Australian Government

Department of Immigration and Border Protection

Information and Communication Technology (ICT) Strategy

2014–15

people our busi

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Secretary's foreword

Information and communications technologies are critical enabling services in the department which enable us to meet client needs and support staff in delivering departmental outcomes and intended benefits. This has been recognised in the department's Strategic Intent, which includes a strategic priority to build more efficient and effective ways of delivering accessible services through the use of digital channels as our default form of delivery.

The department's Information and Communication Technology (ICT) Strategy is a key supporting long-term plan that supports the department's Strategic Intent and provides direction for ICT planning and investment for 2014–15. It also informs staff, industry and partners on the department's likely strategic direction for ICT over the next three years.

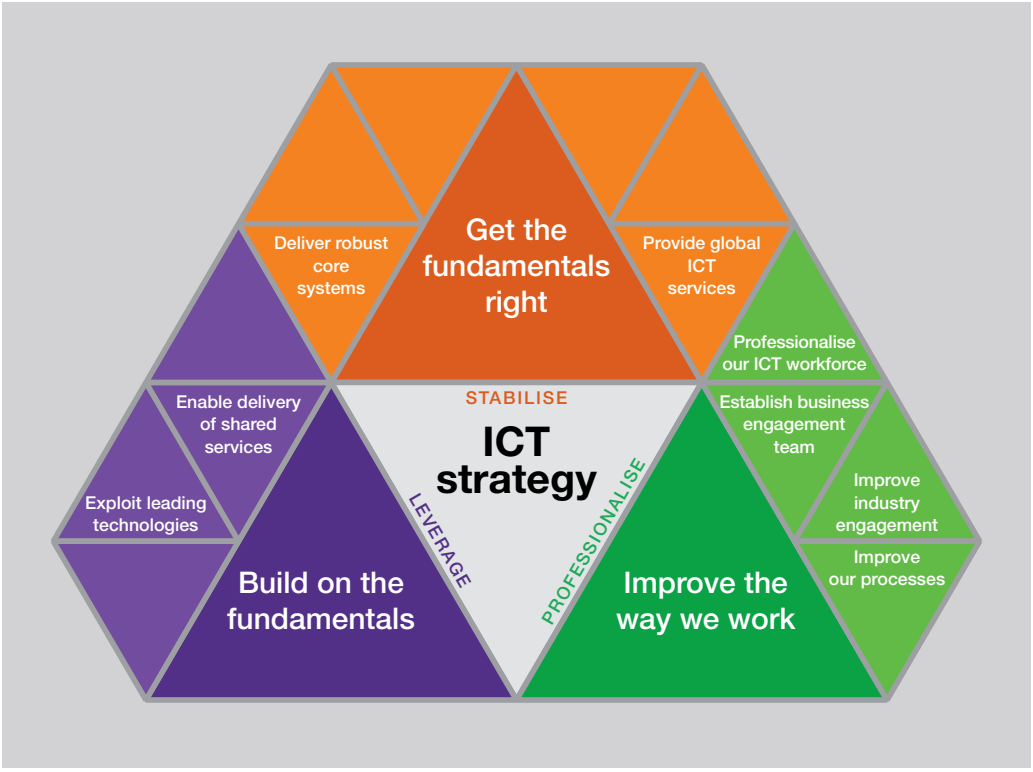
The ICT Strategy provides an exciting vision for how technology can support all aspects of our work and I look forward to seeing the delivery of stable, reliable services for our clients, partners and staff both onshore and offshore and leveraging innovative ICT services that can support the transformation of our organisation to meet the emerging challenges facing our department.

Martin Bowles PSM
Secretary
Department of Immigration and Border Protection

Executive summary

The department faces new challenges in managing an increasing volume of people travelling to Australia in the coming years which will require a careful balance between managing integrity risks and ensuring that Australia can benefit from the economic benefits that tourists, students and workers can bring to our nation. We will also be working in an increasingly global community where we will need to share information with each other, with our partners, with other government agencies and other countries to provide effective border protection, targeted temporary and permanent migration and humanitarian and citizenship programmes for Australia.

The delivery of ICT services will need to be responsive and efficient in the face of these challenges within financial constraints. The department will therefore deliver technology 'as a service' to meet portfolio outcomes, underpinned by a strong service culture from a professional ICT workforce.



In order to achieve the departmental vision, the ICT Strategy sets out three strategic priorities:

1. **Get the fundamentals right.** Stabilise the ICT environment so that we can deliver reliable services. This will include delivering improved offshore services and sourcing commoditised services from industry.
2. **Build on the fundamentals.** Leverage the stabilised ICT environment to deliver new and innovative services. This will include establishing a big data strategy and improving our critical platforms including consolidation to a single visa platform and improving the integrity of client information.
3. **Improving the way we work.** This includes a focus on professionalisation of our ICT workforce, the establishment of a Technology Services Division (TSD) business engagement team, improving processes and delivering an ICT workforce plan. Improved ICT investment will also be a priority through establishing a baseline for the cost of delivering core ICT services and optimising governance processes for ICT investments.

Introduction

The department invests in information technology to support the department's purpose to enhance Australia's national security, economy and society through efficient immigration, border protection and citizenship services.

In order to realise this purpose, the department must achieve the following three strategic outcomes required of it by the government:

- **Outcome one:** Support a prosperous and inclusive Australia through managing temporary and permanent migration, entry through Australia's borders, and Australian citizenship.
- **Outcome two:** Support Australia's international and humanitarian obligations by providing protection, resettlement and assistance to refugees and those in humanitarian need, including through arrangements with other countries.
- **Outcome three:** Support Australia's border protection through managing the stay and departure of all non-citizens.

These are underpinned by strategic priorities for the department including:

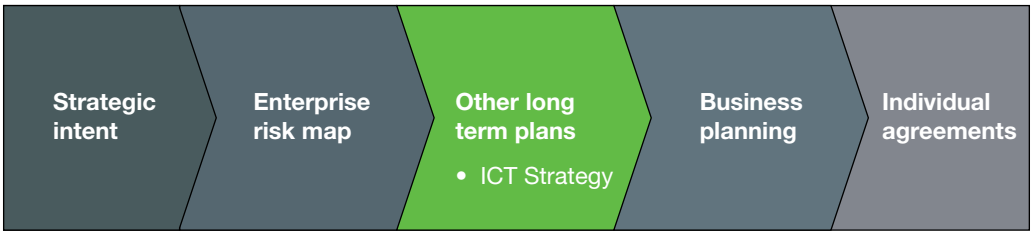
- building our capability to facilitate the significant increase in border crossings
- protecting Australia's borders through our participation in whole-of-government initiatives
- working with our regional and other partners to implement offshore processing arrangements and build capacity
- building more efficient and effective ways of delivering our services
- delivering key Australian international and humanitarian commitments
- contributing to Australia's productivity through well managed temporary and permanent migration.

Fundamental to achieving the strategic outcomes and priorities for the department are enabling capabilities that include ICT. The ICT capability for the department includes the hardware (servers, desktops), software (email, TRIM, ImmiAccount) and support services (help-desk, planning) that are required to provide ICT services for the department's staff, clients and partners. Our ICT services are critical to our staff, clients and partners to support efficient access to the department's services and support our staff to meet our legislative and record keeping requirements.

The department's ICT Strategy is one of a series of key long-term planning documents that will enable the department to achieve the strategic priorities and priorities set out in the department's strategic intent.

The ICT Strategy will also align and support the department's other long term strategy such as the people strategy, through the development of the ICT Workforce Plan that will align with the department's people strategy and the department's property strategy, that will require the underpinning ICT services such as robust core services and mobile capabilities to support our staff in the wide variety of locations managed though the departments property strategy.

The ICT Strategy supports the strategic priorities and capabilities of the department's Strategic Intent as follows:



Building our capability to facilitate the significant increase in border crossings

Improved decision-making through better data quality. The significant increase in border crossings will require enabling ICT capabilities to support improved decision-making, automation of assessments based on risk and improved quality control of our data.

Improving the integrity of client identity will be critical. This will be achieved through the use of better quality data including biometrics and improved analytic capabilities. A big data and predictive analytics strategy will be prioritised to direct our investments in these new capabilities.

Get the fundamentals right by stabilising our core services including our global ICT Service and maturing our security services to resist, detect and respond to emerging cyber threats and support increased interconnectivity and mobility which will be essential in managing increased border crossings.

We build more efficient and effective ways of delivering our services

Improve the delivery of core ICT services and processes to provide 'ICT as a service' to support departmental outcomes.

