



Mapping Tomorrow

A Strategic Plan
for the
Digital Transformation
of the Public Administration
2019 - 2021

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June 2019

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Foreword

The high speed at which society is transforming, the digital revolution and fiscal pressures are presenting governments with challenges that will all impact on the future of public services. One cannot pretend change is not happening; the only option is to get up to speed.

The Government's mission is to provide high quality public services to all who need them, designed and delivered seamlessly to any citizen or business at any moment of time. Technology plays a big part in making this happen. Technology is no longer just a tool to automate back office functions and improve public sector efficiency; it has assumed a transformative role in public service design and delivery.

We have already come a long way. We rank high in EU eGovernment Benchmarking and are now providing online services 24 hours a day, every day, from anywhere, just as we had set out to do in the Mobile Government Strategy launched in 2016. However, there is much more to be done and this Strategic Plan is our map for the next 3 years. It includes various strategic projects and initiatives, both horizontally across government and vertically in multiple sectors. It lays the foundation for future developments for a Public Administration that meets the emerging needs of the country. We cannot just address the present situation; we need to have foresight to look ahead beyond the present and into tomorrow.

Exchanging data and winning trust are twin pillars of citizen-centric services. In recent years, we have taken great strides to improve public services delivery, building trust along the way. We have looked at the needs, expectations and pain points of citizens and businesses, improved and simplified administrative processes and eased access to services through the setting up of one-stop shops and multi-channel service delivery. Data sharing across government is an ongoing challenge and at the heart of this digitalisation plan is the 'Once-Only Principle'. Having it in place does away with the frustration of having to give the same personal information repeatedly. Once data has been given to a Ministry or a Government Officially Appointed Body, it will be shared as permitted by law or through consent - a digital transformation that is truly connected government.

Extensive process re-engineering is required to put the latest technology to work but we are determined to make it happen. We are looking at how best to embed Artificial Intelligence capability into business processes and how to adopt other emerging technologies to achieve services of excellence. New technologies, such as Artificial Intelligence, are incredibly powerful tools and offer remarkable opportunities. As with all good things, there can be ethical implications, and unintended consequences, which need to be managed and mitigated.

The benefits of technology use in the Public Administration are wide reaching, from better health provision to speeding up the courts' processes and from delivering faster emergency services to setting up a business in one day. The possibilities are many and the goals of this Strategic Plan ambitious. We can only succeed if we work together, not in silos. If we exploit the advantages of interoperability and 'once-only' data usage, commit to service standards, measure satisfaction and have services designed with the user in mind, only then can we aspire to reach our target of a digital society.

Our aim is to have a Digital Public Administration that is continuously renewing itself, transforming the way citizens and business interact with government and providing public services of excellence.

Mario Cutajar

Principal Permanent Secretary



1



Setting
the Scene





1.1 Introduction

The Government of Malta has a long history of accomplishments in the provision of electronic public services. It embraces and applies information technologies continually to achieve greater heights in the quality of services.

Emboldened by these achievements, the Government is taking the Public Administration into a new era, to further simplify the administrative burden on citizens and businesses. This will be accomplished through various strategic pillars, including the digitalisation of the Public Administration, as presented in this strategic plan for the period 2019 – 2021.

1.2

Situational Analysis of the Environment

Advancements were achieved through championing and coordination at the highest levels of Government. Digitalisation initiatives are spearheaded by the Office of the Principal Permanent Secretary in the Office of the Prime Minister as part of the Public Service Reform Programme and implemented by the various ministries, departments and Officially Appointed Bodies. The Offices of ministry Chief Information Officers (CIOs) have been strengthened to deliver the digital agenda of each Ministry. Strategic and Corporate initiatives are coordinated through the CIO Forum, chaired by the Office of the Principal Permanent Secretary.

servizz.gov is an agency within the Office of the Prime Minister that brings all government services together, making them more accessible to the public. The Malta Information Technology Agency is the central driver of Information and Communications Technology policy, and provides infrastructure, security, information systems and consultancy services to enable the Government's digital transformation.

Government services have advanced from the traditional over-the-counter experience, where citizens and business people physically had to visit multiple offices, and sometimes encountered long delays between the initiation of the request and the provision of the service. eGovernment and Mobile Government are now household terms. Electronic public services are no longer the exception, but the rule, and will become more prevalent with the adoption of innovative and disruptive technologies such as Artificial Intelligence. The fact that availability of online public services is now taken for granted is, in itself, a measure of their success.

This success is also attested by results obtained in European and international benchmarks for the quantity and sophistication of services and information provided online and through Government portals, such as the European Commission's eGovernment Benchmark report. In 2018, Malta's public services scored first among EU states, based upon measures of client-centricity, transparency, cross-border mobility and key enablers such as the use of a secure electronic identification.

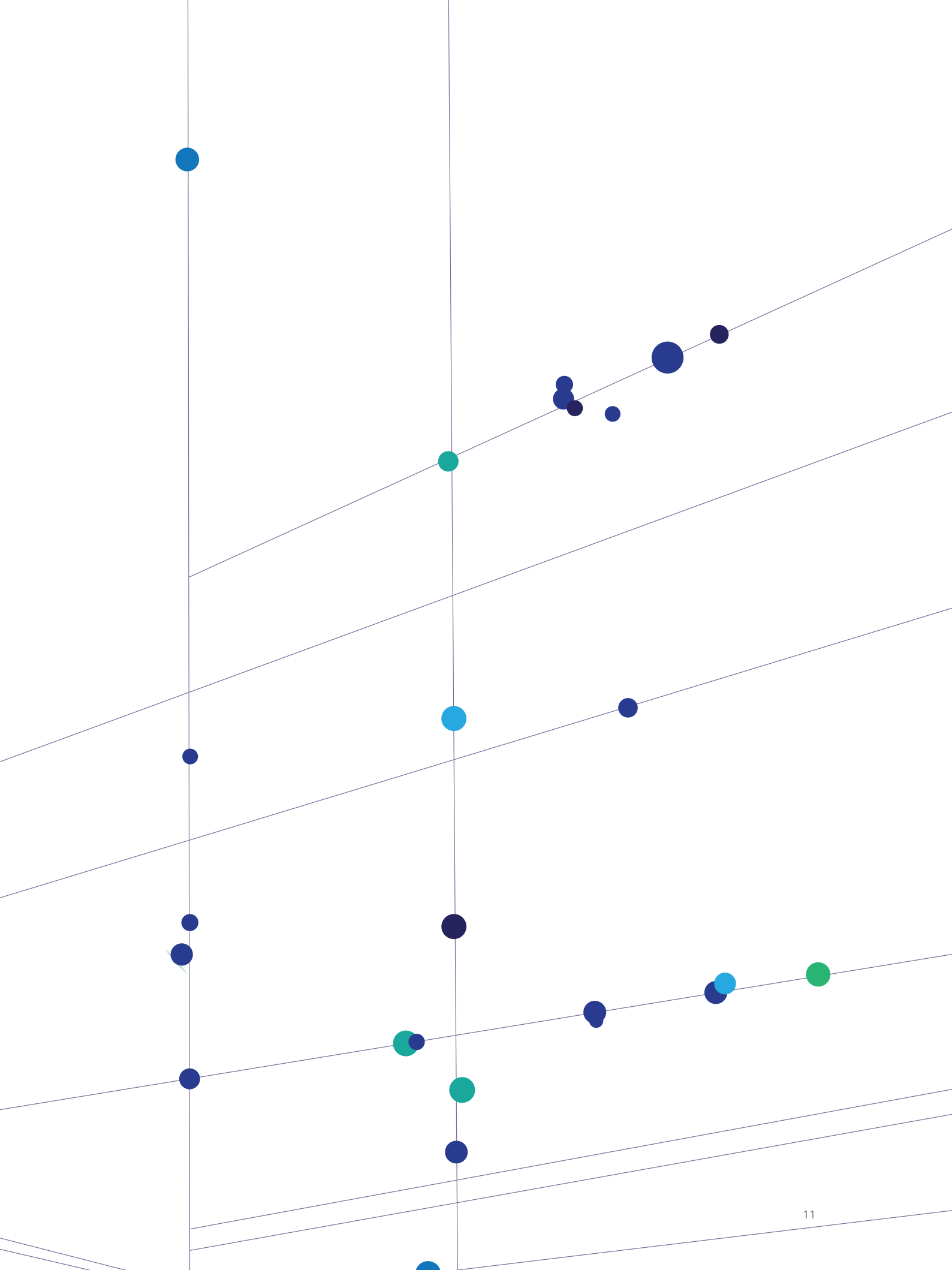
The European Commission's Digital Economy and Society Index for 2018 ranked Malta's progress in digitalisation as 12th among member states in terms of broadband connectivity, internet use and digital skills, citizens' use of internet content, communication and online transactions, integration of digitalisation and e-commerce in business, and digital public services. These reports were complemented by the United Nations' e-Government Survey. Malta was included in the Very-High E-Government Development Index group in 2018 and scored highly on its Online Services Index for the Government's use of ICTs in the delivery of public services at a national level, with special focus on the technical features of national websites as well as the application of e-Government policies and strategies.

The digital public service user experience was improved further through the implementation of the Mobile Government Strategy 2017-2018, making various new and enhanced public services available anytime and anywhere via mobile devices. More services will follow.

These efforts are being strengthened through the operations of the Data Governance Council which will help the Government deliver the next leap forward in public service maturity - the concept of Once-Only.

The digitalisation of the Public Administration is underpinned by the Digital Malta Strategy (2014-2020) and complemented by the National Cyber Security Strategy 2016, along with other government circulars and policies to improve internal operations.

Not only does this deliver on the Government's electoral manifesto commitments but also fulfils Malta's European obligations, laid out in the European Commission's Digital Single Market Strategy, the European eGovernment Action Plan 2016-2020 and the Tallinn Declaration on eGovernment.

