies, complexity etc)

The economic evaluation was based on two dimensions, for which detailed criteria were used in the evaluation method:

### *Strategic Alignment*

This dimension of the analysis considers the extent to which each option aligns to the outcomes set out in the Joint Policing Strategy, 2020. The *Strategic Outcomes* included within the analysis are: Threats to public safety and wellbeing are resolved by a proactive and responsive police service; The needs of local communities are addressed through effective service delivery; The public, communities and partners are engaged, evolved and have confidence in policing; Our people are supported through a positive working environment, enabling them to serve the public; and Police Scotland is sustainable, adaptable and prepared for future challenges.

### *Benefits Contribution*

This dimension provides an analysis of the extent to which each option delivers benefits defined with the Benefits Delivery Framework<sup>2</sup>. Benefit Categories used within this analysis are Wellbeing; Strategic Threat Resolution; Strategic Priority (Capability); Organisational Risk Reduction; Delivering Efficiency; and Legal/Regulatory compliance.

Both Strategic Outcomes and Benefits Contribution were assigned a weighting, reflecting the significance within the context of the target outcomes of the Digital Strategy.

The economic assessment of projects was initially carried out by the Digital Division Senior Management Team and the Chief Data Officer with the support of our advisers, with the resulting short list of options then being reviewed with various stakeholder groups to obtain their input and feedback. The resulting short list of options was agreed by key stakeholders and approved by the Delivery Board.

---

<sup>2</sup> Standard framework used to evaluate projects and programmes within Police Scotland's Change Portfolio. This framework is administered by the Change Portfolio PMO.

### 4.2.6 Assessment of Costs

As part of the economic appraisal of options, a quantitative assessment was carried out to determine which option was most cost-effective. This assessment provided an estimate of the costs associated with each candidate project which was in turn, used to calculate overall costs for each option.

To calculate the cost for each option, all candidate projects were reviewed, and bottom-up estimates were derived. The cost associated with each option was principally determined by aggregating the cost estimates for in scope projects.

A Panel Estimating approach was adopted, utilising available information from current projects, developed project proposals, and review and refinement by the Digital Division SMT. Key considerations included:

Funding Impact	Cost estimates have been derived based on three cost categories: Capital funding; Revenue funding; and Reform funding where applicable.
Investment Timescale	A five-year investment horizon has been used. This is considered a prudent approach as the through life benefits of digital, data and technology often extend beyond this (and/or the underlying asset is 'sweated' beyond this period).
Estimating Accuracy	Estimates have been developed on a Rough Order of Magnitude (ROM) basis, which is appropriate to the SOBC, and these estimates will be refined and developed in more detail as projects are commissioned. At this point, IBCs and FBCs will be developed for individual projects.
Estimating Baseline	For the purposes of economic evaluation, it has been assumed that option 3 will deliver Minimum Viable Product (MVP) across the portfolio, and that option 4 will incorporate incremental scope to enhance benefits. The assessment of enhanced benefits will be undertaken at the point of commissioning each project. For the purposes of economic and financial evaluation, incremental funding of 10% - 30% has been assumed for option 4 (thus a range of Costs and Risk Adjusted Value for Money scores are presented for this option).

### 4.2.7 Assessment of Risk

The Options identified each have different Risk Profiles which may impact costs and benefits realisation. Risk management will be incorporated within programme and project management controls as projects are commissioned, but it is important to provide a relative assessment of the Risk Profile of each Option so that a 'like for like' comparison may be made at this stage.

An indicative Risk Profile has been developed for each Option by considering the comparative relevance and application of categories of risk to each Option. The categories of risk used (also referred to as Strategic Risks) were as follows:

- Strategy & Direction
- Project Management
- Change Management
- Lifecycle/Implementation Management
- Governance & Approvals
- Commercial & Procurement; and
- People & Culture

#### 4.2.8 Options Scoring – Method

An overall score has been developed for each option which has been calculated as shown in the diagram below. Whilst scoring is important to enable an objective comparison, it is not solely relied upon to derive a preferred option. Specific factors have been considered and reviewed during working sessions and in consultation with stakeholders and the Digital Strategy & TOM Steering Group.

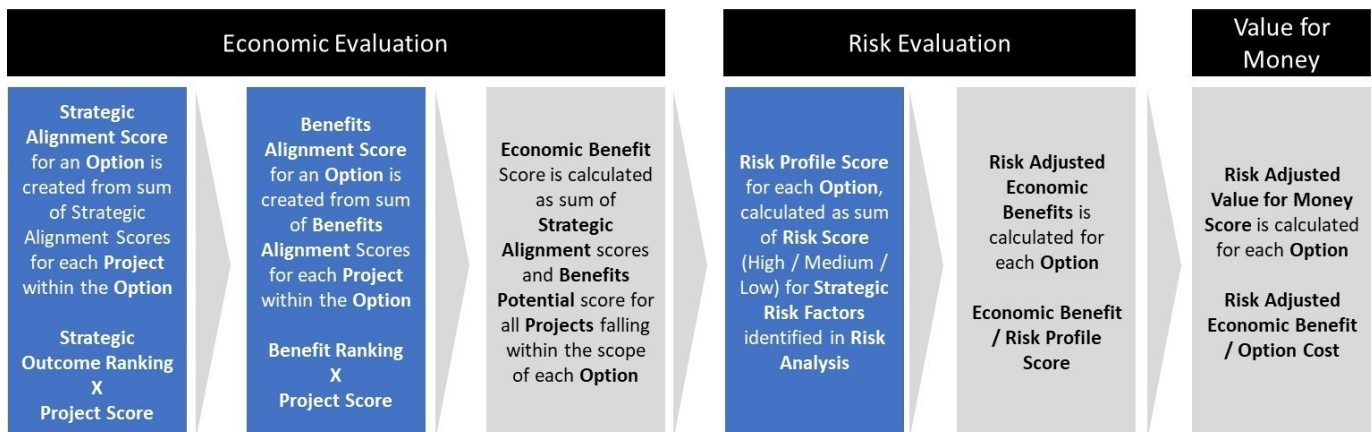


Figure 5: Options Scoring Framework – Digital Strategy

The Options Scoring Method delivers four key measures:

<b>Economic Benefit Score</b>	An indicator of the extent to which an Option is aligned to Strategic Outcomes and its potential to deliver Benefits.  Higher score indicates most desirable Option.
<b>Risk Profile Score</b>	An indicator of the overall risk associated with an Option considering Strategic Risk Factors.  Lower score indicates most desirable Option.

**OFFICIAL**

<b>Risk Adjusted Economic Benefit Score</b>	An indicator of the extent to which an Option will deliver Economic Benefit, taking account of the Risk Profile for the Option.  Higher score indicates most desirable Option.
<b>Risk Adjusted Value for Money Score</b>	A qualitative indicator of potential return on investment, simply derived by dividing the Risk Adjusted Economic Benefit Score by the Financial Cost for each Option.  Higher score indicates most desirable Option.

### 4.2.9 Economic Analysis

This section presents the scores and key indicators calculated in accordance with the Options Scoring Method described above.

<p><b>Strategic Alignment</b></p>	<p>Strategic Alignment is derived on the basis of the extent to which a project contributes to the outcomes listed below (i.e. High/Medium/Low):</p> <ol style="list-style-type: none"> <li>1. The needs of local communities are addressed through effective service delivery;</li> <li>2. The public, communities and partners are engaged, evolved and have confidence in policing;</li> <li>3. Our people are supported through a positive working environment, enabling them to serve the public; and</li> <li>4. Police Scotland is sustainable, adaptable and prepared for future challenges.</li> </ol> <p>A numerical score was assigned to each of the High/Medium/Low rankings. Outcomes are weighted equally. The score for each project is calculated as follows:</p> <p style="text-align: center;"><i>Ranking x Outcome Weighting</i></p>
<p><b>Benefits Potential</b></p>	<p>Benefits Potential is derived on the basis of the extent to which a project may deliver benefits as follows:</p> <ol style="list-style-type: none"> <li>1. Wellbeing, [Weighting 15%];</li> <li>2. Strategic Threat Resolution, [Weighting 25%];</li> <li>3. Strategic Priority/Capability Delivery [Weighting 20%];</li> <li>4. Organisation Risk Reduction [Weighting 15%];</li> <li>5. Efficiency Delivery [Weighting 15%]; and</li> <li>6. Legal/Regulatory Compliance [Weighting 10%];</li> </ol> <p>A numerical score was assigned to each of the High/Medium/Low rankings. Outcomes are weighted equally. The score for each project is calculated as follows:</p> <p style="text-align: center;"><i>Ranking x Outcome Weighting</i></p>
<p><b>Economic Benefit Score</b></p>	<p>Strategic Alignment Score + Benefits Potential Score</p>

**OFFICIAL**

<b>Risk Profile Score</b>	Derived from portfolio assessment of risk based upon the following factors: Strategy & Direction; Project Management; Change Management; Lifecycle Management; Governance & Approvals; Commercial & Procurement; and People & Culture.  A higher Risk Profile Score indicates greater risk for the portfolio delivery.
<b>Risk Adjusted Benefit Score</b>	Adjusts the Economic Benefit score for risk, and is derived by dividing the Economic Benefit Score by the Risk Profile score.
<b>Net Present Cost</b>	Calculated from Project Analysis, comprising the total Revenue, Reform and Capital funding over a five year period for each option.
<b>Risk Adjusted Value for Money (VfM) score</b>	Provides a relative indication of value for money, taking account of investment, benefit and risk, derived by dividing Risk Adjusted Benefit score by Net Present Cost.

