

Digital Strategy 2019 - 2023

CONNECT







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Introduction

I am delighted to publish 'An Garda Síochána Digital Strategy 2019 – 2023'. An Garda Síochána has a proud history of providing a policing and security service working closely and in collaboration with the communities we serve and protect. Our Digital Strategy for the period 2019 – 2023 ensures that information and communications technology will continue to support and transform An Garda Síochána's capabilities in areas such as crime prevention, investigation and detection, supporting victims of crime, and protecting vulnerable members of society. It supports the implementation of the Garda Síochána Strategy and the Garda mission of keeping people safe.

The overarching theme and title for our Digital Strategy is, 'CONNECT'. It is a five-year strategy, consisting of five core strategic objectives: Collaboration, Enabling Information Led Policing, Ensuring Our People Are Connected, Enhancing Public Engagement, and Building ICT Capability.

Our strategy will ensure that our front-line policing and support staff have the technology to connect to the information and systems they require; that we can connect with our partner agencies who we collaborate with to achieve An Garda Síochána strategic goals, and most importantly that we can connect with the public whom we serve.

The combined themes and objectives from the Garda Síochána Strategy 2019 – 2021, the Report of the Commission on the Future of Policing in Ireland, the 'A Policing Service for the Future' Implementation Plan and the Public Service ICT Strategy, together with the research and consultation that was conducted, are all reflected in our new Digital Strategy, 'CONNECT'.

In developing our strategy, we have ensured that we have listened to – and incorporated – the requirements of our stakeholders, most especially:

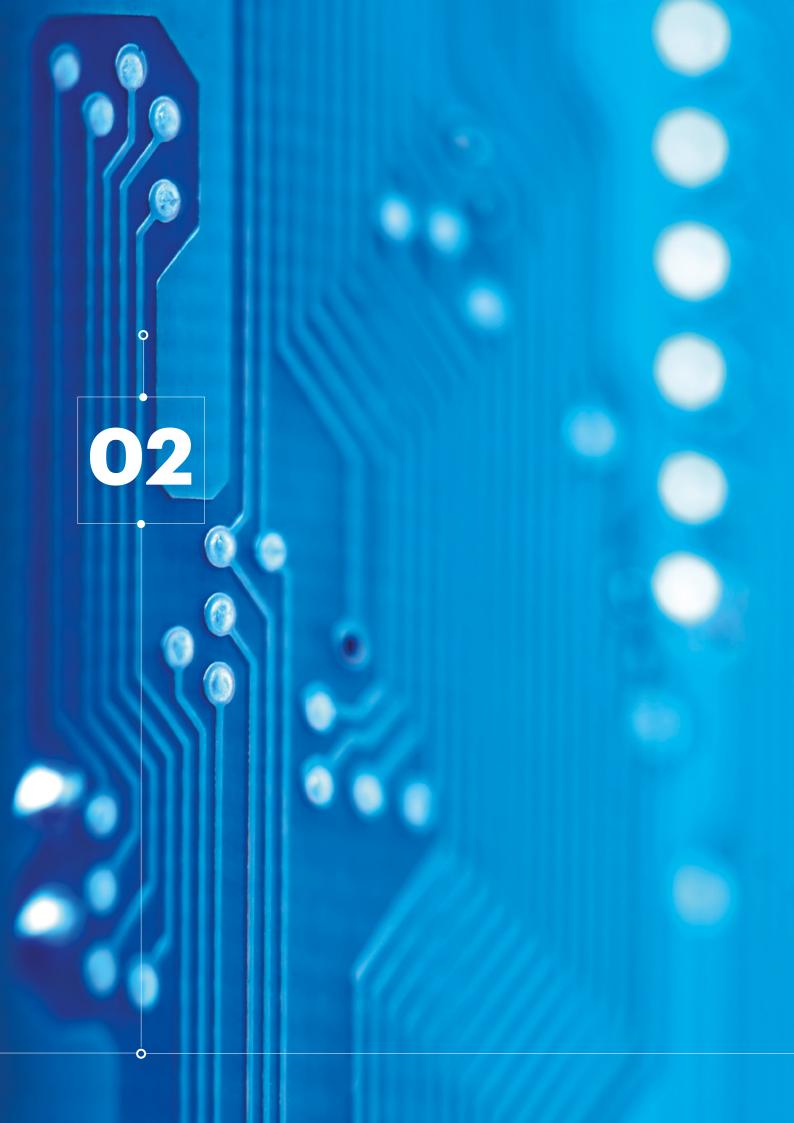
 Our front-line police officers and our support staff, who want better access to information and improved technology systems when and where they require it; they want to be more effective in their duties and improve their ability to respond to calls for service; they want to collaborate better with their colleagues and with other agencies; and they want to reduce their administrative burden. The public, who want to see more visible policing supported and enabled by technology and to be able to communicate with us through digital channels at a time that suits them as well as in person.

Our strategy is ambitious but grounded in a broad set of requirements, which we must deliver upon. It is a living document that will evolve and develop in line with other important strategies being developed in An Garda Síochána, including for the new Operating Model, learning and development, fleet, human resources, and the finance function.

We acknowledge that, in order for our strategy to be successful, a number of building blocks will need to be in place, including updated ICT infrastructure, the implementation of an ICT Human Resources Strategy, an effective model of governance, and fit-for-purpose ICT accommodation. We have an excellent and dedicated ICT team, who are committed to delivering our Digital Strategy, which we believe will truly transform An Garda Síochána into a leading digitally-enabled police force.



Drew HarrisCommissioner



Our Digital Vision and Mission

Our Vision

Our Mission

To be a leader in digitally enabled policing

To provide front line policing and support staff with the technology to keep people safe





Our Strategic Objectives

The overarching theme of our strategy is CONNECT; ensuring that our front-line policing and support staff have the technology to connect to the information and systems they require; that they can connect with our partner agencies who we collaborate with to achieve An Garda Síochána's strategic goals and, most importantly, that we can connect with the public whom we endeavour to keep safe.

This central theme of CONNECT is underpinned by our five ICT strategic objectives:

- 1. Collaboration
- 2. Enabling Information Led Policing
- 3. Ensuring Our People Are Connected
- 4. Enhancing Public Engagement
- 5. Building ICT Capability

Delivering on our ICT objectives will enable ICT to support An Garda Síochána in meeting its strategic goals and in delivering key organisational strategies, including for the new Garda Operating Model, human resources, learning and development, accommodation and fleet, and for the various strategies that will underpin Garda action in these and other fields. There will also be close cooperation with the Department of Justice and Equality where any question arises as to whether legislative change may be required to support ICT initiatives.

We will be innovative in how we deliver on these objectives to ensure that the technology we introduce will support and enable new and more efficient and effective ways of working rather than merely digitising existing practices.