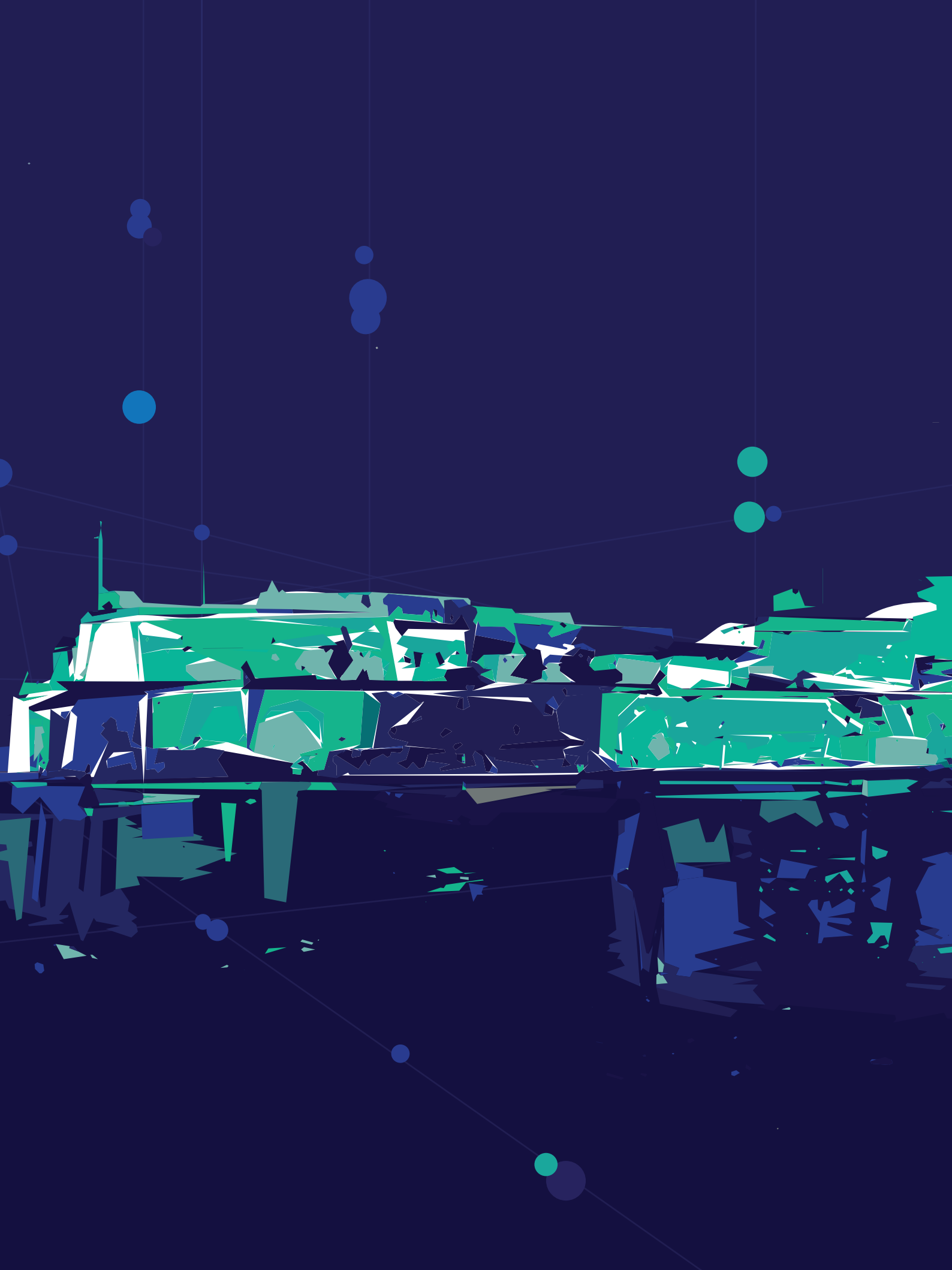




2



Strategic
Position



2.1 Vision

The Public Administration aims to provide citizens and businesses with the information or assistance they need.

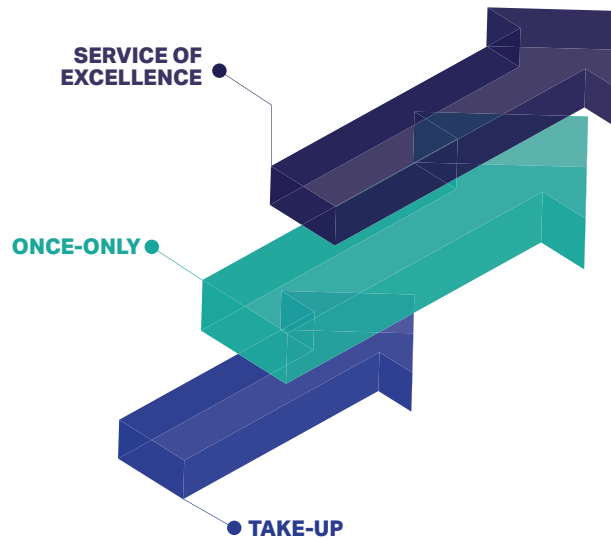
At a time when Malta is doing exceptionally well economically, simply providing public services is not enough. Information must be submitted only once and then shared within the appropriate legal framework. Public services must be easy to find, access and consume, and improve quality of life. Digital technology makes it possible to provide truly client-centric services that elevate the overall public service experience. This is the basis of the vision being set for the Public Administration in this Strategic Plan.



A PUBLIC
ADMINISTRATION
EMPOWERED
BY DIGITAL
TRANSFORMATION

2.2 Goals

The goals of this Strategic Plan do not exist in isolation but build upon each other and form a continuum of improvement in service delivery.



- **Take-Up**

The Government has introduced 24x7 access to public services from anywhere. More simplification of online services, making them easy to use, providing services which are digital end-to-end, and building trust towards the digitalisation process, will improve take-up further.

- **Once-Only**

The Public Administration will strive to ensure internal sharing and re-use of data and information that has been provided previously by a citizen or organisation, or which has already been collected and stored through other Government official processes. This will help attain the Once-Only Principle with the benefits that this brings both for clients and the Public Administration. Such sharing and re-use will be managed within the appropriate legal framework.

- **Service of Excellence**

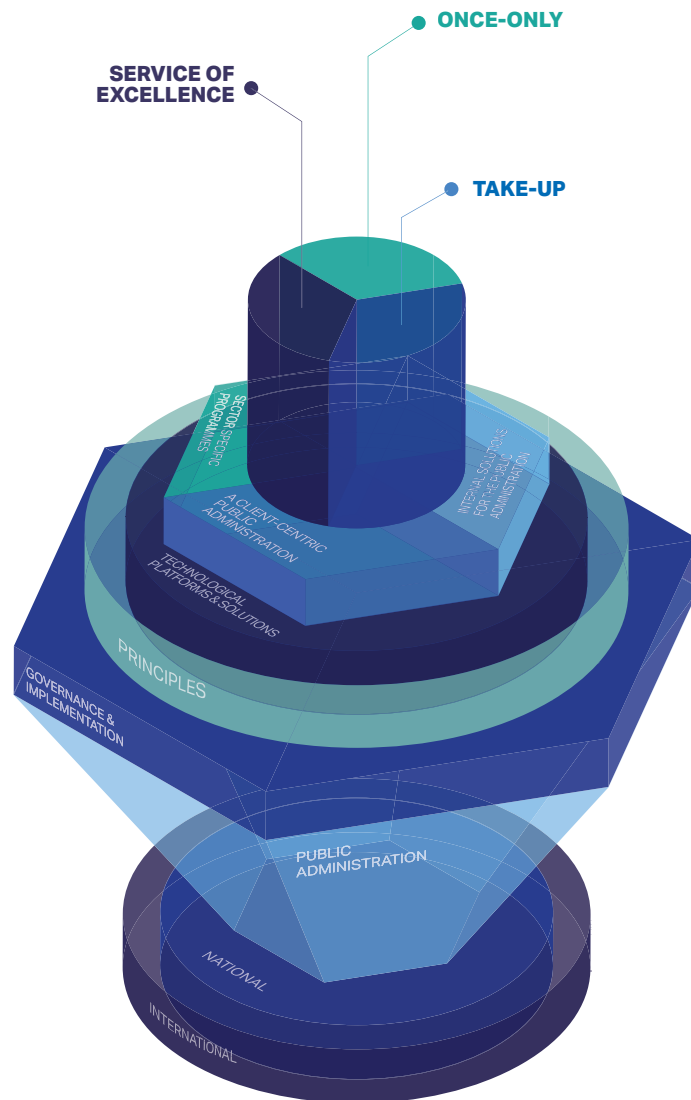
The Public Administration is committed to excellence in service delivery and will use Artificial Intelligence, among other disruptive technologies, to bring public services to the level expected by citizens and businesses, in line with social trends and demands. Public services will be personalised, user-friendly and timely. Users of these services may benefit from self-service. They will receive notifications about service eligibility and be provided with automatic services where appropriate. They may also interact with public service providers at any stage of the service. Client expectations will be managed, met and, where possible, exceeded.

2.3 Model

The attainment of the vision and goals is outlined in the model shown below. It illustrates an intensified drive towards transformation in client-centric public services, sector-specific ICT programmes and corporate systems, supported by innovative underlying technological platforms, particularly Distributed Ledger Technologies, Artificial Intelligence and the Internet of Things.

A set of key principles and critical success factors will guide the implementation, while embracing the potential of emerging technologies, within national and international contexts.

Successful implementation of this Strategic Plan requires a central governance framework.





3

Enabling Principles
and Technologies



3.2

Specific Concepts

- **Client-Centricity**

Services will be oriented towards clients' needs rather than around Government agencies' responsibilities and way of working. Placing clients at the centre necessitates their ongoing interaction and involvement in prioritisation, design and implementation.

- **One Government**

There will be an integrated approach to public service delivery. Different units will be linked so as to offer the client one holistic solution.

- **Sharing and Re-use**

The sharing and re-use of data and information between public service providers, where appropriate, will be managed within a legal framework with a consent mechanism. Stakeholders will be required to embrace the associated benefits and address any legal rights and obligations.

- **End-to-End Services**

Clients will be provided with secure services which can be consumed digitally from point of request to point of delivery. End-to-end digital services may require the adoption of electronic signatures, digital certificates, secure payments and secure electronic delivery.

- **Digital by Default**

Digital shall be considered as the default choice for delivering public services. Assessments should consider the extent of digitalisation, the medium to use and prioritisation of public services.

- **Process Re-engineering**

The implementation of solutions shall be accompanied by the necessary streamlining, simplification and re-engineering of business processes. This will remove unnecessary burden on clients and improve the internal efficiency of Government.

3.3 Generic Principles

- **Trust**

Accountability, openness and transparency promotes trust and take-up. Clients will be kept informed of the progress of their requests for public services. Where possible, clients will be given more control over the service.

- **Stronger Awareness**

Additional education and awareness campaigns will promote the benefits of digital services, to improve trust and increase take-up.

Training will be provided to public officers as digitalisation requires well-trained staff to nurture the adoption of technologies.

- **Security and Privacy**

There will be a comprehensive and holistic approach towards the confidentiality, integrity and availability of data. Best practice and proactive measures will be engaged throughout the design, development, implementation, hosting and access of information systems. Personal data will be safeguarded in line with the General Data Protection Regulation.