Standardise the internal visa systems to a single visa platform that will provide an effective ICT capability to deliver our visa and border services. The strategy also sets out the need to assess options to make information accessible through the internet to clients, including through mobile devices that will be more efficient for our clients.

Support staff to work more efficiently and effectively by improving mobility services so that staff can work securely regardless of location and improve the effectiveness of decision-making through a renewed focus on data governance to improve the quality of information available to decision-makers.

We protect Australia's borders through our participation in whole-of-government initiatives

Leverage and deliver shared services where there are opportunities to do so with other Commonwealth agencies.

Share information with other national security and law enforcement agencies including improving the automatic exchange of quality data through enhancements to existing information exchange channels and working with other agencies and partners to improve the integrity, management and sharing of client data through secure connectivity services.

We simplify our business

Deliver efficient and effective ICT core services through the decommissioning of obsolete technology and standardising and simplifying ICT services. The ICT Strategy will also prioritise improving the way ICT staff work by improving and simplifying processes to ensure timely delivery of ICT services to a high standard.

We strengthen our key relationships

Strengthen key relationships with industry and the business. The department will use a 'best in class' approach to acquiring and maintaining core capabilities from industry and will engage with industry to encourage the provision of comprehensive, value added services. TSD will improve engagement with the business through the establishment of more effective partnership relationships between ICT staff and policy, programme and operational staff.

We manage cost and invest in long term sustainability

Improved ICT investment. Establish a baseline for the cost of delivering core ICT services, maximising investment in our core systems and improved governance for consideration of ICT investments.

Introduction of commodity-based services. Examine options to adopt cloud technologies and crowd sourcing models to improve the speed of infrastructure and software delivery, reducing capital expenses.

We embed innovation in our work

Improve decision-making through the use of innovative technologies. Consolidate and incrementally improve our data warehousing environment to provide a single data warehouse for business intelligence, financial modelling and reporting. Explore use of open source technologies such as Hadoop to deal with growing data sets and innovation approaches to predictive analytics. This will support the opportunity for greater innovation in our policies, programmes and operations, as staff are supported to gain new insights into the data held by the department.

Optimising ICT governance processes. Innovation will be enabled through the use of forums and prototyping capabilities that allow ideas to be brought forward and potential technology solutions to be tested to determine whether the idea is viable prior to committing further resources to evolve the idea.

Vision

The department will deliver technology ‘as a service’ to meet portfolio outcomes, underpinned by a strong service culture from a professional ICT workforce.

Future direction

Demand for ICT services is expected to significantly increase—in line with the movement of people in and out of Australia and the department increasing its involvement in the national security and law enforcement community. This will require that ICT be characterised by scalability, reliability, security and cost effectiveness.

In order to deliver ICT with these characteristics the department will offer ICT 'as a service'. This will focus on the delivery of ICT to support departmental outcomes that are:

a. **fit for purpose**—services that fulfil departmental needs. For instance, systems are trustworthy, easy to use, are well integrated and enable increased productivity
b. **fit to use**—services are available when a user needs it. For instance, systems critical to the movement of people in and out of Australia will be highly available. The quality of the data in the systems can be trusted
c. **adaptable**—services that can be adapted to meet changing policy and global settings. For example, the ability to quickly alter automatic risk assessments as people movement pressures change according to global political and social shifts.

The department will leverage industry for delivery of ICT 'as a service', in conjunction with TSD, where fit-for-purpose solutions are available, offer the best value for money, are assessed to be in line with government policies and provide adequate management of operational and security risks.

Expected benefits

Pursuing our future direction based around ICT 'as a service' will deliver significant benefits to the department. It is expected that:

a. all departmental staff will have access to a global ICT service that is predictable, responsive to their needs and aligned with a consistent user experience and business process. Staff will be able to access and use information they need to do their job regardless of their location in a manner that is easy to understand. For example, corporate systems will better support the 'business doing business' through solutions that are likely to include automated workflow processes that are accessible any place (onshore, offshore) and from any device (desktop, mobile). Staff will have trust that the data they are accessing is correct through improved governance controls over the quality of the data that is available

b. all departmental ICT staff will have a strong culture of delivering ICT 'as a service' to enable and support departmental outcomes as part of the specialist support services provided by the Business Services Group. This will be underpinned by an effective business engagement model

c. our clients will have access to departmental services and up to date information through the most appropriate and cost effective channel, with digital positioned as the default service channel. Our clients will be provided with rapid, automatic approvals where they are identified as low risk. Our systems will facilitate the movement of people through tiered assessments and automated processes, facilitating timely and efficient decisions supporting skilled migration, education and tourism in a competitive global market. Our systems will also provide support to manage risk, intent, integrity and compliance with the department's legislative and regulatory requirements

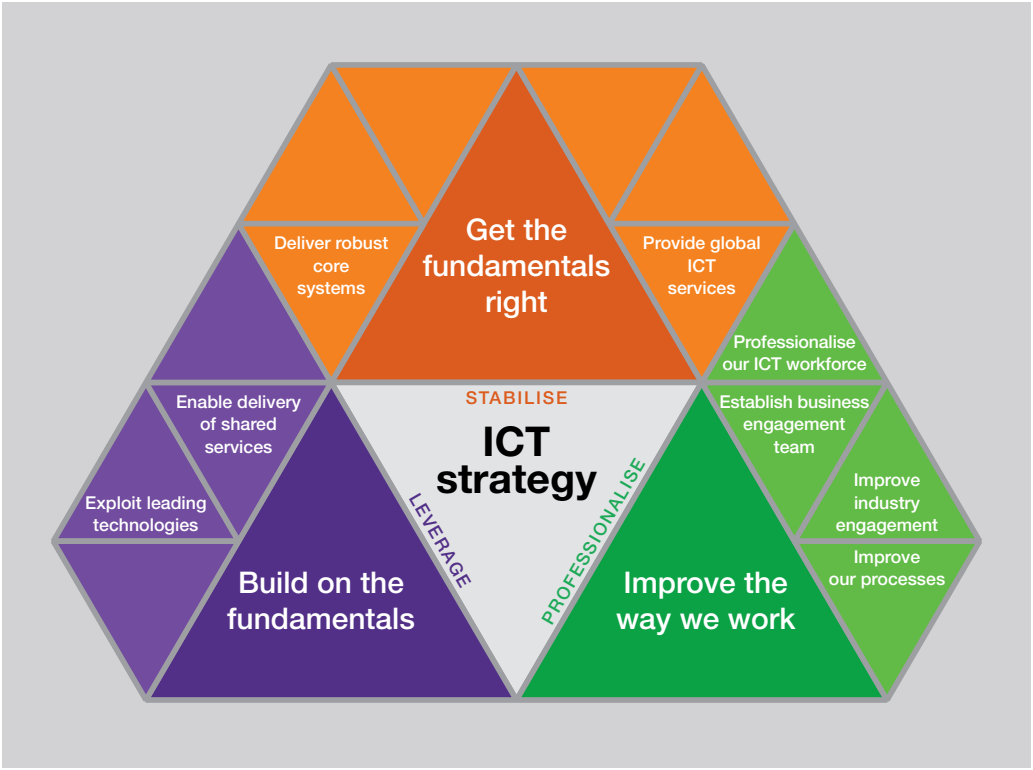
d. our partners will be able to collaborate with the department and share data and information. This will include service delivery partners for visa and citizenship application support, detention services for compliance support, collaboration with other governments through the Five Country Conference (FCC) and through the delivery of shared services with other government agencies. The department will exploit the use of FCC shared third party providers as a leverage point to provide services, and seek opportunities to expand the use of partners to deliver additional services to our clients.

Strategic priorities

In order to achieve the departmental vision, the strategy sets out three strategic priorities:

1. **Get the fundamentals right**—stabilise the ICT environment so that the services we deliver today are robust, reliable, highly available and are usable both onshore and offshore.
2. **Build on the fundamentals**—leverage the stabilised ICT environment to deliver new and innovative services to support the transformation of the business by embracing high-value technology trends.
3. **Improve the way we work**—establish a professional workforce that is driven by a culture of customer service underpinned by effective business engagement.

Each of these strategic priorities is underpinned by major programmes that are articulated later in this strategy document.



Business drivers

There are a number of business drivers that inform the priorities for ICT in the department.