	<b>Option 1 Do Minimum</b>	<b>Option 2 Mitigate Risks</b>	<b>Option 3 Optimise</b>	<b>Option 4 Optimise +</b>
<b>Strategic Alignment [A]</b>	96	123.4	153	153
<b>Benefits Potential [B]</b>	383	494.75	562.5	562.5
<b>Economic Benefit Score [C] = [A + B]</b>	479	618.15	715.5	715.5
<b>Risk Profile Score [D]</b>	0.94	1.00	0.76	0.94
<b>Risk Adjusted Benefit Score [E] = [C/D]</b>	510	618	941	761
<b>Net Present Cost [F]</b>	£233,347	£365,366	£389,576	£428,533 - £506,449
<b>Risk Adjusted VfM Score [E/F*1000]</b>	2.18	1.69	2.40	1.50 - 1.77
<b>Overall Ranking</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>4</b>

*Table 8: Strategy Options Evaluation Summary*

The calculated ranked order of these options implies that Option 3 is the leading candidate preferred option. As previously noted, it is important to avoid relying simply on calculated scores and other relevant considerations are summarised below.



Option	Evaluation Considerations
Option 1 Do Minimum	This requires significantly lower investment than other options (c.£200m lower than option 2) but delivers lower economic benefit than others. Whilst the overall risk profile of this option is like others, it should be noted that there is a high risk to the option providing the digital, data and technology enablers to support achievement of Strategic Outcomes.
Option 2 Mitigate Risks	This option is like option 1 but includes projects which will deliver specific refresh of the digital, data and technology infrastructure, thus reducing operational risk. Some of these investments may also facilitate agile delivery of solutions in the medium to long term.
Option 3 Optimise	This option delivers most identified projects at an assumed level of Minimum Viable Product (MVP). This approach prioritises scope based on user need, outcomes, and benefit. The risk profile associated with enabling Strategic Outcomes and delivering Benefits is lower than options 1 and 2 but is higher in respect of delivery complexity and change adoption.
Option 4 Optimise + (Transform)	This option is like option 3 but incorporates additional funding to extend the scope of projects (beyond MVP) thus extending benefits. The level of additional funding required to extend benefits across the portfolio is not easily estimated at the SOBC stage and should be verified on a case-by-case basis when projects are commissioned. For the purposes of economic evaluation, incremental funding of 10% - 30% has been assumed (thus a range of Costs and Risk Adjusted Value for Money scores are presented for this option).

*Table 9: Economic Options Evaluation – Commentary- strategy*

#### **4.2.10 Conclusion**

Option 3 ‘Optimise’ is recommended. This option delivers the digital capabilities necessary to enable Policing in Scotland to achieve the stated outcomes of the Joint Strategy for Policing 2023. This approach continues building the digital foundations and prioritises the scope of delivery based on user need, outcomes, and benefit.

The risk profile associated with Option 3 ‘Optimise’ is lower than Options 1 & 2 in respect to enabling Strategic Outcomes and delivering Benefits, but is higher than Option 1 & 2 in respect of delivery complexity and change adoption.

## 4.3 Economic Case 2 – Target Operating Model

### 4.3.1 Introduction

The delivery of digital, data and technology services has changed radically over the past 10 years. Government Digital Services (GDS) began the transformation of UK Government’s approach in 2011, to accelerate the pace and quality of change, and ensure that the users were at the heart of every part of the digital development process. Police Scotland have consulted with three UK Government departments to talk through their transformative journey, to understand how they now deliver digital services and become user-led, faster, better quality and more resilient. Digital Division also looked at how other UK forces have been transforming their digital operating model.

### 4.3.2 Options Identification

Four options for the TOM design have been explored and option 1 should be seen as the baseline for comparative purposes and effectively means changing nothing. Option 2 reflects existing plans being forged within DD to implement the Digital Support & Evolution Group (DSEG). Digital Division & Police Scotland have agreed on the creation and scaling of DSEG, a dedicated group to maintain, develop, provide governance and enhance digital “products and platforms” in specific instances. DSEG involves the implementation of agile working practices, with multi-disciplinary teams initially for “Mobile” and “COS” services. The model is designed to enable the transition of specific technological developments from project status to being managed within an in-life framework that provides continuous product / platform evolution.

While Option 3 and option 4 aim to deliver the same North Star ambition (i.e. the desired future state which provides a fit for the future operating model), the primary difference is the pace of the change.

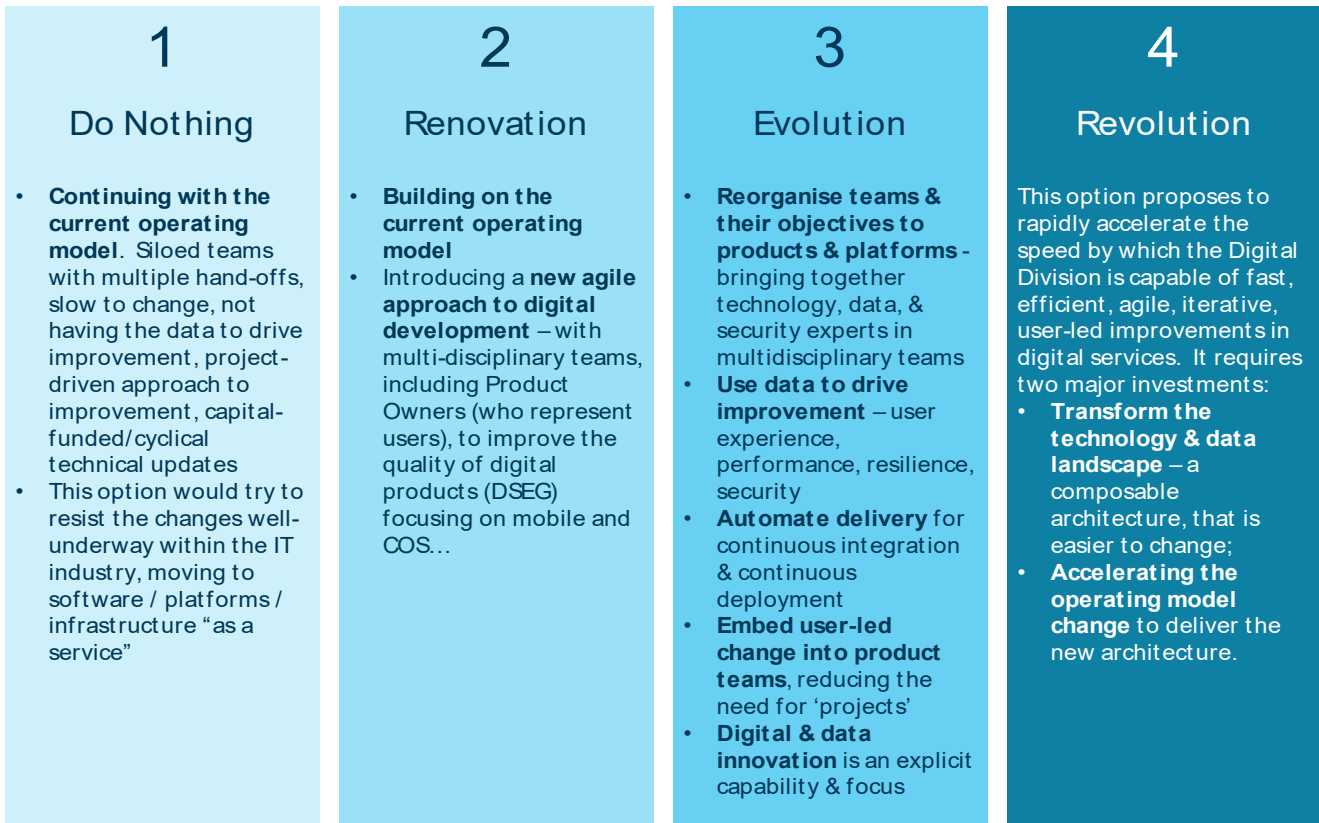


Figure 6: TOM Options Definition

### 4.3.3 Options Evaluation

Driven by the ambition for Digital Division and our strategic objectives, the options have been assessed against five criteria. The first three focus on achieving improvement, while the last two explore the risks and cost of making the change, enabling a balanced assessment:

1. **Directly align to the Digital Strategy’s target outcomes** – structures, processes, performance measures and resources are all aligned to delivering the outcomes defined within the Strategy, continuously improving the products used by Police Scotland, their partners and the public. This alignment will be embedded operationally within the Digital Division, to support the aim of “Being Digital”.
2. **Improve the efficiency & velocity of digital delivery** – reducing friction and waste caused by technical silos, slow decision making, and manual processes. Creating multi-disciplinary teams that coalesce around a problem to solve it, reducing/eliminating hand-offs between teams, using tooling to automate end-to-end development and change processes, embedding change within products to reduce the need for project, and adopting adaptive risk-based governance. Ultimately, this will reduce the total cost of digital (projects and operations, capital and revenue) and improve speed.
3. **Reduce operational risk** – enabling Digital Division to:
  - *Accommodate a multi-speed environment safely*, enabled by a loosely coupled architecture: Digital products can change quickly; enterprise platforms are

standardised, resilient and robust systems of record that change independently of products; and infrastructure services underpin everything and can also change independently;

- *Embed security and assurance* – throughout all stages of the software delivery lifecycle and service management processes, with security and privacy by design, and embedding security expertise within delivery teams;
  - *Data driven* – having visibility of end-to-end service performance, foresight of potential problems before they occur, and clear visibility of user feedback to drive the continuous improvement of digital products, platforms and working practices.
4. **Potential disruption** – the Digital Strategy defines a substantial portfolio of change initiatives, driven by policing priorities. Furthermore, Digital Division must also address the day-to-day challenges of sustaining and protecting operational digital and data services. The scale and pace of operating model change must be considered in this context, and the risk that the process of change could add.
  5. **Cost of change** – while change may bring both efficiency gains and improve the value delivered by digital services to the business, these benefits need to be assessed against the affordability constraints facing the SPA and Scottish Government, particularly given the current economic environment.

The options have been evaluated using 5 key criteria (illustrated below), and Option 3 'Evolution' achieves the highest score. Option 3 brings the best balance of supporting the Digital Division ambition, and enabling the Digital Strategy, while achieving value for money.