- **Agility and Continuous Improvement**

Agility and flexibility in seeking solutions will be maintained. This requires continuous improvement in terms of the quality of solution and in adapting to evolving client needs.

- **Accessibility**

Technology shall be implemented in line with accessibility standards to meet the requirements of persons with differing needs.

- **Availability**

Public services will be available on a 24x7 basis from anywhere. Consideration will be given to the nature of the service and requirements of the target audience.

- **Ongoing Investment and Celebrating Success**

Investment in digitalisation, technologies, methods and human capital will be ongoing. Showcasing success stories, and benefits realised, is imperative to motivate and build a case for further investment.

- **Interoperability and Cross-Border**

In an age of globalisation, interoperability must be attained so that relevant local public services are accessible on an international scale.



3.4 Adoption of Emerging Technologies

- **Artificial Intelligence**

Users of social media and email are already benefitting from personalised services through the application of Artificial Intelligence. These include simple text recognition and interpretation.

Artificial Intelligence is a major enabler for digital transformation. Throughout the period of implementation of this Strategic Plan, the Public Administration will be actively considering areas which can benefit from Artificial Intelligence. It will facilitate the continuous learning and adaptation of processes and services to meet the evolving needs of society. Artificial Intelligence can simplify and automate processes and introduce self-provisioning of services. Subsequently, this reduces bureaucracy, with associated benefits for citizens, businesses and Public Administration employees.

Risks and ethical considerations need to be studied carefully. Artificial Intelligence shall be applied within an applicable legislative framework, accompanied by appropriate education campaigns.

- **Internet of Things**

By using Internet of Things (IoT) technologies, diverse devices, objects and people can be interconnected. IoT has a wide range of application possibilities, especially where big data is available. IoT facilitates many services which can make a difference in people's daily lives.

- **Distributed Ledger Technologies**

The application of Distributed Ledger Technologies, such as Blockchain, has the potential to improve the management of data and streamline processes. It helps reduce transaction costs to clients, increase transparency and ensure traceability. Structure and regulation are important and have already been addressed through the regulatory framework recently introduced in Malta.

- **Business Intelligence and Analytics**

Business Intelligence and analytics are important tools for improved decision-making and public service delivery. They provide an opportunity to visualise information, using different scenarios, and guide where and how change in organisations can impact the digitalisation of public services.

- **Immersive Technologies**

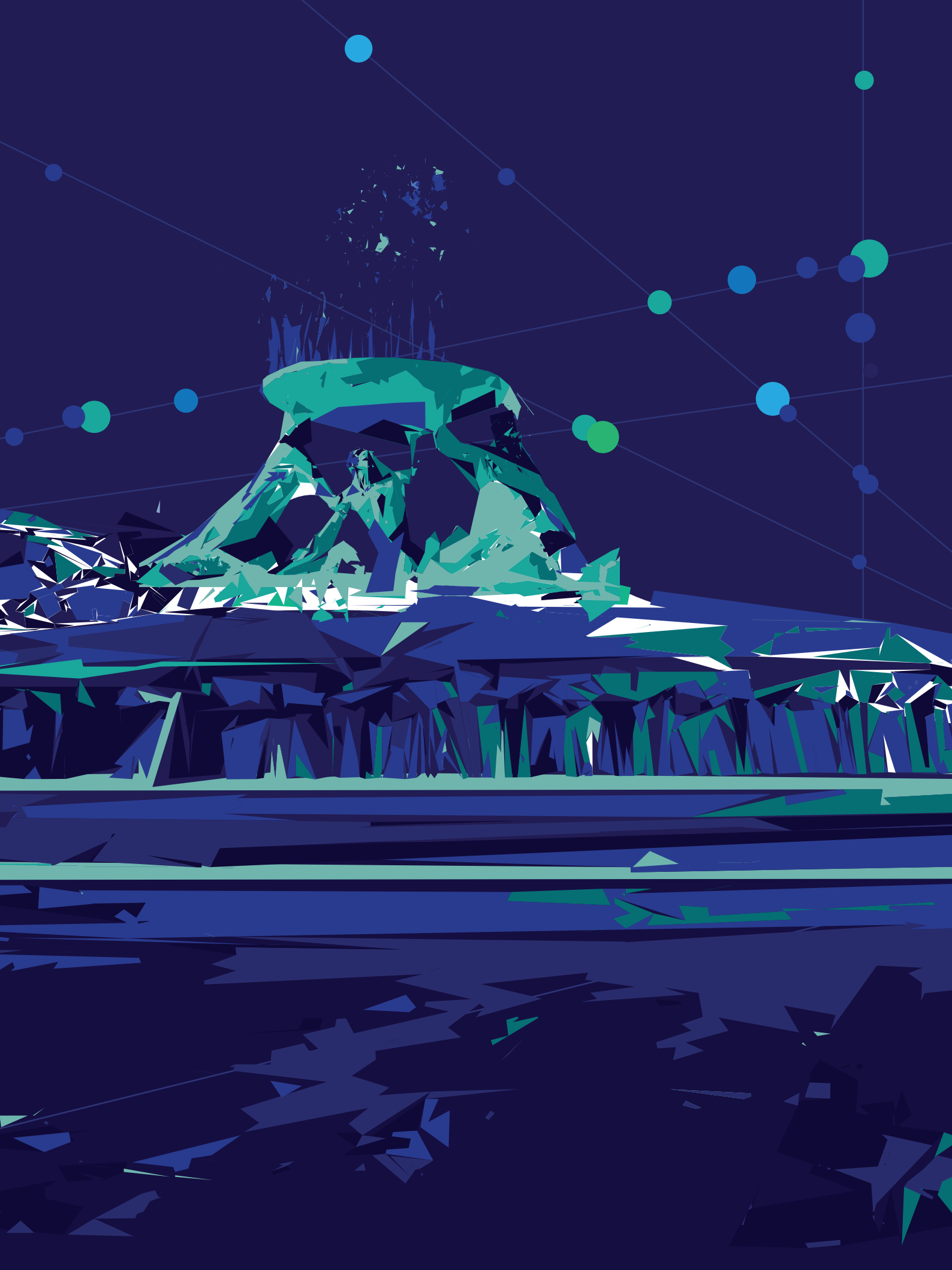
The benefits that the application of Virtual Reality, Augmented Reality and Mixed Reality can bring to public services are many and far reaching. Public employees will be able to perform more creative and experimental tasks. Both public employees and clients may gain from experiences which are otherwise difficult or impossible to come across.



4



Programme
of Works



4.1 A Client-Centric Public Administration

Clients interact with the Public Administration in different ways and at various times during their life. Through the launch of servizz.gov, the notion of a Government one-stop shop service is now a reality.

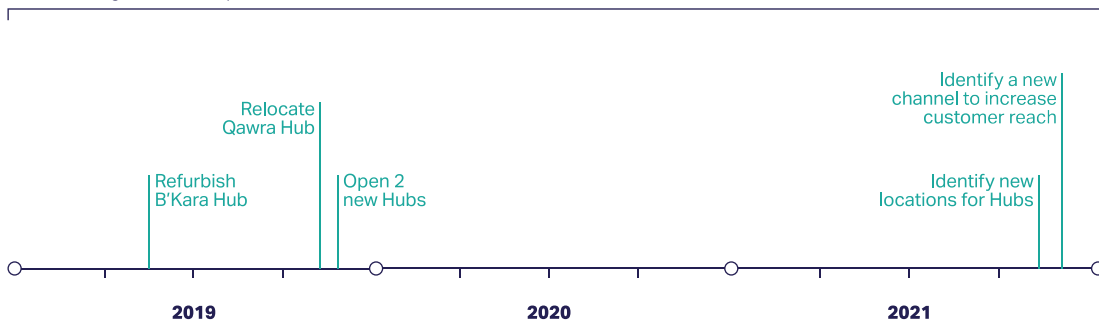
From an eGovernment perspective, during the last 5 years, Malta has kept its position at the top of the EU benchmarking exercise but the challenge to increase take-up persists. Concepts of mystery shopping, quality service charters and quality labels are aimed at continuously improving service delivery. The client is being given a stronger voice through public consultation. A business portal will, likewise, trigger a transformation in the way Government and businesses interact. Ultimately, the Public Administration must continue to aim to achieve simplification, removal of bureaucracy, modernisation and innovation, always keeping the client at the centre of decisions.

4.1.1 servizz.gov

servizz.gov was created to provide a one-stop shop for the public, enabling them to obtain information about numerous services and to access and consume them more easily. Various complementary client service channels were implemented. The traditional service delivery includes a free phone line and a number of regional hubs. The online offering includes email, website channels and mobile apps. More than 4,000 phone calls are received through the free phone service every day, with almost 1,500 visits to the regional hubs every month. The website servizz.gov.mt provides a useful tool for the public to request information, offer suggestions, report bureaucracy or lodge complaints. The IT system incorporates service levels to ensure that feedback to clients is provided in a timely manner. It will be enhanced to enable clients to track their cases and applications.

servizz.gov is a priority for the Government. It is a vehicle of change, delivering services to the public in a concise, standard way. The expectations of the public in terms of the quality of the service will be analysed to achieve the highest standards of excellence.

Ongoing: Monitor existing channel usage and take-up



4.1.2 Business Portal

The implementation of a Business Portal, an initiative of Business 1st - servizz.gov, will enhance and strengthen the concept of the one-stop shop by providing a consolidated online service through single coordinated points of submission.

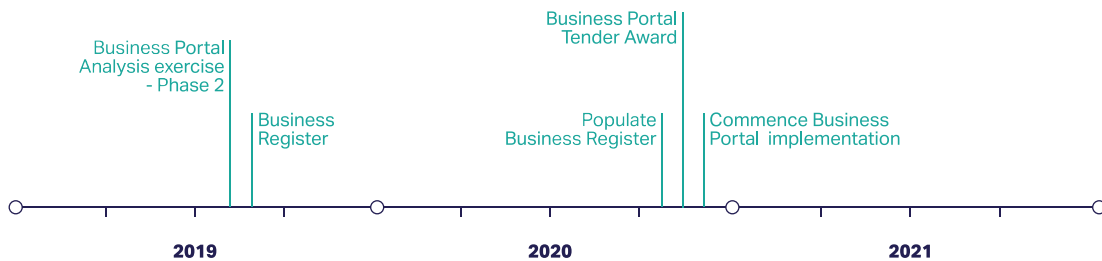
The main objective is for any sole trader or economic operator, starting or running a business, to be able to benefit from a single interactive and intelligent system that automatically and seamlessly forwards requests and submissions to various government entities in a manner which enables them to be processed in parallel. It will also provide smart and intelligent support to those seeking information on starting up, operating or expanding a business.

