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ICT Strategy 2020-2025

Enabling Digital & Data Agility



Developed by the Department of
Enterprise, Trade and Employment

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Foreword by the Secretary General



I am pleased to introduce the Department's ICT Strategy 2020 to 2025.

The potential of Information Communications Technology to transform how we work and how we deliver services has never been greater and this has been further emphasised by the global pandemic. We must now make the most of the opportunities this presents. A modern public service needs to maximise its use of ICT, not only to ensure efficient service delivery, but to use the data and the insights it gives to be sure we are delivering the right services in the first place.

As more services move online and to **cloud**, there is an opportunity to free up resources from day to day infrastructure management to spend more time adding value to our services. Cloud can also offer us new innovative tools to deliver services, such as machine learning to process data more intelligently, or to gain greater insights into our data through new analytics tools.

The adoption in this strategy of a cloud first based approach to new service delivery is therefore very welcome. The use of cloud-based services, combined with a **digital by design** approach, has the potential to transform many of our services. This approach encompasses a vision where our external customers can conduct all of their business online, from initial application, through status updates and case-centric communication to final online delivery. The Department has a number of services which are already on-line and increasing this end-to-end digital model is an important goal.

That digital by design approach can also be applied to our own internal processes, from remote working to internal service delivery and enhanced collaboration. These tools are especially important in supporting us through the COVID-19 crisis, and will serve us well in a more flexible, work-anywhere post COVID world.

In all of this our **customers**, both internal and external, are key. For that reason, the inclusion of a customer engagement theme in the strategy is important, and welcome. For similar reasons, **data** is a key resource in forming policy, managing our services and reviewing our effectiveness. The strategy recognises the importance of data and sets out actions to ensure a structured approach to using that data.

In delivering this programme of change, it is important that we continue to adopt sound **governance** for oversight of the strategy and for individual projects. An enhanced role for the ICT Steering Committee, which is being renamed to the ICT Advisory and Oversight Committee, will reflect its enhanced mandate supporting ICT governance in the Department.

Finally, in order to deliver the goals of the strategy, we must continue to invest in the development of our **ICT support staff** and ensure that our systems and services are appropriately configured to meet our needs.

The Department has a very wide remit, and the breadth of actions encompassed by the strategy is no less so. It is ambitious, as it should be, and I look forward to seeing it come to fruition in the coming years.

Dr Orlaigh Quinn
Secretary General



1. Executive Summary

This strategy represents a significant step change in how the Department uses and delivers ICT services, reflecting new opportunities presented by technologies such as cloud and changes in the ICT delivery landscape both within the public service and the wider environment.

It has a vision “to be a leader among its peers through the consistent delivery of innovative digital and data solutions and services”.

Its mission for ICT services in the Department is to “deliver stable, secure and scalable digital & data solutions and services, that are fit for purpose, through best-in-class ICT practices and services, optimising the user and external customer experience”.

This vision will be delivered through six high level objectives:

- **Cloud First:** Adopt a cloud first approach for service deployment across the Department.
- **Customer Engagement:** Enhance engagement between the ICT Unit and its internal customers including adopting a more innovation led approach.
- **Digital by Design:** Support enhanced introduction and delivery of digital services across the Department using a customer led approach.
- **Data:** Implement a data programme to improve service and use data by design as a key element of all new solutions.
- **ICT Governance:** Put in place enhanced governance arrangements to drive and oversee implementation.
- **Managing ICT Operations:** Continue to build best practice principles to deliver a robust, secure and effective ICT service.

These objectives will be delivered through a programme of 38 separate actions which are set out in the strategy. Delivery of these actions will be aligned with the overall strategic objectives identified. Many of these actions are significant undertakings in themselves, and the delivery of the programme will require careful consideration of priorities and scheduling of resources.

The six high level objectives and the resultant programme of work constitutes a vision for meeting the ICT needs of the Department over the next five years. The strategy is an ICT strategy for the whole Department. As such, its success will depend as much on the engagement of stakeholders and business units across the Department as it does on the role of the ICT Unit.

Finally, this strategy is not a static document, and will need to be adapted as the environment in which it operates changes, to take advantage of new opportunities or to mitigate emerging risks. The strategy context and guiding principles should be reviewed annually to ensure that they remain relevant to the business priorities of the Department.

This strategy was formulated and successively reviewed and updated during the period Q4/2019 – Q3/2020. It has been further revised in the light of the Department’s experience of, and further implications arising from, the COVID-19 pandemic.

2. ICT Strategy 2020 – 2025

2.1 Introduction

This strategy has been developed following a comprehensive consultation process with stakeholders from across the Department's Divisions, Offices and staff in the ICT Unit.

The strategy represents a significant step change from previous ICT strategies and describes a potentially significant transformation regarding the type of services offered by the ICT Unit and how the ICT Unit will meet the business needs and requirements of the Department, its Offices and our external customers over the next 5 years (2020 – 2025).

As new digital delivery technologies are enabling organisations to transform operating models, there is an opportunity for public sector bodies to leverage these technologies to transform service delivery. By adopting a digital by design/digital first approach the Department can provide services that meet the evolving expectations of internal users, external customers and the wider Government.

The strategy proposes the introduction of increasingly more sophisticated cloud and service delivery solutions, increasing the levels of engagement between the ICT Unit and internal customers, and by applying appropriate levels of ICT governance. On this basis it will enable the Department to meet its goals and objectives now, while also laying the foundations to facilitate the adoption of new practices (such as mobile & flexible working, end to end digital delivery and advanced analytics) in the future, and introduce innovative solutions regarding how services are delivered over the coming years.

The strategy, while enabling the Department to benefit from advances in technical solutions and delivery, also brings immediate and long-term challenges regarding how the ICT Unit, and wider Department, adopts the objectives, principles and projects contained within. Complex and far reaching decisions (beyond the ICT Unit) will need to be taken regarding the speed of adoption, the order of adoption, and how the implications of adoption (for people, policy, process, platforms) will be managed. Full implementation will require senior management within the Department to take an active role in supporting the delivery of the strategy.

This strategy document was substantially completed before the onset of the COVID-19 crisis, but

completion was delayed due to the necessity to focus on meeting immediate needs arising from the crisis. It has been updated to reflect the new reality. The need to respond rapidly to the emerging crisis has meant that some aspects of the strategy, in particular the need to react quickly and innovatively to meet the remote working needs of staff, are already well advanced. Other aspects of the strategy may see delays due to reprioritisation of resources, financial and non-financial. Others may need to be realigned to meet the needs of the new normal. However, the broad thrust of the strategy, and the goals identified, remain as relevant post COVID-19 as before.

2.2 Vision

Building on our existing skills and capabilities, this strategy sets out a vision for ICT within the Department, that will deliver stable, secure and scalable digital solutions and services which are fit for purpose and will meet the needs of staff, external customers and business in a consistent, innovative and agile delivery model. We will do this by leveraging, appropriate, best in class solutions from Government (OGCIO) and private cloud service providers, enabling and supporting the goals and objectives of the Department, its Offices and our external customers.

2.2.1 Vision Statement for ICT in the Department

“To be a leader among its peers through the consistent delivery of innovative digital and data solutions and services.”

2.2.2 Mission Statement for ICT in the Department

“Deliver stable, secure and scalable digital & data solutions and services, that are fit for purpose, through best-in-class ICT practices and services, optimising the user and external customer experience.”

2.3 Achieving Our Vision

In order to achieve the vision, there are several key objectives that will have to be considered and addressed, and these are outlined below. They set the direction of the strategy and, while enabling the ICT Unit to achieve its goals, also have implications for the wider Department, some of which are outlined below.

2.4 Summary of Key Objectives

The Strategy identifies a number of key objectives:

- **Cloud First:** Adopt a cloud first approach for service deployment across the Department.
- **Customer Engagement:** Enhance engagement between the ICT Unit and its internal customers including adopting a more innovation led approach.
- **Digital by Design:** Support enhanced introduction and delivery of digital services across the Department using a customer led approach.
- **Data:** Implement a data programme to improve service and use data by design as a key element of all new solutions.
- **ICT Governance:** Put in place enhanced governance arrangements to drive and oversee implementation.
- **ICT Operating Model:** Continue to build best practice principles to deliver a robust, secure and effective ICT service.

These objectives are discussed in more detail below, and key actions under each area are identified. Some of these projects may have impacts relevant to more than one objective.

2.5 Cloud First

The question is no longer about whether the Department should adopt a cloud first approach in relation to the deployment of solutions; it is now a question of what we move, when and to what type of cloud (the deployment model). Deploying suitable applications and services to the cloud will provide greater levels of agility and resilience, provide increased access to the latest advances in technology and enabling future technology adoption, while also releasing capacity within the ICT Unit to develop and offer new value-add services.

There are multiple routes to cloud adoption & different cloud models. All will need to be evaluated and assessed based on the specific needs of the Department and its Offices, taking account of both current and long-term demand. Cloud adoption brings significant advantages and benefits; however, there are also consequences, constraints and risks that need to be considered. These have implications for both the ICT Unit and the wider Department.

We will consider other service delivery models¹ such as platform-as-a-service and software-as-a-service both of which have similar benefits, risks and implications for the ICT Unit (staffing and long-term role) and wider Department. These options will be considered using the Cloud First objective in building the business case for a new system.