Managing volume and integrity

The department will continue to manage the rise in the movement of people in and out of Australia. For example, the department has conservatively estimated that passenger movements into and out of Australia will rise from 30 million to 50 million per annum by 2020. Travel rates within the Asia-Pacific region are expected to rise faster than in any other region with the emergence of large middle class populations. In addition to the anticipated increase in volumes of travellers, the expectation on channel engagement is shifting, with the global community increasingly expecting to be able to conduct their everyday business, including travel, across international borders, in an online environment regardless of their location. Client expectations are driving a strong demand for visa and border processing services that are fast, accurate and always accessible.

Temporary visas for students and visitors are critical to our nation, with the education sector the third biggest export sector for the Australian economy. They also significantly contribute to Australia's productivity and economic prosperity through building business links and personal relationships that support the future trade of ideas and the growth of businesses over the long-term. Encouraging and supporting the continued growth in volume of these temporary visas will therefore be critical to Australia's long term prosperity and will be an important driver to support outcome one for the department.

Outcome two for the department also requires that ongoing support for Australia's international and humanitarian obligations is maintained by providing protection, resettlement and assistance to refugees and those in humanitarian need, including through arrangements with other countries.

The increased volumes in demand for the department's services are expected to emerge from countries that are currently considered higher risk sources for overstaying or illegal entry into Australia. Outcome three for the department sets out the requirement to support the protection of Australia's border through managing the stay and departure of all non-citizens. The volume, complexity and organised nature of attempts to enter Australia's borders illegally are expected to become more intricate and better targeted and will need to be an ongoing focus for the portfolio.

These trends will require a fundamental change in the way that the department provides services in the future. The increasing caseloads will need to be addressed through efficiencies in processes, policies and systems. The department will increasingly need to rely on the identification of behaviours of known customers/clients that can demonstrate where trust can be placed in approving the movements of people. This will require a shift from non-dynamic transactions to dynamic case management for our systems, policies and processes.

The increase in border movements will also put more pressure on airports to process low risk passengers quickly through automated border clearance processes. Borders are becoming increasingly 'digitised', with airlines changing their business models towards entirely self-service air travel. Check-in counters are expected to become obsolete, with online check-ins and passport checks all automated. Self-serve kiosks with no direct action by customs/immigration officials will continue to proliferate. Staff at ports will be there to largely deal with exception-processing. Crucial to these changes are robust, stable and reliable ICT systems.

Improved identification of clients

Client identity is a critical issue to support both national security, law enforcement and the delivery of support services to clients. The integrity and quality of information that provides proof of identity for an individual is a significant asset of the department, as it is used in so many critical processes including support for national security and law enforcement outcomes for government. Verification of an individual's identity is therefore critical for every aspect of the department's business.

To address the increased volumes of border crossings, the department will need to use technologies such as biometrics to manage the identity of individuals. Biometrics will be one of the key mechanisms used to re-confirm the identity of an individual when permanent residency is sought and to verify identity when an individual seeks citizenship. It will increasingly be used to provide facilitation of processes to support client applications, border crossings, stay and departure activities. This will require closer integration between border crossing and client identification systems to enable analysis of successful/unsuccessful border crossings to be incorporated into client identity models and watch-lists.

The quality of the data in our systems will therefore be crucial to ensure that client information can be appropriately analysed and used to facilitate our core processes to deliver services to both individuals and to government.

Enhanced interoperability with partners

With increasing complexity in managing services across the portfolio, the department must work with partners more strategically to deliver business outcomes. Given the broad array of functions that we perform, our partners are also diverse, including: the wider border agency community, state and federal government agencies, industry and community partners, other countries and many other organisations. There will be a growing requirement to work effectively and share timely, accurate information between these different stakeholders. This will include improved capabilities for data sharing and managing both high and low risk travellers with multiple communities of interest including our regional neighbours, such as ASEAN and APEC and our FCC partners. Emerging departmental needs that will increase the need for interoperability with partners include:

- **expanded regional cooperation to manage security and the movement of people**—the department will work with other governments, including FCC countries, for the exchange of biometric information and other national security and law enforcement agencies to coordinate whole-of-government responses to security threats and support national security and law enforcement outcomes for government.

The department will therefore have an increasing demand to access information or systems and share information securely with other governments, Australian government agencies, our partners and our clients. Examples include new regional data sharing initiatives, the expansion of regional movement alerts and the Australian Business Travel Card within the APEC region and Interpol checking across the traveller pathway

- **increasingly complex information exchange with service delivery partners**—the department has a long history of strategic partnership to enable its business processes, particularly in the offshore environment. Our challenge is the provision of appropriate ICT services in the global context. Many of our clients do not speak English and currently require the services of agents to apply for visas and to follow-up on progress. It is expected that our service delivery partners will evolve their service offering to increase the availability of assessment-ready applications for the department. Examples of this include the need to capture and share biometric and other identity information automatically with the department, and the need to increase the provision of digital cases to the department. This will allow the department to focus on analysis and decisions rather than the more costly, lower value, document handling processes
- **agencies working collaboratively to deliver common outcomes**—the government will continue to push for shared services across government where it makes sense. Portfolio synergies with other government agencies will need to be leveraged if the department is to achieve its outcomes. The department will also need to exchange trusted information with different agency networks at different security classifications. To make this successful, the department must be in a position to contribute to and leverage its own core businesses and share data efficiently between agencies.

The department plays a leading role in establishing a non-citizens digital identity in Australia and must play a large role in providing a client's supported identity to other government agencies when required such as the Australian Tax Office (ATO) and Department of Human Services (DHS). Australian governments will increasingly require the department to provide integrated, digital services and information to individuals through common access channels such as Australia.gov.au and my.gov.au. There will be an emphasis on supporting government interactions with individuals and providing government services online as the default method of delivery. The Australian Government has also mandated that its data should, wherever practicable, be made available to the public. Governments will also continue to seek to reduce the compliance burden on individuals and companies. ICT systems, if properly leveraged, can support both the de-regulation agenda and making information available to citizens, industry, other agencies and the broader Australian community.

Improved responsiveness to a changing environment

The department must ensure that we are able to support the government to flexibly deliver agreed policies and programmes. This includes changes to products and services, for example new visa sub-classes or changes to conditions of existing visa sub-classes. Other examples include dealing with sudden increases in refugee influxes, due to adverse changes to the global socio-political environment and natural calamities. The department requires ICT to be sufficiently agile to meet these needs, including the ability to support identification and management of changing client behaviours and characteristics, and changes required by government in a timely manner.

Increased efficiency in a fiscally constrained environment

The department, as with all government departments, must operate in a tight fiscal environment while looking for opportunities for efficiency. The department is committed to delivering efficiencies as part of the government's red tape reduction and regulatory reform initiatives. ICT systems, if properly leveraged, can reduce the compliance burden on individuals and companies. For example, the Regulatory Reform Project (RRP) seeks to simplify the department's visa framework, which has a number of benefits including contributing to the department's red tape reduction targets and simplifying requirements for clients. A simplified visa framework is also likely to result in savings for ICT development, as a reduced number of visa subclasses that need to be migrated to a single visa system or that need to be regression tested as part of future change releases will contribute to reduced costs to the department.

The challenge is to deliver in the short-term on government priorities and to continue to focus on our responsibilities as the stewards of our organisation and ensure that we develop the capabilities to position ourselves as an agile and responsive department. Both these long and short term priorities need to progress in an increasingly tight budgetary environment.

ICT will play a crucial role in enabling opportunities for efficiencies, however the current fiscal environment will require clear and timely decisions for any ICT investment. This is demonstrated by the fact that the department's total forward capital allocation will remain at approximately $85 million–$90 million through the period 2014–18. This allocation must fund all asset replacement, infrastructure, property and new software projects. The department will look for opportunities to use ICT to provide practical measures to reduce this impact.

Technology trends

Digital

Our clients, partners and staff are online in greater numbers than ever before. The majority of these clients are using social media and the web through increasingly sophisticated mobile devices. With mobile touch screen interfaces becoming increasingly pervasive for personal use, consumers of information expect to have access to services and departmental systems outside of traditional offices and office hours via mobile computing platforms, smart phones and tablets. Connected society is generating demand for pushing information to mobile devices like flight status and time to board, and pulling information such as locating passengers in an airport who are late for their flight.

Clients, partners and staff expect to be able to engage and receive services through the internet, for example checking of visa entitlements or application lodgements. This type of channel engagement offers an opportunity for both clients and the department to streamline and digitise operations and client dealings providing efficiency and possible savings. For example, clients no longer need to travel lengthy distances to lodge a visa application, as they can do it from their own home, laptop or mobile device anywhere in the world and any time, thus ensuring greater accessibility and reduced costs for clients.

