



THE FUTURE OF POLICING IN IRELAND

SUBMISSION TO THE COMMISSION ON THE FUTURE OF POLICING IN
IRELAND

BY IBM IRELAND

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IBM is the longest-established IT multinational in Ireland, having opened our first office here in 1956. We are one of Ireland's largest employers, with a broad range of operations. In addition to sales and services for our Irish customers, we provide several international missions including services, digital sales, research and software development. While the majority of our staff is based in Dublin we also have sizeable software development teams in Cork and Galway.

IBM is a global technology and innovation company headquartered in Armonk, New York. It is the largest technology and consulting employer in the world, with 380,000 employees serving clients in 175 countries. IBM's expertise is in the intersection of technology and business, providing artificial intelligence (AI) and cloud-based solutions that are changing the way the world works.

INTRODUCTION

IBM Ireland welcomes the opportunity to contribute to the Commission on the Future of Policing in Ireland. Since its foundation in the 1920s, An Garda Síochána has served the State not just in policing and security, but in playing a role in the development of Ireland as a country. As Ireland becomes more globalised, digitised and open, new challenges have stretched the organisation and tested its resilience. This is not a concern that is unique to Ireland, though the country has its own specific context.

IBM has decades of experience in partnering with justice departments and police forces all over the world, from IT modernisation projects to big data, video analytics, predictive policing, and augmented intelligence solutions. In addition, IBM has been at the forefront of solutions that have helped countless enterprises to re-train, cross-train and facilitate the transformation of workplaces. We believe that three elements stand at the core of policing transformation: people, information and communication.

In the sections below we have set out our views on the questions raised in the consultation document. We have only sought to address the areas where we believe we have competency, and can add value. If you would like further information on any aspect of this submission please contact Nick Holmes, Public Safety & Policing Worldwide Leader, IBM.

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POLICING CONTEXT AND IBM'S POINT OF VIEW

As the Terms of Reference point out, An Garda Síochána has been the subject of significant controversy over the past decade, resulting in *'concerns in relation to accountability... leadership and management capacity and its culture and ethos'*. Every police force in the world has been forced into some kind of reckoning with the accelerating digitisation of society in the past ten years, and with the public's *'increased expectations of transparency, accountability and professionalism'*. The combination of issues has been particularly taxing in Ireland, in part due to the broad set of responsibilities resting with An Garda Síochána, extending beyond policing into community safety, immigration control and state security.

Within these challenges, there are opportunities that emerge. Pervasive digitisation offers opportunities for new sources of data and intelligence that can make the force more efficient. Wireless broadband networks allow for multiple new bi-directional communications channels, along three crucial vectors: first, between the Gardaí and the public; second, between the Gardaí and partner bodies including government, health and emergency services, and stakeholders in accountability such as the Police Authority and the Garda Inspectorate; and third, within the force itself.

DATA, PUBLIC SAFETY AND CYBERCRIME

We firmly believe that Data and Information are at the heart of the police force of the future. As crimes change, as threats increase, it is better use of data and information that will keep our communities safe and secure. Many police organisations have a tremendous amount of both structured and unstructured data, that has taken many years, and thousands of man hours to assemble (think structured data like investigation reports, or unstructured data like CCTV footage). Many times that data is not used in an optimal manner for a variety of different reasons. That data can provide insight into a person, an object, location or an event which are critical to combating the borderless crimes that we see today. Further, when you expand the data aperture to include Open Source data (the open web, the deep web, and the dark web) you can start to aggressively track down the digital footprints of bad actors – including those focused on modern slavery, inciting terror networks, or radicalising the impressionable.

Public Safety, particularly in cities, has never been so important. Threats are changing across every city in the world. All cities now appear to be legitimate terrorist targets, in a way that has become almost commonplace. Understanding the patterns associated with these attacks, collaborating with police forces in other jurisdictions, and sharing intelligence on known threats quickly, will be essential to the assurance of public safety.

Criminals are increasingly leveraging cyber tools to perpetrate traditional and non-traditional crimes. Law enforcement analysts and investigators must adopt common practices such as: protect, prepare, prevent, and pursue relating to offences committed through cyberspace, while protecting both their own system vulnerabilities and the public. The use of cyber-crime analysis is increasingly becoming a necessary element of law enforcement crime management and police

forces are now beginning to leverage cyber data sources such as sophisticated Security Intelligence and Event Monitoring and Threat Intelligence feeds.

DEVELOPING TALENT AND SKILLS

Staff performance and morale in An Garda Síochána have suffered in recent years, and any programme of transformation must be people centric in its approach to ensure success. Addressing skills and personal development at various career levels will be critical for reversing this position. In recruitment, identifying and attracting the right talent; in mid-career, facilitating the appropriate advancement mechanisms and incentives; and in late career, managing appropriate retention and extension programmes.

Continuous listening, making employees feel valued and that the organisation wants to be an employer of choice, are basic requirements for attracting, retaining and developing people. Adopting an appropriate talent management framework, and executing culture and skills fit assessments will be important in workforce deployment and balancing. Crucially, rank and file members should be a central part of this work. The importance of employee engagement cannot be overestimated; Engaged employees are typically happy employees who feel an emotional connection to their organisation and who feel motivated to perform at their best.