Note that Cloud First does not mean cloud only, but that cloud deployment should be the first option to be considered for new service deployment. Cloud deployment may be to private Government cloud or to public cloud suitably configured to meet the Department's security and privacy standards.

2.5.1 OGCIO Shared Desktop Service

The Cloud First approach, in addition to providing options regarding the deployment models implemented, also brings opportunity regarding by whom and how the solutions are administered and supported (as-a-service models). As with deployment models there are multiple options available; ranging from models where support and administration remains fully with the ICT Unit to fully outsourced models. All these models have benefits, consequences, constraints and risks attached that need to be considered.

The ICT Unit will evaluate adopting the OGCIO Shared Desktop Service. Essentially this would involve outsourcing the Department's desktop, mobile phones, ICT helpdesk and hosting for all on-premise line of business systems to OGCIO. While this model provides economies of scale and would release capacity within the ICT Unit, it is not without risks and implications (including ICT staffing) for the wider Department to consider and evaluate. COVID-19 has highlighted the advantages of having an agile ICT function which can react quickly in a crisis to address urgent and immediate needs of the Department. In any move to centralised services it would be important to retain such agility. Any advantages inherent in a locally provisioned service must be weighed up in the longer term against the risk posed to this capability in the event of the loss of key ICT staff members, on whom much of our ability to effectively deliver services depends.

1 The United States National Institute of Standards and Technology (NIST) definition of cloud computing identifies for its cloud model three service models (Software as a Service - SaaS; Platform as a Service - PaaS; and Infrastructure as a Service - IaaS). <https://csrc.nist.gov/publications/detail/sp/800-145/final>

2.5.2 Related Actions

The following table contains the key actions on the strategy roadmap related to this theme.

#	Hosting, Cloud & Service Provision
A.1	Subject to sufficient assurance on service quality and security, we will work with OGCIO to design and migrate our internet facing infrastructure to OGCIO's new internet facing cloud service, starting with hosting for CRO's system refresh, and then other internet facing services.
A.2	We will engage with OGCIO to determine the suitability of OGCIO's hosting services for replacing end of life hosting infrastructure in our Kildare St. and Earlsfort data centres with OGCIO hosted services. If OGCIO hosting is not ready to meet DBEI needs at this time, we will liaise with OGCIO in identifying alternative hosting arrangements, either in public cloud or on-premise.
A.3	We will review the implementation progress of the OGCIO shared desktop model during the course of this strategy to determine if and when it may represent a preferable option for long-term service delivery for core desktop services.
A.4	<p>We will carry out a proof of concept pilot to assess the suitability of a hybrid model for Microsoft Dynamics (Dynamics in the cloud, email on-premise) in order to have assurance that the hybrid model will meet the Department's need. We will use the outcome of this pilot to inform our hosting options for new case management systems, particularly for Employment Permits and Trade Licensing.</p> <p>[Note: While vendors indicated that the hybrid deployment model is possible, finding many examples of organisations who have done so has been challenging. Some of this may be a reflection of a conservative approach to system development, and some is a reflection of the relative newness and rapid developments in the technology. The Health and Safety Authority has implemented a hybrid cloud Dynamics system, and there is no reason in principle why the technology should not work more widely. However, given differences in systems architecture and network topologies, the proof of concept approach is prudent. There is also a shortage of good systems architects for innovative systems of this nature, and the proof of concept approach minimises the risk posed by poorly resourced systems implementers.]</p>

#	BUILD To SHARE (BTS) Deployments
A.5	We will work with OGCIO to support and promote the successful roll out of eDocs
A.6	We will roll out eFol in the Offices (WRC and ODCE)
A.7	eCorrespondence: we will work with OGCIO and our Ministers' and Secretary General's Offices to address current functionality gaps in eCorrespondence and support its adoption once these issues are resolved
A.8	We will support the development and deployment of the eRisk system
A.9	We will actively work with OGCIO to identify other opportunities for Build to Share applications



2.6 Customer Engagement

Feedback from customers, including formal surveys, indicate that the level of satisfaction with the ICT service is generally good. However, this can vary from business unit to business unit. More work needs to be done to develop a consistent level of mutual understanding. That relationship can range from very good, to sometimes strained. The very good cases are characterised by regular dialogue and an understanding of mutual needs and constraints. Some tension is inevitable where competing demands and limited resources, particularly where tight deadlines or complex business needs are involved, but those are the areas where ongoing dialogue and interaction are important.

The pace of technology change, increasing user expectations, and the increasing complexity of solutions all require new ways of working between the ICT Unit and its customers. A greater level of customer understanding and knowledge of the business is required, within the ICT Unit, so that it can be best placed to proactively identify solutions to changing business needs. It is also important to recognise the importance of ICT in delivering services from the Department to our external customers, and the importance of dialogue with business units, and between business units and external customers, in order to ensure optimised service delivery to those external customers.

As part of the strategy development process, stakeholders identified the need for the ICT Unit to adopt a more innovative and proactive approach to solution delivery. This changing relationship will require new roles (or formalisation of existing roles), responsibilities and skills to be developed within the ICT Unit, e.g. business relationship management, along with changes on the business side regarding when and how the ICT Unit is engaged on projects.

Business relationship management (BRM) provides

a mechanism to implement this new way of working for both project-based work and ICT operations and support activities. It provides for an on-going engagement between the ICT Unit and its customers. At its simplest it requires establishing product roadmaps, Division and Office level ICT strategies/roadmaps and regular ICT and business engagement and discussion. As it matures it can evolve into specialist teams within the ICT Unit responsible for the end-to-end delivery of solutions aligned with dedicated customers within the Department.

This new way of working will require changes not only within the ICT Unit, but also, critically, within business units. It is only with a strong engagement within business units for this new way of working that the potential benefits can be realised. There are also capacity constraints that may need to be overcome to release time within the ICT Unit to provide this additional level of attention to business requirements, outside of projects.

2.6.1 Related Actions

The following table contains the key actions on the strategy roadmap related to this theme.

#	Customer Engagement Actions
A.10	<p>Introduce Business Relationship Management:</p> <ul style="list-style-type: none"> • We will formalise existing customer engagement processes between the ICT Unit and the Offices • We will establish regular meetings between the ICT Unit and each Division to better understand business unit ICT needs and to identify opportunities for greater use of technology solutions • Subject to resource constraints, we will establish a business relationship management role within the ICT Unit to coordinate and enhance communications with our customers. • We will continue to use ICT bulletins, Lunch and Learn Fora and other means to engage in meaningful two-way communication with our customers.
A.11	<p>Customer Strategies</p> <ul style="list-style-type: none"> • We will work with the Department's Offices to help each of them build a vision for ICT which serves their long-term needs, is compatible with the vision for end to end digital delivery, and which is aligned with the Department's ICT Strategy.
A.12	<p>ICT Led Innovation</p> <ul style="list-style-type: none"> • We will build further on our capacity to meet customer needs for new ICT solutions. • We will maintain a role within the ICT Unit for first stage customer engagement, where customers with new needs can engage to identify solutions to business problems. • As part of this task, we will develop a capability to use Microsoft Forms, PowerApps and associated technologies to automate simple workflow processes which are currently carried out manually.
A.13	<p>Technology Training (End Users)</p> <p>Recognising the ongoing demand identified in the strategy development process for ICT training:</p> <ul style="list-style-type: none"> • We will support and promote the delivery of ICT training through OneLearning. • We will continue to offer shorter more specialised training for Department specific systems. • We will use our new business relationship management role to identify gaps in end-user ICT skills and develop new opportunities to address these gaps, through the use of OneLearning, or through local targeted training initiatives, the use of ICT tips and supports on BoB or other appropriate channels.
A.14	<p>Reorientation of Capability</p> <ul style="list-style-type: none"> • While retaining a strong focus on core service management and delivery, we will use the capacity made available through the consolidation and retirement of older technologies to build our capability in project management, governance and business relationship management. • We will seek opportunities to build deeper capability in our core business system offerings, particularly MS Dynamics and Business Intelligence platforms. • We will build capability in other areas which add value to our customers such as business and process analysis and change management.
A.15	<p>Support for Accessible Solutions</p> <ul style="list-style-type: none"> • In building new solutions, we will, as part of our design process, consider how best to meet the needs of all of our system users, including those with special accessibility needs, by reference to accessibility and universal design principles.

2.7 Digital by Design (Digitising Delivery)

We will facilitate the expansion of Digital by Design services and channels across the Department and Offices - for both internal and external customer interactions. ICT projects will be considered from the customer journey perspective looking to maximise the customer experience through the delivery of self-service / self-administered portals and digital communication channels. Underpinning the digital experience, we will look to deploy best in class digital platforms that provide a foundation onto which future technology and functional expansion can be deployed. The Digital by Design approach will apply equally to new solutions and for renewing/enhancing existing solutions.

A key element of the strategy will be the careful consideration of which systems to pilot, and when. There are several suitable projects scheduled within DBEI that will benefit from the Digital by Design

and Cloud First approaches. However, decisions will need to be taken regarding the sequencing of the projects. Ideally a pilot project would be adopted to trial the approach and technology before expanding it to further projects. However, this may present a challenge regarding pent up demand. The ICT Steering Committee and Management Board will play a critical role in the selection and prioritisation of projects balancing the risk of adoption vs. the need to deploy new solutions.