Option	DDICT Strategy Alignment	Increase Business Value	Reduce Operational Risk	Potential Disruption	Cost of Change	Ranking Position
<b>Option 1 - Do Nothing</b> Retain the existing operating model	<b>0%</b> (0/5)	<b>4%</b> (1/5)	<b>4%</b> (1/5)	<b>16%</b> (4/5)	<b>20%</b> (5/5)	4
<b>Option 2 - Renovation</b> Optimise the existing operating model	<b>10%</b> (2.5/5)	<b>12%</b> (3/5)	<b>16%</b> (4/5)	<b>15%</b> (3.75/5)	<b>12%</b> (3/5)	3
<b>Option 3 - Evolution</b> Phased transition to a multi-speed, business aligned operating model	<b>16%</b> (4/5)	<b>16.8%</b> (4.2/5)	<b>18%</b> (4.5/5)	<b>8%</b> (2/5)	<b>12%</b> (3/5)	1
<b>Option 4 - Revolution</b> Adoption of a cloud-first, product-centric operating model	<b>12%</b> (3/5)	<b>20%</b> (5/5)	<b>20%</b> (5/5)	<b>0%</b> (0/5)	<b>0%</b> (0/5)	2

**Table 10: TOM Options Evaluation Summary**

Option 3, Evolution, is considered the preferred option, balancing the benefits, scale and pace of change, with its potential cost and risks. Evolution will see a fundamental shift in the operating model for Digital Division. However, while many of the changes and benefits can be introduced rapidly, its full implementation will take time, and is limited only by the speed at which the Police Scotland IT estate and architecture is modernised.

### 4.3.4 Conclusion – Target Operating Model

#### Evolution is the recommended option – moving to a product-centric operating model

To deliver the organisation’s ambition, and overcome many of the challenges it faces today, Digital Division needs to reorientate its funding, decision-making, and performance to the products that Policing in Scotland values.

A **product-centric operating model** provides a way of organising resources and delivery to align more closely with continuously improving business outcomes, rather than the current binary model that focuses on “projects” (build) and “run” (with minimal improvement). It encourages **cross-functional teams** to be dedicated to products, **driven by an on-going pipeline of improvements** which is prioritised by the business, delivering continuous improvements to end users. It aligns the business strategy (Policing Plans) to product development and execution, while empowering product teams to determine the best way to deliver the outcome. Importantly, product teams are led by the business (Product Owner) with business SMEs, working with a mix of designers, developers, engineers, architects, security specialists, testers, etc.

## OFFICIAL

Product-centric operating models have been enabled through the development of virtualised and cloud services, whereby new products can be created, developed and replaced quickly. The limiting factor becomes the way the organisation works, not the nature of the technology it uses.

With this in mind, organisations that embark on this journey are predominantly aiming to substantially improve the efficiency of the operating model, in order to improve the velocity and quality of new features/capabilities being delivered to the business

There are a range of benefits that product-centric delivery enables, including:

- **Reduced friction** by enabling teams to coalesce around a problem to solve it, rather than working in silos with multiple triage and handoff steps throughout the digital delivery cycle;
- **Higher velocity**, underpinned by a pipeline of priorities set by Product Owners (from the business) and effective data to measure speed and quality, enabling teams to deliver value faster;
- **Creating capacity** through extensive automation of delivery processes, by adopting enterprise-wide platforms, standards and technologies, and by simplifying the estate to enable repeatable patterns and resilient highly skilled teams;
- **Increased resilience** through development of cross-functional capability.

To deliver the capabilities, working practices and cultural changes needed; a new organisation design is being proposed (as shown in the diagram below). Importantly, we are proposing to bring the Chief Data Office (CDO) into Digital Division. The rationale for this is, as follows:

- **Secure by Design” and “Privacy by Design”** - Embedding technical and information security throughout digital & data product delivery is part of the Government Cyber Security Strategy (outcome 9) and Transforming for a digital future: 2022 to 2025 roadmap for digital and data (commitment 11). The Cabinet Office is leading this programme to help all public bodies to adopt a common approach for securing digital & data services; aiming to ensure appropriate and proportionate security and privacy measures are embedded within the delivery of digital & data services from the start, ensure risks are effectively managed at the right level and on an ongoing basis, and security posture is continually assured throughout the digital & data life cycle.
- **Digital, data, technology & security as a unified profession** - Digital, Data and Technology (DDaT) has been created by Scottish Government (and UK Government) as a recognised profession of aligned skills and capabilities, which includes all aspects of security & technical assurance. Importantly, DDaT aims to create of “T-shaped” individuals, whereby data people have broader technology skills, and all data & digital professionals have security and privacy expertise;
- **Data & digital are powerful together** – our refreshed Digital Strategy sees data as a fundamental component of Police Scotland’s transformation. Likewise, in England & Wales, the National Policing Digital Strategy describes data as an essential asset to enable digital transformation; recommending the need to bring digital and data capabilities together.

## 5. Financial Case

The Financial Case demonstrates that the preferred option will result in a fundable and affordable deal.

### 5.1 Financial Case Overview

The Financial Case provides a high-level assessment on the affordability of the preferred option, noting that, in the long term, estimates may be sensitive to multiple factors.

As outlined in the Economic Case, the Financial Cases for the implementation of the Digital Strategy and the Target Operating Model have been presented separately.

#### 5.1.1 Accountancy Treatment and General Assumptions

In forecasting the financial impact of the preferred options for both Digital Strategy and Target Operating Model, there are a number of assumptions and accounting treatments which have been applied. Principally, these relate to Optimism Bias, Inflation and Capitalisation of Costs, all of which will be addressed within specific IBCs and FBCs and will be treated in accordance with Police Scotland policies and guidance.

### 5.2 Financial Case 1: Digital Strategy

#### 5.2.1 Introduction

The preferred option for the Digital Strategy, identified within the Economic Case is option 3, Optimise. This option seeks to optimise benefits, cost, and risk mitigation. It assumes that projects will be delivered based on a Minimum Viable Product (i.e., scope will be defined and constrained to minimise costs without compromising target benefits).

#### 5.2.2 Overall Affordability and Funding

The funding appraisal sets out costs by the following cost types:

- Capital expenditure
- Revenue
- Reform

The table below presents the forecast of the incremental impact of the Preferred Option on the Police Scotland income statement over the next five financial years:

**OFFICIAL**

	Year 1 (000)'s	Year 2 (000)'s	Year 3 (000)'s	Year 4 (000)'s	Year 5 (000)'s	Total
	23/24	24/25	25/26	26/27	27/28	
Capital	£19,730	£52,127	£43,680	£50,434	£39,000	£204,972
Revenue	£7,594	£24,712	£23,903	£21,713	£26,208	£104,130
Reform	£14,083	£19,260	£22,980	£16,223	£7,928	£80,474
<b>Total</b>	<b>£41,407</b>	<b>£96,099</b>	<b>£90,563</b>	<b>£88,370</b>	<b>£73,136</b>	<b>£389,576</b>

*Table 11: Overall Affordability Analysis - Strategy*

These costs are shown disaggregated below:

	Year 1 (000)'s	Year 2 (000)'s	Year 3 (000)'s	Year 4 (000)'s	Year 5 (000)'s	Total (000's)
	23/24	24/25	25/26	26/27	27/28	
<b>Existing Projects</b>						
Capital	£5,080	£19,627	£8,900	£13,074	£2,000	£48,682
Revenue	£5,744	£15,567	£14,013	£11,928	£16,438	£63,690
Reform	£12,249	£17,910	£20,855	£14,503	£5,958	£71,475
<b>Existing Projects Total</b>	<b>£23,073</b>	<b>£53,104</b>	<b>£43,768</b>	<b>£39,505</b>	<b>£24,396</b>	<b>£183,847</b>
<b>New Projects</b>						
Capital	£14,650	£32,500	£34,780	£37,360	£37,000	£156,290
Revenue	£1,850	£9,145	£9,890	£9,785	£9,770	£40,440
Reform	£1,834	£1,350	£2,125	£1,720	£1,970	£8,999
<b>New Projects Total</b>	<b>£18,334</b>	<b>£42,995</b>	<b>£46,795</b>	<b>£48,865</b>	<b>£48,740</b>	<b>£205,729</b>

<b>Total</b>	<b>£389,576</b>
--------------	-----------------

*Table 12: Disaggregated Affordability Analysis- Strategy*

### 5.2.3 Assumptions

The assumptions used in the financial appraisal are set out below:

<b>Baseline Scope &amp; Estimation</b>	The quantum of work covered includes only those projects identified in the preferred option, though other projects may become ready for delivery over the next phases of the programme. These are outside the scope of this Business Case, and future projects requiring additional funding will develop separate business cases
	Existing project costs have been taken from documentation that has been available supporting the funding allocations



**OFFICIAL**

	<p>for those. Existing project costs apply from FY23/24 onwards within this business case.</p>
	<p>All costs for existing projects are included in whole, (not just the digital element), except for Policing in a Digital World which was deemed to include significant cost beyond just the digital cost threshold.</p>
	<p>Project costs include standard resource rates, have been used to develop high-level estimates</p>
	<p>Existing Business Case documentation (BJC, IBC, FBC) have been used to extract costs for in-flight projects and programmes from 23/24 onwards</p>
	<p>Option 1 has included a proportion of Core Refresh costs, applicable to years 3, 4 and 5 of the planning horizons. This has been done to counter the potential/likely impact of technological obsolescence which may result in a Significant increase in operational risks (e.g., out of support technologies, vulnerability to breach and cyber-attack)</p>
<p><b>Project Evaluation &amp; Ranking</b></p>	<p>Projects have been evaluated against criteria including Strategic alignment, and Benefits Delivered, using prioritisation measures objective criteria and benefits delivered to obtain project rankings. Outlying and non-standard projects have been further evaluated to determine whether additional criteria or exceptional circumstances need to be taken into account.</p>
	<p>Police Scotland standard benefits frameworks have been used (to enable comparison with other portfolios) as follows: 1. Wellbeing ; 2. Strategic Threat Resolution; 3. Strategic Priority (Capability); 4. Organisational Risk Reduction; 5. Delivering Efficiency; and 6. Legal/Regulatory</p>
<p><b>Treatment of Financial Measures</b></p>	<p>Inflation and Optimism bias are not factored in these calculations</p>
	<p>The general assumption taken for expenditure to be capitalised is for it to be directly attributable to the making of an asset. Revenue has been estimated by looking at the revenue impact once the project has been implemented and gone into BAU. The capital revenue and reform costs have been based on estimates of the requirement and the collective experience and knowledge of the DDSMT</p>