NEW TECHNOLOGIES & DATA OBLIGATIONS

New technologies bring new types of crime, and new modes of policing. The instrumentation of cities and national infrastructure presents an opportunity to automate an understanding of behaviour. Augmented Intelligence technologies like IBM Watson can learn how different environments behave, and can detect unusual behaviour, based on people, vehicles, or data traffic – such as on open social media. AI ‘chatbots’ can answer queries from the public in natural language, either through text or speech, about routine matters such as traffic, official forms, or even logging anti-social behaviour complaints.

With digital systems being used by the Gardaí to share intelligence internally and interact with the public, Cybersecurity will become increasingly important. These systems by their nature will be accessible from the Internet and will be prime targets from all types of individuals from organised crime looking to corrupt the integrity of these systems, to politically motivated groups and even pranksters, looking for attention. Control of access, integrity and availability of these systems will be paramount in order to realise the full benefits digitisation can bring and maintain the public trust in the systems of the Gardaí.

Data centric policing can be hugely rewarding, but it is not without its own internal obligations. The General Data Protection Regulation (GDPR) that enters into force in 2018, and the related Data Protection Directive (2016/680) for the police and criminal justice sector, add responsibilities that need to be respected by data controllers, along with the increasing demand for compliance with international standards such as ISO27001. Collaboration with the Office of the Data Protection Commissioner will be important, and all policies, procedures and data

processing systems within the Gardaí need to be compliant. Operationally, Gardaí must be able to demonstrate that their systems are managed in a secure manner, reassuring the public in their integrity and allowing the information they gather and process to contribute to the successful prosecution of those involved in crime. A 'privacy by design' approach to systems engineering will significantly offset potential problems.

DIGITAL COMMUNICATIONS

Finally, collaboration tools, including public web sites, semi-public web sites, and mobile apps should play a central role in the transformation of An Garda Síochána. The current web portfolio is not fit for purpose. It could be made much more useful for relatively simple processes such as passport applications, and should be central for achieving demonstrable transparency. Internal collaboration tools, allowing for instant messaging, internal communities and working groups, and video calling will deliver greater collegiality and cohesion to the force from Donegal to Wexford, while also flattening the learning curve for new recruits to the Garda ranks.

INFORMATION SYSTEMS APPROPRIATE TO THE NEEDS OF A MODERN POLICE SERVICE

There are several critical information systems necessary for a modern policing function. In the context of the future of An Garda Síochána, we consider the following to be of the utmost importance:

- Unified communications and collaboration tooling including websites and mobile applications. These should be grouped under three major categories: internal communications; stakeholder communications; and external communications.
- Personal Development & Training: Having the right systems in place includes having a staff who are adequately equipped to deploy them. Processes around security, access control, workflow and accountability are essential to the proper functioning of Garda systems. Developing these capabilities within an agreed talent framework, and with engaged members of the force (not just the transformation team) will be important.
- Several Augmented Intelligence applications including: Machine Learning and solutions for traffic law enforcement; Social media analytics; video analytics for road traffic offences and people searching; and digital communications technologies including chatbots for interaction with the public via social and owned channels.
- Cybersecurity systems are essential in order to protect the investment made in the rest of the information systems developed, so that they may deliver their full potential and allow the Gardaí to make full use of their benefits. Attacks now use a multitude of methods and only integrated real-time monitoring, powered by AI analysis will ensure they can be stopped before they breach the integrity of Garda systems. IBM's cognitive

cybersecurity solutions are being used to distil enormous volumes of structured and unstructured data into actionable knowledge, helping police forces to significantly reduce the time to identify threats and enable prompt reaction and remediation to such threats.

- Public safety platforms are Cloud based and offer many services on a consumption basis. This allows the latest intelligence led policing or digital evidence management solutions for all police forces, without a huge overhead cost, or increasing the burden on an IT organisation. The platform allows you to plug in existing capabilities, while taking advantage of the tools and configurations that are considered best practices in the industry.

In addition, all systems need to inherit characteristics of robustness, security, transparency and workflow accountability in order to support the transformation to a more effective service. It will be very important that those legacy systems that are retained are subjected to fit-for-purpose audits as part of that process.

OPERATING WITHIN A FRAMEWORK OF GOVERNANCE AND ACCOUNTABILITY TO THE LAW AND TO THE COMMUNITY

The three central tenets of the IBM point of view are people, information and communications. We've dealt with 'people' in describing the best in class systems for recruitment, professional development, and talent management. Data and information are central to the prevention and investigation of crime in the 21st century. Finally, we have discussed communications as essential for a cohesive force, integrated in itself and in the wider community. Communications are also essential in governance and accountability, and in demonstrating transparency. An Garda Síochána should consider its commitment to 'open data', publishing as freely and as frequently as legally possible data about traffic, crime, arrests and other performance metrics. This data should be available to third party developers, such as insurance companies, city planners, NGOs and policy development entities.

ADDITIONAL COMMENTS

IBM has been in Ireland since 1956, as a force for innovation and transformation through the development of the modern Irish state. Our people and culture in Ireland represent engaged, professional participants in the modern Irish State, and we share the desire of the Commission to see a transformed, effective, and successful policing service in the country. As society adapts to the digital world, and vast amounts of data become available from disparate sources, there are enormous opportunities in technologies such as augmented intelligence to become the nucleus for enterprise transformations. All organisations, whether public or private, big or small, are both threatened and empowered by the wave of disruption around the world – in this time of profound change for An Garda Síochána, this is an opportunity that simply must be taken.