The following table contains the key actions on the strategy roadmap related to this theme. The nature of the Digital by Design objective implies that these projects are almost all business system projects, where the ICT Unit will work in partnership with business units to deliver new or improved services.

2.7.1 Related Actions

The following table contains the key actions on the strategy roadmap related to this objective.

#	Digital By Design Actions
A.16	<p>Employment Permit Processing System</p> <ul style="list-style-type: none"> We will build an end to end service delivery platform which maximises processing efficiency while delivering an excellent customer service portal for service users. This is a significant project (12 months approx.) which will require significant ICT technical, vendor management and project management support, as well as significant business unit inputs for system design, test, training and roll out.
A.17	<p>Trade Licensing System redevelopment</p> <ul style="list-style-type: none"> We will build an end to end service delivery platform which maximises processing efficiency while delivering an excellent customer service portal for service users. This is also a significant project with similar resource requirements as for A.16 above. There should be opportunities for time and resource savings in areas such as procurement and vendor management, as well as reuse of some technology components in order to streamline development timelines. Nevertheless, decisions will be required on prioritization between projects A.16 and A.17.
A.18	<p>CRO System Refresh</p> <ul style="list-style-type: none"> We will support the CRO's system refresh project, in particular providing the hosting platform, providing advice on best practice service development and deployment and assisting in ensuring that the service is delivered to the highest security standards.
A.19	<p>Patent & SPC eFiling including interactive template; other IPOI Projects</p> <ul style="list-style-type: none"> We will support the IPOI in the development and deployment of its new Patent and SPC eFiling service. We will also work with the IPOI to develop and deploy solutions which reduce dependence on single vendor solutions.

#	Digital By Design Actions
A.20	<p>WRC Conciliation Module (Dynamics)</p> <ul style="list-style-type: none"> • We will support the development and deployment of a new module in WRC's system to support the work of the WRC conciliation service.
A.21	<p>WRC Front-End Replacement</p> <ul style="list-style-type: none"> • We will work with the WRC to identify a suitable technology to replace their current eForm based system for customer complaints, and will work to implement a full service portal solution which delivers an end to end digital service which meets the needs of its customers and maximises processing efficiency in the WRC.
A.22	<p>WRC: Extension of Case Management system to Support Mediation Services</p> <ul style="list-style-type: none"> • We will support the development and deployment of an extension of WRC's MS Dynamics system to support the WRC mediation service.
A.23	<p>Labour Court System Refresh</p> <ul style="list-style-type: none"> • We will work to replace the Labour Court's ageing systems and deliver solutions which meet its needs and the needs of its customers.
A.24	<p>Unified WiFi solution for meeting areas etc.</p> <ul style="list-style-type: none"> • We will roll out Government Network's shared WiFi solution for use in key areas across the Department.
A.25	<p>Pilot of PowerApps/Flow</p> <ul style="list-style-type: none"> • We will pilot connectivity between our email services and Microsoft Office 365 using best practice secure architecture. • If successful we will use Office 365 Power Apps to deliver low-code solutions to implementing simple current manual processes, starting with applications for phones or tablets to the ICT Unit.
A.26	<p>Identify alternative options - Smaller Lotus Notes Apps</p> <ul style="list-style-type: none"> • We will identify suitable options to replace Lotus Notes applications for which Build to Share applications are not available.
A.27	<p>ODCE Development of in-house digital forensics capability</p> <ul style="list-style-type: none"> • We will support ODCE's procurement and implementation of an in-house digital forensics capability.
A.28	<p>ODCE Case Management System</p> <ul style="list-style-type: none"> • We will work with the ODCE to identify options for an ODCE case management solution which meets its needs and which can be supported by the Department's ICT service.

A.29

Work Anywhere

Recognising the challenges posed by COVID-19 and the need to respond in a way which allows the Department to continue to deliver services effectively irrespective of staff location, we will:

- Provide facilities which will allow all of our staff who need it to work from anywhere.
- Encourage greater use of existing collaboration tools, in particular Hive, through the use of channels like ICT tips and training opportunities.
- Supporting the roll out and optimum use of eDocs.
- Facilitating and encouraging self-service use of WebEx for video conferencing for regular users. In doing so we will also continue to provide support and advice to users of videoconferencing applications to assist them in optimizing the videoconference experience.
- Review and update the infrastructure supporting videoconferencing to optimize the delivery of this service.
- Pilot the use of Microsoft Teams, which is available as part of our Office 365 subscription, for allowing greater ad-hoc collaboration on projects. If the pilot is successful, we will roll the technology out to all staff.
- Examine options to use soft-phone technology, which would allow staff to make phone calls from their laptop/tablet. In effect, a staff member's telephone extension would be available to them wherever they work.



2.8 Data

We recognise the growing importance of data as an enabler for improving service delivery and its role as an asset that can be leveraged internally for policy development and externally for improving the delivery of government services and transparency regarding service delivery.

The ICT Unit will, in partnership with business units, look to implement a data programme that will build the Department's capacity to make evidence based policy and management decisions, and which will support wider Government initiatives for greater use of common identifiers which support service delivery and facilitate greater use of administrative data to inform policy. In all cases the data programme will be compliant with the necessary legislation and regulations (including GDPR).

While the ICT Unit can design and deploy the necessary tools and technologies to support data management and use, it will be critical that business units identify and specify their requirements regarding data and what it requires. The ICT Unit will focus on deploying technology and solutions that (a) are a fit for requirements and (b) are productively utilised by end users. Ahead of undertaking the data programme a comprehensive consultation process will be required to understanding the data needs and requirements of the Divisions, Offices and wider Government ahead of deploying any technical solutions. In this regard, options to use the Unique Business Identifier (UBI), which is still under development, but also other identifiers such as Eircode should be considered.

2.8.1 Related Actions

The following table contains the key actions on the strategy roadmap related to this objective.

#	Data Actions
A.30	<ul style="list-style-type: none"> We will ensure the use of common identifiers across line of business systems, where appropriate, in order to facilitate reuse of commonly held data.
A.31	<ul style="list-style-type: none"> We will continue to build IT capabilities in Tableau, and to promote it as our preferred end-user data analytics and visualization tool. We will continue to research, and where appropriate deploy alternative tools for data analytics purposes, particularly for advanced analytics purposes. In assessing the benefits and risks of deploying additional toolsets for analytics purposes, we will involve the end users of those toolsets in agreeing what to deploy.
A.32	<ul style="list-style-type: none"> In consultation with key users of data analytics tools in the Department, we will develop proposals for data warehousing for data analytics, together with the associated data management & governance framework with appropriate toolsets for data loading, access, and analysis. We will deploy this data warehousing solution with appropriate tools and promote its use.

2.9 ICT Governance

Key to the success of the strategy will be having an appropriate level of governance applied from the ICT Steering Committee, and ultimately the Management Board. The ICT Steering Committee must provide the necessary levels of oversight and sponsorship which are key to ensuring the strategic projects succeed. The existing ICT Steering Committee has served the organisation well. However, with the implementation of this Strategy and the changing nature of technology (solution and services) proposed, there is an opportunity to refresh and strengthen its mandate.

To realise the ambition contained in the strategy while balancing the portfolio of ICT operations and ICT/business projects, it will be critical that the ICT Steering Committee has a clearly defined mandate, and contains senior nominees (at PO level) of the Management Board representing all ICT stakeholders. Participants

will need to have clarity regarding their roles and responsibilities on the ICT Steering Committee, along with the associated effort and commitment. In addition to recommending projects and priorities for approval to the Management Board, the ICT Steering Committee also needs to provide adequate execution oversight and operate as an escalation point for significant project decisions, including managing competing demands across ICT customers and prioritisation of project workloads, and of ensuring visibility across the Department and Offices.

The ICT Steering Committee will, over the life of this strategy, be responsible for recommending significant ICT transformation efforts that will have implications for the ICT Unit and the wider Department (Divisions and Offices); for example regarding cloud adoption and potential changes in service provision from in-

house to external suppliers (OGCIO and others). It is therefore critical that the mandate and make-up of the committee has the authority to meet the nature of the decisions to be taken.

2.9.1 Related Actions

The following table contains the key actions in the strategy roadmap related to this theme.

#	Governance Actions
A.33	<p>ICT Governance</p> <ul style="list-style-type: none"> • We will build on the existing role of the ICT Steering Committee, adopting a new mandate to match the changing nature of ICT and business needs, requirements & relationship. • The ICT Steering Committee will provide the Governance and on-going evaluation of the execution of the ICT Strategy.
A.34	<p>Project Management Office Expansion</p> <ul style="list-style-type: none"> • We will build on and increase the implementation maturity of the existing ICT PMO, including the further development and implementation of standards for project management frameworks, templates, governance, reporting and processes. • We will investigate the potential to leverage the OGP Enterprise Project Portfolio Management solution (scheduled for release during 2020) to provide enterprise level oversight, evaluation and prioritisation of ICT projects.

2.10 Managing ICT Operations

The delivery of high quality, reliable ICT services depends on the availability of an experienced team of people with the right skills who are passionate about service delivery. In that respect, the ICT Unit has been fortunate in attracting and retaining capable staff. It is important that we continue to provide the structures and supports that are attractive to good staff and we continue to build and develop their skills. In the current environment of high demand for ICT skills, we must also continue to seek out and support innovative options for building team capability, such as the recent ICT Apprenticeship scheme.