	23/24 is Year 1 for financial forecasting and budgeting purposes
	Where appropriate revenue costs have been estimated for a period of up to 5 years (FY 27/28)
	Year 1 (23/24) of revenue will be treated as Reform costs
	Non capital costs for years 2-5 are to be treated as revenue
	Capital Core Refresh is assumed as being an annual allocation – for BAU, Component Refresh and Minor works from a Digital perspective
	Core Refresh – We have assumed we will receive £14m per year (the 22/23 level of funding) for the next 3 years
	Core Refresh – We have assumed Police Scotland will receive £17m for years 4-5 onwards, this is to account for the requirement to replace the mobile device estate
	VAT has been excluded from the calculations
	Inflation has been excluded from the calculations
	NPV and NPC calculations will not be factored into the costing

*Table 13 Financial Case - Digital Strategy Assumptions*

## 5.3 Financial Case 2: Target Operating Model

### 5.3.1 Introduction

To deliver and sustain the capabilities we need, we are proposing an investment in Digital Division’s organisation design.

We are proposing to **invest in 54 new permanent roles**, alongside making changes to some existing roles. The current permanent establishment within Digital Division (417) and the Chief Data Office (79) equate to 496 FTE (inc. vacancies).

These new roles will bring new skills and competencies to the Division, enabling the delivery of the target capabilities and agile, product-centric working practices. They will also support us in addressing many of the themes identified within the Current State Assessment, and enable us to harmonise spans of controls in alignment with Police Scotland’s organisation design standards.

The proposed changes to the organisation design, including new skills and capacity, will increase Police Scotland’s current permanent establishment cost, as follows:

- Current budget for Digital Division and CDO (recognising the 2023 pay uplift, on-costs): £27.1m
- Forecast establishment budget for Digital Division (including CDO) TOM: £30.3m

- **Proposed increase in establishment costs of £3.2m (c. 11.9% increase).**

However, in addition to permanent resources, we use temporary resources to provide additional, project-based capacity. The average spend on temporary resource has been £3.8m per annum, over the past 4 years. In FY22, we spent £5.4m. Assuming the new organisation design is operational during 2024/25, with productivity gains being achieved over time. While the creation of new permanent roles will increase Police Scotland’s revenue expenditure, it will reduce the reliance on temporary project resources which are funded through the Reform budget. The net impact on the public purse will be neutral from FY2027/28.

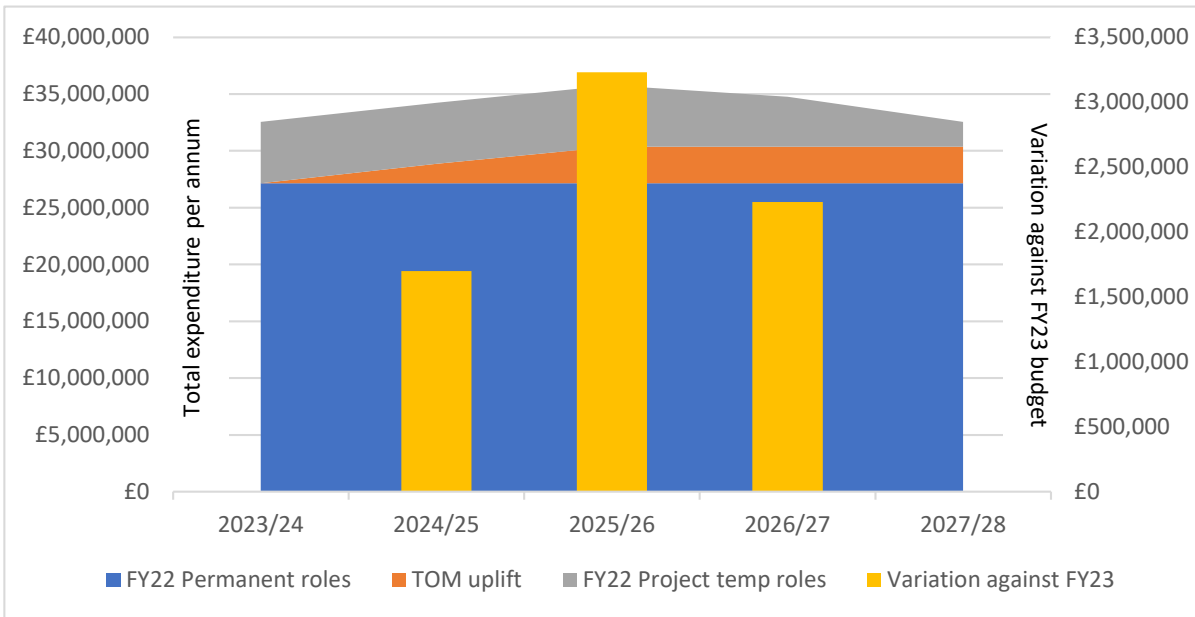


Figure 7: Target Operating Model - Variations in Costs

### 5.3.2 TOM implementation investment

The target operating model will see a major step change in the way Digital Division will work, moving forwards. The headline priorities on the implementation roadmap will include:

- **Managing the organisation design changes** – working alongside P&D, which is likely to be a 12 to 18-month activity with several overlapping waves;
- **Developing the skills and capabilities of Digital Division’s talent** – adopting SFIA, and developing industry-standard career pathways, harmonising the way digital, data and technology (DDaT) roles are defined and developed;
- **Defining the target architecture, roadmap & guiderails** – this will be critical in articulating the composable architecture for Police Scotland, to enable a faster, more efficient product & platform-based approach. By defining the target architecture, Digital Division can work towards building core platforms and products for the future, defining architectural guiderails for delivery teams;
- **Demand & capacity management processes** – including the management information, governance and planning mechanisms to forge an effective, short/medium/longer term view of requirements;

## OFFICIAL

- **Performance management** – defining and agreeing the performance framework and how it will be adopted across different teams within Digital Division; implementing appropriate tooling (e.g., end-to-end observed performance; delivery flow/velocity/quality performance; ITSM); developing performance dashboards; and iteratively testing/improving the approach to acting on performance insights;
- **Sourcing changes** – working with Procurement Services to develop a strategic approach to procuring:
  - *Technology* (e.g., platforms, infrastructure) to be driven by an intentional target architecture, rather than the ad hoc requirements of projects. This will require greater forward planning, a more strategic approach and greater use of existing CCS frameworks.
  - *Professional services* (e.g., delivery management, scrum masters, user research, service design, business analysis, software development, testing, data analysis, data engineering, platform engineering, cloud operations). Police Scotland should consider adopting best practice, moving away from project-based sourcing, and focusing more on the DDaT specialisms and/or outcomes that may well need over a 3 to 4-year period with a small number of strategic partners (using single supplier frameworks). This will enable a more dynamic approach to addressing changing needs, create greater resilience and knowledge sharing, and also enabling access to lower cost delivery models.
- **Establishing a Digital Innovation Hub** – while this will be an enduring capability, the effectiveness of its initial creation will have a lasting impact on its success. Learning from public and private sector organisations demonstrates that “innovation” requires robust approaches, a safe technical environment/sandpit, relationships with partners (e.g., Public Health Scotland, Courts Service) and disruptive thinking.
- **Governance** – this will involve working both within Digital Division (to incrementally develop and codify guiderails into everything teams do, including security, architecture, and privacy). However, importantly, the target operating model and changes in the technology industry require wider changes in close collaboration with other teams, for example:
  - *Change & Project Management* – to adopt the Digital Scotland Service Standard for agile delivery, and a product-based approach (including the use of common tools to manage a team’s backlog).
  - *Adaptive governance process* – to enable and encourage a robust and risk-based approach; forging an adaptive governance regime that ensures that empowers the right people to make the right decision within clear guiderails (e.g., financially, operationally and technically).
  - *Finance* – particularly given the move across the IT market to offer software / platforms / infrastructure “as a service”, which will have a material impact on the funding of digital development, with greater pressure on revenue, rather than capital budgets.

We would anticipate that this implementation support, bringing addition capacity to deliver the changes inherent in the TOM, would be up to **£2m over 2 years**.

### 5.3.3 Affordability and Funding

The current permanent roles for Digital Division and the Chief Data Office are supported by a revenue budget of £27.15m (FY23/24). In addition, we spent £5.4m on temporary resources, using Reform funding during FY2022/23; this temporary resource cost has been increasing over the past 4 years and is expected to continue.

The TOM will lead to the creation of new permanent roles which will increase our revenue expenditure. However, it will reduce the reliance on temporary project resources which are funded through the Reform budget. The net impact on the public purse will be neutral from FY2027/28 for these resources.

We have assumed that Reform funding would be used to fund the new roles while the TOM is being implemented, as is the case with the existing “DSEG Implementation” Project. However, from FY26/27, the full recurring cost of the new operating model would be funded by our revenue budget. This would increase revenue expenditure by £3.23m per annum (c11.9% of the current establishment revenue budget).

During the transition to the North Star, with more and more products coming to be managed in a product-centric model as programmes such as Mobility and COS transition to go-live, the balance of project vs. product delivery will begin to tilt away from projects and increasingly towards products. In the TOM, project delivery will not be entirely eliminated, and there will likely always be a need for projects and programmes to manage complex, large-scale changes that will have considerable organisational impact. However, the TOM will provide the Division with the residual capability to manage the vast majority of smaller changes to products within product teams. As a consequence, the investment in permanent Digital Division resources and more efficient working practices will, over time, reduce the level of spend on temporary resource.