Such a common infrastructure for closer collaboration within the Public Administration will deliver effective, efficient and coherent Government services, significantly simplifying processes and reducing bureaucracy. Common datasets will be shared across departments within the Public Administration.

The Business Portal will offer a single electronic point of reference based on Government-to-Business services. This will be supported by a dynamic front-end system based on process flows covering all key aspects of the service lifecycle.

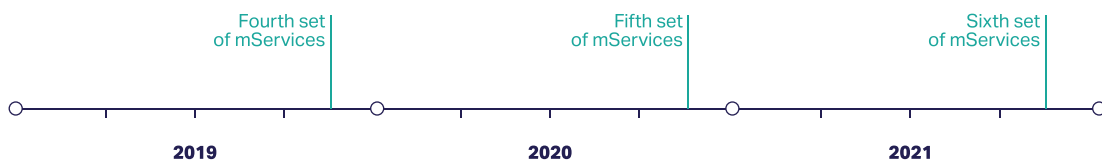
Businesses will also have the facility to receive notifications on various events such as renewal of employment and trading licences, tax returns and financial statement submissions.

The Business Portal will make use of Artificial Intelligence and Natural Language Processing facilities to provide users with essential information during the business lifecycle from pre-registration until closure.



4.1.3 Mobile Services

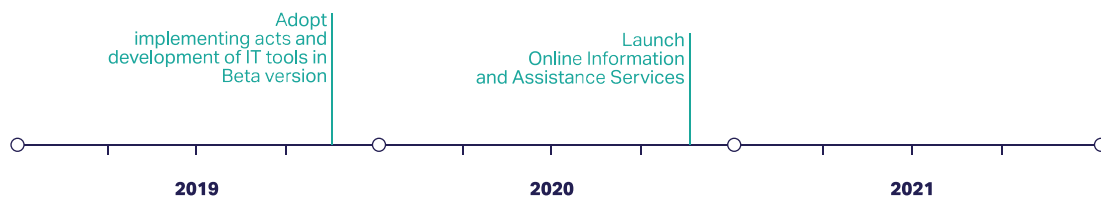
The Mobile Government Strategy, launched in 2017, was a prime instigator for public services being available on a 24x7 basis from anywhere. About 70 native or hybrid apps and responsive websites have since been launched. They all feature on the maltapps launcher – an app which provides easy access. Use of mobile devices to access services is continually increasing. New mServices are being planned and the Government is committed to simplification. mServices have also benefited public officers when on site during the execution of their duties.



4.1.4 Single Digital Gateway

Life events that disrupt an individual's usual activities, causing a substantial change and readjustment, are catered for in specific client-driven services that prominently feature on the gov.mt portal. The information is being constantly updated by the Department of Information with the service contributing to Malta's leading role in eGovernment.

EU regulation requires that, by 2020, the life events concept is replaced by the Single Digital Gateway. This will facilitate online access to the information, administrative procedures and assistance that citizens and businesses need in order to become active in another EU country. A basic principle is that any procedure available to citizens of a member state should be equally accessible to those from other member states. This will be a one-stop shop for the most common administration procedures of the EU, and will make it easier for people to interact with public administrations.



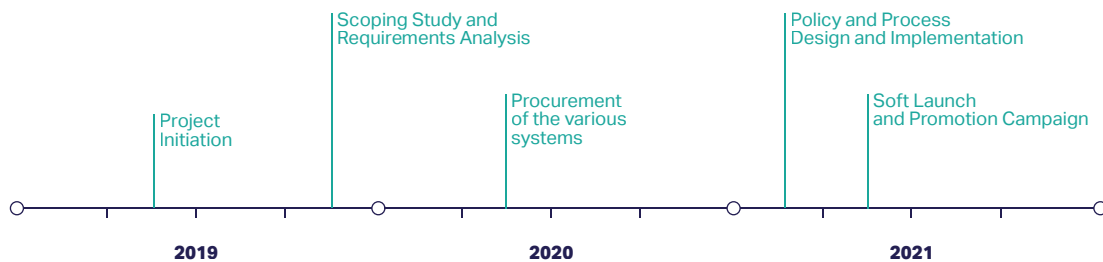
4.1.5 eParticipation

The Government will conduct a scoping study to determine how the implementation of an eParticipation platform, and associated best practices and tools, could further promote development of public policy, boost public trust and help persuade citizens and businesses to collaborate effectively with Government. The study will map research findings and case scenarios to see how they would fit in a local context and present recommendations regarding the way forward.

Additionally, the konsultazzjoni.gov.mt website will be redesigned to include new templates and user-friendly forms. It will direct citizens to the public consultations of various Ministries, based on topic and workflows, and client access will be improved.

Open consultations will include topics easily understood by diverse target groups, using questionnaires and surveys to facilitate data collation, analysis and reporting. The portal will allow citizens to view responses from the public for all closed consultations with features such as subscriptions, push notifications and blogs to debate proposals. Government responses will also be visible.

The introduction of eDemocracy will promote social innovation, online public engagement in policy making decisions and clustering of ideas and trends.



4.1.6 Mystery Shopping

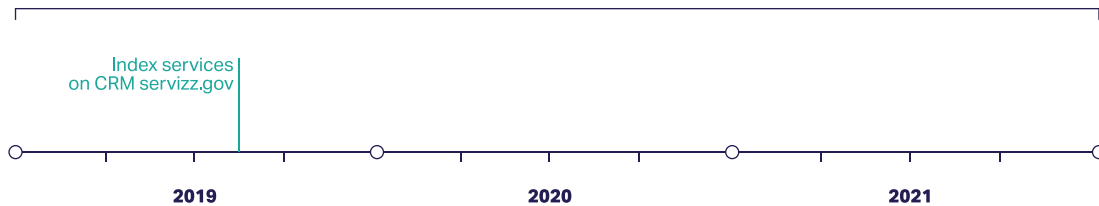
The Mystery Shopper project addresses issues deemed to prevent good quality service delivery. Mystery shopping reports will be submitted by external clients. The aim is to instil a service culture within the Public Administration, complemented by an attitude of ongoing improvement of service delivery, with client-facing officers aware that the service is being monitored and assessed.

Follow-up mystery shopping exercises will be undertaken and used as an assessment tool to help ensure continuous service improvement. Together with quality assessments, this will determine departments or Officially Appointed Bodies meriting a Quality Label. The first Quality Labels shall be awarded in September 2019 with the intention for this to be a continuous process.

4.1.7 Register of Public Services

A single repository of public services is vital to providing the desired service of excellence. servizz.gov has developed a client relationship management system that brings together its various channels through a common database of services. Through this, a standard and efficient service delivery can be guaranteed. Such a database needs a system of ongoing housekeeping to take account of updated services, new services, and terminated services. This database will be transformed, through servizz.gov, into a register of public services, enabling the various Ministries to keep their respective services current.

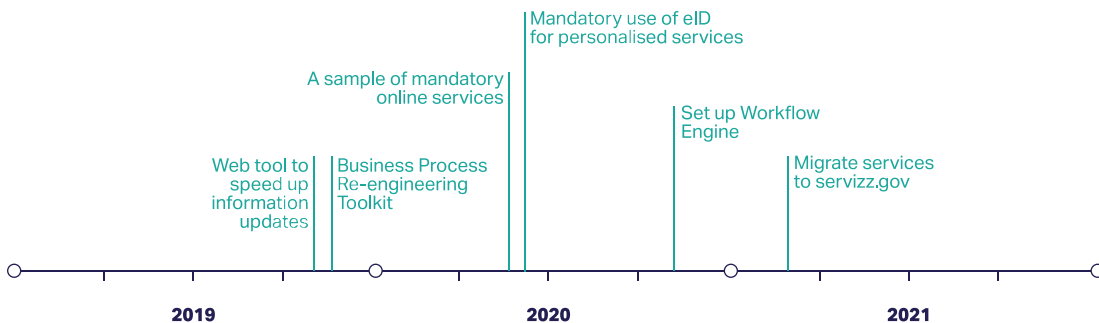
Ongoing: Aligning of servizz.gov CRM database services with Ministries



4.1.8 Take-Up of Online Services

A plan of action, drafted and approved in 2018, listed several tasks and initiatives required to increase the take-up of online services by the end of 2020.

The action plan addresses several shortcomings including bureaucratic communication channels, resistance to change, legacy service portals and lack of trust in secure transactions. Awareness campaigns are important to educate public employees about the benefits of digital services. A toolkit will help decision makers within the Public Administration identify processes that require re-engineering through digitalisation. In addition, new online public services will evolve around the client to ensure that they are user-friendly and accessible to all.





4.2 Sector Specific Programmes

Beyond shared corporate responsibilities, each Ministry and Officially Appointed Body has its own objectives to achieve and programme of activities to implement. Programmes that are specific to Government sectors are key for the attainment of Government’s overall mission. Such programmes will be supported through the digitalisation process to attain the goals of this Strategic Plan.

4.2.1 Identity Management

Personal data is an important consideration for Government services. There are various instances when clients come into first contact with Government, where information is captured and digitalised by various Ministries according to the requirements of the respective line of business.

Identity Malta Agency is committed to linking information related to the person so that the Government will have one common data source available across all Ministries. The Agency has a primary role in delivering the Once-Only Principle through the provisioning of a new Person Register by linking different life events to enable the sharing of data across Government.

A project will be carried out to pilot the provision of online legal searches to replace those currently conducted on physical documents. A further project will be an analysis of implementing blockchain technology in ID Card data and citizenship applications.

- Ongoing:
- Person Register
- Identity Card System updates
- Passport System upgrades
- Resident Cards updates

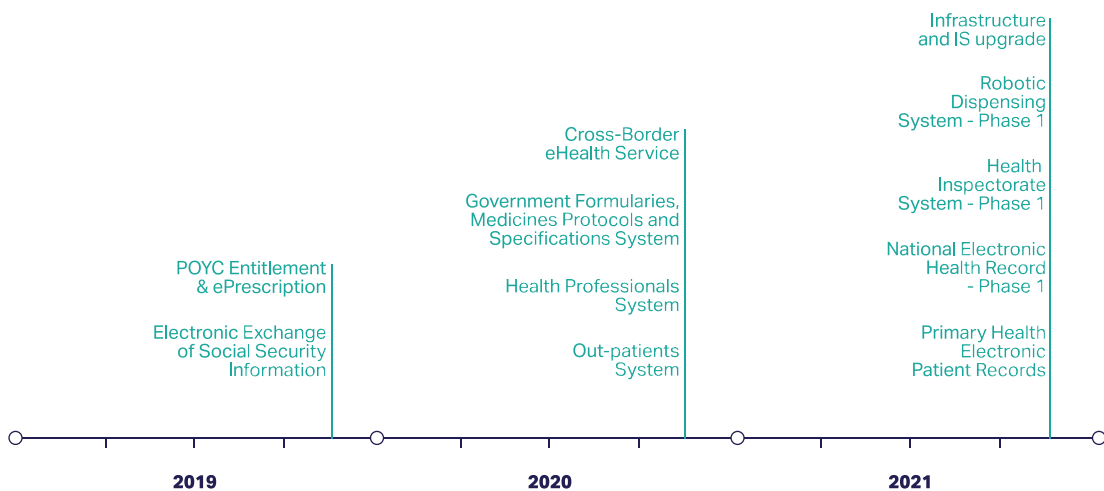


4.2.2 Health

Through the myHealth portal, patients and doctors are already experiencing the benefits of technology, sharing various services such as medical records and information on admissions and appointments.