These digital efficiencies cannot be achieved without a strong organisational commitment and focus towards becoming 'digital by default'. This means that digital services become so straightforward and convenient that all those who can use them will choose to do so whilst those who can't are not excluded from access to services. The department will therefore establish a digital strategy to identify opportunities to exploit digital capabilities for the department.

Mobility

ICT Mobility is the provision of access to the department's internal systems and information resources to clients, staff and service delivery partners (SDP) anywhere and at any time. It is about responding to their needs and making it easy to find and share information and accomplish important tasks. It requires a high-standard for the delivery of timely data, informative content, simple transactions, and seamless interactions that are easily accessible. With significant improvements in the availability and quality of end point technologies such as laptops, smartphones and tablets, offshore and onshore staff and business partners will be able to access computing resources securely in the

future regardless of where they are physically located.

Staff will continue to drive change as they identify new devices and request access to organisation's applications and data, including using their own devices—Bring Your Own Device (BYOD). The trend towards BYOD is expected to contribute to the eventual obsolescence of traditional departmental desktops. This trend is expected to drive cost efficiencies, as the costs of appropriately managing security are expected to be more than offset by savings associated with reducing the procurement and management of hardware.

Supporting improved mobility is the provision of enhanced collaborative technologies including integrated voice, video and document sharing. This will enable new opportunities for staff to identify and share information with each other and support improved integration of services for individuals no matter which channel they are using, such as improved delivery models for contact centre services including voice, email and social media services.

Automation and artificial intelligence

The department will continue to be faced with global events such as political upheavals and environmental disasters that will impact on our humanitarian, migration and border protection services. The ability for our systems to support trend analytics to provide early warning for policy and delivery areas would be a powerful planning and management capability in the future. Similarly, the ability to undertake sophisticated risk analytics of individuals based on both disclosed and undisclosed information will deliver a powerful border protection capability for the nation. The rapid exchange of information between systems will be increasingly critical to support automated, real-time decision-making to meet the large increase in demand for short and long term visits in the region and globally.

The application of human-like reasoning, or 'artificial intelligence', is a technology which is emerging into the mainstream to enable reasoning systems to harness the output of multiple analyses and apply the business best-practices to consider a case, such as a visa application, holistically, reducing the human effort and accelerating business processes.

Reasoning, also known as cognitive computing systems, leverage the information available to the organisation—internal, external, structured and unstructured—and apply analytics to that information to derive a knowledge base which forms the foundation for reasoning. The ability to harness a broad corpus of knowledge, potentially far beyond that which a human could embrace, enables better decisions to be made in a more timely manner.

Timely and accurate decision-making capabilities that can support on-line, self-service applications with automated background checking and automated granting of visitor visas, advance passenger processing and other IT enabled automatic clearance processes at our borders will be critical. This includes the need for improvements to, and adoption of, technologies such as facial recognition and biometric acquisition and verification supported by powerful artificial intelligence analytic tools. These technologies can speed the clearance process at the borders while maintaining or improving integrity checking, and will be critical to manage the volume and integrity business drivers for the department.

Reasoning technology is compute and data intensive, requiring big data solutions and so traditional infrastructure provisioning and management approaches will be challenged. This makes reasoning applications a natural fit for new cloud-based service provisioning models.

Data

Industry trends indicate that the pace of change in the management of data is rapidly increasing. Traditional architectures are being overwhelmed by these pressures and new technologies and associated business and IT methodologies are emerging rapidly in response.

The department's caseloads are become increasingly digital, with risk-based processing and predictive analytics based on sophisticated technologies already enabling efficiencies in border and visa processing. Improved these capabilities will be essential to assess the integrity of client information, as will the speed and sophistication of analysis available for staff to manage client information before individuals reach our borders.

Data management systems will need to move from highly structured data moving along limited pipelines for pre-determined purposes to faster moving (velocity), more diverse types (variety), in increasing volumes and with varying levels of veracity (the four 'Vs").

Unstructured data analytics technologies show the potential to reveal more important data interrelationships than previously possible. The ability to develop predictive models, detect outliers, identify hidden connections and networks is enabling more accurate risk detection. This, in turn, facilitates streamlined processing for the vast majority of low risk clients. Analytics can provide capabilities to process very large volumes of fast-moving data in combination with 'static' data in corporate systems, to better support decision and policy-making. These technologies are currently classified as 'Big Data'. Implementation of big data strategies requires new approaches to the capturing, storing, and analysing of data. It requires new ICT infrastructure specifically tailored for high volume data handling. New analytics methods based on new software will also be required to process the data.

Crowd sourcing

The department has recognised that the global ICT workforce market is changing, with a global market for IT skills available through crowd sourcing models. Application development through crowd sourcing approaches provides the opportunity to make problems available to communities of interest, with solutions offered for consideration by the department. This approach encourages innovation and could lead to significant cost reductions associated with application development. This will present a unique set of security challenges that will need to be carefully considered.

Cloud

Cloud computing is both a sourcing model and a delivery model for a variety of ICT services. Cloud computing includes:

a. **Software as a Service**—application provided to the consumer
b. **Platform as a Service**—platform to build applications provided to the consumer
c. **Infrastructure as a Service**—storage, networks and processing provided to the consumer.

The type of service determines the level of control the department will have over a system and the information contained within those systems. It also determines the appropriateness of hosting data/systems internally or externally. Industry is one element for sourcing these services, however there are a range of cloud deployment models (public, community, private and hybrid) which offer and support differing sourcing strategies/models.

Cloud computing sourcing models are becoming increasingly available in the Australian market and can provide the opportunity to quickly purchase both infrastructure and application services to address surges in demand, stand up transient development or testing environments, lower the upfront investment costs associated with the purchase of ICT and reduce the cost of standard services such as email through the economies of scale available from private industry. Other opportunities could include moving disaster recovery infrastructure capability to the cloud, use of a SAP Government Cloud or even 'Call Centre in the Cloud'.

Some of the current constraints of using cloud computing include less flexibility and limited customisation, as the services that are provided are designed and costed to support standard, typical process which may not be suitable for the department. Current enterprise adoption trends are typically for services such as desktop applications like word processing and email. Adoption of cloud also moves pressure from capital to operating budgets.

Security

Security at its core is about the protection of things of value from harm. The security of the department's ICT systems provides reliability and trust in the function and output of all of those systems which, in turn, support virtually all of the department's business and service delivery functions. The department will be required to increasingly access and share information at higher levels of security with other government agencies, requiring access to multi-level security networks including Protected, Secret and Top Secret networks.

The threat landscape is becoming more sophisticated, with coordinated, highly complex and well-targeted attacks on ICT systems increasing across a range of industries, including the Australian government, and the department. Foreign governments are

highly motivated and have an interest in information with an economic focus as well as Australia's business dealings, intellectual property, resource industry, scientific data, international movement of people and government intentions.

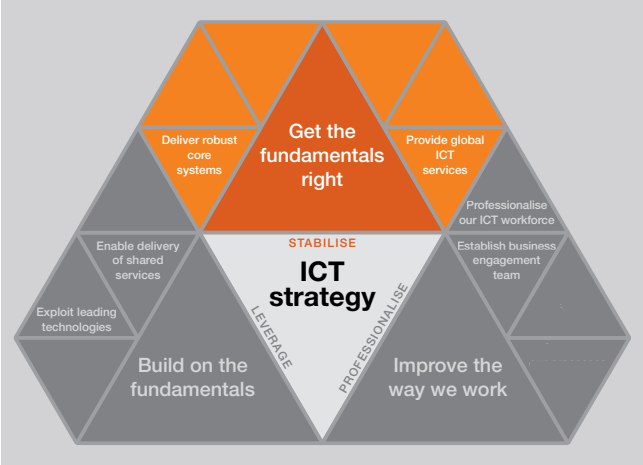
Increased costs of digital security will be the price for moving to digital borders that can support the increased volume in the movement of people. There will be a diminishing point of return for replacing people with machines at our borders. The department will assess the potential trade-offs, including the relative costs of security to ensure system integrity and availability. For example, manipulation of data or substitution of microchips in ePassports is one possible avenue of fraud. Improved detection will be critical, including ensuring that the provided biometric data was acquired from a real person. Passport document security features will continue to get more sophisticated. This will lead to more machine verification of document security features, as most features like holograms and cryptographic signatures cannot be verified with the naked eye.