We are seeking a net investment of £9.16m over the coming 5 years to transform our Division, which is circa 2.3% of the total investment underpinning the SOBC, as below:

	Year 1 (000)'s	Year 2 (000)'s	Year 3 (000)'s	Year 4 (000)'s	Year 5 (000)'s	Total (000)'s
	23/24	24/25	25/26	26/27	27/28	
<b>Reform funding</b>						
TOM implementation	£750,000	£1,000,000	£250,000	£0	£0	<b>£2,000,000</b>
Organisation design changes	£0	£1,700,000	£3,230,000	£-1,000,000	£-3,230,000	<b>£700,000</b>
<b>-sub total</b>	<b>£750,000</b>	<b>£2,700,000</b>	<b>£3,480,000</b>	<b>£-1,000,000</b>	<b>£-3,230,000</b>	<b>£2,700,000</b>
<b>Revenue funding</b>						
Support to implementation	£0	£0	£0	£3,230,000	£3,230,000	<b>£6,460,000</b>
<b>-sub total</b>	<b>£0</b>	<b>£0</b>	<b>£0</b>	<b>£3,230,000</b>	<b>£3,230,000</b>	<b>£6,460,000</b>
<b>Total net impact</b>	<b>£750,000</b>	<b>£2,700,000</b>	<b>£3,480,000</b>	<b>£2,230,000</b>	<b>£0</b>	<b>£9,160,000</b>

Note: The above costs only include the people and change costs. Tooling costs form part of the costs associated to the Digital Strategy

**Table 14 : Net Impact of Costs - Target Operating Model**

## 5.4 Conclusion

The delivery of the refreshed Digital Strategy and Target Operating Model will require funding of £398.736m across the 5 years. However, it is important to note, £183.847m of these costs of pre-approved funding for existing and in-flight projects. The finance governance process allows for pre-approved projects to receive prioritised funding in the annual budgetary cycle and therefore this case does not seek to initiate an approval process for that funding again.

The net additional funding requirement is £214.889m, which includes £174.449m of capital investment upfront, along with a revenue impact of £40.440m across the initial 5-year period.

The Digital Division will be critical to enable the efficient, safe and timely delivery of the Digital Strategy. The current operating model is not fit for purpose. Since 2018, the Digital Division has had limited opportunity to invest in itself, as the organisations priority has been exclusively to deliver the DDICT Strategy.

**The proposed net investment in the TOM equates to circa £9.16m** (including change management and employee engagement, and new permanent roles), which is less than 2.4% of the total SOBC. **The TOM will be critical in enabling the Digital Strategy to be delivered in the most efficient way;** maximising automation; reducing the long term use of high cost temporary resources; and enabling sustained and continuous improvement in digital and data services to policing.

### Overall Affordability Analysis

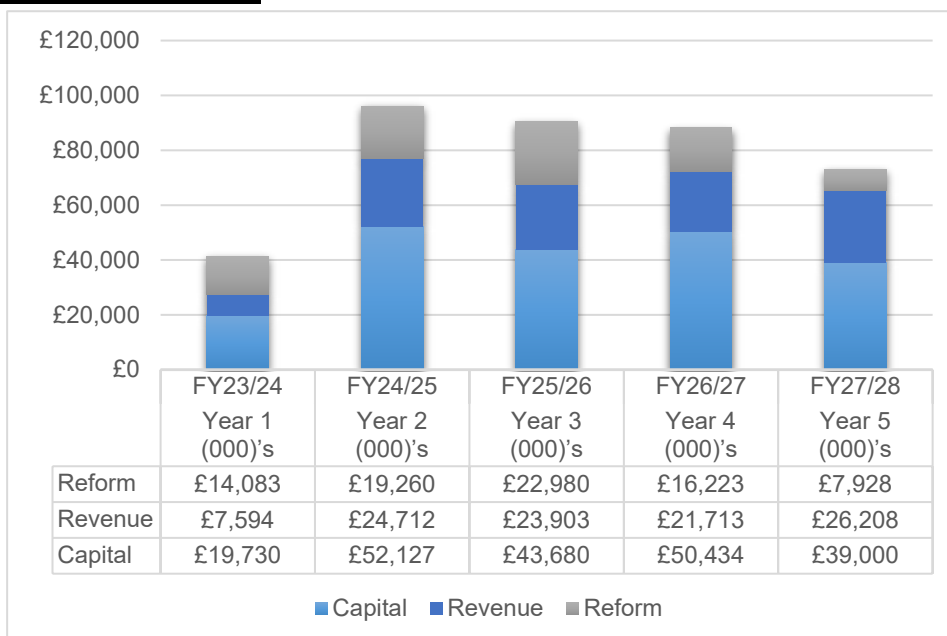
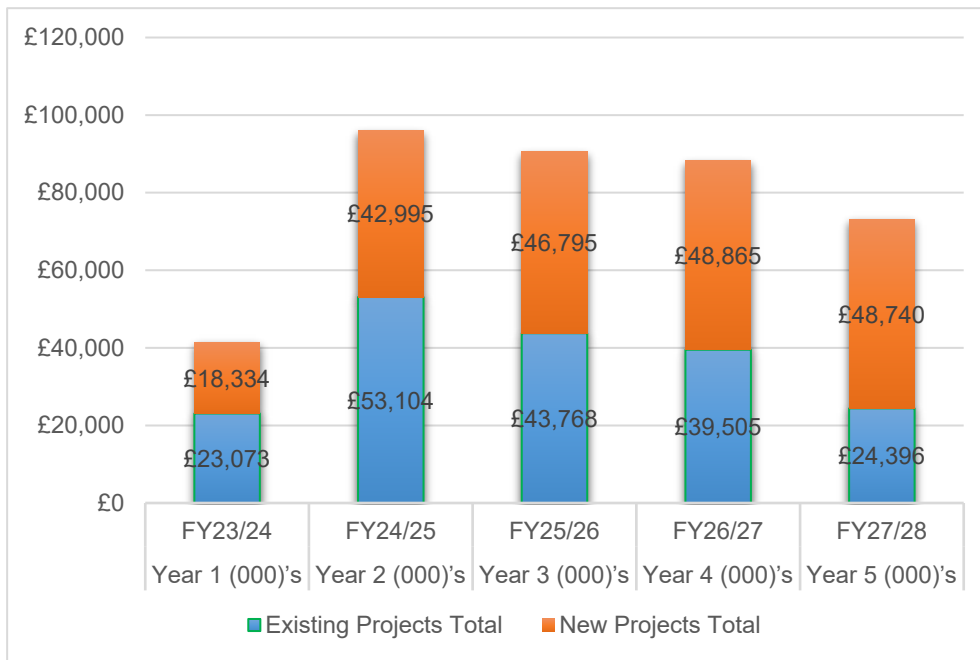


Figure 8 – Overall Affordability analysis

**Disaggregated Affordability Analysis**



**Figure 9 – Disaggregated Affordability analysis – Digital Strategy**

## 6. Commercial Case

The Commercial Case demonstrates that the preferred option will result in a viable procurement and well-structured deal.

### 6.1 Commercial Case Overview

The Commercial Case identifies the market for those services required by Police Scotland to deliver the Digital Strategy and Target Operating Model outlined in the Economic Case. It describes how Police Scotland may access and engage with the market in a way that will optimise value for money, covering the following:

- Scope of potential procurement(s).
- Principles / approach to be adopted.
- Procurement process.
- Commercial risks to be addressed; and
- Key procurement options to be considered.

### 6.2 Scope of Procurement

The Strategic Case outlined the capabilities we need to build, and the associated projects were identified and evaluated within the Economic Case. Whilst many of these projects are at an early stage in their development, technology, solutions, and third-party services will be required to deliver these. The scope of products and services required is summarised within this section, and are presented in the following categories:

- Technology Solutions.
- Implementation and Support Services; and
- Enabling Tooling.

#### 6.2.1 Technology solutions

Technology solutions include hardware and infrastructure, applications and software, and the equivalent components that may be procured 'as a service'.

Hardware and infrastructure	<ul style="list-style-type: none"><li>○ Devices - desktop computers, laptops, tablets, mobile phones, body worn cameras</li><li>○ Servers</li><li>○ Networks, routers, switches and other networking technology</li><li>○ Security infrastructure, including firewalls etc</li><li>○ Storage devices, including back-up, recovery and archiving</li></ul>
-----------------------------	---



Applications and Software	<ul style="list-style-type: none"> <li>○ Application software, including Commercial Off the Shelf (COTS) products</li> <li>○ System software</li> <li>○ Data systems related software</li> <li>○ Programming software</li> <li>○ Application software</li> </ul>
Hosted Services	<ul style="list-style-type: none"> <li>○ Software as a service (SaaS) - software licensing model in which access to the software is provided on a subscription basis, with the software being located on external servers rather than on servers located in-house.</li> <li>○ Platform as a service (PaaS) – a cloud computing model that provides a complete cloud platform—hardware, software, and infrastructure—for developing, running, and managing applications.</li> <li>○ Infrastructure as a service (IaaS) - a form of cloud computing that delivers fundamental compute, network, and storage resources to consumers on-demand, over the internet, and on a pay-as-you-go basis.</li> <li>○ On-premise - hardware infrastructure and software are deployed and running within the physical location of the organisation.</li> </ul>

### 6.3 Implementation and Support Services

This category covers services required to implement and support solutions. In many cases Police Scotland may provide these services to projects but supplement project teams with third party resources, either to provide specialist resource or to provide the required capacity, through resource augmentation. Services may cover multiple stages of the project lifecycle: initiation, design and build, integration, test, deploy and support (including data migration). These are set out below:

Programme & Project Management	Providing specialist skills to deliver and coordinate the various programmes and projects. This may include the control and direction of investment and monitoring programme outcomes.
Commercial Management & Procurement	Provision of specialist skills to manage and coordinate the commercial and procurement activities required to deliver the capabilities of programmes and projects. Services may include the specification of requirements, management of procurement processes and ongoing commercial and contract management.