The Department's ICT service has traditionally been characterised by a very broad number of technologies which have been supported in-house. Given the Department's broad remit, there is always likely to be a significant level of variety in technologies supported. Nevertheless, some strides have been made in consolidating the range of technologies supported, with opportunities to provide a higher level of service or to focus more resources in areas where there are growing demands, such as project management and business relationship management. We should continue to seek

opportunities to consolidate platforms and to retire older technologies so that we can focus on value added services. We must also recognise that, as technologies change and systems move to new platforms, this will pose challenges for ICT staff, who will need support and training in updating their skills as roles change.

2.10.1 Related Actions

The following table contains the key actions in the strategy roadmap related to this theme.

#	ICT Operations
A35	<ul style="list-style-type: none"> • As we retire older technologies and consolidate support onto a smaller number of platforms, we will review our capacity and seek to deploy resources in areas of greater added value, including business relationship management, project management and data analytics.
A.36	<ul style="list-style-type: none"> • We will support development and training opportunities, through a wide range of mechanisms, for our ICT staff to enable them to carry out their work to high standards in a changing ICT environment.
A.37	<ul style="list-style-type: none"> • We will also seek to identify opportunities to complement our existing skills and competencies by remaining actively open to opportunities to strengthen our team.
A.38	<ul style="list-style-type: none"> • We will seek opportunities to consolidate and rationalise the Department's technical environment through standardising the application portfolio, and through the implementation of platforms rather than products that allow for deployment across multiple Business Units/Offices.

2.11 ICT Unit Implications

Executing the strategy represents a significant undertaking. This would present a challenge to the ICT Unit if it was the only demand placed on ICT. However, the strategy must be executed in parallel with on-going business-as-usual ICT operations and a portfolio of existing and planned ICT and business projects. In executing the strategy, it is critical that due regard is given to balancing the overall ICT Unit workload with available capacity. The ICT Governance model will need to balance the competing demands and map out a programme of work (that is regularly re-evaluated and adjusted) to deliver the maximum benefit to all stakeholders, with due regard to the demands it places on ICT Unit resources.

The strategy also has implications for the ICT Unit regarding the nature and type of work that the ICT Unit will deliver over the course of the strategy and beyond. The strategy has potential to significantly change how the ICT Unit delivers solutions and services and what solutions and services are delivered. These changes at the individual and unit level need to be adequately managed and addressed in the execution of the strategy.

2.12 Prioritising Our Commitments

Delivering on all of the commitments outlined above will require the application of considerable resources and will take time. While many of those identified can be progressed in parallel, it is important that they are prioritised and resources are applied to those areas which are considered to be most important to the Department's business needs. Many of the goals are significant ICT delivery projects which will require the application of significant technical and management resources to ensure that they are delivered on specification and within agreed budget. That will require decisions on relative priority of individual projects.

2.13 Case Management Systems: Some Important Considerations

Of particular note, there are a number of business system projects where it is proposed to move existing Lotus Notes case management systems to Microsoft Dynamics cloud-based platform as a



service model (Employment Permits, Trade Licensing, and possibly Labour Court case management). The Microsoft Dynamics platform has proven itself, in the case of the Workplace Relations Commission, to be a solid platform for case management delivery. There are significant advantages to building on our existing investment in Dynamics, consolidating the number of technologies we support for business systems, and further developing our ability to leverage vendor supports for the platform. However, the existing WRC systems are hosted on-premise, and we need to decide whether future Dynamics systems should be based on-premise or consumed as a cloud-based platform as a service. The platform as a service offering is more compatible with our Cloud First approach, and would focus our energy on adding business value as against traditional low-level system support and maintenance. Cloud-based services are also where most vendor innovation is taking place, and by adopting the cloud offering there are likely to be more opportunities to leverage this innovation. For these reasons, it is recommended that the cloud-based approach is used for new Dynamics deployments. However, there are risks with this approach which must be addressed. In particular, the cloud-based version of Dynamics assumes that a customer is fully invested in all of Microsoft's cloud services. For organisations with a hybrid service delivery model (in particular email on-premise), integrating Dynamics in the cloud is more complex. It is important that the technical feasibility

of the hybrid model is proven before embarking on a significant ICT business system development. Action A.4 in this strategy represents a key project which must be carried out before a final decision on the suitability for the Department of Dynamics in the cloud. Once this issue is clarified, there are potentially three separate and significant Dynamics development projects competing for priority. Given availability of resources and the novelty of the development platform, these projects should be carried out in sequence. As such, decisions will be needed on the relative priority of the projects. Note that this does not mean that those areas which do not start first should be ignored. The Business Process Reengineering studies in all three business areas identified scope for interim supports and solutions until new systems are developed, and these options should be fully explored. Procurement options should also be considered which provide for ongoing MS Dynamics supports which can be used to deliver more than one system, obviating the need for multiple procurements.

Having regard to the foregoing, the following is an indicative assignment of priorities for the goals in this strategy. It should be reviewed as the strategy progresses.

#	Hosting, Cloud & Service Provision	Relative Priority
A.1	<ul style="list-style-type: none"> Subject to sufficient assurance on service quality and security, we will work with OGCIO to design and migrate our internet facing infrastructure to OGCIO's new internet facing cloud service, starting with hosting for CRO's system refresh, and then other internet facing services. 	Short term: needed to support CRO system refresh and replacement of ageing infrastructure
A2	<ul style="list-style-type: none"> We will engage with OGCIO to determine the suitability of OGCIO's hosting services for replacing end of life hosting infrastructure in our Kildare St. and Earlsfort data centres with OGCIO hosted services. If OGCIO hosting is not ready to meet DBEI needs at this time, we will liaise with OGCIO in identifying alternative hosting arrangements, either in public cloud or on-premise. 	Short/Medium term: Needed to replace ageing infrastructure, but should follow A.1 above.
A.3	<ul style="list-style-type: none"> We will review the implementation progress of the OGCIO shared desktop model during the course of this strategy to determine if and when it may represent a preferable option for long-term service delivery for core desktop services. 	Medium: Our current desktop support service is stable, and the outcome of current mid-sized Department migrations would usefully inform this decision.

#	Hosting, Cloud & Service Provision	Relative Priority
A.4	<ul style="list-style-type: none"> We will carry out a proof of concept pilot to assess the suitability of a hybrid model for Microsoft Dynamics (Dynamics in the cloud, email on-premise) in order to have assurance that the hybrid model will meet the Department's need. We will use the outcome of this pilot to inform our hosting options for new case management systems, particularly for Employment Permits and Trade Licensing. 	Short term: The deployment model for a number of business system developments is dependent on the outcome of this pilot.

#	BUILD To SHARE (BTS) Deployments	Relative Priority
A.5	<ul style="list-style-type: none"> We will work with OGCIO to support and promote the successful roll out of eDocs 	Short term
A.6	<ul style="list-style-type: none"> We will roll out eFol in the Offices (WRC and ODCE) 	Medium
A.7	<ul style="list-style-type: none"> eCorrespondence: we will work with OGCIO and our Ministers' and Secretary General's Offices to address current functionality gaps in eCorrespondence and support its adoption once these issues are resolved 	Medium: Delivery timeframes are dependent on new feature releases by BTS service.
A.8	<ul style="list-style-type: none"> We will support the development and deployment of the eRisk system 	Medium: Delivery timeframes are dependent on new feature releases by BTS service.
A.9	<ul style="list-style-type: none"> We will actively work with OGCIO to identify other opportunities for Build to Share applications 	Long

#	Customer Engagement Actions	Relative Priority
A.10	<p>Introduce Business Relationship Management:</p> <ul style="list-style-type: none"> We will formalise existing business engagement processes between the ICT Unit and the Offices We will establish regular meetings between the ICT Unit and each Division to better understand business unit ICT needs and to identify opportunities for greater use of technology solutions Subject to resource constraints, we will establish a customer relationship management role within the ICT Unit to coordinate and enhance communications with our customers. We will continue to use ICT bulletins, Lunch and Learn fora and other means to engage in meaningful two-way communication with our customers. 	Short/Medium term
A.11	<p>Customer Strategies</p> <p>We will work with the Department's Offices to help each of them build a vision for ICT which serves their long-term needs, is compatible with the vision for end to end digital delivery, and which is aligned with the Department's ICT Strategy.</p>	Medium

#	Customer Engagement Actions	Relative Priority
A.12	<p>ICT Led Innovation</p> <ul style="list-style-type: none"> • We will build further on our capacity to meet customer needs for new ICT solutions. • We will maintain a role within the ICT Unit for first stage customer engagement, where customers with new needs can engage to identify solutions to business problems. <p>As part of this task, we will develop a capability to use Microsoft Forms, PowerApps and associated technologies to automate simple workflow processes which are currently carried out manually.</p>	Medium/Longer term
A.13	<p>Technology Training (End Users)</p> <p>Recognising the ongoing demand identified in the strategy development process for ICT training:</p> <ul style="list-style-type: none"> • We will support and promote the delivery of ICT training through OneLearning. • We will continue to offer shorter more specialised training for Department specific systems. • We will use our new business relationship management role to identify gaps in end-user ICT skills and develop new opportunities to address these gaps, through the use of OneLearning, or through local targeted training initiatives, the use of ICT tips and supports on BoB or other appropriate channels. 	Ongoing
A.14	<p>Reorientation of Capability</p> <ul style="list-style-type: none"> • While retaining a strong focus on core service management and delivery, we will use the capacity made available through the consolidation and retirement of older technologies to build our capability in project management, governance and business relationship management. • We will seek opportunities to build deeper capability in our core business system offerings, particularly MS Dynamics and Business Intelligence platforms. • We will seek to build capability in other areas which add value to our customers such as business and process analysis and change management. 	Longer term
A.15	<p>Support for Accessible Solutions</p> <ul style="list-style-type: none"> • In building new solutions we will, as part of our design process, consider how best to meet the needs of all of our system users, including those with special accessibility needs, by reference to accessibility and universal design principles. 	Ongoing