Emerging technologies, such as robotics and Artificial Intelligence, are being integrated into healthcare service provision. The Ministry will implement further technological changes to replace paper documents and minimise bureaucracy. It will strengthen the efficiency and effectiveness of resources and processes through timely and accurate data. Future projects will help patients gain more access to health records and provide the capability of managing consent.

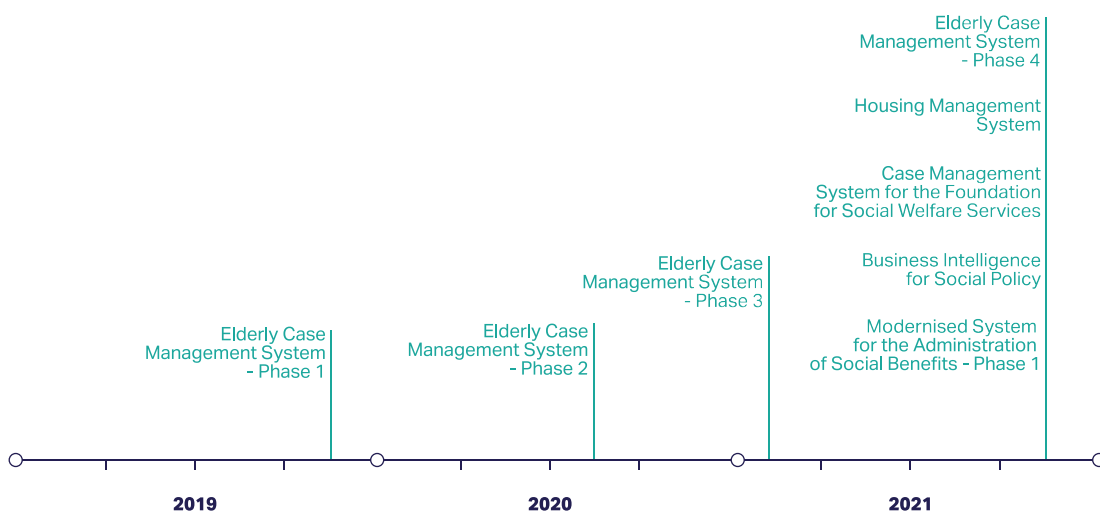
Because patients may already be overwhelmed by their health issues, the lifting of administrative burdens can only be a positive move.



4.2.3 Social Security

Social services have secured basic wellbeing in Maltese society for more than 60 years. Today, not only can clients make requests, access personalised services and monitor the progress of applications online but specific services are triggered automatically, following a life event, without the need to apply.

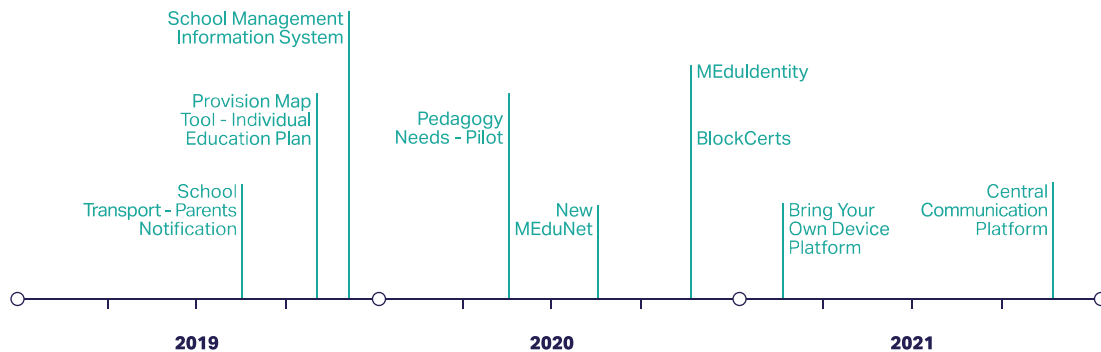
The modernisation of systems will enable greater inter-Ministerial coordination and facilitate better informed decisions about policies and programmes. The Social Solidarity Ministry shall contribute to the achievement of the Once-Only Principle through systems interconnected with those of Inland Revenue, JobsPlus and others. Projects will be carried out so that clients, either directly or through a professional representative, record and share data for a better and more personalised service. Some offerings will be on a self-service basis or automated.



4.2.4 Education

Technology is a crucial element in developing future generations. Parents and custodians have access to a child’s academic progress and school activities through the Parental Portal. The ‘One Tablet Per Child’ scheme helps to ensure that all children are given a fair and equal opportunity to make use of technology. Educators are provided with a wealth of resources on mobile devices, enabling collaboration in an engaging virtual learning environment. This has enhanced and simplified classroom technology, giving teachers more control and supervision of the use of digital devices. These services require substantial investment and continued commitment.

To improve the provision of these services, the focus is two-fold: effective administration of information regarding students who attend state schools, and identification of individual learning programmes. Educators and other professionals will gain digital access to a student’s education plan through a central system. More content and assignments will be provided digitally, and online communication tools will be available. The goal is to provide a personalised service following a child’s development using a system which captures achievements, attendance, behaviour and participation in learning programmes.

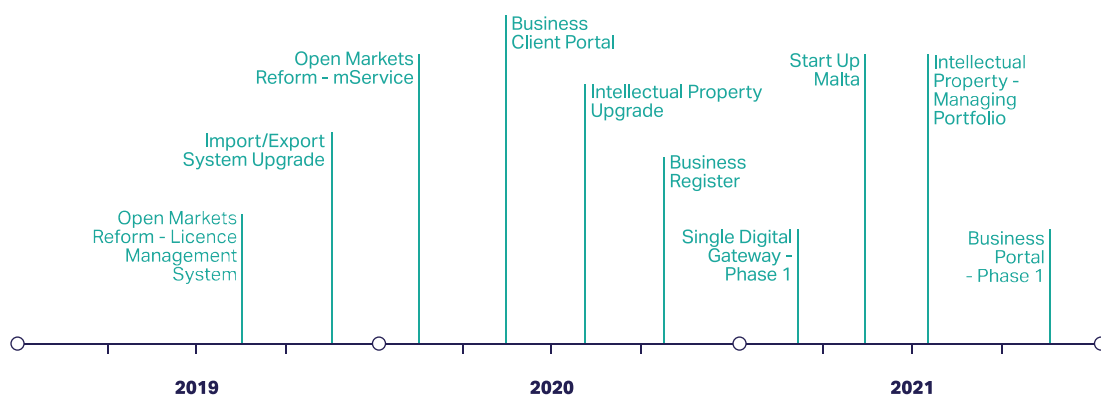


4.2.5 Business

Malta is a natural business hub in the Mediterranean offering investment incentives, modern infrastructure and political stability. Digitalisation of the Public Administration has contributed towards the high growth rates in Gross Domestic Product experienced in recent years.

Government-to-Business services and processes have been re-engineered to benefit existing businesses and prospective ones, both local and foreign. Through the Business 1st - servizz.gov initiative, public services are now consolidated, enabling entrepreneurs to set up and run a business more easily.

Further technological improvements, such as the Business Portal, will create a more uniform experience for business clients through innovative platforms and the standardisation of forms and layouts.



4.2.6 Finance

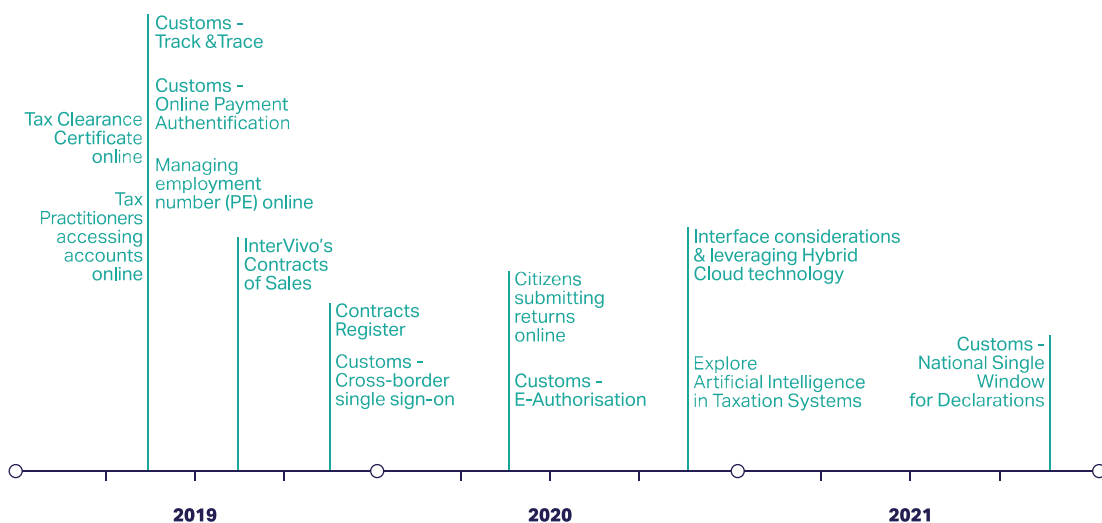
The Public Administration needs to ensure taxes are collected in a fair and timely manner to fund healthcare, education and other vital public services.

Technological advances mean various services are available online or on mobile; for instance, taxpayers can check and pay tax using a mobile app. The next step will see systems modernised and processes simplified so that taxpayers, or their representatives, are able to submit tax returns online. More common functionalities for taxation and social security systems will be introduced and linked to Payroll, Human Resources and Accounting systems to facilitate and automate the capturing of data and meet compliance rules.

The Office of the Commissioner for Revenue will build intelligence to analyse micro-economic behaviours and trading activities, and measure levels of take-up and the quality of services through its Taxpayer Services Directorate. The Compliance and Investigations Directorate will gather intelligence through access to more data sources and integration with publicly available data, while Customs will re-engineer and automate clearance processes to make the movement of goods more transparent.