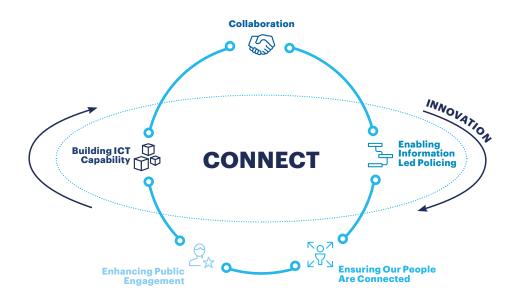


Diagram 1: ICT Strategic Objectives



Our Digital Principles

To enable An Garda Síochána realise the ICT strategic objectives, we have established a core set of principles applicable to all ICT initiatives:

Secure

The information we hold is only accessed by those who are authorised to do so and all such access is appropriately audited.

Accurate

Our systems support the accurate recording and maintenance of information.

Accessible

Our users can access the information needed when and where required to do their jobs.

User friendly

Our systems are intuitive and easy to use.

Innovative

Our technology will support and enable new and more efficient and effective ways of working rather than merely digitising existing practices.

Value for Money

The best value for money is achieved with all our technology investments.

Mobile First

Our systems for front-line policing are designed from a user perspective to work optimally while engaged in the community.

Connectivity

Our systems are connected through open architecture and standards.



Strategic Objective 1: Collaboration

Digital policing will make collaboration easier both within An Garda Síochána and with the public. It will enable us to make better use of digital intelligence and evidence, and exchange information in a digital format, particularly within the criminal justice system.

Collaboration within An Garda Siochána, with our Government partner agencies, with community groups, and with international police services and agencies will support us in providing the best possible service to the public.

The success of previous data collaboration initiatives, such as the Criminal Justice Integration System with the Courts Service, has shown the value in terms of efficiency and effectiveness that can be achieved. The Criminal Justice Hub initiative provides a platform for enhanced digital collaboration among the criminal justice family of agencies and we will be active participants in this exciting shared service approach.

The interoperability framework for the EU's security information systems sets out a roadmap for future data exchange among member states with the aim of protecting the EU's external borders, improving migration management, and enhancing internal security for the benefit of all citizens.

The implementation of the Schengen Information System in Ireland is being led by An Garda Síochána and supported by the Department of Justice and Equality. Successful implementation of the Schengen Information System will bring about a step change in Ireland's policing and security data collaboration with our EU partners.

The Office of the Government Chief Information Officer is leading out on the implementation of important 'Build to Share' and 'Data as an Enabler' initiatives under the Public Service ICT Strategy¹. Leveraging these wider Government shared services, including 'Build to Share' initiatives where possible, and exploring open data opportunities will assist us in maximising efficiency in how we deliver our ICT services.

Engaging with the public and our partners in the community to prevent and detect crime has always been a strength of An Garda Síochána. There is an increasing amount of digital content available, in particular video, that can be shared with us in this regard and there is a need to make this process as convenient as possible for our partners in the community through the provision of new digital platforms.

Building internal collaboration in An Garda Síochána, through the provision of improved information and knowledge sharing platforms, will enable us to be as effective as possible in completing our work and mitigate against the loss of corporate knowledge through staff churn and retirement.

However, we recognise that collaboration, team building, and knowledge sharing can be challenging and complex, especially among such a diverse range of stakeholders. To overcome this challenge, we have set out to create a set of collaborative initiatives that will leverage the work we have completed to date, as well as the capabilities of modern technology, to allow for efficient real-time collaboration.

^{1.} Public Service ICT Strategy https://ictstrategy.per.gov.ie/ictstrategy/files/Public%20Service%20ICT%20Strategy.pdf

Priority Actions

- 1. **COMPLETE** the implementation of the Schengen Information System and the associated Schengen evaluation process.
- 2. CONTINUE to progress international data exchange opportunities with other law enforcement agencies including, subject to a Government decision to opt-in, the EU Commission proposal on 'Interoperability of EU information systems for security, border and migration management' and also with the Police Service of Northern Ireland in support of our shared Cross Border Policing Strategy.
- 3. PROGRESS data sharing opportunities with the other criminal justice agencies including through continued active participation in the Criminal Justice Hub and e-Jarc initiatives and with relevant stakeholders including with the Road Safety Authority in support of the road safety agenda.
- 4. WORK collaboratively with other public sector agencies including the Office of the Government Chief Information Officer on shared service and data sharing opportunities, in particular, by participating in the planned Government Data Centre, adopting 'Build to Share' applications, and in supporting the implementation of the

Public Service Data Strategy.

- **5. IMPLEMENT** new internal digital communications and knowledge sharing channels through redeveloping the Garda Portal (intranet) and implementing a secure internal messaging platform.
- 6. BUILD an interoperability platform, based on an API-led Service Oriented Architecture that will support data and services exchange within An Garda Síochána and with external partners.
- **7. ADOPT** and implement open standards to ensure that all systems can integrate now and into the future.
- 8. **DEVELOP** digital platforms for our partners in the community including members of the public to collaborate with us especially in respect of preventing and detecting crime and including the sharing of video captured through, for example, CCTV, mobile phone, and dash-cam technology.

Outcomes

- 1. Schengen Information System operational
- 2. Migration to the Government Data Centre complete
- 3. Criminal Justice Hub Initiatives (commencing with Charge Sheets and Higher Court Outcomes) implemented
- 4. E-Jarc rollout in An Garda Síochána
- 5. An Garda Síochána and TUSLA Integration (Children First Notifications) implemented

- Road Safety Stakeholder data exchange developed
- 7. Garda Portal upgraded
- 8. Garda Interoperability Platform deployed
- 9. Internal messaging platform deployed
- Public-facing video sharing platform deployed



Strategic Objective 2: Enabling Information Led Policing

Data has enormous potential as a crime-fighting tool. Successful police organisations exploit the innovation offered by technology and data to change the way policing is done, disrupt criminality, and improve productivity. Transforming data into information and on to actionable insights is the goal, whether that is for front-line policing or in administrative and support functions.

Garda members need accurate and timely information to enable real-time decision making in the field.

We will, where possible, utilise technology to automate manual paper-based processes, such as for custody management, and eliminate redundant and duplicate data entry. The information we collect will be used to provide better insights to support crime prevention and detection, support victims of crime, and provide the organisation with improved management information to support resource management processes. In this regard, the advent of big data and advanced analytics solutions provides tremendous opportunities to not only analyse past crime trends but also to predict and intervene where crime may occur in the future. Bringing all of the information feeds, from records management, Computer Aided Dispatch, CCTV etc., into a single analytics platform will support our Garda Síochána Analysis Service, our front-line police and commanders, and the planned real-time crime centre with all of the information needed for dynamic decision making as well as informing longer term planning.