#	Digital By Design Actions	Relative Priority
A.16	Employment Permit Processing System <ul style="list-style-type: none"> We will build an end to end service delivery platform which maximises processing efficiency while delivering an excellent customer service portal for service users. 	Needs to follow Action A.4. Given rising demand for permits, it is suggested that this proceed in advance of goals A.17 and A.23. It may also be possible to leverage the existing employment permits online service in the new system.
A.17	Trade Licensing System redevelopment <ul style="list-style-type: none"> We will build an end to end service delivery platform which maximises processing efficiency while delivering an excellent customer service portal for service users. 	See notes on A16 above. Recommendations of the BPR report should be considered for quick wins for this system.
A.18	CRO System Refresh <ul style="list-style-type: none"> We will support the CRO's system refresh project, in particular providing the hosting platform, providing advice on best practice service development and deployment and assisting in ensuring that the service is delivered to the highest security standards. 	Short term: This project has already commenced.
A.19	Patent & SPC eFiling including interactive template; other IPOI projects <ul style="list-style-type: none"> We will support the IPOI in the development and deployment of its new Patent and SPC eFiling service. We will also work with the IPOI to develop and deploy solutions which reduce dependence on single vendor solutions. 	Short term: Project has commenced
A.20	WRC Conciliation Module (MS Dynamics) <ul style="list-style-type: none"> We will support the development and deployment of a new module in WRC's system to support the work of the WRC conciliation service. 	Short term. Expected to commence shortly
A.21	WRC Front-End Replacement <ul style="list-style-type: none"> We will identify a suitable technology to replace the WRC's current eForm based system for customer complaints, and will work to implement a full service portal solution which delivers an end to end digital service which meets the needs of its customers and maximises processing efficiency in the WRC. 	Longer term
A.22	WRC: Extension of Case Management system to Support Mediation Services <ul style="list-style-type: none"> We will support the development and deployment of an extension of WRC's MS Dynamics system to support the WRC mediation service. 	Short term



#	Digital By Design Actions	Relative Priority
A.23	<p>Labour Court System Refresh</p> <ul style="list-style-type: none"> We will work to replace the Labour Court's ageing systems and deliver solutions which meet its needs and the needs of its customers. 	See notes on G16 above. Recommendations of the BPR report should be considered for quick wins for this system.
A.24	<p>Unified WiFi solution for meeting areas etc.</p> <ul style="list-style-type: none"> We will roll out Government Network's shared WiFi solution for use in key areas across the Department. 	Short term
A.25	<p>Pilot of PowerApps/Flow</p> <ul style="list-style-type: none"> We will pilot connectivity between our email services and Microsoft Office 365 using best practice secure architecture. If successful we will use Office 365 Power Apps to deliver low-code solutions to implementing simple current manual processes, starting with applications for phones or tablets to the ICT Unit. 	Medium/Longer term
A.26	<p>Identify alternative options - Smaller Lotus Notes Apps</p> <ul style="list-style-type: none"> We will identify suitable options for simpler Lotus Notes applications for which Build to Share applications are not available. 	Medium/Longer term
A.27	<p>ODCE Development of in-house digital forensics capability</p> <ul style="list-style-type: none"> We will support ODCE's procurement and implementation of an in-house digital forensics capability. 	Medium
A.28	<p>ODCE Case Management System</p> <ul style="list-style-type: none"> We identify options for an ODCE case management solution which meets its needs and which can be supported by the Department's ICT service. 	Medium/Longer term

#	Digital By Design Actions	Relative Priority
A.29	<p>Work Anywhere</p> <p>Recognising the challenges posed by COVID-19 and the need to respond in a way which allows the Department to continue to deliver services effectively irrespective of staff location, we will:</p> <ul style="list-style-type: none"> • Provide facilities which will allow all of our staff who need it to work from anywhere. • Encourage greater use of existing collaboration tools, in particular Hive, through the use of channels like ICT tips and training opportunities. • Supporting the roll out and optimum use of eDocs. • Facilitating and encouraging self-service use of WebEx for video conferencing for regular users. In doing so we will also continue to provide support and advice to users of videoconferencing applications to assist them in optimizing the videoconference experience. • Review and update the infrastructure supporting videoconferencing to optimize the delivery of this service. • Pilot the use of Microsoft Teams, which is available as part of our Office 365 subscription, for allowing greater ad-hoc collaboration on projects. If the pilot is successful, we will roll the technology out to all staff. • Examine options to use soft-phone technology, which would allow staff to make phone calls from their laptop/tablet. In effect, a staff member's telephone extension would be available to them wherever they work. 	Short/Medium Term

#	Data Actions	Relative Priority
A.30	<ul style="list-style-type: none"> • We will promote the use of common identifiers across line of business systems, where appropriate, in order to facilitate reuse of commonly held data. 	Ongoing
A.31	<ul style="list-style-type: none"> • We will continue to build IT capabilities in Tableau, and to promote it as our preferred end-user data analytics tool. • We will continue to research, and where appropriate deploy alternative tools for data analytics purposes, particularly for advanced analytics purposes. In assessing the benefits and risks of deploying additional toolsets for analytics purposes, we will involve the end users of those toolsets in agreeing what to deploy. 	Ongoing.
A.32	<ul style="list-style-type: none"> • In consultation with key users of data analytics tools in the Department, we will develop proposals for data warehousing for data analytics, together with the associated data management & governance framework with appropriate toolsets for data loading, access, and analysis. • We will deploy this data warehousing solution with appropriate tools and promote its use. 	Medium/Longer term

#	Governance Actions	Relative Priority
A.33	ICT Governance <ul style="list-style-type: none"> We will build on the existing role of the ICT Steering Committee, adopting a new mandate to match the changing nature of ICT and Business needs, requirements & relationship. The ICT Steering Committee will provide the Governance and on-going evaluation of the execution of the ICT Strategy. 	Short term
A.34	Project Management Office Expansion <ul style="list-style-type: none"> We will build on and increase the implementation maturity of the existing ICT PMO, including the further development and implementation of standards for project management frameworks, templates, governance, reporting and processes. We will investigate the potential to leverage the OGP Enterprise Project Portfolio Management solution (scheduled for release early 2020) to provide enterprise level oversight, evaluation and prioritisation of ICT projects. 	Medium

#	ICT Operations	Relative Priority
A35	<ul style="list-style-type: none"> As we retire older technologies and consolidate support onto a smaller number of platforms, we will review our capacity and seek to deploy greater resources in areas of greater added value, including business relationship management, project management and data analytics. 	Longer term
A.36	<ul style="list-style-type: none"> We will support development and training opportunities, through a wide range of mechanisms, for our ICT staff to enable them to carry out their work to high standards in a changing ICT environment. 	Ongoing
A.37	<ul style="list-style-type: none"> We will also seek to identify opportunities to complement our existing skills and competencies by remaining actively open to opportunities to strengthen our team. 	Ongoing
A.38	<ul style="list-style-type: none"> We will seek opportunities to consolidate and rationalise the Department's technical environment through standardising the application portfolio, and through the implementation of platforms rather than products that allow for deployment across multiple Business Units/Offices. 	Ongoing



3. Background to the New Strategy

The Department of Enterprise, Trade and Employment has a wide and complex brief to support the growth of business, enterprise and innovation throughout the economy.

The ICT Unit's services to the Department are reflected in the diverse needs of the Department's wide-ranging remit. They include services for policy development staff as well as customer facing services by the Labour Court, the Workplace Relations Commission, Companies Registration Office, Patents Office, the Office of the Director of Corporate Enforcement and the Department's Employment Permits Unit as well as a number of smaller outward facing services.

The Department provides ICT supports for these functions through a mix of technologies & services, using an internal team of 30 staff supplemented by outsourced support in several areas, including ICT Helpdesk and hosting environment management. The ICT team is also supplemented with external contract resources providing services in the areas of application, database and network support. Technologies are a mix of older legacy systems and more modern systems, mostly hosted internally.

3.1 Strategy Context

This strategy does not exist in isolation. Instead it has been designed and executed within a complex layered environment, meeting the needs of multiple stakeholders and subject to both internal and external forces and trends. It has also been led by the business, enabling and facilitating the organisation to achieve its goals and objectives.