Traditional models of security had a focus on preventative controls forming a secure boundary, or perimeter, around an organisation's ICT systems. Emerging requirements and technologies have driven the need for this focus to be broadened to extend into end points (such as mobile devices) and internal systems. Controls now need to strike the right balance across the full spectrum of deterrence, prevention, detection, response and correction. For example, there is an increasing requirement for departmental officers and partners to have authorised access and use systems from outside of the department's ICT environment, and for non-departmental staff to access systems inside the environment, distorting the 'trust boundary' between inside and outside of the department. Cloud based services further blur this boundary, and introduce concepts of shared or delegated stewardship of information and information systems.

Increasingly the department will need to understand how meeting its security requirements and regulatory responsibilities will play out in the fine print of service contracts, and accept third party assurances about compliance with a range of Australian or international commercial and government, standards. For example, the use of options such as the adoption of cloud services needs to take into account the security threats and the availability of cost effective options to manage these risks.

Legal jurisdiction issues come into consideration if cloud services are in play, sometimes introducing subtle and unexpected complexities. For instance, the US Patriot Act provides for sweeping abilities for US law enforcement to access data stored in US data centres regardless of geography or country of data ownership. Protecting the data stored in cloud infrastructure can be challenging. Given its virtual nature it means it is not possible to know necessarily where a piece of data is being stored in the cloud, nor is it always clear who exactly at the third party service provider has access to that data.

Get the fundamentals right



Several ICT services delivered today do not meet the expectations of the department. In order to provide services that are fit for purpose, fit for use and adaptable requires that we get the fundamentals right.

The department will improve the quality of the current ICT services by maturing and stabilising current ICT systems so that they are robust and provide trustworthy, reliable, highly available services. ICT services will be responsive to change, and be able to scale rapidly when volumes fluctuate for both legal and illegal migration activities.

The department will prioritise stabilisation of systems based on the level of risk that failure of the system would have on the department. For example, systems that are critical to the conduct of our business, and have a higher likelihood of failing and disrupting the delivery of services to our clients will be prioritised.

Deliver core systems that are robust and provide reliable, highly available services that support the business

Decommission obsolete technology and standardise/simplify services

The department has undertaken a major reform programme to integrate systems to ensure the consistent treatment of clients. While new systems have been introduced, the department has continued to use systems that had been identified for decommissioning in order to achieve business outcomes because of the difficulties in introducing business process change, associated training and the variability in offshore systems performance which has significantly limited the relative speed within which caseloads can be transitioned and online capability expanded. This has increased the complexity of the ICT systems, making maintenance and changes complicated, time consuming, costly and delivering less than optimal staff experiences.

The department will also have an ongoing requirement for agility, including responsiveness to changed policy settings, technologies and business models. The department aims to standardise, consolidate and constrain the proliferation of new systems ICT systems to:

- reduce the complexity of the ICT environment
- improve the speed of change and delivery of systems to meet business needs
- reduce licensing and maintenance costs for the department.

The department will consolidate ICT systems and simplify the number of products and services

The department will therefore consolidate and reduce the number of ICT products and services to a set of high performing systems, for example eVisa to ELP and from GVP/IRIS to ICUE, and a standard suite of current ICT investments and commercial off the shelf (COTS) products.

The department will develop a decommissioning plan for systems

The department will also develop a decommissioning plan for systems that provide duplicate functionality or expose the department to significant risks.

Maximise investment in core systems

The department will maximise the use of our current ICT investments by ensuring that we fully understand and utilise existing functionality and fully resource the requirements for maintenance and upgrades for our core systems such as our corporate systems.

The department will improve the availability of training for current systems to ensure that the full functionality and benefits can be achieved

The department will also ensure that the full benefits of our existing ICT investments can be realised by improving the availability of training in our core systems for both our staff and partners.

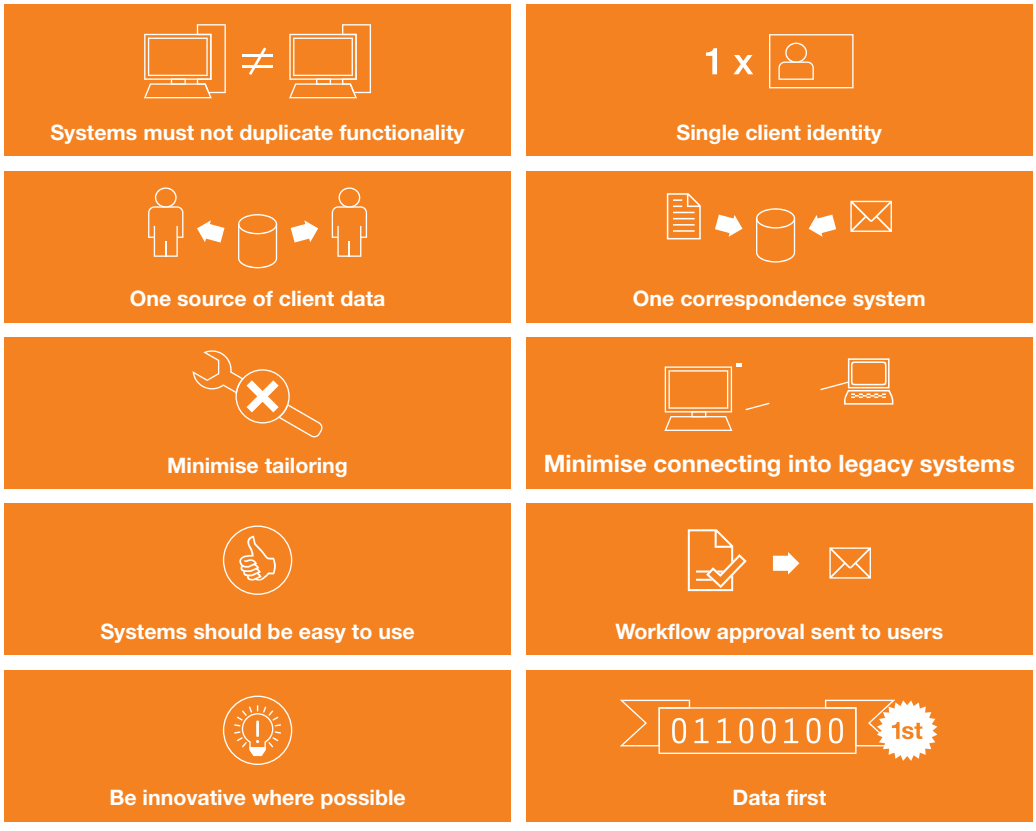
The department will establish improved governance for consideration of ICT investments

The department will prioritise simplification of ICT solutions and ensure that the impact on users, such as processing officers, is closely considered in the design phase of any proposal, because this is where so many of the impacts/efficiencies can be realised.

The department will also seek to improve the underlying business processes used by staff to ensure that systems can be designed and built on simplified, standardised, efficient processes. This will ensure that our core processes can be supported by robust, supportable, cost effective systems. Simplification of policies, programmes and processes is not just an ICT problem but the responsibility of everyone in the department. The department will therefore introduce stronger ICT governance for the design and management of hardware and software. This will include improved planning and project governance including that benefit realisation includes opportunities for rationalisation and decommissioning so that savings can be reinvested to deliver cost effective and flexible systems.

We will govern our development work around core principles

The introduction of improved ICT governance will also include the design and approval of ICT using key principles that will be used by the key ICT governance processes including the capability boards and SBSC.



Commoditise

The department will begin to introduce commodity-based services

Commoditisation is the sourcing of IT assets that are common to most industries, such as desktop computers, email and browsers, and can be provided as a standard service for a lower unit cost due to the large volumes that are provided to both government and private sector organisations.

An assessment of industry offerings that are cost-effective for the department to pursue will be undertaken to assess the impacts on the broader ICT capabilities of the department and whether some of the specialist needs of the department can be met with the services offered by industry. This will include assessing whether data security and integrity controls available from industry are compliant with Australian Government policy, commensurate with the department's requirements, and whether the ongoing support costs will be higher over the long-term. This will include an assessment of the security and integration requirements of the department. The department will take an incremental approach to the use of industry services and continue to assess offerings based on value for money and agreed criteria such as quality and reliability.

The department will examine options to adopt cloud technologies to improve the speed of infrastructure delivery, reducing costs and the writing off of capital expenses

The department will begin to introduce a commodity-based approach to source and manage ICT services, which may include, where appropriate, the use of selective sourcing through industry providers. This may include leveraging industry 'best of breed' and 'best in class' technologies to ensure that the business needs are met for the lowest ongoing cost to the department. It may also include the use of industry based cloud services such as moving some office productivity tools such as our email system to a cloud provider.