Our existing PULSE system has served the organisation well but it has become difficult to use; implementing changes to the system is difficult and it has contributed to some of the data quality challenges facing the organisation. There is a need for a new crime and policing records management solution that meets the needs of a modern policing service.

In this regard, the Commission on the Future of Policing in Ireland², in its report, has recommended that "PULSE, outdated as it is, can be used as the resource to support the digital transformation of An Garda Síochána. New software and mobile applications can be introduced, which draw from the data and the business logic in PULSE. These new applications and capabilities should comprise an integrated digital platform, also connecting computer aided dispatch and mobile devices. They include systems for investigation management (already developed but not yet deployed), budget, human resources, property management, risk management, enterprise content management, and rostering". This sets out a vision for an integrated digital platform, which we will now incrementally build through the implementation of our Digital Strategy. Indeed, we have already started on this journey through the implementation of the Property and Exhibits Management System and the projects ongoing for mobility, the Investigation Management System, the Enterprise Content Management System, the Roster and Duty Management System and Computer Aided Dispatch.

In the past, we have prioritised our technology investments on solutions for front-line policing, which, although completely understandable, has meant that the administrative and support functions have fallen behind in technology support in important areas such as human resources, finance, and fleet management. In particular, there is a need for a new human resource information system, which provides a single view of all human resources in An Garda Síochána and supports devolved human resource management and digital self-service capabilities for all Garda personnel. In summary, there is a need for a step change in the supporting technology platforms in these important areas to support an organisation of the scale and complexity of An Garda Síochána.

We will work closely with the Chief Data Officer in An Garda Síochána to improve how we collect, manage, and use digital content and information. In this regard, a key enabler for the successful exploitation of data and transforming it into useful information is to have reliable data identifiers, including for persons.

2. http://www.policereform.ie/

We will work collaboratively with the Department of Justice and Equality and other public service bodies on how to improve the availability of common data identifiers permitted by law, and potentially including assessment of any need for supporting legislative changes.

Digital interview recording systems, enabled by legislative change, will support the move away from recording to traditional solid-state media and provide efficiencies in conducting investigations and in the secure distribution of interviews with legal teams as required.

Digital policing is evolving rapidly with innovations emerging around artificial intelligence and robotics offering exciting possibilities for the automation of routine tasks such as answering non-emergency inquiries from the public. Drone technology, smart wearable devices and the internet of things are also emerging within the emergency services field and bring the potential to augment our capability to respond to incidents. These and other emerging technology developments will be monitored on an ongoing basis to assess their level of maturity and potential applicability for use by An Garda Síochána, in accordance with law.

Priority Actions

- 1. REPLACE our core records management system PULSE with modern, fit-for-purpose systems. This includes the implementation of the new Investigation Management and Property and Exhibits Management systems in order to achieve a fully electronic case file capability and the implementation of a new Custody Management System.
- 2. SUPPORT priority Data initiatives and, in particular, the Chief Data Officer in the development of an information management strategy for An Garda Síochána. This includes the implementation of Mobile strategies that can facilitate the collection of timely, accurate data at the point of entry, and supporting the Garda Síochána Data Protection Officer in implementing a new GDPR management system.
- **3. IMPROVE** our searching and analytics software capabilities for data and other digital content including video.
- **4. IMPROVE** our resource management IT systems, including HR, finance, fleet, and estate. In particular:
 - Implement a single Human Resource Information System integrated with the Roster and Duty Management System, Computer Aided Dispatch System and Financial / Payroll Systems
 - New Financial Management Systems that support financial resource management processes
- **5. COMPLETE** the implementation of the Roster and Duty Management System.

- **6. SUPPORT** the implementation of the Garda Cyber Crime Strategy including the rollout of regional cybercrime capabilities.
- **7. SUPPORT** the requirements of the national intelligence service.
- **8. BUILD** the technology platforms to support the real-time crime centre.
- **9. SUPPORT** the Garda College with the organisation's training requirement by implementing a learning management system incorporating e-learning capability.
- 10. WORK collaboratively with Forensic Science Ireland, the Irish National Immigration Bureau, the Garda National Immigration Bureau, the Irish Prison Service, and the International Protection Office on the requirements for a new Automated Fingerprint Identification System.
- **11. IMPLEMENT** management information dashboards in support of the Performance and Accountability Framework.
- **12. IMPLEMENT** enhanced biometric identification services, including face recognition and mobile fingerprint capability.
- **13. ENHANCE** our Geographical Information (Mapping) capabilities.
- **14. ENHANCE** our interview recording systems to support digital audio and video recording, subject to supporting legislative change.

Outcomes

- 1. Records management systems (PULSE replacement), including:
 - Investigation Management System
 - Property and Exhibits Management System
 - Custody Management System
- 2. Information Management Strategy in conjunction with the Chief Data Officer
- 3. Human Resource Information System, including:
 - Roster and Duty Management System
 - Learning Management System
- 4. Enterprise Resource Planning Systems, including:
 - Financial Management System
 - Fleet Management System
 - Estate Management System
- 5. Performance and Accountability Framework Phase 3 (Technology Support)

- 6. Regional cybercrime centres (ICT infrastructure)
- 7. Real-time crime centre technology support delivered
- 8. National intelligence service ICT requirements delivered
- 9. Automated Finger Print Identification System operational
- 10. Supporting Platforms deployed:
 - Enterprise Content Management System
 - Enterprise Search
 - Analytics Platform
 - Geographical Information System
- 11. Digital Interview Recording System deployed



Strategic Objective 3: Ensuring Our People Are Connected

The digital revolution is transforming how policing services are being provided. Through the use of mobile devices, smart wearable devices and intelligent sensors, policing organisations can digitally connect with members on-site and in remote locations, providing them with timely, relevant, and rich information to assist them in their work.

Having our Garda members connected out in the community means we are bringing the station to the citizen rather than the citizen having to come to a Garda station to interact with us in person.

We will provide the infrastructure and equipment to enable all of our Garda members and support staff to have access to the systems and information when and where it is needed to do their jobs. Access will be enabled in all Garda buildings and most importantly while outside in the community. The introduction of mobile technology will be a key enabler in this regard and has the potential to truly transform how our front-line policing service is delivered. The success to date of the Garda ACTIVE mobility programme, including the pilot in the Limerick Division, has generated the impetus to carry on and progress the implementation of mobility across An Garda Síochána, with a particular focus on supporting front-line policing. The new Garda Fleet Strategy will incorporate building mobile connectivity into the Garda fleet for computer aided dispatch and for inquiries on our records management systems, which will further enhance the functionality available for our

front-line members. Providing shared workspaces in our Garda stations where our members can connect their personal mobile device to do more intensive work, such as criminal investigations, will be important also, and we will work with the Garda Head of Estate Management in this regard.