Just as the adoption of new digital delivery technologies has enabled private sector organisations to transform operating models, there is an opportunity for public sector bodies to leverage these technologies to transform service delivery. Through digitalisation, public sector organisations can provide services that meet the evolving expectations of internal users, external customers and business. External customers prefer digital services in their interactions with government, and digital services can also empower those customers & broaden their engagement with public sector organisations. For businesses, too, digital services are convenient and efficient. Public sector digitalisation efforts can also compel businesses to digitalise more quickly. This digital agenda is being enabled through the introduction of

increasingly more sophisticated cloud and service delivery solutions and a digital first / digital by design approach to solution development and deployment.

In addition to changes in the external environment, this ICT strategy aligns with the Public Sector ICT Strategy and the five core pillars contained within: Build to Share, Digital First, Data as an Enabler, ICT Governance and Increased Capability.

From our stakeholder consultations it is clear that the ICT Unit’s customers are looking for solutions that are stable and secure as well as supporting their core operational needs. At the same time there is a demand for innovative solutions and practices to allow the organisation maximise the potential from digital both internally and in the multiple line of business applications.

This dual mandate requires a strategy that is more than the traditional incremental evolution of the past and considerably more ambitious, that embraces new technical paradigms (cloud, as-a-service), leverages central government strategies and, where appropriate, OGCIO solutions and services while increasing the level of engagement and partnership between the ICT Unit and its customers and stakeholders.

3.2 Guiding Principles

The strategy contains 14 principles. These guiding principles will govern the decisions & actions taken by the ICT Unit and provide a framework to evaluate options and design solutions.

Guiding Principle	Statement of Intent
Enterprise Value	We will aim to maximise the long-term benefits to the enterprise from all solutions deployed.
Build-To-Share	We will aim, in the first instance, to leverage existing appropriate Government 'build-to-share' solutions for applications and infrastructure over procuring or building any digital or data solutions.
Minimal Footprint	We will look to hosted, as-a-service solutions where possible over on-premise or other service models & solutions
Simplicity	We will choose the simplest viable products and solutions and aim to reduce operational complexity of the business.
Reuse - Buy - Build	We will maximise the reuse of existing assets. If we can't reuse, we will procure efficiently. If we can't procure, we will build solutions adopting low code/configuration over code and customisation.
Managed Data	We will manage data as an asset in compliance with a data governance model.
Technical Diversity	We will control the diversity of technology (utilise standard platforms, hardware, applications), while holding fast to our simplicity and fit-for-purpose principles.
Managed Security	We will manage security enterprise-wide, in compliance with our security strategy.
Innovation	We will proactively look for innovative technology solutions to maximise the benefits for the Department. Innovation will be aligned with our organisation's goals and objectives, not innovation for the sake of innovation.
Stakeholder Centric	We will engage with and deliver an appropriate, high-quality, transparent experience to all customers & stakeholders.

Guiding Principle	Statement of Intent
Digital by Design	We will look to digital solutions first, looking to automate and digitalise where feasible and appropriate.
Right Source	We will utilise the most appropriate service delivery models possible, including leveraging proven 'best-in-class' external advisors and service providers to complement internal skills & capacity. We will invest in & develop our people.
Cloud First	We will adopt a cloud first stance for new solutions.
Green ICT	We will look to adopt a lead by example seeking to minimise our carbon footprint.

Table 1 - Guiding Principles

The strategy principles are aligned with the three umbrella principles agreed by the OGCIO Digital Leaders Group, which in turn encompasses the OECD 12 principles on digital government strategies⁶. The diagram below provides a graphical snapshot of the areas of alignment.

Guiding Principle	Targets for usage of digital services	Common Products & Services	OECD Principles on Digital Government
Enterprise Value			
Build to Share			
Minimal Footprint			
Simplicity			
Reuse - Buy - Build			
Managed Data			
Technical Diversity			
Managed Security			
Innovation			
Stakeholder Centric			
Digital First			
Right Source			
Cloud First			
GREEN IT			

Figure 1 - ICT Unit Guiding Principles Alignment

The high degree of alignment means that the ICT Unit is well placed to capitalise on best practices both nationally and internationally in the design and execution of a fit for purpose digital strategy.

⁶ [OECD Recommendation on Digital Government Strategies](#)

3.3 Existing Environment

It is important to acknowledge that this strategy is building on a technical environment that is currently secure and stable. The ICT Unit is effectively delivering services and solutions today in a Trusted Operator model. This was acknowledged during the strategy development process through consultation with stakeholders and in the business satisfaction survey results.



	DEPARTMENT	OFFICES
Innovator - Transforms the Business Reliable Technology Innovation		
Business Partner - Expands the Business Effective Execution on Business Projects, Strategic Use of Analytics & Customer Technology		
Trusted Operator - Optimises the Business Effective Fulfilment of Work Orders, Functional Business Applications, and Reliable Data Quality	●	●
Firefighter - Supports the Business Reliable Infrastructure and IT Service Desk		
Unstable - Struggles to Support Inability to Provide Reliable Business Services		

Figure 2 - ICT Unit - Current Position on ICT Capability Maturity Model for Service Delivery to the Core Department and the Offices

By having a stable and secure technical foundation, we can now focus on delivering solutions and services to expand, and in some cases transform, the business, through the expansion and enhancement of existing online solutions and the introduction of innovative digital online services and channels. We must also however continue to maintain the current levels of service, system stability and security.

3.4 Department and ICT Strategic Alignment

The DBEI current strategy statement (Statement of Strategy 2018 – 2021) sets out seven high-level goals aimed at delivering the commitments assigned under the Programme for Partnership in Government 2016:

- Create and sustaining high quality enterprise & employment across all regions
- Lead a whole of Government approach to developing the most competitive environment for investment, productivity and sustainable jobs
- Position Ireland as a Global Innovation Leader
- Deliver positive workplace relations supports, well-functioning dispute resolution mechanisms, robust enforcement of employment rights and a safe working environment
- Ensure that business regulation facilitates business investment and development, competition in the marketplace, high standards of consumer protection and corporate governance
- Work ambitiously with our EU and International Partners across a wide range of interests, including Brexit
- Invest in our staff and optimising our resources



3.5 Business Priorities

As part of the strategy development process a set of specific business priorities have been identified.

#	Requirement for an ICT Strategy that will ...
P.1	Support and enable delivery of the seven defined high-level goals detailed in the DBEI Statement of Strategy 2018-2021
P.2	Support and enable the Department’s objective to be recognised as a Department of excellence and a role model for other Departments to follow.
P.3	Support the Department’s core work in policy formulation, through the provision of appropriate best-in-class tools and technology; facilitating a data driven approach to policy development.
P.4	Support the Department’s outward facing solutions with a digital first/digital by design approach to solution architecture and delivery.
P.5	Support the delivery of ICT services and solutions in a responsive, agile, innovative and user centric model, matching the capacity and capability within the ICT Unit with the demands and requirements of its customers.
P.6	Support the delivery of digital customer (internal and external) services and solutions, that leverage best in class standardised cloud and as-a-service models to maximise the potential of all solutions.

Table 2 – Business Priorities

3.6 Strengths, Weaknesses, Opportunities and Threats

<p>Strengths</p> <ul style="list-style-type: none"> • The ICT team has a significant level of competence in a number of areas • Many things we do are excellent for an organisation of our size e.g. desktop, service automation, frequent patching & updates • Customer perception of our services is generally very positive • ICT staff turnover has been low • Culture: we have succeeded in refocusing ICT service delivery culture on customer needs • Our systems availability metrics are good 	<p>Opportunities</p> <ul style="list-style-type: none"> • Cloud service offerings represent an opportunity to shift service delivery up the customer value chain and create new opportunities for service delivery and resilience. • New technologies create new opportunities e.g. AI/machine learning, robotic process automation. • A consolidation of the technologies supported presents an opportunity to create capacity to focus on other areas e.g. data, project management, customer relationship management • Shared services, if done well, present an opportunity for efficient high-quality services • Data: there is an opportunity for the Department to do more in the data analytics space • New cloud services such as low code/no code solutions present new opportunities to automate business processes
<p>Weaknesses/Challenges</p> <ul style="list-style-type: none"> • The ICT Unit is highly reliant on a small cohort of skilled staff • Recruitment of qualified and experienced staff is becoming more challenging • Low customer demand for data analytics suggests that the Department may not be fully exploiting the opportunity to use data for research and management purposes • The Department is very diverse, which creates a very diverse ecosystem of ICT systems and requirements which has a high support overhead compared to many similar sized organisations • The oversight role of the ICT Steering Committee should be strengthened • There will be an increased demand for new business systems development in the medium term, which will require prioritisation • The vendor landscape is tightening, and getting the right support or development contractors is becoming challenging 	<p>Threats</p> <ul style="list-style-type: none"> • Ageing data centre infrastructure will require replacement, but the options and implications of those options are more complex than heretofore • Risk of loss of key staff • If shared services are not done well it will inevitably lead to a diminution of service quality and of confidence in our ICT capability • The rapid evolution of the ICT service environment will challenge us to keep up • The Department's service delivery model, with some key components on-premise, makes new cloud service deployments more complex and creates implementation uncertainties and challenges • Ageing finance system needs careful management until shared financial services issues are resolved

3.7 Wider Strategy Context

This strategy is also informed by and aligned with other Government Strategies and initiatives including:

- Innovation 2020
- Data Sharing and Governance Bill
- Public Service Data Strategy 2019-2023
- Open Data Technical Framework
- eGovernment Strategy
- Public Service ICT Strategy
- PM Handbook for Public Services
- Cloud Computing Advice Note (October 2019)
- Climate Action Plan.