The department will examine options to adopt crowd sourcing models to improve the speed of software delivery and reducing cost

The department will also examine opportunities to utilise crowd sourcing models to deliver new technologies and provide more capacity to develop software when there is a specific business need to do so. For example, small, contained and standalone applications could be developed through engagement of crowd sourcing options. Additionally crowd sourcing could assist with team augmentation to manage peaks in technical development workload. The department will examine the commercial models that are available and

assess whether these models can provide opportunities to extend the capacity to undertake development work and decrease the time taken to deliver solutions to meet the changing needs of the department. The department will only access crowd sourcing models, utilising a crowd sourcing governance framework and capability, when it makes financial and security sense to do so.

Mature security services

The department will deliver trust in portfolio outcomes through trusted identity, trusted systems, and trusted information. The department's security programme will focus on delivering the following outcomes:

- trust in decision making through dependable systems and information
- accountability for the collection, use and storage of information held and managed by the department and its partners
- maintaining stakeholder trust in the integrity of system-based decision making and the sound stewardship of information
- risk balanced security capabilities focused on enabling business outcomes.

The department will enhance and extend existing security capabilities to support increased interconnectivity and mobility

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We assess systems and processes for risk and make a balanced judgement on the level of risk we will accept. The department will take its already well-established ICT security to the next level by improving cybersecurity to include improvements in the detection, analysis, mitigation and response to sophisticated cyber threats. The department will take advantage of technology trends including location awareness, mobility and the cloud in the light of information security. The use of options such as the adoption of cloud services will take into account the security threats and the availability of cost effective options to manage these risks.

The department will also examine opportunities to provide access to higher level security networks for departmental staff to share information with other agencies including Protected and Secret networks.

The department will modernise security capabilities to resist, detect and respond to emerging cyber threats

The department will work with its service providers and companies that own and manage its crucial infrastructure to promote security and resilience in infrastructure, networks, systems, data and services.

Provide a global ICT service that delivers consistent ICT services for both onshore and offshore staff

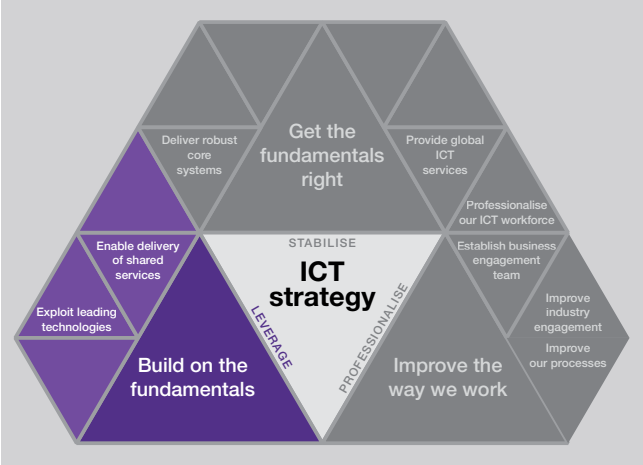
The department will deliver 24/7 ICT services for both onshore and offshore staff and partners

The department recognises that our clients exist globally and improved access to our services will drive a better quality customer service delivery environment. In delivering our services, the department also recognises that risk is better treated at the source—before people arrive at our borders.

The department will therefore deliver our services globally with the support of third-party providers such as service delivery partners who can work with clients in their own countries to capture and analyse information on their eligibility to travel to Australia. The department will also increasingly rely on third party providers in Australia for the provision of services. The department will therefore seek to improve the options to share information so that it can be managed in an integrated way between the department and our partners.

The department will also rely on its global workforce and service delivery partners to manage the increased volume in movements of people. To support this, the department will provide a global, 24-hour ICT service that provides consistent ICT services between onshore and offshore staff and our partners. TSD will plan improvements to the offshore services in consultation with affected staff and service providers such as the Department of Foreign Affairs and Trade.

Build on the fundamentals



As the fundamentals improve, the department will focus on delivering shared services that can be leveraged by other agencies whilst also exploiting leading-edge technologies to support transformation of the business.

The department will seek to utilise leading edge technologies where there are demonstrated benefits to improve the efficiency and effectiveness of our services and improving the trustworthiness and quality of information held by the department. This includes the use of advanced analytics to identify and manage high risk individuals while supporting the automated approvals to support the temporary movement of visitors, students and workers and long-term migration. The return on investment for leading edge technologies will be identified and projects will be prioritised where they can demonstrate benefits, such as the introduction of the e-medical system.

Enable the delivery of shared services

The government will continue to ask departments to work in the most cost effective way possible.

The department will leverage and deliver shared services where opportunities arise

The department will look for opportunities to work effectively with other Commonwealth agencies, including alignment of our systems, processes and information with other national security and law enforcement agencies that are responsible for or support the protection of Australia's borders. This will include ongoing consultation with the Australian Customs and Border Protection Service as the two agencies are consolidated into a single Department of Immigration and Border Protection from 1 July 2015.

Exploit leading-edge technologies to support transformation of the business

The department will be a leading adopter of new technologies within government. It will do this by providing innovative solutions through a highly responsive ICT platform and ICT service that enables the department to transform the way we do business and get better outcomes for both the department and the client, including easily accessible, personalised self-service options.

Share information

The department will provide an improved capability for staff to access and share information within the department, with other Australian government agencies and our international partners. The support of our service delivery partners, for example, improves the integrity and availability of decision-ready applications and the costs to the

department of delivering visa services. If, for example, there was a ten percent increase in the number of individual applications that were not ready for decision, the department would face a significant increase in the cost of managing these applications.

The department will assess options to make information accessible to clients and partners, including through mobile devices

The department will improve and enhance the ability for our staff to share information with both national security, law-enforcement and with non-security agencies such as the ATO and DHS. The department will examine and develop the processes and supporting technology required to exchange trusted information with other government agencies, our partners and other countries in the most cost effective, secure way possible to manage risk while supporting an increasingly mobile global population.

Programmes will include:

- improving information sharing capabilities and electronic record keeping for staff
- establishment of a unified communications strategy
- implementing intra-organisational user identity and access management and processes
- improving the automatic exchange of data with national security, law enforcement and domestic agencies such as the ATO, through enhancements to existing information exchange channels
- working with other agencies and partners to improve the integrity, management and sharing of client data through secure connectivity services in accordance with the Privacy Act.

Improve decision-making

Analytics

The department will investigate and exploit the potential of artificial intelligence and analytic technologies to support the automation of risk based assessments and management of complex cases

The department expects to see a continuing growth in the demand for entry to and exit from Australia. To meet this expected demand, the department will continue to improve the ability to facilitate automatically processing and decision-making for approval of low-risk applicants before their departure to Australia.

The department will therefore require an increased capacity for e-lodgement and auto-granting capabilities that can ensure Australia remains competitive while maintaining robust security and integrity through appropriate risk tiering processes. Our systems will need to be fast and flexible to enable risk rules to be quickly changed as global circumstances change and our staff can be supported to transition from managing transaction processes to decision-support processes.

While the management of illegal maritime arrival cases is expected to diminish following the results of Operation Sovereign Borders, the cases are expected to be complex and support to manage the ongoing compliance caseload will also require the availability of more sophisticated technologies to support the detection, management and analysis of information related to character, identity and health for compliance cases.

Core systems will generate the reporting that is required to meet our organisational obligations and business needs

The department will also have an ongoing requirement to improve performance reporting for all aspects of our business. For example, it will be important to understand how the new reporting requirements under the Public Governance, Performance and Accountability Act will impact on reporting from our systems. The department will ensure that core systems can generate reporting in an understandable way for staff, rather than staff having to resort to the ad hoc use of tools such as Excel spreadsheets to manipulate data and to verify systems reporting.

The department will also support an improved capability for reporting and analysis of major trends that can inform policy and programme development for the department's services. The department will therefore incrementally improve our investments in our data warehouse as our default reporting system to deliver improved business intelligence and analytics capabilities, and our current systems such as SAP and SIEBEL to support specific reporting capabilities within these systems.

Data

The department will establish a big data strategy

Data is at the centre of our work. Data is used to assess applications for visas and citizenship, determine the lawful status of a client, conduct integrity checks, manage border operations, establish bona fides and verify identity. The department also collects and uses other types of data, for example, information relating to human resources, corporate and financial management, policy development and legislation. It is therefore critical that we prioritise the efficient collection and effective storage of data and ensure

the availability of data where and when it is needed to support improved decision making through analysis and our core business processes. Data storage and processing will also become an increasing cost driver for the department. The availability of staff with data analytic skills will be critical to the successful implementation of a big data strategy. The department has already established that powerful, open source analytics and big data solutions are agile and effective, and such solutions will be considered using either an in-house support model or by contracting third-party support providers. The department will therefore establish a big data strategy to provide direction for future investment in these technologies.