The Department of Contracts has launched a pilot project where bidders for Government contracts provide information only once. This will also allow such information to be re-used each time the operator submits a tender.

Projects in Finance will empower businesses and citizens. Interaction will be facilitated through digital tools. Compliance obligations will be eased, and processes will be offered as self-service or automated.



4.2.7 Tourism and Culture

Technology has brought together the relevant stakeholders to provide improved services and deliver a more uniform, high-quality experience. VisitMalta.com is one such example.

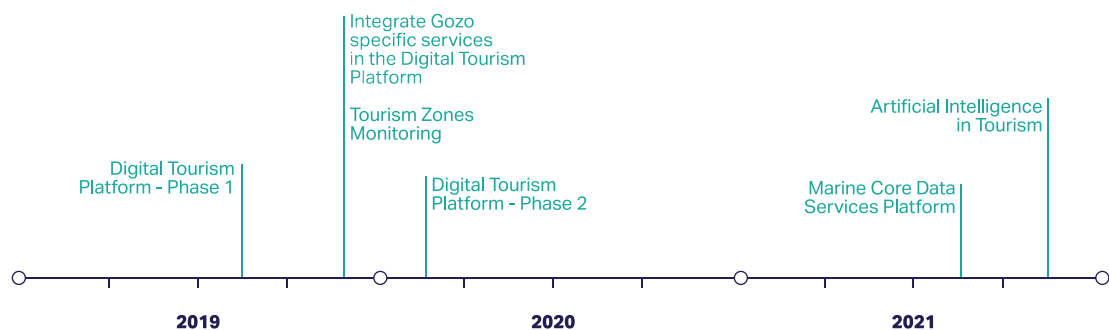
Government is implementing a Digital Tourism Platform which will strengthen collaboration and digitalise services, cutting across different entities; for example, by aggregating related services into one mobile application. The platform will be used for promotion, bookings, payments and other tourist services. Tourists will experience a more seamless, fun and useful digital service as they explore cultural sites and other attractions enriched by augmented reality and virtual reality.

Artificial Intelligence will gather and analyse data to identify areas for improvement. Through the platform, and particularly using Artificial Intelligence techniques, the Government may better understand tourists' behaviour, tailor services and improve their experience. It will provide stakeholders with strategic information for planning and improving aspects relating to the environment, infrastructure and economic development. The platform could recommend special packages according to tourists' preferences and specific interests and help in managing queues.

Similarly, the application of the Internet of Things will revolutionise data collection about tourists to ensure the provision of just-in-time services and an improved cultural heritage experience.

Furthermore, robots at tourist sites may enhance the experience by providing not only information but safety through first aid facilities and security through surveillance cameras.

Beyond the purely touristic experience, the Ministry is working on the National Marine Core Data Service that will serve to report cases of maintenance works, waste collection and cleansing within tourism areas.



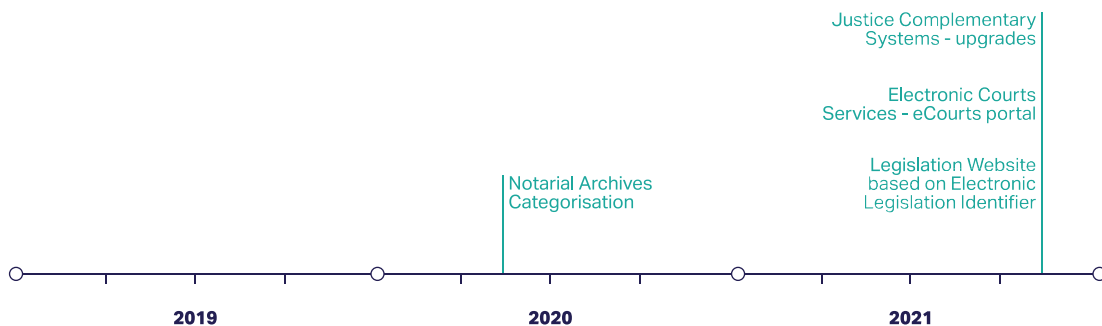
4.2.8 Justice

Digitalising administrative and back-office processes in the Courts of Justice Department will increase efficiency in the provision of services.

Through an online portal, citizens and legal professionals will be able to access personalised court services, including judgements, case information and notifications. It will be possible to settle fees and fines online. A revamped and modernised responsive website dedicated to Maltese legislation will be equipped with intuitive search facilities. It will facilitate research on historical data and enable cross-ministerial collaboration in the process of drafting legislation.

The processing time within Notarial Archives will be improved, and public deeds will be made available online. Digitised copies of Notarial Archives will be available through an mService.

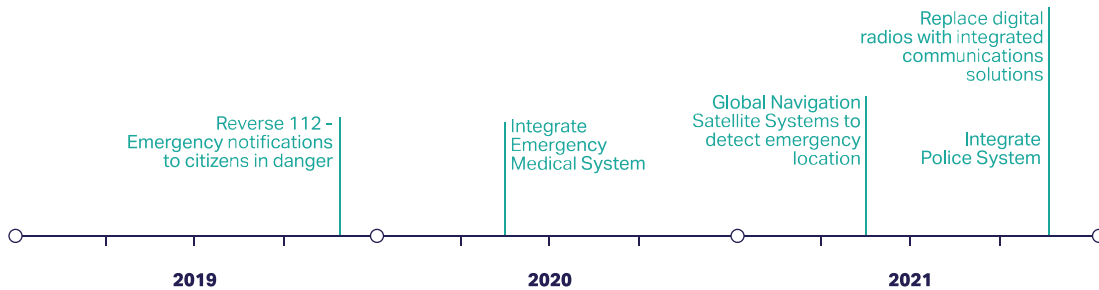
Emerging technologies, such as blockchain and Artificial Intelligence, will be studied. They can enable the sharing of data across functions and systems, and allow clients, whether professionals or the public, to submit data only once. With respect to Artificial Intelligence, the Ministry for Justice will be bringing together ICT stakeholders, such as MITA and University of Malta, to develop a proof of concept involving a semantic enhancement tool for the Maltese judiciary processes.



4.2.9 National Emergency Services

The emergency services are already client-centric with a central access line, 112, irrespective of the type of emergency.

An Emergency Management Solution will be a critical tool to assist and provide information for all Emergency Response Teams on a 24x7 basis. Various emergency services will share data in real-time so that mission-critical service-timeframes are drastically improved. All emergency data will be pushed through a single source - the 112 Control Room – from which missions can be set for individual or aggregated teams, with visible updates available to all concerned. Malta will be one of the front-runners in Europe to adopt such an approach, which should produce a higher success rate in life saving situations.



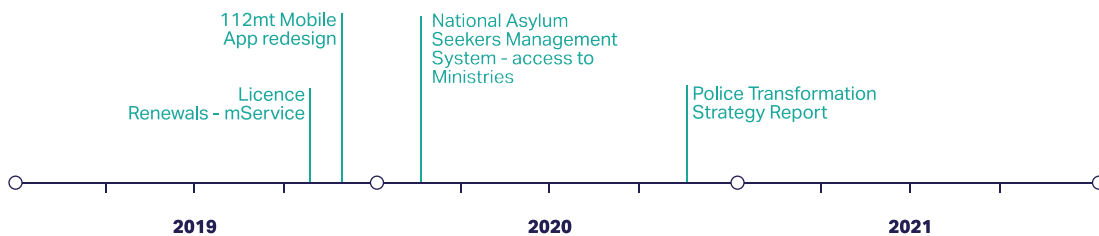
4.2.10 Police and Immigration

Technology has been adopted by the Malta Police Force for its public-facing services, and is now also being successfully deployed within its structures.

The Police are drafting a new strategy, shifting towards an intelligence approach. This means moving from the traditional 3R (random patrol, rapid response, reactive investigation) method to the 3T (targeting, testing, tracking) approach. This will entail the digitalisation of policing across crime prevention, reporting, response and investigation. Removing the need for officers to return to police stations to enter reports will mean more police on the streets. In addition, through predictive data analytics, resources will be assigned more rationally and hence more efficiently.

The Home Affairs Ministry is bringing various stakeholders together in the area of immigration. The National Asylum Seekers Management System allows them to access and share data to deliver more complete, end-to-end services.

Future solutions will see systems linked to make data available in real time for faster processing of asylum requests and immediate validations and verifications.



4.2.11 Transport

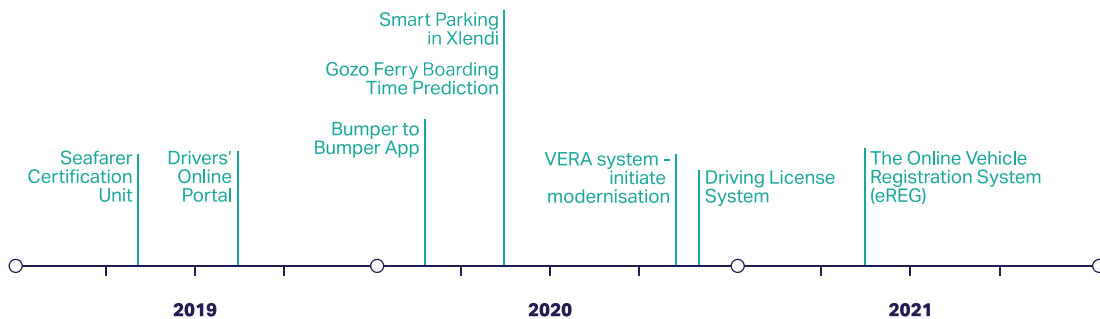
The Transport Ministry and the authority for Transport have taken a number of digital initiatives to reduce bureaucracy, increase accountability and make more services available on a 24x7 basis. These facilitate popular services such as filing front-to-rear collision reports, applying for a driving instructor permit or driving practical test and driver licence renewal.

Services related to driving licences will be digitalised from the initial request to start learning to the actual test and issuing of a licence. Similarly, a new web-based portal shall bring together several services related to seafaring, from training to certification.

In line with the Government objectives of the Once-Only Principle and Service of Excellence, the Ministry is working to link systems within it and across other sectors of Government.

In the case of Gozo, the Government is planning to introduce Artificial Intelligence for smart traffic management and parking. This will be achieved through a platform with displays installed in designated areas, informing drivers in real time of traffic flows and parking availability. This will reduce congestion, pollution and travelling time. With the acquired real-time and historic traffic data the system will predict and detect incidents, while suggesting the most suitable strategies for traffic and parking management.