Independent Assurance	Provision of assurance services which may include stage gate type reviews, systems and solution reviews, quality reviews and specialist 'deep dives' which are focused on resolution of specific issues.
Solution Implementation Services	Provision of specialist technical skills to enable the integration of multiple solutions and coordination of the deployment of these solutions. Services may include Initiation, Design & Build, Integration, Test, Deploy & Support (including data migration).
Functional/Digital Specialists	Provision of business domain expertise, typically focused on leading and best practice but may also include business analysis and design skills.
Business Change Management	Provision of specialist technical skills to support the successful adoption of new business solutions and processes. Services may include change readiness and planning, communications and engagement and end user training and adoption.
Business Architecture and Management	Provision of specialist skills to establish and maintain solution designs. This may include the delivery of concept of operations, business process design, and technical solution architecture to develop and maintain a consistent design to deliver programme and project outcomes.

Services to be provided may be determined on a project-by-project basis (i.e., there is no single model for services that applies) and this will be influenced by multiple factors including technical specialism, complexity, capacity etc. In addition, Police Scotland may elect to establish a 'client side' capability for the purposes of oversight, management, governance, and assurance.

## 6.4 Enabling Tooling

The target operating model design has identified specific capabilities within Digital Division that will be created or enhanced. These capabilities will be enabled by an investment in tooling.

**New and enhanced capabilities for Digital Division:** This involves training, development and the provision of specialist business and technical skills to support in the implementation of the target operating model.

The capabilities requiring investment may include Enterprise Architecture, Digital Innovation, and Centre for Enablement. In order that these capabilities may be delivered effectively, investment in tooling will be required.

The scope of tooling-based investment may include:

- Source Control Version Management
- Automated testing

- Build Automation
- Automated Deployment
- Containerisation
- Product Backlog Management
- Orchestration (including Cloud)
- API Management
- Observed Performance Management
- Live Asset + Config Management Platform

## **6.5 Commercial Objectives**

The Procurement Strategy 2021-2023 outlines Police Scotland's strategic procurement objectives and forms the basis for all procurement activities within the Digital Strategy.

The Procurement Strategy highlights that Police Scotland will deliver a procurement service that promotes transparency, best practice and continuous development whilst delivering in a sustainable, accountable, and equitable way to the benefit of our suppliers, customers, stakeholders, and the public purse.

All procurement conducted while delivering the Digital Strategy will be conducted in line with the objectives, guidance and processes set out in the Procurement Strategy 2021-2023, as follows:

- Objective one: Deliver savings and best value outcomes
- Objective two: Ensure compliance with procurement legislation with open, transparent, and robust governance
- Objective three: make procurement spend accessible to small and medium sized businesses and the third sector
- Objective four: ensure fair working practices are adopted by suppliers
- Objective five: Securing and Delivering community benefits
- Objective six: Support Equality and diversity goals and principles
- Objective seven: Enable innovation and best practice solutions
- Objective eight: Contribute to national climate targets and Police Scotland's Environmental Strategy

## **6.6 Options for Procurement**

This section summarises the requirements, market considerations, and procurement considerations for products and services to be procured, which will typically be evaluated on a case-by-case basis in the context of specific projects. There may be exceptions to this when common products and services which are to be utilised by multiple projects, or on a cross-cutting basis. In this case, consideration will be given to enterprise and architectural requirements in addition to individual project requirements.

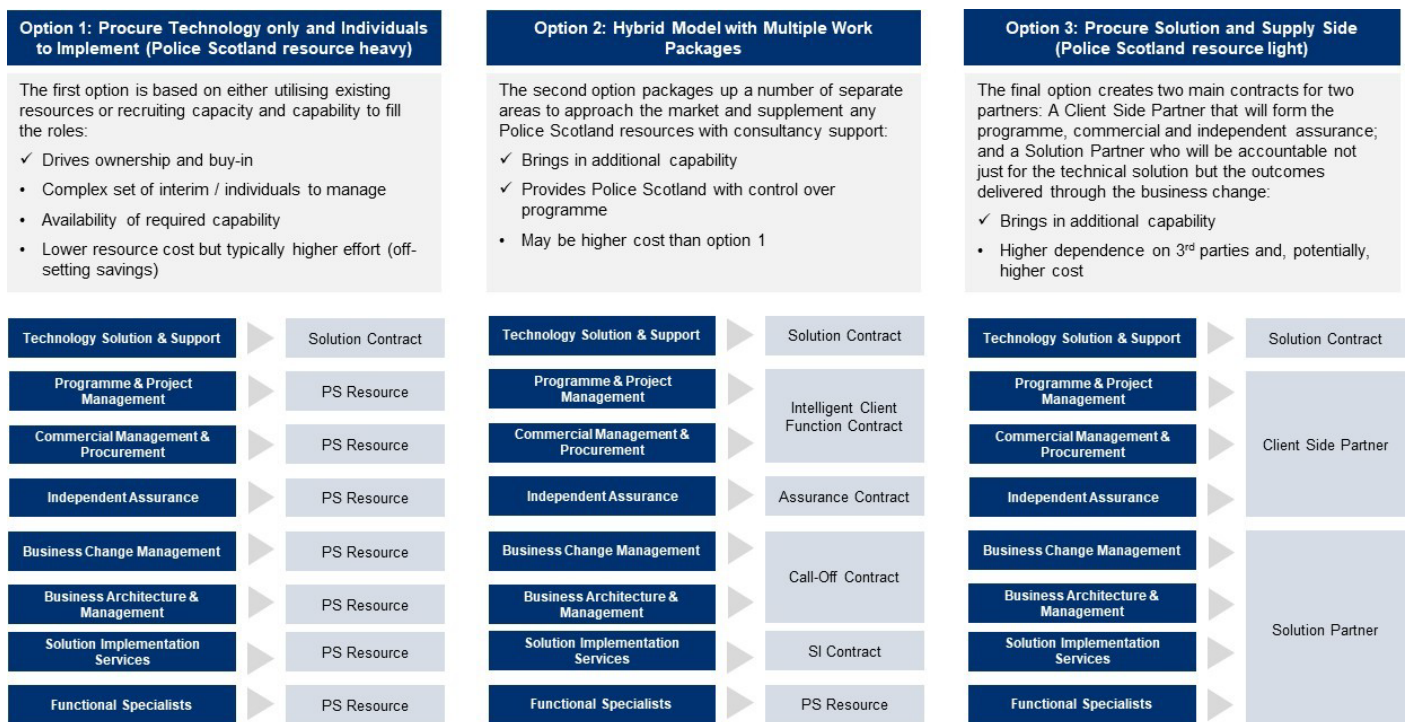
In all cases, projects will progress in accordance with established Police Scotland governance and business cases will be developed and refined according to the project stage (i.e., through the development of BJCs, IBCs/OBCs and FBCs).

In most cases, three procurement options will be open to Police Scotland, though as noted above, each will be considered on a case-by-case basis and variations on the three options may be selected.

The three procurement options available to Police Scotland are:

- Option 1: Procure Technology Solutions, with Police Scotland undertaking implementation activity
- Option 2: Hybrid Model with Multiple Work Packages Implemented by both Police Scotland and Third-Party Resources
- Option 3: Procure Solutions and Supply Side/Third Party Resources to Implement

The features of these options are summarised in the diagram, below.



**Figure 8: Procurement Options**

## 6.7 Procurement Considerations

The target architecture, supported by the demand and capacity planning analysis, should drive a strategic and enterprise-wide approach to sourcing technology solutions and services. Below are some considerations (some of which have been derived from lessons learned since 2018) that should be explored alongside Police Scotland’s general procurement guidance.

**OFFICIAL**

<p>Securing Contracted Outcomes</p>	<p>Police Scotland may be dependent upon multiple third parties to deliver the outcomes of the Digital Strategy. This will require robust oversight and control, coupled with appropriate independent review and assurance. This will be particularly important if inter-supplier dependencies exist.</p> <p>The 'Intelligent Client' function with the CTO group will be critical in managing the service providers to ensure successful delivery, in the context of the organisations architectural &amp; service de-dependencies.</p>
<p>Single vs Multi-Supplier Contracting</p>	<p>Many of the major programmes and projects that will be delivered will require a breadth of technical skills and services. It will typically be possible to identify and specify the lots that will comprise the contracted elements of the project which will, in turn, inform contracting options.</p> <p>Police Scotland should plan the potential scope and scale of these requirements, and should consider putting in place call-off agreements to enable support and services to be used, when needed.</p> <p>A key consideration will be the choice of contracting with a single service provider or adopting a multi-vendor approach. There are advantages and disadvantages of both (e.g., risk of sub-optimal performance by a single supplier; need for collaboration agreements between multiple vendors).</p> <p>In addition to conducting supplier due diligence, an approach to determining the most appropriate form of contracting is Early Market Engagement (see below).</p>
<p>Encouraging Breadth in Supply Chain</p>	<p>It is often beneficial to include Small to Medium sized Enterprises (SMEs) in the implementation of projects as they are often providers of specialist expertise and/or form part of the local economy.</p> <p>At the same time, managing a complex mix of small providers will create additional risk and substantial effort. A common approach being used across the public sector, is for buyers to select a small number of strategic partners (typically large organisation) who, in turn, are responsible for using a minimum percentage of contracted spend on SMEs.</p> <p>This obligation would align with other commitments (e.g., attracting talent from disadvantaged communities, training in junior talent, NetZero commitments, etc) which would need to be factored into the contract.</p>