A secure digital radio service will remain a key requirement for An Garda Síochána going forward and so we will continue to be a key user of the national shared emergency services digital radio system. We will work collaboratively with the Office of the Government Chief Information Officer on the procurement process for the new national digital radio system. We will also closely monitor emerging mobile network communications solutions for emergency services, such as the UK Emergency Services Mobile Communications Programme.

Body-worn camera technology is a proven solution in many police forces worldwide. The introduction of this technology in An Garda Síochána will provide increased security and accountability for our Garda members. It will require the implementation of a supporting legislative basis and we will work with the Department of Justice and Equality in bringing this forward. Another important consideration for bodyworn cameras is the significant supporting video and data storage requirements and associated costs, which will necessitate an important discussion on the choice or balance between an on premise or cloud storage solution.

Our Automated Number Plate Recognition (ANPR) solution currently supports general policing and, in particular, roads policing services. The current system is nearing end of life and there is a need for investment in a new ANPR solution that will support the mobile and fixed site requirements of An Garda Síochána, in accordance with law.

Developing a user end point device strategy will be key to ensuring that we maximise the availability of ICT services for our users and also ensure that the maximum value of money is achieved. In this regard, we will strive towards the goal of each user having a single personal-issue device thus removing, where possible, the necessity to provide and support multiple devices for each user.

It is important that our underlying technical infrastructure, including networks, telephony, and

storage systems, is capable of supporting these new and developing technology solutions. Investment in this often unseen but critical infrastructure will provide a reliable, secure, and performant platform to ensure that our people remain connected at all times.

Priority Actions

- 1. ENSURE all Garda buildings are securely connected to Garda information systems and that our telecommunications infrastructure, including our networks, has the capacity to support the new technology initiatives.
- 2. **BUILD** the infrastructure needed to manage and support enterprise mobility and deploy mobile solutions with a focus on front-line policing.
- 3. MAINTAIN a secure digital radio service and work with the Office of the Government Chief Information Officer on the procurement of the national emergency services digital radio system.
- **4. BUILD** connected capabilities into our Garda vehicle fleet.

- **5. CONTINUE** to invest in Automated Number Plate Reading technology for mobile and fixed locations.
- **6. DEVELOP** a user end point device strategy that optimises access for all Garda users, front-line and support staff, while also ensuring optimum value for money.
- 7. **DEVELOP** a cloud computing strategy taking account of the Garda Data Classification Policy and informed by the advice of the Office of the Government Chief Information Officer.

Outcomes

- Network, telephony and unified communications deployed
- 2. National Digital Radio System deployed
- 3. Front-line mobility deployed
- 4. Body-worn video operational

- 5. Automated Number Plate Recognition system deployed
- 6. All Garda personnel have access to an end point device suitable to their role
- 7. Cloud computing strategy



Strategic Objective 4: Enhancing Public Engagement

Advancements in technology offer exciting opportunities for An Garda Síochána to engage the public as partners in the community to prevent and detect crime. By leveraging this technology and serving our public through a variety of new digital channels, An Garda Síochána can increase its speed of operation and produce an enhanced experience for our citizens. This ensures citizens receive the service they need, want, and expect.

The implementation of new systems to manage calls for service and our interactions with our customers – especially victims of crime – will aid the provision of a consistent and reliable service.

An Garda Síochána will soon complete the rationalisation of the national control and contact centre structure from a divisional to a regional basis. ICT is a key enabler in this regard in equipping these regional control and contact centres with our current technology platform. However, while this is an important step forward, it is also recognised that there is a pressing need for a significant ICT upgrade in order to implement a modern contact centre technology solution incorporating features such as advanced call taking and dispatch, optimal resource deployment, mapping, and video capabilities.

The implementation of a Customer Relationship Management software solution will enable An Garda Síochána to maintain a single, consolidated, view of all interactions with the citizens we engage with, for example a member of the public, a community group, a local school or business. This may be in the context

of routine service provision such as, for example, the signing of forms (including passport application forms), processing a licensing requirement, engaging with a local community group, or in the unfortunate context of the person being a victim of crime. Having this consolidated view of our customers will support An Garda Síochána in providing the best possible service to our stakeholders and victims of crime and will, in particular, support some of our more specialised units such as our Regional Control and Contact Centres and our Protective Services Units. This project will be progressed in accordance with the advice of the Data Protection Officer.

CCTV has and will continue to make an important contribution to An Garda Síochána in the prevention and detection of crime. An Garda Síochána will continue to invest in our own CCTV estate by upgrading to the latest digitally-based technology and working collaboratively with communities in the establishment and operation of local community-based CCTV schemes. Advances in solutions for video management, CCTV download from private premises and video analytics may provide efficiencies for Garda personnel in retrieving and reviewing CCTV footage and in automatically detecting potential items of interest, thus enhancing the effectiveness of our criminal investigations.

As a society, we are increasingly communicating by digital means rather than the traditional 'in person' approach via face-to-face, telephone etc. More and more public services are adopting a digital first approach, which offers certain efficiencies in service delivery for both the customer and the provider.

However, this can create somewhat of a conflict for the provision of traditional policing services. Whereas some policing services lend themselves to a digital process, the 'in person' contact is often preferred – and indeed necessary – for parts of our policing functions.

Nonetheless, there remains huge potential to offer an improved service provision in some areas by adopting a digital first approach. Our website was recently

upgraded and we will further enhance it to provide the information most commonly sought by the public about An Garda Síochána, including on topics such as crime prevention, crime trends, and localised policing

activity. The enhancement of our online crime reporting facility and more public-facing apps will further strengthen our links with the communities we serve.