Data governance will have a renewed focus in 2014

Data can also pose a significant risk to the department when it is incomplete, incorrectly entered and/or formatted, subject to outdated or inaccurate business rules and processes, or captured in systems which are not easily accessed, have poor usability and poor integration with other systems. Manual workaround or ad hoc remediation will be required after data management problems have been identified, resulting in increased costs and lower efficiencies for the department. The department will improve the management of our data to allow informed decision-making and to meet our compliance and reporting obligations under legislation. This will be achieved by undertaking data management initiatives to improve accountability for the quality of the data stored in the department's systems. The Data Governance Working Group (under the ECCB) will be critical in driving improvements in the quality of our data and its 'share-ability' and will be driven by business needs.

Improve integrity of client identity

The department will continue to manage the integrity of client identity information through improvements to ICT systems that can provide the ability to have a single view, single search and single identity match for individuals. This will include the establishment of single client identity management environment.

The department will develop biometric capabilities through a combination of mobile devices and applications

The department will also introduce new approaches to providing a biometric capability to capture, store and share biometric information to provide greater assurance of identity for individuals while maintaining compliance with the Privacy Act.

The department will also improve the border processing and compliance case management systems. This will include prototyping new solutions including mobile options to meet case manager's information needs and improve the quality of information that is provided by case managers when information is entered into the system at the point in time that it is collected.

The department will consolidate and incrementally improve our data warehousing environment to provide a single data warehouse for risk analytics, financial modelling and reporting

The department will support the national security and law enforcement outcomes required by government through the delivery and management of leading-edge identity and risk-based systems that:

- support the identification, management and resolution of threats to Australia's national security before individuals arrive at Australia's borders
- provide comprehensive information and analytic capabilities for decision-makers to inform decisions on who is eligible to come to Australia
- support the resolution of the status of individuals who are in Australia
- provide a client-centric rather than transaction-based approach.

Improve mobility

The department will improve the ability for staff to work securely regardless of location

The department will be seeking to provide mobile IT solutions for staff (portable equipment and Wi-Fi) and mobile applications for clients, partners and staff. The department will continue to investigate options which provide greater device and network agnostic access to the department's ICT systems, services and information environment whilst ensuring risks to departmental assets are appropriately managed. Expected benefits include:

- **increased flexibility in conducting departmental business:** staff and partners will be able to access information through various mobile solutions and remote access services. ICT will further invest and improve this capability to make real time information available as new mobile solutions become available from industry
- **improved efficiency of departmental operations:** the department will develop a mobile strategy that will support information to be captured and decisions recorded regardless of location. This will ensure the availability of the right information, at anytime, anywhere to achieve efficiency and correct decision making
- **greater productivity, communication, collaboration and participation between staff will be achieved through improved mobility capabilities:** further investment in enterprise mobility platform infrastructure will be made.

Improve our critical platforms

The department must continue to meet the demand of increasing border crossings, whilst constrained in its ability to scale its workforce accordingly. The department will also continue to manage risks to the integrity of identity information through the delivery of a range of improvements to our systems. Pivotal to meeting this demand is an efficient and effective visa platform.

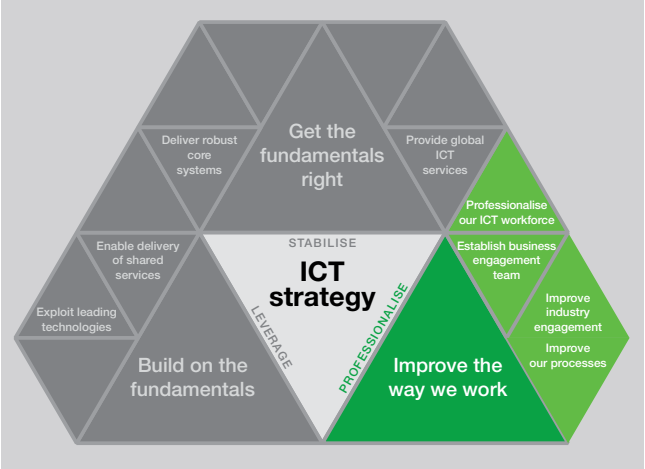
The department will standardise the internal visa systems to a single visa platform

The department currently supports one external (ETA) and three internal (IRIS/ICUE/GVP) systems that support our visa business. The department will standardise the three internal visa systems to a single visa platform- the ICUE platform, and migrate and decommission the IRIS and GVP systems. The current lack of integration of a number of systems with the Client Data Hub (CDH) will also be addressed through upgrades to the single visa platform, decommissioning of specialist, isolated ICT systems and greater control over the design and approval of new ICT systems. This will provide a global processing system that supports common processes, common training and the ability to move work between teams to meet peaks in demand across the globe. The department will continue to support improvements to the external ETA systems.

Investigate opportunities to improve border crossing platforms

The department will also investigate opportunities to improve border crossing platforms to support the transition from biographical to biometrically managed borders. This will be necessary to address the increased volumes at our borders while managing integrity risks. This can be achieved through the automatic capture and verification of biometric information before individuals reach our borders and as they depart Australia.

Improving the way we work



The department will shift to the delivery of ICT 'as a service' to improve the quality and transparency of ICT services for the department. This will include examination of the options to deliver infrastructure, software and data services through TSD, other IT service providers within the department, other government agencies and/or private industry.

This will be underpinned by strong business and industry engagement, improved processes to ensure the timely delivery of ICT services and a focus on professionalising the ICT workforce.

Establish a business engagement team

The department will introduce a partnering approach to improve the engagement between ICT staff and business teams to ensure that changes to the ICT environment will be predictable and well-disciplined from both the demand and supply side.

The department will establish more effective partnership relationships between policy, programme, operations and ICT staff

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TSD will build partnering relationships to ensure the best ICT solutions are designed for business needs and communication on the status of projects and changes to systems is readily available to staff. This will be achieved by establishing a business engagement team to create an ongoing dialogue on current and future business needs from small scale innovations to major change programmes with policy and operational staff and staff responsible for the design and delivery of ICT across the department. This will be undertaken within the planning and project management framework for the department and will include improved communication on the current status of ICT services.

This will be underpinned by improvements in our service delivery processes that are currently being implemented by the integrated service management solution programme and improvements to the change release process which will include improved communication on the prioritisation and delivery of ICT projects.

The business engagement model implemented by TSD will be developed in consultation with staff across the department to ensure that the avenues for engagement and underpinning business processes will deliver mutually beneficial results and outcomes.

Improve engagement with industry

The department will strengthen industry partnerships, including trialling and exploring various service offerings from industry, where it makes good financial and business sense to do so. However, we will not be building insular relationships with single providers. The department will not be looking for large system integrator partners, rather will be looking for industry partners who can provide specific services that are best of breed and can provide real differentiators to help us.

The department will use a 'best in class' approach acquiring and maintaining core capabilities and delivering ICT services

The department will leverage industry to provide commoditised ICT services, where lower costs will enable us to reinvest our own resources to deliver more in areas that are higher value for the department. Where there are opportunities for the department to use standard services, we will seek support from industry for services that represent the lowest possible cost and 'best fit' for the department. This is likely to include select sourcing for whole services with individual companies who can provide high value to the department where there are demonstrated business benefits in doing so.

In assessing benefits, the department will take into account the specialist business needs, the relative benefits of providing specialist ICT services in-house or through specialist companies and the availability of low-cost 'commodity' services from industry.

The department will seek comprehensive, value added services from our partners

The department will seek access to the intellectual property that is available from our industry partners, including their research and innovation, to continuously improve the ICT services that can help the department transform.

Improve our processes to ensure timely delivery to a high standard

Improved processes

Improve the change release process

The department will seek to improve the delivery of new ICT services through improvements to our change management processes to provide regular change releases of minor enhancements and an improved planning process and release programme for major projects in the department. The department will also examine opportunities to continuously improve processes for building and running ICT services.

Implement a revised software development lifecycle

The department will improve the software development process so that the department has a more agile environment capable of delivering non-integrated software projects more quickly into production, whilst maintaining quality and system stability. This will support the delivery of ICT systems that can be more responsive to changed policy settings, technologies and changed business models.

The department will also look for opportunities to work collaboratively with our service delivery partners to adopt a co-design/co-development approach for the delivery of ICT services to ensure that information can be integrated and shared between our partners and the department with strong controls over data integrity.