<p>Early engagement with the market</p>	<p>Police Scotland and the Digital Division Senior Management Team have successfully engaged with third parties for advice on what effective engagement with industry looks like, what are the future emerging solutions in the industry that can be explored and how Police Scotland can be digitally ready to fully access solutions and services from industry.</p> <p>The breadth of the feedback provided reinforces the steps taken thus far and provides insights suitable for the next stage of engagement. This includes engaging early and adopting what is deemed to be acceptable as leading practice based on scope and outcomes deliverability.</p> <p>Engagement with the market will be further refined and formalised as part of the project specific BJs, IBCs/OBCs and FBCs.</p>
<p>Economies of Scale</p>	<p>There is an opportunity to review and capitalise on economies of scale by combining the requirements of programmes and projects and identifying common services. This applies within the Police Scotland context and also across Criminal Justice and the wider public sector, for example, DESC is an asset being deployed under Police Scotland management, but it will be used by multiple parties.</p> <p>An important consideration when commencing a phase of delivery of the Digital Strategy will be the identification of opportunities to realise economies of scale. This will need careful consideration to ensure that aggregate commitments align to availability and sources of funding, and project commissioning will need to take account of the potential for reductions of funding in-flight. In the latter case, it will be necessary to define project increments so that ‘off-ramps’ may be built in to ensure that projects deliver benefit.</p> <p>The Digital Strategy Roadmap and the Reference Architecture are important artefacts that may be utilised by the Architecture and Procurement teams to identify these opportunities.</p>

## 6.8 Managing Commercial Risk

For the Digital Strategy and Target Operating Model a range of key procurement risks need to be actively managed – and this section sets out the proposed approach to procurement which is intended to mitigate these risks. The table below outlines the key risks and how it is intended to mitigate these:

**OFFICIAL**

<b>Risk</b>	<b>Impact</b>	<b>Mitigation</b>
Market conditions	Price volatility arising due to unanticipated fluctuations in factors that have an affect the entire financial market.	Inflation is managed against the Police Scotland's budget at organisation level and therefore, will not be included in this business case
Supplier failure	The competition leads to the appointment of a supplier who fails to deliver on the contract or performs poorly.	The mandatory evaluation model is part of supplier due diligence and will need to evidence a Pass/Fail threshold of ability to perform, financial sustainability and other key issues.
Volume risk	Significant fluctuations in demand jeopardises validity of economic model for either Police Scotland or the supplier, leading to contract breakdown.	Analysis of requirements and volumes prior to procurement, and with structuring of the contracts to enable both parties to mitigate the risks.
Performance risks	Supplier underperforms on service delivery, leading to loss of confidence in the solution and failure to deliver benefits.	Put in place service credits and other penalties, aligned to key performance standards. Also, adoption of proactive measures including leading indicators, collaboration agreements (where multiple suppliers involved) and partnership governance.
Bidders drop out	Bidders dropping out of the process in the dialogue phase will result in reducing competition amongst remaining bidders	Early market engagement to gain and early view of supplier interest and take an appropriate minimum number of number bidders into evaluation to maintain competition.
Procurement timescales	Significant delays compared to the roadmap are likely to impact the target date for implementation and reduce benefits.	Ensure Procurement are engaged in the planning process. At points of high demand, it may also be necessary to hire interim Procurement professionals to supplement the core team. Identify contingent areas or options such as only contracting for what can be specified. Consider incremental approach to contracting
Capacity to secure and manage suppliers	Failure to identify adequate resource in preparation for next phases may result in delay to procurement timescales.	Resource plans prepared in advance so resources may be identified and secured. This is covered in the Management Case. Police Scotland will need to have access to dedicated legal support, commercial support to develop the specifications and procurement expertise.
Requirements & Target Architecture are immature	There is a risk that the level to which requirements, and the target architecture has been defined means that the requirement shared with potential suppliers could be subject to change, leading to poor solution design and subsequent rework.	Allow time to prepare and improve the requirements – this improves the chances of a successful procurement.

*Table 15: Managing commercial risks*

## 6.9 Contract Management

Whilst the majority of the Commercial Case has addressed the procurement process it is important to recognise that the value delivered will, to a significant extent, be realised through effective contract management.

Contracts for delivery of the Digital Strategy will be designed and constructed in conjunction with Police Scotland’s Procurement function, and consideration should be given to the ‘deliverability’ of each contract. Factors which Digital Division and project sponsors should consider are summarised in the table below.

Proposed Charging Mechanisms	Proposed Contract Lengths	Proposed Contract Terms	Risk Transfer
It is anticipated that charging mechanisms will be proposed on a contract-by-contract basis during the development of Full Business Cases (FBC).	Contract lengths will be assessed on an individual basis but typically will be three to five years in duration. In fast-moving technology markets, it is important to be flexible as the market evolves. To achieve flexibility, contracts may include extension options and complex contracts will include ‘off-ramps’, whereby contracts are let in stages to give us the ability to terminate or change at specified milestones.	Contract clauses will be used on a contract-by-contract basis and will be developed during the FBC stage. It is proposed that ‘model’ contracts which have proven application in similar situations be used as the basis for contracting for strategic support services.	A general principle to be adopted is that risks should be passed to ‘the party best able to manage them’, subject to value for money. The principal parties involved in risk management (and therefore risk transfer) are Police Scotland and suppliers, though this may vary according to the nature of Services, consortium and sub-contracting arrangements and contractual terms which may exist between suppliers.
<p>Examples charging mechanisms that could be used:</p> <ul style="list-style-type: none"> <li>• Payment by results.</li> <li>• Outcome related charging.</li> <li>• Risk and reward sharing.</li> </ul>			<p>Categories of risk which will be evaluated and managed include:</p> <ul style="list-style-type: none"> <li>• Design risk</li> <li>• Solution development risk</li> <li>• Transition and implementation risk</li> </ul>



Proposed Charging Mechanisms	Proposed Contract Lengths	Proposed Contract Terms	Risk Transfer
<ul style="list-style-type: none"> <li>• License Fees (upfront or periodic).</li> <li>• Warranty Charges (one off); and</li> <li>• Staged payments.</li> </ul>			<ul style="list-style-type: none"> <li>• Availability and performance risk</li> <li>• Operating risk</li> <li>• Variability of revenue risks</li> <li>• Termination risks</li> <li>• Technology and obsolescence risks</li> <li>• Control risks</li> <li>• Residual value risks</li> <li>• Financing risks</li> <li>• Legislative risks</li> </ul>
<p>In specific cases, professional service providers may require payment on a time and materials basis (typically encountered when commissioning legal and other specialist services).</p>			<p>The FBC's will set out specific key terms and clauses once these are identified from the procurement and contracting processes.</p>

*Table 16: Contract management factors*

## **6.10 Conclusion**

Police Scotland has been effective in procuring digital, data and technology services since 2018 and is strongly positioned to continue this trend, utilising expertise within Digital Division and Commercial Services.

There is a high degree of commonality in the procurement categories identified in 2018, though there have been changes, such as the inclusion of more extensive 'as a service' categories, and additional categories applicable to the delivery and operation of the Target Operating Model. In the latter case, consideration has been given to capabilities which enable agile delivery and operation of modern and technologies and platforms.

Additionally, the consideration of frameworks to enable pace of delivery, and to provide timely access to scarce and specialised resources has been highlighted.

The procurement approach will be refined as projects business cases progress through their development and governance and as funding and requirements are confirmed.

## 7. Management Case

The Management Case demonstrates that the preferred option is capable of being delivered successfully.

### 7.1 Management Case Overview

The purpose of the Management Case is to set out the arrangements to be established to enable successful delivery of the Digital Strategy and is presented as follows:

- Programme Delivery Structure
- Governance Arrangements.
- Programme Control & Management.
- Benefits realisation.
- Risks; and
- Project assurance and post-project evaluation.

The Management Case is presented in the context of established governance within the SPA, Police Scotland, Change Portfolio and Digital Division, and it is assumed that the implementation of the proposals set out in this document will be subject to the current governance arrangements. Notwithstanding this, it has been proposed that a board is established to provide direction and oversight with regard to the implementation of the strategy and the Digital Division target operating model.