Priority Actions

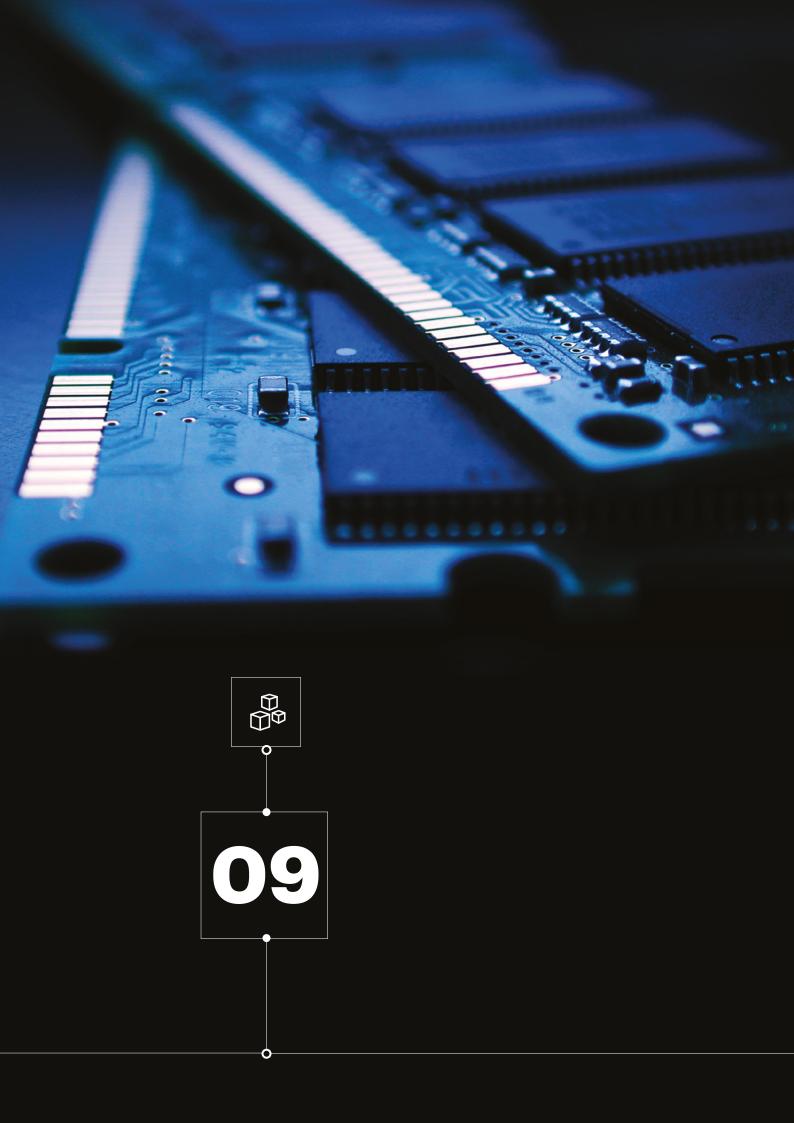
- 1. EQUIP our regional control and contact centres with up-to-date systems and technology including a new computer aided dispatch system in support of the regional control room structure, which is fully integrated with the Roster and Duty Management System, records management system, telephony and radio, mobile and mapping.
- 2. IMPLEMENT a new customer relationship management system, which will support An Garda Síochána in providing the best possible service to the public and – most importantly – victims of crime.
- **3. REPLACE AND ENHANCE** the existing Closed Circuit Television (CCTV) estate.

- **4. ENHANCE** our toolsets for web and social media presence to enable the public to communicate more easily with us through these channels.
- **5. ENHANCE** our eServices portfolio, for reporting crime online and by upgrading the Garda website to provide the public with more information on crime and policing activity relevant to the area they live in.
- 6. EXAMINE future opportunities for digitallyenabled public engagement in line with the Garda Síochána Strategy and central Government initiatives such as Our Public Service 2020.
- **7. IMPLEMENT** a video evidence management and analytics system.

Outcomes

- 1. Computer Aided Dispatch (CAD1) regional control and contact centres operational
- 2. Computer Aided Dispatch (CAD2) new contact centre technology solution deployed
- 3. Customer Relationship Management System deployed
- 4. Upgraded CCTV systems deployed

- 5. Video evidence management and analytics system deployed
- 6. Online crime reporting facility operational
- 7. Garda website upgraded
- 8. Public-facing apps available



Strategic Objective 5: Building ICT Capability

In order to deliver on our Digital Policing Strategy, it will be necessary to build capability and capacity in the ICT function in An Garda Síochána. A Human Resources Strategy is required to optimise the ICT function to best support the organisation and to deliver on its strategic objectives. This will be required to ensure that we have the best people, with the required skills, to support An Garda Síochána.

We will invest in our people, ensuring that we have the knowledge and skill sets required for modern-day police ICT services.

We will also need to invest in the right tools to enable our people to perform their duties to the maximum of their potential. Our resourcing approach will aim to build internal capability in key functions including enterprise architecture, project management and co-ordination, security, and technical design authority.

We will use external service provision and supplement our internal resources with externals, as required, to provide expertise and capacity, but we will maintain a bias towards developing internal permanent resources, in particular, in the key functions outlined above. In this regard, we will work with our human resources division to recruit the ICT resources required. We will strengthen our ICT Project Management Office (PMO) to ensure that we are continuously aligned with our organisation's strategic goals, that we are correctly managing our work, that we are reporting on our work in a transparent and accountable manner, and that we can take corrective action in a timely manner when this is required.

We will adopt a more agile approach in designing and delivering enhancements to existing ICT systems and in delivering new ICT solutions. This will be required, as we must manage the day-to-day operational demands from ICT, along with the strategic programmes of work set out in this strategy.

The current ICT accommodation is not conducive to a collaborative agile team working environment. It will be necessary to identify appropriate accommodation to meet the needs of the ICT function for the years ahead, as part of overall Garda accommodation priorities.

The Report of the Commission on the Future of Policing in Ireland sets an ambitious and exciting target for the establishment of a Digital Policing Innovation Centre, with An Garda Síochána as the anchor organisation.

This would allow us to move from a catch-up stage to a situation in which we will be an innovator in the use of policing technology and become an exemplar in this regard. The report sets out that the "Centre would draw on the research and implementation expertise of Irish and global higher education institutions (including University College Dublin's world class centre for research and education in cybercrime, cybersecurity, and digital forensics), and Irish-based national and international companies.

The Centre would operate in a similar way to other EI/ IDA funded centres and it would initially work on research and initiatives that could deliver early results for An Garda Síochána. Industry partners could have options to commercialise the products after initial deployment.

In time, the Centre would work on longer term innovation in policing." Establishing the Centre will especially support An Garda Síochána in delivering innovative solutions to the front line in an agile and cost-effective manner.

Priority Actions

- **1. FINALISE** the Human Resources Strategy for ICT and commence implementation as part of Garda Human Resources priorities.
- 2. SUPPLY our people with the right tools and capabilities to perform their duties, including by implementing an ICT staff learning and development plan.
- **3. DEVELOP** the business case and progress implementation of new ICT accommodation as part of Garda accommodation priorities.
- **4. WORK** with the relevant enterprise development agencies to explore how the concept of a Digital Policing Innovation Centre can be realised and develop the proposal in relation to same.