Improved ICT investment

The department will establish a baseline for the cost of delivering core ICT services

Funding to establish new ICT services has traditionally been absorbed within the ICT budget through efficiencies in maintaining current systems. Funding to maintain existing services is now at critical levels and will need to be reviewed to ensure that maintenance services can be provided through the continued availability of a skilled workforce, and that ongoing costs such as licensing can be supported.

The delivery of ICT services will require greater transparency of the ICT services that are delivered by different areas within the department. This will include transparency not only of the costs of work, but how costs are tested and driven down where possible.

ICT services will be delivered through an effective investment programme that reflects the real costs of maintaining ICT services to an agreed service standard. The department will improve the transparency of ICT resourcing to deliver ICT services including the identification of the ongoing costs to maintain standard services and improved costing and benefits for proposed projects.

Improved service delivery

The department will improve the delivery of core services including our offshore capability

The department will deliver ICT services using similar models to the delivery of cloud-services to enable continuous improvement of service delivery and position the department to take advantage of cloud services when there are suitable models available.

The delivery of an offshore strategy will also be key in the delivery of improved services, with consistent ICT services provided to both onshore and offshore staff.

The department will develop an IT Service Management Strategy and Service Standards

An IT service management strategy will be developed that will identify critical services, their dependencies and their value to the business, to establish a baseline of our service delivery standards and initiate a programme to reduce the impact of systems outages on business areas. This will include benchmarking service standards and the costs of providing those services so that the department can make an informed decision on the amount of investment that should be made in ICT service delivery.

Services standards will be agreed with business areas and performance reporting and client surveys will be reviewed jointly with ICT staff and business areas to identify options for improvements to the delivery of ICT Services and ensure that ICT continues to deliver the required outcomes for the business.

Increase the professionalisation of our ICT workforce

The department recognises the importance of maintaining the availability of ICT skills that are required to maintain our critical systems. To manage the risks of losing critical ICT skills, the department will identify the specialist skills that are required within the department to support the unique aspects of delivering our services and ensure that appropriate staff retention and professional development and certification strategies are included within the ICT workforce plan.

As a key service provider, TSD will consider future business and technology trends and how our ICT workforce might need to change to meet these drivers over the next four years. An analysis of the department's future drivers will enable the division to appropriately structure its workforce to meet the impact of those future demands.

The department will deliver an effective workforce plan to identify and manage key job families and the design of the workforce to support the delivery of new technologies and maintenance of our core systems

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The department will continue to improve the delivery of ICT services through the development of a professional ICT workforce with skills and capabilities aligned to the strategic direction of the department. This will include the release of an ICT workforce plan and cultural change plan to guide the staff development and retention strategies.

Resourcing

By rebalancing the investment for ICT services, the department will manage the risk of decreased productivity and data loss due to the unavailability of ICT services and the failure of critical systems that would severely impact the ability of the department to maintain operations including global services. The department will aim for a resourcing split of 60 per cent of resourcing allocated to maintaining current ICT and 40 per cent applied to new programmes. The department will establish a three year budget for business as usual and new investments for ICT. This will include in-principle agreement for capital investment over a three year period.

Governance

The department will seek to maximise the benefits of its investment in ICT through effective governance. Key bodies that will govern ICT include the:

a. **Secretaries' ICT Governance Board and Chief Information Officer Committee**—the department will participate in whole-of-government ICT policy initiatives which may also drive ICT investment decisions for the department

b. **Strategic Business Support Committee**—for decisions on ICT investment. The capability boards provide significant inputs to the Strategic Business Support Committee (SBSC) and the Resources and Finance Committee (RaFC) in their functions relating to sound and innovative delivery models, investment priorities, capital plan operations and an oversight of ICT and other significant projects

c. **Capability Boards**—the capability boards scrutinise potential capability and technology investments and prioritisation of these potential investments, including trade-offs, interdependency assessment and strategic alignment and support cross divisional investment decisions. There are three capability boards: Borders, Visa and Citizenship (BVC) Capability Board; Humanitarian and Status Resolution (HSR) Capability Board; Enabling and Corporate Capability Board

d. **Architecture Review Board**—governance and oversight of ICT architectural direction and solution designs

e. **Data Governance Working Group**—(under the ECCB) drives improvements in the quality of our data and its 'share-ability' and underpinned by business needs.

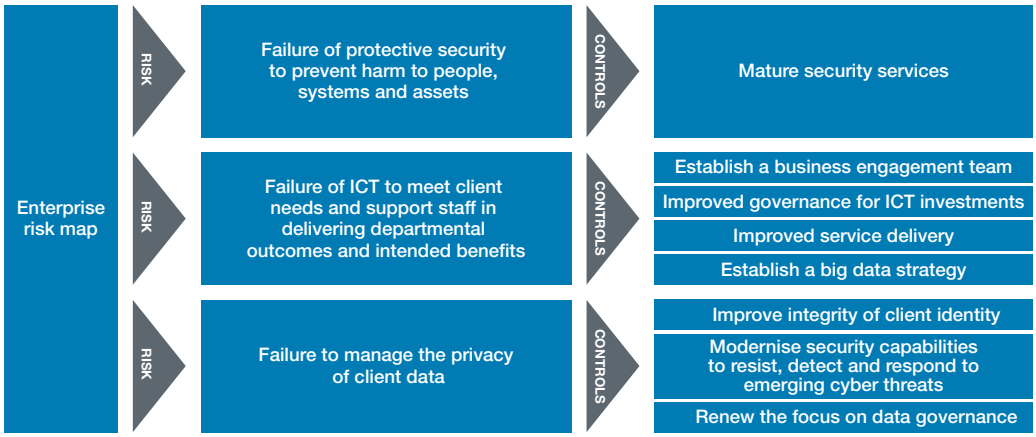
In order to deliver ICT services more quickly the department will continue to focus on optimising its governance processes for ICT investments. For instance, the department will look for opportunities to prototype systems and applications to determine whether the idea is viable prior to committing further resources to evolve the idea. Prototyping processes will be built into revised project and planning frameworks for the department. This will enable confidence that a selected solution is highly-likely to deliver the required business outcome and provide a means to co-develop solutions with end users directly involved.

Risks

ICT is critical to enable the delivery of services and outcomes for the department. Risks to the delivery of ICT services are therefore an important consideration in the establishment of priorities for ICT in the department.

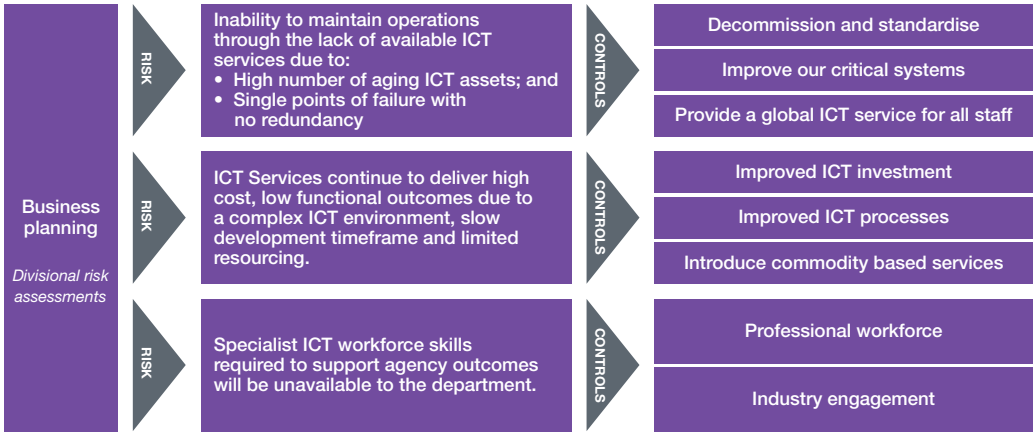
Enterprise risks

The ICT Strategy supports the management of the department's enterprise risks as follows:



ICT risks

The ICT Strategy also addresses the management of the following risks for TSD:



The management of these risks has informed the priorities for the ICT Strategy.

Forward plan

Get the fundamentals right (year 1)

- Invest in what we have
- Reduce outages
- Decommission—reduce risk of data loss. Improve information for decision
- Reduce costs
- Standardise software development lifecycle and other system development practices
- Support essential business requirements (legislation, policy, risk management)
- Development of a future-state Architectural Intent

Improving the way we work (years 1–3)

- Develop a workforce strategy
- Deliver a cultural change programme
- Invest in up-skilling staff
- Clear career pathway
- Improved processes
- Improved governance

Build on the fundamentals (years 2–3)

- Improve current systems and services
- Deliver new services
- Improved productivity
- Improved information management