### 7.2 Programme Delivery Structure

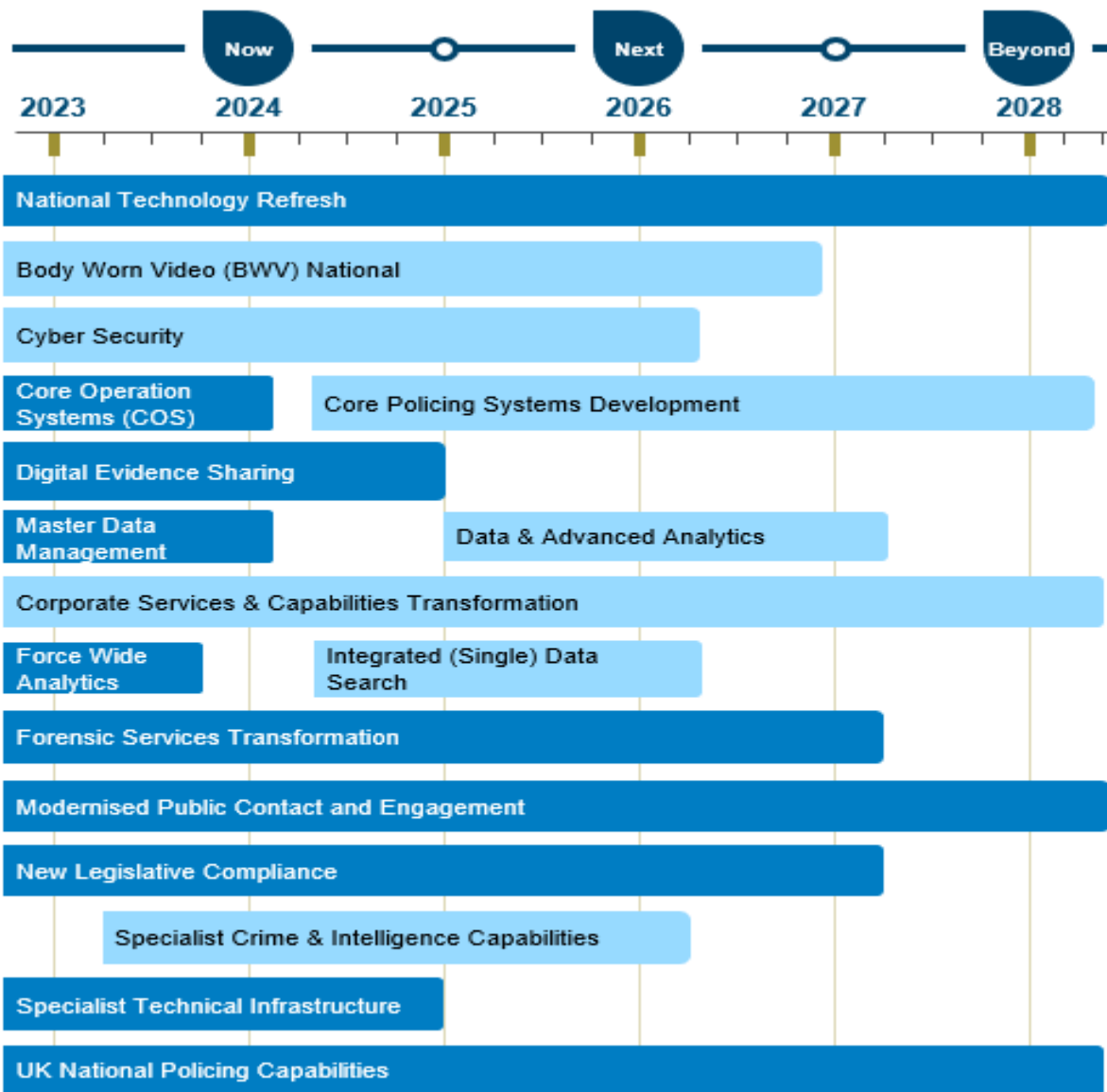
The implementation of the Digital Strategy and the associated Target Operating Model will be managed in accordance with an integrated Programme Plan.

The Programme Plan is presented below, showing the planning horizons and the principal workstreams. Key points to note regarding the plan are as follows:

Portfolio & Programme Design	Delivery of the strategy is underpinned by the delivery of circa 78 projects over a five-year horizon. As has previously been the case, an approach which is phased and provides incremental improvements in capability has been adopted. This helps to reduce delivery risk but also ensures that duplicate or wasteful investment is avoided. Importantly, a phased approach enables regular release of benefits, promoting confidence within and outside of Police Scotland.
------------------------------	---

<p>Workstream Structure</p>	<p>The plan presents an aggregated view of projects which have been identified while developing the Digital Strategy and the Digital Division TOM. Projects have been grouped thematically, recognising where they contribute to common outcomes and where inter-project dependencies exist.</p>
<p>Planning Horizons</p>	<p>The plan is presented in accordance with three planning horizons: 'Now'; 'Next' and 'Beyond'. Each planning horizon comprises projects (organised within workstreams) which are designed to deliver defined and self-consistent outcomes. This means that each completion of the implementation of projects within each planning horizon will deliver, or enable delivery of, a defined set of benefits.</p>

Table 17: Programme Delivery Structure



All projects and programmes to support these capabilities will continue to be subject to established governance and approval of their own detailed Initial and Full Business Cases via Portfolio Management Group, Change Board and SPA.

Figure 11: Programme Plan

## 7.3 Governance

### 7.3.1 Overview

As noted previously, implementation of the Digital Strategy will be subject to established governance, which is provided by, and on behalf of, the SPA and Police Scotland. This governance is currently operational and, in summary, comprises the following:

- Portfolio Management Group
- Police Scotland Change Board.
- Scottish Police Authority.
- Scottish Government

It is proposed to create and operate a *Digital Board* which will be accountable to the *Change Board*, and this board will oversee and provide direction and control for the delivery of the Digital Strategy and Target Operating Model.

### 7.3.2 Digital Board

The Digital Board will operate with a defined remit (described below) and with support of working groups, which will be established and operated within the Digital Division future TOM.

This section describes the role and operation of the Digital Board, covering:

- Purpose and objectives.
- Decision making and authority

A full terms of reference for the Digital Board is maintained within Digital Division.

#### 7.3.2.1 Purpose and Objectives

The purpose of the Digital Board is to provide a formal Governance structure to discuss, agree and provide leadership in relation to the Digital Strategy as it evolves and develops in line with organisation and operational policing requirements.

This programme board will create a place for all technology and digital products and programmes to be discussed and reviewed, with representation of all operational policing and corporate portfolios at a senior level (e.g ACC/Head of Service).

The Digital Strategy will be the main driver for all Digital work being undertaken and planned by Police Scotland. The proposed responsibilities of the Digital Board are:

- Represent stakeholder views to ensure that programme and project delivery aligns with the Digital Strategy.
- Provide an escalation route for decisions on matters which impact delivery of the Digital Strategy.
- Provide resolution to strategic and directional issues to enable progression of Strategic objectives.
- Advocating and championing the business change required within stakeholder organisations to support the delivery of Strategic objectives.
- Support the SRO in the delivery and management of the Digital Strategy.
- Provide challenge to the Digital Strategy to deliver agreed outcomes in line with approved business case(s) and within the agreed scope boundaries.
- Ensure the integrity of benefit realisation plans and assignment of ownership of defined benefits; and
- Monitor and report investment levels for Digital Strategy components.

### **7.3.2.2 Decision Making and Authority**

The remit of the Digital Board is to support the CDIO (Chief Digital Information Officer) in providing overall direction and management of the Digital Strategy.

The CDIO is ultimately accountable for successful delivery of the Digital Strategy and the associated outcomes, including:

- defining and communicating the Digital Strategy vision and business outcomes.
- ensuring the business needs required from the programme are being addressed.
- securing the buy in of key stakeholders, including the policing portfolios and other key service users.
- providing programmes and projects with leadership, decisions, and clear direction in relation to the Digital Strategy.
- maintaining the Digital Strategy so that it remains current, relevant, and appropriate to the priorities of Police Scotland and the SPA.

## **7.4 Resources**

The resource requirements for each of the programmes and projects described in this portfolio will be set out in each of the business cases developed for them, this will also detail of resourcing options, including in-house, interim, third party and solution provider. Notwithstanding this, Police Scotland will need to provide critical resources to oversee, direct and assure the delivery of programmes and projects. This capability will comprise resources with specialised experience and capability in the following principal areas:

- Programme and project management;
- Commercial and procurement management
- Enterprise and solution architecture and design;
- Service architecture and design; and

- Information and cyber security.

Resources acting in this capacity will typically be employed by Police Scotland or will be acting on behalf of the organisation in an interim capacity. As Police Scotland will be delivering an exceptional level of technology enabled change over the period of this investment the level of resource required will significantly exceed the 'business as usual' capacity and it is therefore likely that interim resources will be required, particularly at times of peak demand.

The Target Operating Model has been designed to support comprehensive change enabled by digital, data and technology and introduces dedicated capabilities to support this. This function will own and define the technology strategy, roadmap and target architecture, which will be crucial in facilitating the transition to the new Target Operating Model and delivery of the Digital Strategy. A high level high-level overview of this capability has been noted below.

## **7.5 Programme Control & Management**

Delivery of the Digital Strategy and the Target Operating Model will be undertaken in conformance with Police Scotland standard programme and project management practices. These will include:

- Business Case development;
- Planning;
- Risk, Assumption, Issue and Dependency (RAID) management;
- Stakeholder Management;
- Benefits Management (including benefits realisation);
- Financial Management;
- Sourcing and Vendor Management; and
- Monitoring and Reporting

Recommendations made within the Digital Strategy and Target Operating Model design also highlight the importance of establishing Portfolio Management practices to enable delivery of the Digital Strategy to be optimised. Implementation of these practices will form part of the delivery of the Target Operating Model.

## **7.6 Risks and Risk Management**

Risks associated with the delivery of the Digital Strategy and Digital Operating Model will be managed in accordance with the Police Scotland Risk Management framework via the Digital Board. There are 11 key risks applicable to the portfolio, and these have been assessed on a 5 x 5 (Severity vs Likelihood) scale. The unmitigated risk score for the portfolio is 18.5 and the mitigated score is 9.5. The portfolio risk profile is considered to be moderate on this basis.

Descriptions of risks, impacts and mitigation are provided in appendix A.

The operational risk register will be reviewed monthly and the top risks and matters for immediate attention will be communicated at the weekly SRO update meeting. Mitigating action plans will be developed and agreed. Risks that are considered to have an impact on the Digital Strategy will be escalated to the CDIO and appropriate actions plans implemented along with continuous risk monitoring. This structure will remain in place until the Strategic Outline Business Case is approved and thereafter, will be dealt with by the Digital Strategy Delivery Board as appropriate.

## 7.7 Conclusion

The programme of work set out in this business case is deliverable over a five year period, delivering a future fit Target Operating Model for Digital Division and implementation of the refreshed Digital Strategy.

The business case for, and delivery of the Digital Strategy is significantly enabled and underpinned by the implementation of the Target Operating Model.

Whilst the Digital Strategy and the Target Operating Model may be delivered independently, there are significant benefits to coordinating these two recommendations and common governance is proposed to enable this. Failure to implement the proposed Target Operating Model would necessitate the reevaluation of cost, pace and scale of the Digital Strategy.

The governance arrangements proposed centre on the establishment of a Digital Board, with supporting arrangements delivered through the implementation of the Target Operating Model. It will therefore be important to prioritise implementation of elements of the Target Operating Model.



## 8. Appendices

A	Portfolio Risk Assessment
---	---------------------------

### Appendix A – Portfolio Risk Assessment



Appendix  
A\_SOBC\_Risk Profile.pdf