Outcomes

- 1. Human Resource Strategy for ICT implemented
- 2. ICT staff learning and development plan in operation
- 3. ICT accommodation provided
- 4. Digital Policing Innovation Centre operational

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ICT Governance

In order for our Digital Strategy to be successful, we will need to ensure that a strong governance model underpins its implementation. A governance structure has been implemented that will support and oversee the current and future programme of ICT initiatives, to allow them to contribute to the achievement of Garda Strategies and Policing Plans. Our approach considers the following:

- The need to balance demand for new business and technology solutions with the organisation's resource capacity (financial, human and technological).
- The need to ensure that the implementation of our strategy does not negatively affect the operation of existing Garda ICT systems or impact service levels to the business.
- The need for ongoing upgrading of our existing Garda ICT infrastructure, to support the delivery of new ICT solutions, within available budgets

Transformation Board

The Transformation Board oversees the prioritisation, approval, and implementation of all reform initiatives / projects in An Garda Síochána, including those that are ICT-related, ensuring alignment with organisational strategic objectives, policing plan priorities, and commitments under the 'A Policing Service for the Future' implementation plan. For the period 2019 - 2022, the prioritisation, sequencing, and monitoring of reform projects in An Garda Síochána will be also be overseen by the Implementation Group on Policing Reform in the Department of the Taoiseach. The Transformation Board is supported by the Strategic Transformation Office, which provides a programme management function for the various reform initiatives and projects across the organisation, encompassing business change enablement, user training, and deployment support. ICT work in partnership with the Strategic Transformation Office to implement strategic ICTenabled initiatives across the organisation. The Executive Director for Strategy and Transformation provides an update on the implementation status of ICT-enabled reform initiatives and projects to the ICT Governance Board.

ICT Governance Board

The ICT Governance Board oversees the development, approval, and implementation of the ICT Strategy and ICT budget for the organisation, including assessment of ICT-related business cases and post-project review and evaluation as appropriate. The ICT budget includes business as usual (recurring support and maintenance type activities) and projects (time and resource bound type activities). The board reviews the ICT Risk Register, which is part of the overall An Garda Síochána risk management approach, to ensure that adequate mitigation is being taken with respect to key risks. The Executive Director ICT reports into the Governance Board in this regard and is supported by the ICT Project Management Office (PMO) and the ICT Senior Management Team. The Board is chaired by the Chief Administrative Officer and has representatives from the Department of Justice and Equality, the Policing Authority, the Department of Public Expenditure and Reform, and the Office of the Government Chief Information Officer (OGCIO). Garda attendees include the Executive Director for Strategy and Transformation, and the Executive Director of Finance and Services.

Measuring Success

This robust governance structure is intended to facilitate scrutiny and challenge across all ICT services, to determine whether – and to what extent – the goals within this Strategy are being achieved. An Garda Síochána commits to producing Benefits Realisation Plans and Post-Project Evaluations to be approved by the Transformation Board with external oversight being provided by the ICT Governance Board in an ongoing process of corporate oversight and accountability.

Prioritisation

ICT is a significant contributor to the achievement of strategic goals and objectives. As such, there is a need to prioritise the diverse set of ICT needs within the organisation.

A prioritisation matrix, that considers the value and weighting of potential projects against assessment criteria, will be ratified by the Transformation Board. This matrix will be utilised to prioritise all projects that require resources and/or funding and, as a minimum, will be reviewed quarterly to ensure continued strategic alignment. The ICT Governance Board will provide external oversight, input and review in this regard, including through its assessment of ICT-related business cases.

Risk

An Garda Síochána operates a risk management approach that aims to provide greater accountability and transparency through enhanced governance, enhanced ability to achieve strategic objectives and goals, and better decision-making. The risk management approach is governed through the Risk and Policy Governance Board and is supported by a dedicated Risk Management Unit and a Risk Champion Network. Garda ICT follows this risk management approach and the Garda ICT Risk Register is reported on at the ICT Governance Board.

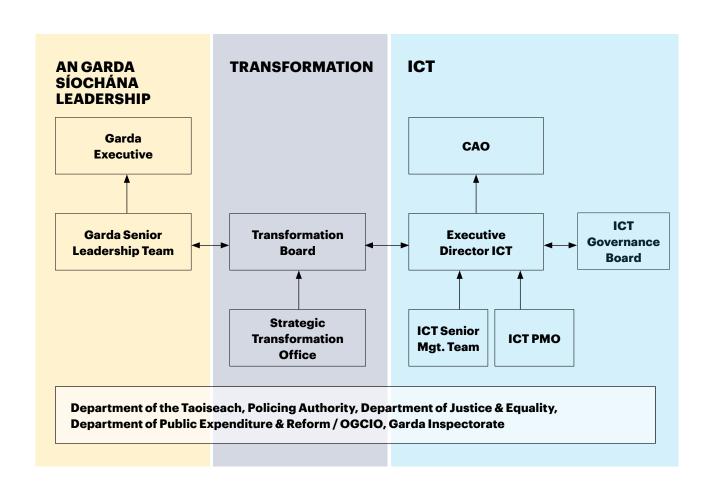


Diagram 2: ICT Governance Structure



Appendix A – Creating Our Strategy

The combined themes and objectives from the Garda Síochána Strategy 2019 – 2021, the Report of the Commission on the Future of Policing in Ireland, the 'A Policing Service for the Future' Implementation Plan, the Public Service ICT Strategy, the research and consultation that was conducted and the advice received, are all reflected in our new Digital Strategy, 'CONNECT'.

An external expert in digital policing advised us on best practice and current and future policing technology developments. We also engaged with police forces in the USA and Europe, including in the UK and the Police Service of Northern Ireland. In addition, key internal and external stakeholders were consulted. These key inputs are discussed below.

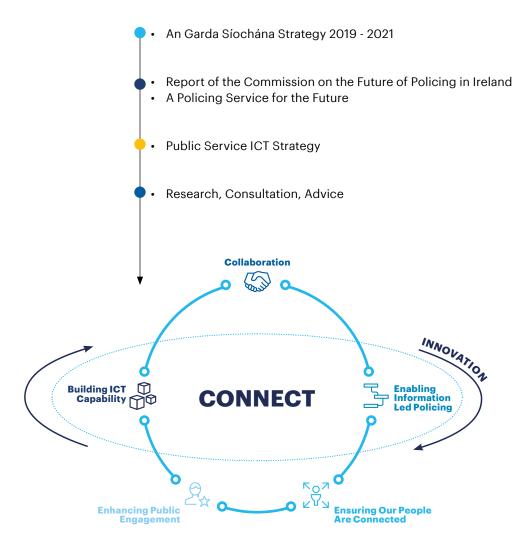


Diagram 3: Creating the Digital Strategy CONNECT

An Garda Síochána Strategy 2019 – 2021

The Garda Strategy sets out a series of strategic outcomes under six strategy pillars with the mission being 'Keeping People Safe'.

Community Policing

Engaging with communities and providing a visible, responsive service.

Protecting People

Improving our crime reduction and response, including through a multi-agency approach; improving our investigative response; utilising our data to enable information led policing; supporting victims of crime and helping to make our roads safer.

A Secure State

Management of threats to the security of the State including that of terrorism; enhancing our intelligence capability; and collaboration with our partners for national and international security.