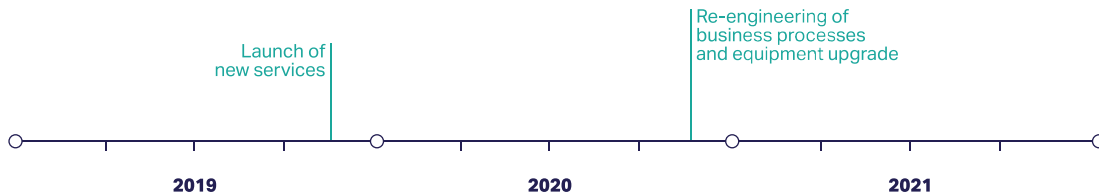
Artificial Intelligence is also envisaged for the calculation of boarding time for the Gozo Channel ferries by using information from video cameras installed in Mġarr and Ċirkewwa ports. The waiting time to board ferries will be made available on the Gozo Channel mobile application, which is currently being developed.



4.2.12 Energy

Entities in the utilities sector have launched web portals and are modernising databases and systems to allow better handling and management of what is now considered as big data.

This resource will be further utilised through the adoption of emerging technologies. These include Artificial Intelligence to aid in data mining and trend analysis, processing of payments, verification of payments and anti-fraud verification. Clients will be equipped with tools to track the progress of services requested.



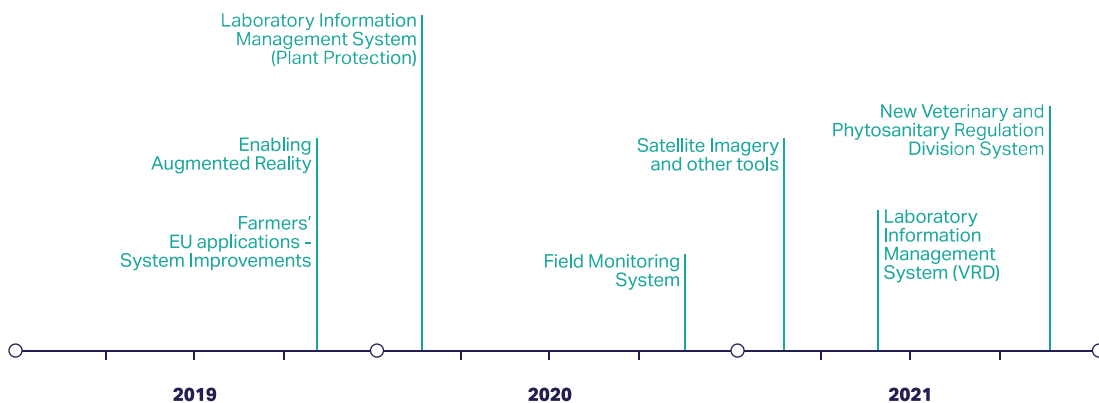
4.2.13 Agriculture

Smart farming and data analysis are among the main technological advances to support the profitability and sustainability of agriculture in Malta.

Farmers can already view information related to their fields through augmented reality and, while on site, information can be superimposed on the actual image of the land. New enhancements will be introduced, such as automated tools that will generate advice and alerts related to crops by using satellite imagery, temperature and humidity data, and other information.

Farmers and others will also benefit from the implementation of new online systems and mobile apps, which provide up-to-date information about the status of payments, waste management and applications for EU funding. Systems will be integrated to share data, therefore requiring it to be submitted only once.

The Agriculture and Rural Payments Agency is also working on a pilot project to detect markers such as harvesting, ploughing and crop maturation. This could be used to classify crop groups including cereals, winter crops, summer crops, fallow land and abandoned land. During the planned extension of the pilot project, the Agency will be looking at how Artificial Intelligence, particularly machine learning, could be utilised to improve the existing algorithms.

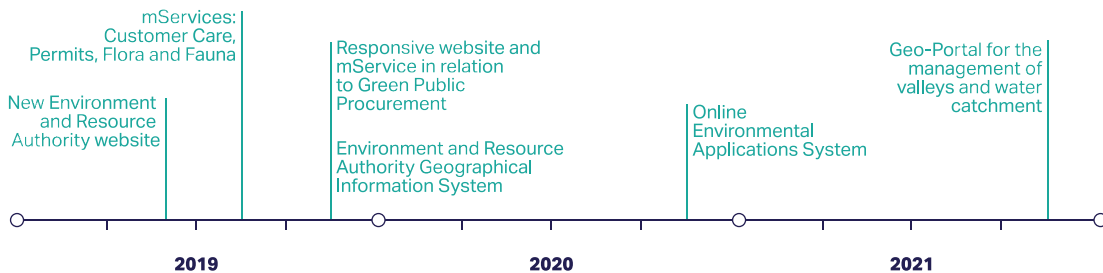


4.2.14 Environment

The online portal of the Environment and Resources Authority, will provide personalised information about case status, access to online consultations, managed personalised user-dashboards and facilities for online payments and email notifications. Processes will be improved to optimise service delivery times.

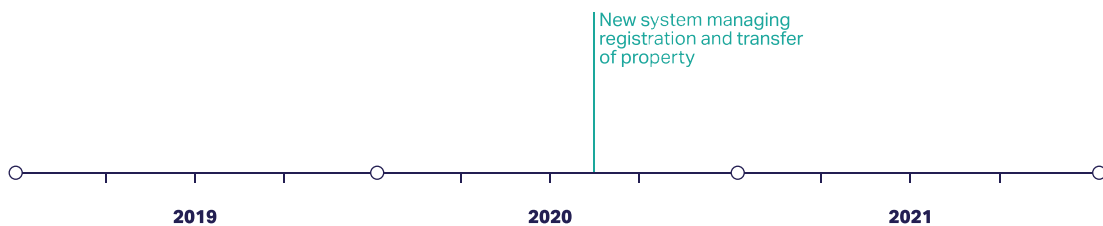
The Environment Ministry is also adopting a geodatabase related to valleys and water catchment areas in Malta and Gozo. This information will be used in decisions related to their management and planned interventions.

Green Public Procurement is being promoted, with mServices facilitating access to information, reporting and permit applications.



4.2.15 Infrastructure

Current processes are being reviewed and re-engineered with a new software system being developed for land registration. Any change in property ownership will be easily managed by a Notary online, even at contract signing. The system will be designed to identify and trace fraudulent or money laundering transactions. Clients and financial consultants will be able to verify the registration of property and security guarantees online easily.



4.3

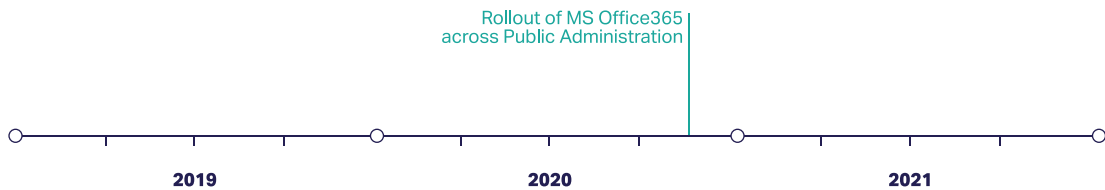
Internal Solutions for the Public Administration

For business functions which are of a corporate and horizontal nature, common information systems are implemented and shared across Government. This approach brings consistency, sharing of data, standardisation and economies of scale.

4.3.1 Government Modern Workplace

Most public employees use computers and other digital devices in their day-to-day duties. This initiative is about creating a modern and secure digital workspace, which is user-centric and based on collaboration. It is the next step in empowering Government employees to optimise work practices and create services of excellence.

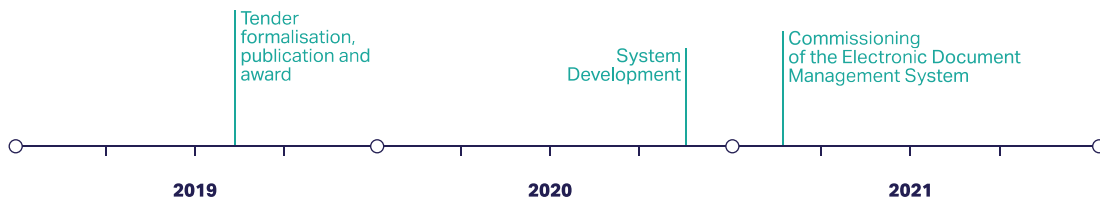
The project rolls out several cloud-based tools, such as messaging, collaboration and storage. It will provide a standard platform allowing Government employees to work anywhere, anytime and, most importantly, on any device in a secure manner.



4.3.2 Electronic Document Management System

A single Electronic Document Management System will replace the disparate systems that currently exist throughout the Public Administration. One of the objectives is to go beyond a system that is limited to tracking of physical movement of documents to one that digitises content for it to be accessed online.

This will serve as a central, secure repository for all official files, normally referred to as Green Files. Digitalisation will begin on a certain date, along with web-based access for authorised personnel, resulting in a reduction in paper and storage space, while the speed of retrieving information will improve. The exchange of official documents between Ministries will also be easier.



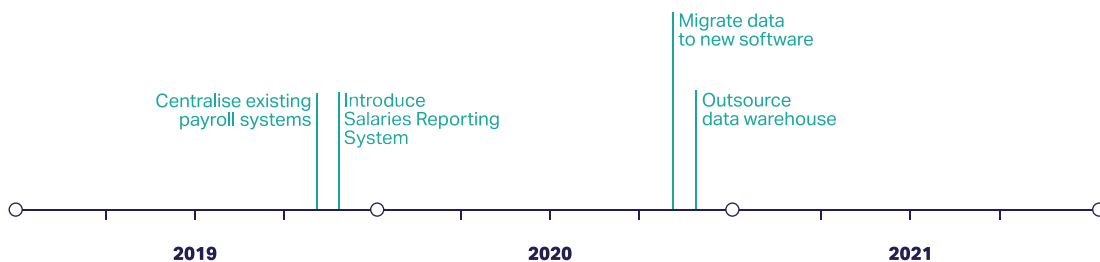
4.3.3 Human Resources and Payroll

The Public Administration benefits from a centralised Human Resources and Payroll system. This allows for an open standard data warehouse for human resources and payroll information, and synchronisation of all relevant data, with improved reporting and analytics capabilities.

Government employees will not be required to provide details already stored in existing payroll systems, thus contributing to the achievement of the Once-Only Principle.

One challenge is integrating highly dynamic and complex legacy data that predates the introduction of the General Data Protection Regulation. Any legacy system still in operation shall be replaced or modernised and integrated with the current application software before the introduction of the data warehouse. In parallel, data cleansing and data validation exercises will be commissioned, along with the introduction of data entry standard procedures. Eventually, the existing 'My Personal Kiosk' (mypersonalkiosk.gov.mt) will play its part as the link between the employee and the People & Standards Division. Ultimately this service will act as the single point of contact for an employee in terms of HR and payroll details.