4. Strategy Execution

4.1 Partnership Approach

Critical to achieving the strategic goals and objectives is the realisation that the success or otherwise of the strategy will rest with the level of engagement, support, participation and ownership that business stakeholders are prepared and able to give. In reviewing the implications of the strategy, it is critical that the significant impacts and potential changes that need to happen within the business must be adequately addressed and prioritised within those areas.

- Project selection and prioritisation, and ensuring visibility of projects and prioritisation across the Department and Offices
- Project approval
- Governance & monitoring of project execution
- Support and championing the strategic objectives at individual project level
- Overseeing annual reviews and assessment of strategy & adjustments (as required)
- Balancing the portfolio of work across the three delivery areas of operations, projects and strategic workstreams – getting the balance right.

4.2 Strategy Execution and Governance

The successful realisation of the strategy benefits will be dependent on applying appropriate levels of governance and programme management in relation to the execution of the workstreams. The execution of the strategy needs to be considered as a programme of work with significant change management at organisational and business unit levels.

4.2.2. Portfolio Approach

In executing the strategy, it is critical that due regard is given to balancing the overall ICT Unit workload and capacity. There is a need to consider the strategic workstreams and projects in conjunction with the current operational workload on ICT and the project workload driven by both ICT and business projects. A portfolio management approach is required to balance these competing demands. The ICT Governance model needs to balance the competing demands across all three delivery areas and map out a programme of work (that is regularly re-evaluated and adjusted) to deliver the maximum benefit to all stakeholders. It will be necessary to make informed decisions regarding project selection and prioritisation.

4.2.1. ICT Governance

Key to the success of the strategy will be having an appropriate level of Governance applied from the ICT Steering Committee, providing the necessary levels of oversight and sponsorship to enable the strategic projects succeed. The ICT Steering Committee will be required to fulfil several roles including:

The ICT Steering Committee will play a critical role is balancing the demands across all three areas and factoring in constraints, across the full portfolio, such as:

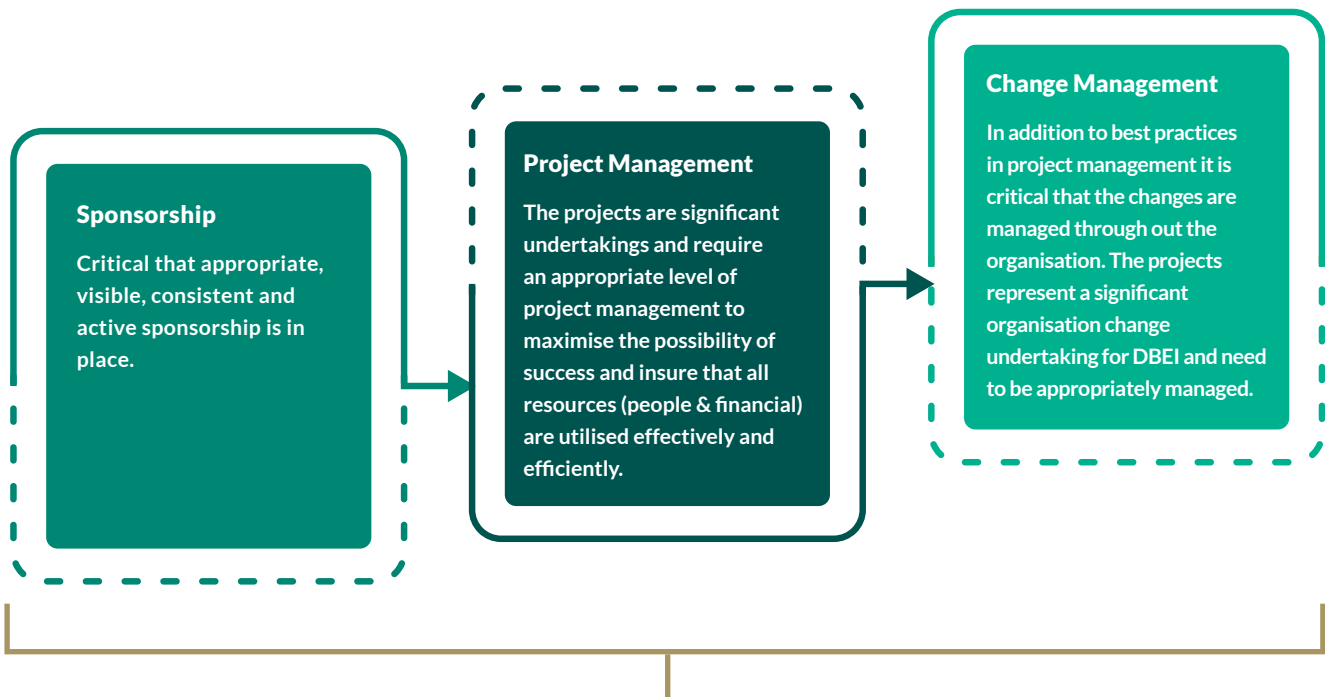
Constraint	Consideration
Capacity	<ul style="list-style-type: none"> • Need to evaluate if the required resources within both the ICT Unit and any impacted business unit(s) are available to participate and contribute to the project as defined. • Important that consideration is given to ensure that the right resources are available (right skills, levels, authority, interest) and not just any resource.
Capability	<ul style="list-style-type: none"> • Need to evaluate if the required skills, knowledge and experience to successfully deliver the project is available. If not available within the ICT Unit can they be accessed via the vendor base?
Financial Capacity	<ul style="list-style-type: none"> • Will we have the budget/financial resources available to support the project? • Do we have the budget/financial resources to address the total cost of ownership and any on-going (recurring costs) associated with the project?
Risks	<ul style="list-style-type: none"> • Do we have full and appropriate visibility to the risks associated with executing the project and have we identified and defined appropriate mitigation measures? • Do we have full and appropriate visibility to the risks associated with not executing the project and the associated implications?

Constraint	Consideration
Benefits	<ul style="list-style-type: none"> Do we understand and have we validated the benefits associated with executing the project? Have we assessed the cost/benefit both tangible and intangible?
Inter-Dependencies across The Portfolio	<ul style="list-style-type: none"> Do we understand the interdependencies and sequencing of the project? What does it enable/block? What is the optimum portfolio of projects and priorities to achieve the best return?

Table 3 - Portfolio Considerations

4.2.3. Programme Management

Critical to the success of the Strategy Execution will be putting in place appropriate structures and resources for managing programme, project and change management activities. Each project will be accompanied by a detailed Business Case, prior to execution and will be approved by the ICT Steering Committee, with an appropriate level of project sponsorship applied. The overall programme management approach is captured below.



Programme Management

Recommended that the Projects are managed as a single programme & that a programme management approach is adopted to manage the points of integration and the organisation wide change, risks & critically resource capacity.

Figure 3 - Strategy Execution

4.2.4 Strategy Oversight and Periodic Review

Delivery against the strategy's goals will be overseen by the ICT Steering Committee and Management Board. The strategy is not a static document and will need to be adapted as the environment in which it operates changes, to take advantage of new opportunities, or to mitigate emerging risks. The strategy objectives and the underlying projects should be reviewed annually to ensure that it remains relevant to the needs of the Department.



5. Risks and Benefits

5.1 Implications & Risks

A number of high-level risks have been identified to the successful execution of the Strategy:

Risk 1: That a business led strategy requires active and on-going business engagement to be successful.

Mitigations:

- It is important that both ICT and business units come together and gain consensus on what type of ICT is required/desired for the organisation. We should build on the analysis captured during the assignment to demonstrate the drivers and demand for change – linking both the internal and external factors.
- Define and communicate what Business Relationship Management means in the DBEI context and importantly the requirements and demands it places on both ICT and the business (re: roles, responsibilities, effort, etc.).
- Secure Management Board buy-in.

Risk 2: Lack of resources (both capacity and capability) within the ICT Unit to deliver key elements of the Strategy.

Mitigations:

- Starting the skills development project as early in

the strategy as possible to build out some level of internal knowledge and capability.

- Identifying capacity requirements up-front across the portfolio of work (operations, projects and strategy) and proactively identifying potential capacity and capability gaps.
- Identifying and engaging with best-in-class vendors to provide additional capacity and capability as required.
- Leverage the ICT Steering Committee to provide governance and direction on project prioritisation and allocation of limited resources.

Risk 3: ICT Steering Committee not operating at right level / not engaged.

Mitigations:

- Develop a revised Charter for the ICT Steering Committee outlining roles and responsibilities, profile of participants (seniority), detail effort required and expectations, processes and procedures for operation.
- Get Secretary General and Management Board level support for charter role and remit.
- Implement appropriate reporting on ICT Steering Committee meetings and activities.

Risk 4: Loss of key resources from within the ICT Unit during strategy execution.

Mitigations:

- Conduct a review of staffing complement and identify key resources (& knowledge). Where possible/feasible (within resource constraints) look to implement knowledge transfer and management practices to capture tacit and explicit knowledge and build out capacity within team.
- Look at options to migrate/transfer the knowledge risk through introduction of vendors/support partners who many have the required knowledge.
- Look at mitigating the risk through migration of functions via cloud and/or as-a-service deployment and delivery models.