Transforming Our Service

Implementation of the recommendations of the Commission on the Future of Policing in Ireland; implementing the Garda Operating Model; increasing public confidence; enhancing our communications capacity internally and externally; rebuilding confidence in our data; and investing in technology, including mobile technology.

Our People - Our Greatest Resource

Supporting our people; having the right people, with the right skills, in the right places, at the right times; providing leadership; developing a learning culture; recognising excellent work and managing underperformance; and supporting the health and wellness of our people.

A Human Rights Foundation

Embedding human rights, ethical behaviour and equality into all of our policing and business Garda activities.

Aligning ICT Objectives with An Garda Síochána Strategy

Our ICT objectives align with and support the implementation of the Garda strategic objectives and mission of 'Keeping People Safe', as set out in the Garda Síochána Strategy Statement 2019 – 2021.

Garda Strategic Objectives:

- 1. Community policing
- 2. Protecting people
- 3. A secure State
- 4. Transforming our service
- 5. Our People Our Greatest Resource
- 6. A human rights foundation

ICT OBJECTIVES	JECTIVES AN GARDA SÍOCHÁNA STRATEGIC OBJECTIVES							
	1	2	3	4	5	6		
Collaboration	\bigcirc	\bigcirc		\bigcirc		\bigcirc		
Enabling Information Led Policing		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc		
Ensuring Our People Are Connected	\bigcirc	\bigcirc		\bigcirc	\bigcirc	\bigcirc		
Enhancing Public Engagement	\bigcirc	\bigcirc		\bigcirc		\bigcirc		
Building ICT Capability				\bigcirc	\bigcirc	\bigcirc		

Report of the Commission on the Future of Policing in Ireland and 'A Policing Service for the Future' Implementation Plan

The report of the Commission on the Future of Policing in Ireland and the Government's response, 'A Policing Service for the Future' set out a vision for transformation in An Garda Síochána and the associated plan to realise that vision. The Commission's report sets out a broad range of recommendations within a proposed framework for policing, security, and community safety. The Commission set out some key principles of relevance to technology adoption in An Garda Síochána, including that policing and national security are not the responsibility of the police alone; police duties should be clearly defined and resources deployed accordingly; An Garda Síochána should be structured and managed to support front-line policing; the people of An Garda Síochána are its greatest resource; policing must be information led; and policing must be adaptive, innovative, and costeffective.

The Commission recommends four major areas for building a strategy for organisation-wide digital services, namely:

Enabling Front-Line Mobility – building on the successful mobility pilots in An Garda Síochána to deliver mobility across the organisation. A focus on front-line policing: providing access to basic records (PULSE data) and Computer Aided Dispatch (CAD), and reducing paperwork and administration.

Empowering Public Engagement – providing more data on crime and policing activity to the public relevant to their particular district. Better use of social media, public apps, and the Garda website for two-way engagement with the public and non-urgent crime reporting.

Improving Organisational Capacity – building a new digital platform to replace PULSE but utilising existing PULSE data and business logic with a continued movement of digital services to a cloud computing environment. This new platform to include the new Investigation Management System, budget, human

resources, property management, risk management, enterprise content management and rostering. Implementing a new national CAD, body-worn cameras, a real-time digitally-enabled crime and safety centre, and building cybercrime and cyber security capabilities. Working with the Chief Data Officer to improve the quality and use of data in An Garda Síochána, including search and analytics. Implementing systems to empower the support functions in An Garda Síochána, including human resources and finance, and building a customer relationship management capability.

Facilitating Inter-Agency Cooperation – the digital strategy should support the development of more effective and efficient cooperation between An Garda Síochána, other departments within the criminal justice system, and key partner agencies in Ireland and internationally. Shared data should, subject to appropriate privacy safeguards, be available to those police officers who respond to emergency calls for service.

Finally, the Commission recommends the establishment of a Digital Policing Innovation Centre, which sets an ambitious goal for An Garda Síochána to become a leader rather than a follower in digitally-enabled policing.

Public Service ICT Strategy

The Public Service ICT Strategy has identified five key strategic objectives that set the future direction for innovation and excellence in ICT within the Public Service.

Build to Share – Creating ICT shared services to support integration across the wider Public Service to drive efficiency, standardisation, consolidation, reduction in duplication, and control cost.

Digital First – The digitisation of key transactional services and the increased use of ICT to deliver improved efficiency within Public Bodies and provide new digital services to citizens, businesses, and public servants.

Data as an Enabler – Facilitating increased data sharing and innovative use of data across all Public Bodies to enable the delivery of integrated services, improve decision-making and improve openness and transparency between the Government and the public.

Improve Governance – Ensuring that the ICT strategy is aligned, directed, and monitored across Public Bodies to support the specific goals and objectives at a whole-of-Government level and with an emphasis on shared commitment.

Increase Capability – Ensuring the necessary ICT skills and resources are available to meet the current and future ICT needs of the Public Service.

Research and Consultation

The external assessment of technology requirements for An Garda Síochána and the learnings from other police services has identified some important and relevant themes:

Exploiting Data to Empower Digital Processes and Decision-Making

The exponential growth of digital data and its proliferation in everyday life is both a challenge and an opportunity for law enforcement. The investigation of crime increasingly involves digital content such as from smartphones, video, and social media. An Garda Síochána requires enhanced ICT platforms, including for storage and data analytics, to improve crime investigation, resource planning and deployment, and intelligence capabilities. Digital transformation of traditional paper-based processes, including for crime investigation and custody management, can decrease costs, reduce workloads on front-line employees, and provide improved levels of service. Collaborating with other agencies through the sharing of data improves our service provision to the citizen.

Enabling Front-Line Mobility and Enhancing Community Engagement

Engaging with communities and providing a visible and responsive service can be enabled and supported through using technology. Providing police officers with mobile devices, on person and in vehicles – and connected to ICT systems whilst out in the community – reduces the need to return to the station. Body-worn cameras are becoming the norm in police forces, providing increased safety for the public and police and increased accountability. Modern emergency and non-emergency contact and customer relationship management systems help to improve the response to calls for service. Providing digital channels of communication and open data through website, social media, and apps improves the two-way

communication with the communities we serve.

Sustaining Operational Excellence

Having the required management information systems for human resources, finance, fleet, and estate enables the most effective and efficient use of the finite resources available to An Garda Síochána. Supporting our Garda personnel with learning management, performance management and task management technology solutions.

ICT Infrastructure

Cloud technology offers potential for improved scalability, speed of deployment, security, service offerings, and cost savings. Police forces in the USA and UK are incrementally moving to partial or full cloud adoption for their core policing ICT systems. In order to get access to the best-of-breed technology solutions that are available, and to provide the best possible service to our users, An Garda Síochána will need to carefully assess the adoption of cloud-based solutions, ensuring that our data security and classification rules and principles are adhered to.

ICT Capability

All of the police forces we engaged with are experiencing difficulties in hiring and keeping skilled ICT resources. ICT resourcing is a challenge for all public and private sector organisations. The importance of having a specific ICT HR Strategy, that identifies the skills needed and the appropriate mix between internal and external resourcing, was highlighted. Where required, external service provision is used but core business knowledge and expertise, and control over technology architecture and direction, is retained by internal resources.

ICT Governance

The importance of the alignment of services and projects to organisational priorities and objectives, taking account of corporate risk and capacity to deliver and deploy within the organisation, including user-training requirements.

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Appendix B - Roadmap

A significant budget is available for Garda ICT infrastructure, with levels of capital funding already known to the end of 2021. Our roadmap sets out a direction of travel in relation to the initiatives set out in this strategy, with an indication of sequencing and timeframes. It will inform our detailed planning for the lifetime of this strategy. However, we must also remain flexible in this regard, recognising that the

Organisation's needs and priorities may change and taking into account our governance structures for oversight of approach, expenditure, and prioritisation. Our highest priority will always be to ensure that our ICT systems and infrastructure are supported and maintained to provide the required level of service to our front-line members and our support staff.

Collaboration

DO NOW

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Within 12 months

- Schengen Information System
- Prepare for move to Government Data Centre
- Criminal Justice Hub Charge Sheets
- Develop business case for electronic TUSLA Children First Notifications
- Progress other data exchange initiatives
- Commence build of data interoperability platform

DO NEXT

Within 24 months

- Continue preparations for move to Government Data Centre
- Criminal Justice Hub Commence Higher Court Outcomes
- Progress electronic TUSLA
- Children First Notifications
- Progress other data exchange initiatives
- Commence Portal Upgrade
- Complete build of data interoperability platform
- Commence internal messaging platform
- Commence public-facing video sharing platform

DO LATER

Criminal Justice Hub – Continue data exchange opportunities

Beyond 24 months

- Complete move to Government Data Centre
- Progress other data exchange initiatives
- Complete Portal Upgrade
- Complete internal messaging platform
- Complete public-facing video sharing platform

Build ICT Capability

DO NOW

Within 12 months

- Complete HR Strategy for ICT and commence implementation
- Develop ICT staff learning and development plan, and commence implementation
- Develop business case for accommodation

DO NEXT

Within 24 months

- Continue implementation of HR Strategy for ICT
- Continue implementation of ICT staff learning and development plan
- Advance accommodation needs
- Develop business case for Digital Policing Innovation Centre

DO LATER

Beyond 24 months

- Complete implementation of HR Strategy for ICT
- Continue implementation of ICT staff learning and development plan
- Advance accommodation needs
- Advance proposals for Digital Policing Innovation Centre

SUPPORT AND MAINTAIN OUR ICT SYSTEMS AND INFRASTRUCTURE

Information Led

DO NOW

DO NEXT

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DO LATER

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Within 12 months

Develop PULSE Replacement Business Case

- Contribute to Information Management Strategy development and commence supporting initiatives
- Continue implementation of Investigation Mgt. System
- Commence procurement of HRIS
- · Continue implementation of
- Roster & Duty Mgt. System
- Continue rollout of ICT for regional cybercrime centres
- Develop proposal for realtime crime centre
- Develop proposal for national intelligence ICT requirements
- · Agree strategy for AFIS
- Implement Enterprise Content Mgt. System
- Develop business case and legislative proposals for digital interview recording system

Within 24 months

- Commence PULSE Replacement
- Complete implementation of Investigation Mgt. System
- Commence procurement of Custody Management System
- Commence implementation of HRIS, including Learning Mgt. System
- Complete implementation of
- Roster & Duty Mgt. System
- Complete rollout of ICT for regional cybercrime centres
- Commence procurement of enterprise resource planning (ERP) systems
- Commence implementation of real-time crime centre
- Commence implementation of national intelligence ICT requirements
- Commence procurement of new AFIS
- Implement mgt. information dashboards for PAF
- · Implement Enterprise Search
- Develop analytics business case
- Commence procurement and implementation of digital interview recording system

Beyond 24 months

- Complete PULSE Replacement
- Implement Custody Management System
- Complete implementation of HRIS
- Implement Enterprise Search
- · Implement Analytics platform
- Implement ERP systems
- Complete implementation of real-time crime centre
- Complete implementation of national intelligence ICT requirements
- · Implement new AFIS
- · Implement Analytics platform
- Complete implementation of digital interview recording system

Public Engagement

DO NOW

O

DO NEXT

DO LATER

Within 12 months

- Implement CAD1
- Commence procurement of CAD2
- Commence replacement of CCTV
- Develop Customer Relationship Mgt. System business case
- Develop video evidence management and analytics system business case

Within 24 months

- Continue implementation of
- Continue replacement of CCTV
- Commence implementation of Customer Relationship Mgt. System
- Develop business case for Garda website upgrade, including online crime reporting
- Commence implementation of public apps
- Commence procurement and implementation of video evidence management and analytics system

Beyond 24 months

- Complete implementation of CAD2
- Complete replacement of CCTV
- Complete implementation of Customer Relationship Mgt. System
- · Upgrade Garda website
- Continue implementation of public apps
- Complete implementation of video evidence management and analytics system

SUPPORT AND MAINTAIN OUR ICT SYSTEMS AND INFRASTRUCTURE

Connected

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DO NOW

DO NEXT

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DO LATER

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Within 12 months

- Commence upgrade of network and telephony
- Work with the OGCIO on procurement for national digital radio system
- Develop business case for mobility
- Commence procurement and deployment of mobile devices
- Develop business case and legislative proposals for body-worn video
- Develop business case for ANPR
- Develop end point device strategy and commence implementation
- Develop cloud computing strategy

Within 24 months

- Continue upgrade of network and telephony
- Commence implementation of national digital radio system
- Continue mobile device deployment
- Commence procurement for body-worn video and supporting legislation
- Commence implementation of ANPR
- Continue implementation of end point device strategy
- Commence implementation of cloud strategy
- Develop business case for unified communications solution

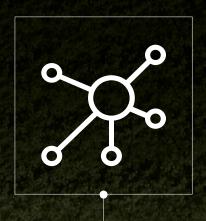
Beyond 24 months

- Complete upgrade of network and telephony
- Complete implementation of national digital radio system
- Complete mobile device deployment
- Implement body-worn video
- Complete implementation of ANPR
- Complete implementation of end point device strategy
- Continue implementation of cloud strategy
- Implement unified communications solution

SUPPORT AND MAINTAIN OUR ICT SYSTEMS AND INFRASTRUCTURE

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AN GARDA SÍOCHÁNA DIGITAL STRATEGY 2019 - 2023