Risk 5: Moving to the OGCIO Shared Desktop Service results in a poorer level of service to the Business and/or places unacceptable constraints regarding what technical options and solutions DBEI can implement.

Mitigations:

- Conduct a thorough review with existing OGCIO customers of current service offerings, service levels and customer satisfaction to establish a baseline.
- Using baseline engage with OGCIO to assess how their offering can improve our current offering.
- Identify and evaluate gaps re: as-is and OGCIO offering. Assess impacts to ICT and business.
- Evaluate Strategy Roadmap and Guiding Principles to understand how OGCIO can support future planned projects e.g. low-code/no-code solutions, integration with as-a-service solutions e.g. MS Dynamics. Identify technical constraints.
- Implement comprehensive and detailed service level agreements with OGCIO re: service provision and implement account/service management practices regarding service delivery.

Risk 6: Cloud not a viable option for DBEI requirements.

Mitigations:

- Strategy advocates a cloud- first stance not cloud only. In all cases the most appropriate solution for DBEI should be implemented.
- Detailed consideration should be given to circumstances when cloud is not considered appropriate and that decision challenged. The overall DBEI technical and application architecture(s) should be designed and where necessary transitioned to a cloud ready state.
- If legacy applications are preventing the migration to cloud these should be considered as early candidates for retirement, replacement or redesign to enable subsequent cloud projects.
- Where a valid argument is made for on-premise or other (non- cloud) deployment models e.g. there is no cloud alternative - then the long-term future of the solution should be evaluated and assessed. Most vendors are focusing their R&D and innovation efforts on cloud solutions with lower levels of investment going into traditional on-premise versions. Non-cloud solutions may have limited lifespans and restrict future scalability and suitability.

Risk 7: Negative impact on the overall service delivery capability within the ICT Unit of the adoption of cloud (as-a-service) and/or OGCIO Shared Desktop solutions.

Mitigations:

- Establish a roadmap for service adoption and build into the planning potential changes to roles and responsibilities.
- Implement skill and capability development programs to move impacted staff into new roles.
- Identify the opportunities to leverage impacted staff to deliver new/higher value services to the business e.g. process analysis/mapping, change management, application consulting.

5.2 Benefits

Stakeholder	Benefits	Achieved By
DBEI Business Users	<ul style="list-style-type: none"> • Greater level of engagement with the ICT Unit both operationally and project based resulting in a higher level of satisfaction. • Proactive identification of solutions, introduction of innovative solutions and access to latest technology (providing scalable, suitable, supportable and secure solutions) that enable growth and provide increased levels of agility regarding change management. • Access to increased services e.g. business analysis, change management etc. • Access to increasing level of data for operational, strategic and insight analysis. • Access to best-in-class technical solutions for collaboration and 'on-the-go' working. 	<ul style="list-style-type: none"> • Business Relationship Management • Increased Project Management Maturity • ICT Led Innovation • Cloud/As-a-service solutions leveraging latest technology • Expanding Service Catalogue • Data Programme • Work Anywhere • Collaboration & Communication
Public-Facing Solutions	<ul style="list-style-type: none"> • Access to latest technical solutions. • Increased solution resilience • Increased scalability and security of solutions • More agile approach to solution deployment and change management. • Adoption of best-practice re: delivery of online government services through self-service / self-administer portals and solutions. • Access to increasing level of data for operational, strategic and insight analysis 	<ul style="list-style-type: none"> • ICT Led Innovation • Cloud/as-a-service solutions leveraging latest technology • Business Relationship Management • Increased Project Management Maturity • ICT Standardisation • ICT Architecture Refresh (Cloud First) • Self Service by Design • Data Programme
Offices	<ul style="list-style-type: none"> • Greater level of engagement with the ICT Unit both operationally and project based resulting in a higher level of satisfaction. • Proactive identification of solutions, introduction of innovative solutions and access to latest technology (providing scalable, suitable, supportable and secure solutions) that enable growth and provide increased levels of agility regarding change management. • Access to increased services e.g. business analysis, change management etc. • Access to increasing level of data for operational, strategic and insight analysis • Access to best-in-class technical solutions for collaboration and 'on-the-go' working. 	<ul style="list-style-type: none"> • Business Relationship Management • Increased Project Management Maturity • ICT Led Innovation • Cloud/as-a-service solutions leveraging latest technology • Expanding Service Catalogue • Data Programme • Work Anywhere • Collaboration & Communication

Stakeholder	Benefits	Achieved By
ICT Unit	<ul style="list-style-type: none"> • Greater level of engagement with business both operationally and project based resulting in a higher level of satisfaction. • Improved (first-time) project outcomes for business projects • Reduction of time and effort spent addressing low level / non-value add ICT administrative tasks e.g. patch management / reduced support activity. • Access to latest technology and solutions • Improved operational processes / increased capacity for value-add activities. • Increased Governance and Business engagement. • Increased level of skills & capability within the ICT Unit and clear career paths and roles and responsibilities. • Access to best-in-class technical solutions for collaboration and 'on-the-go' working. 	<ul style="list-style-type: none"> • Business Relationship Management • Increased Project Management Maturity • ICT Led Innovation • Cloud/as-a-service solutions leveraging latest technology • Expanding Service Catalogue • Expand existing Service Management Capability • ICT Org Structure • ICT Governance • ICT Standardisation • ICT Architecture Refresh (Cloud First) • Customer Strategies • Work Anywhere • Collaboration & Communication
DBEI Service Users (External customers)	<ul style="list-style-type: none"> • Access to latest technical solutions. • Services designed around needs of customer/citizen • Increased solution resilience • Adoption of best-practice re: delivery of online government services through self-service / self-administer portals and solutions. 	<ul style="list-style-type: none"> • ICT Led Innovation • Cloud/as-a-service solutions leveraging latest technology • ICT Standardisation • ICT Architecture Refresh (Cloud First) • Self Service by Design
Other DBEI, Other Government Departments, Approved Bodies, Agencies, Etc	<ul style="list-style-type: none"> • Access to rich, standard, usable data sets for analysis (policy setting, operational matters, GOV.ie / CSO / Academic / other requirements. • Delivering on the Data As An Enabler pillar of the Public Service ICT Strategy. <p>All within the approved GDPR and related legislative requirements and uses.</p> <ul style="list-style-type: none"> • Data Sharing and Governance Bill - https://www.per.gov.ie/en/datasharing/ • Public Service Data Strategy - https://www.gov.ie/en/publication/1d6bc7-public-service-data-strategy-2019-2023/ • Open Data Architectural Framework - https://data.gov.ie/pages/opendatatechnicalframework 	<ul style="list-style-type: none"> • ICT Led Innovation • Cloud/as-a-service solutions leveraging latest technology • ICT Standardisation • ICT Architecture Refresh (Cloud First) • Self Service by Design • Data Programme

Table 4 – Benefits By Stakeholder

6. Appendix 1: Strategy Overview

VISION

For the Department to be acknowledged as a technology leader through the consistent and agile delivery of innovative digital and data solutions and services

MISSION STATEMENT FOR ICT IN THE DEPARTMENT

Deliver stable, secure and scalable digital & data solutions and services, that are fit for purpose, through best-in-class ICT practices and services, optimising the user and external customer experience

Cloud First	Customer Engagement	Digital by Design		Data	ICT Governance	ICT Operating Model
A.1 Migrate internet facing infrastructure to OGCIO cloud	A.10 Introduce Business Relationship Management	A.16 Enhance Employment Permits service	A.17 Enhance Trade Licensing service	A.30 Promote the use of common identifiers	A.33 Strengthen the role of the ICT Steering Committee	A.35 Use technology consolidation to redirect resources to customer engagement, project management, analytics etc.
A.2 Determine suitability of OGCIO's hosting services for replacing internal services	A.11 Work with Offices to build vision for end-to-end delivery	A.18 CRO system refresh	A.19 Enhance IPOI services	A.31 Promote the use of data analytics	A.34 Expand ICT project management capabilities	A.36 Promote and support training opportunities for ICT staff
A.3 Review options to use OGCIO shared desktop	A.12 ICT innovation capacity	A.20 New WRC conciliation module	A.21 Replace WRC eForms with an integrated digital portal	A.32 Develop and implement proposals for data warehousing		A.37 Identify opportunities to complement existing ICT skills and competencies
A.4 Proof of concept hybrid model for Microsoft Dynamics	A.13 Support technology training opportunities	A.22 : Extension of WRC Case Management system to Support Mediation Services	A.23 Replacement/ enhancement of Labour Court service			A.38 Consolidate & rationalise the Department's technical environment
A.5 Roll out eDocs	A.14 Use capacity delivered by systems consolidation to build capability in new areas	A.24 Unified WiFi solution for meeting areas	A.25 Pilot MS PowerApps/ Flow to automate simple workflow processes			
A.6 Extend eFol to the Offices	A.15 Support accessible solutions	A.26 Identify alternative options for smaller Lotus Notes apps	A.27 Support ODCE's implementation of in-house digital forensics capability			
A.7 eCorrespondence: work with OGCIO and Ministers' Offices, Secretary General's Office to address functionality gaps and roll out		A.28 New ODCE case management system	A.29 Supports for remote working, including video conferencing & collaboration technologies			
A.8 Roll out eRisk						
A.9 Promote other Build to Share opportunities						

Developed by the Department of
Enterprise, Trade and Employment



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