The entire recruitment process is also being digitalised. Through improved forecasting, the Government will become more proactive in planning recruitment.

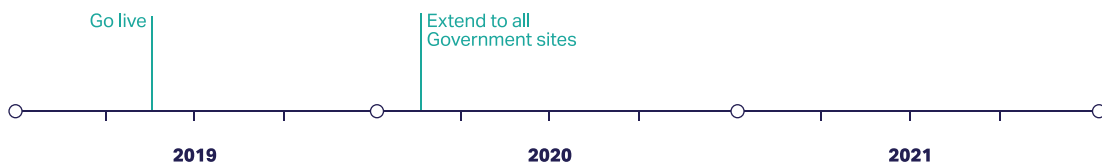


4.3.4 Corporate Financial Management Solution

The implementation of International Public Sector Accounting Standards necessitated a change from a cash-based accounting method, used across the Public Administration, to an accrual-based system, known as the Corporate Financial Management Solution (CFMS).

The CFMS offers higher levels of financial transparency, providing more information to the Minister for Finance, Parliament and the Public Accounts Committee. It also provides timely reporting to European and international financial institutions, such as the statistical office of the EU (EUROSTAT) and the International Monetary Fund, as well as facilitating the implementation of EU directives, regulations and standards.

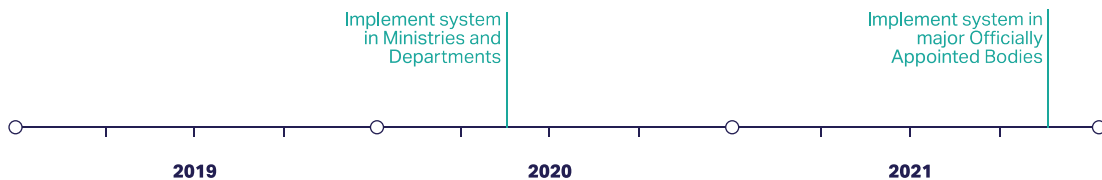
The CFMS also allows for the introduction of e-invoicing and e-procurement.



4.3.5 Corporate Travel Management System

The Corporate Travel Management System is a web portal that facilitates the management of all arrangements for staff whose duties involve travel. It can be accessed from any device and acts as a central repository for all information about meetings, trips, flight itineraries, accommodation, subsistence allowances, advancements, expenses incurred and insurance. Documents can be uploaded too.

This system facilitates cost reductions through better negotiated packages with travel suppliers and the elimination of unnecessary flights. It acts as a deterrent against abuse by providing greater transparency and accountability. It also reduces internal procedures and brings about environmental benefits by reducing the use of paper and printing.

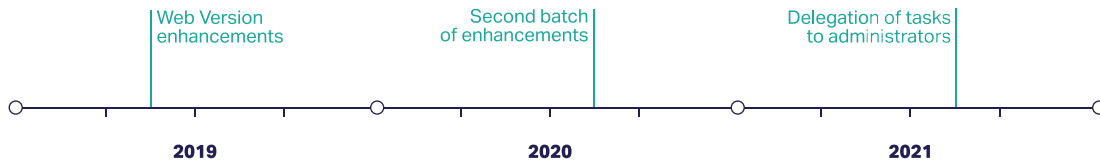


4.3.6 Fleet Management System

The Fleet Management System will enable the delegation of responsibility for several day-to-day tasks related to Government vehicles from the Ministry for Finance to administrators within Ministries.

This initiative is part of wider simplification measures, which will see Ministries taking a more active role in the administration of their respective fleet, although some critical tasks will remain centrally administered by the Ministry for Finance.

Around 700 daily users of the system will benefit from reduced waiting times.



4.3.7 Inspections Online Solution

The Inspections Online Solution is intended to simplify compliance requirements for businesses and also facilitate effective communication through data sharing, shared feedback and shared reporting. It will achieve this through the streamlining of processes of various inspectorates. Joint inspections will be conducted, to promote consistency and reduce the number of inspections required. Various inspection-related information, gathered by multiple inspectorates, will be collected by a single inspectorate. The resulting information will be electronically disseminated to the relevant bodies for further analysis.

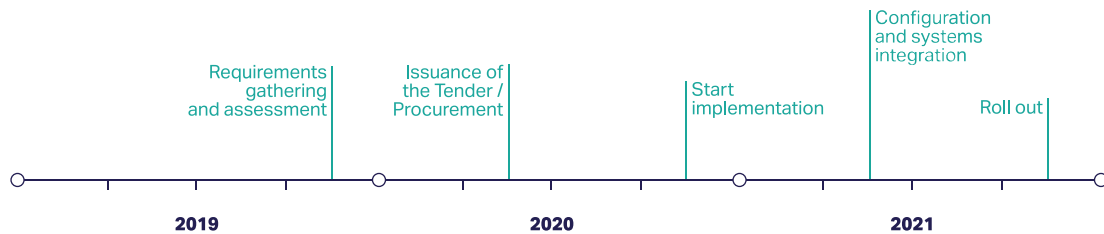
Business operators will be better supported through the introduction of self-assessment as preparation for inspections. They will be able to view all events related to their business and access any reports or feedback provided by the respective inspectorates, upon which a Quality Mark will be provided. These measures are intended to increase compliance and enhance consumer protection.



4.3.8 Consent Management

Substantial investments are being made in the areas of Government-to-Government, Government-to-Business and Government-to-Citizen information systems, to upgrade technologies and introduce new solutions for a more efficient and effective Public Administration.

As business process re-engineering of existing eServices is carried out and enhancements to software implemented, measures will be taken to ensure that the capturing and sharing of data is in line with the General Data Protection Regulation. A central digital consent management portal, and other tools, will be provided for the provisioning or revocation of consent of data by the citizen. It will be possible to manage consent on certain aspects of personal data for specific services.





4.4 Technological Platforms and Solutions

The Public Administration, through MITA, will aim to ensure that technological platforms and services are implemented centrally and shared across Government. These will facilitate the sharing of data leading to Once-Only, bringing about interoperability, standardisation and economies of scale. Platforms are being modernised through the CONvErGE (Connected eGovernment) programme, which is partly funded through the European Structural and Investment Funds (ESIF) 2014-2020, supplemented by national funds.

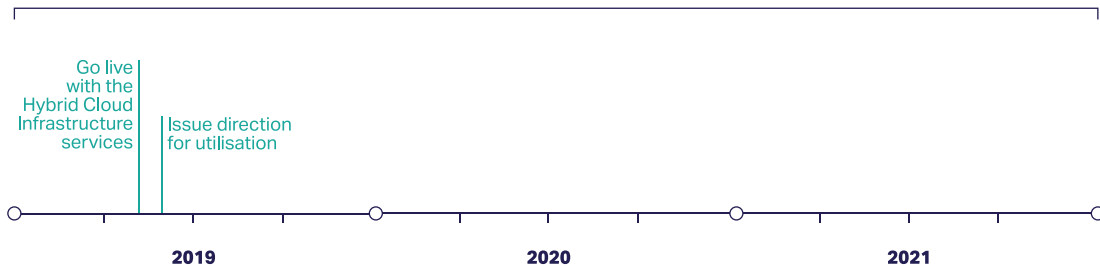
4.4.1 Hybrid Cloud

The Hybrid Cloud Enabling Infrastructure will be the technological foundation for the Public Administration’s digitalisation strategic plan. It will host most of the Government’s Information Systems and Services and will serve as the cornerstone for its ambitious programme of modernisation of core applications.

The infrastructure allows for the aggregation of a suite of technological services, which can be supplied either through a cloud infrastructure hosted from MITA Data Centres, from Microsoft’s data centres in Ireland and the Netherlands, or from a combination of both. As from 2019, Government business data will be hosted on the cloud through the new infrastructure.

This platform will allow Ministries and Officially Appointed Bodies greater agility in creating environments and consuming services, better security, and the latest state-of-the-art services that the cloud offers.

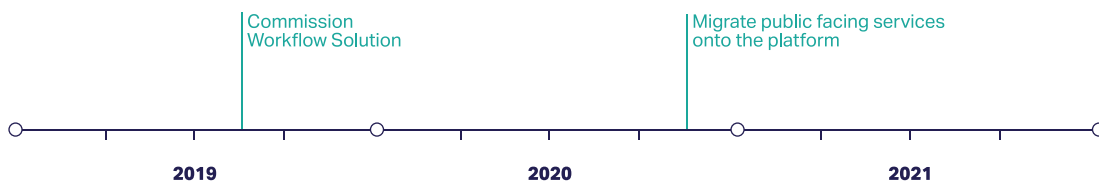
Ongoing: Migration of Government Information Systems



4.4.2 Workflow Solution

The Workflow Solution will be a major building-block for the digitalisation of the Public Administration's business processes. It will facilitate improved quality and delivery of public services and will afford a common and unified user experience for internal and external clients of the Public Administration. It is a suite of tools which can be used to create services that can propagate and update other external information systems to ensure that data is gathered only once. There will also be the possibility of re-using previously collected data, subject to data owner consent. Service creators will also be able to experiment with setting up workflows.

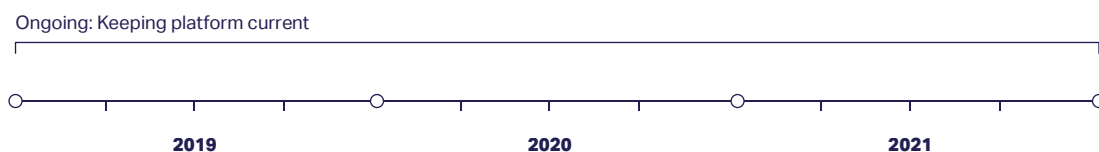
The platform will equip clients with dashboards, allowing them to monitor the status of their services. Additionally, it will provide the basis for calculating take-up more scientifically. Reports and statistical information will permit central administrators to have an overview across all Government service offerings, enabling the implementation of Service Level Agreements and Key Performance Indicators that are critical for measuring service excellence. The aim will be to iron out any bottlenecks and deliver external and internal services on time.



4.4.3 Notifications Platform

The Notifications Platform is utilised by numerous Government information systems. It centralises the Government's SMS and email bulk notifications delivery infrastructure. There are significant advantages in terms of cost effectiveness, reliability and manageability. The platform integrates with mobile operators for SMS message delivery and with the Government's email infrastructure for email delivery.

The Platform provides two modes of access that allow system-to-system integration as well as access to a portal that provides a suite of functions for users. These include a dashboard facility to monitor consumption and generate statistical reports regarding notification delivery, and a facility to send notifications directly via the portal itself. It also allows for other functions, such as the management and configuration of services integrating with the platform and user access management.



4.4.4 Enterprise Data and National Data Portal

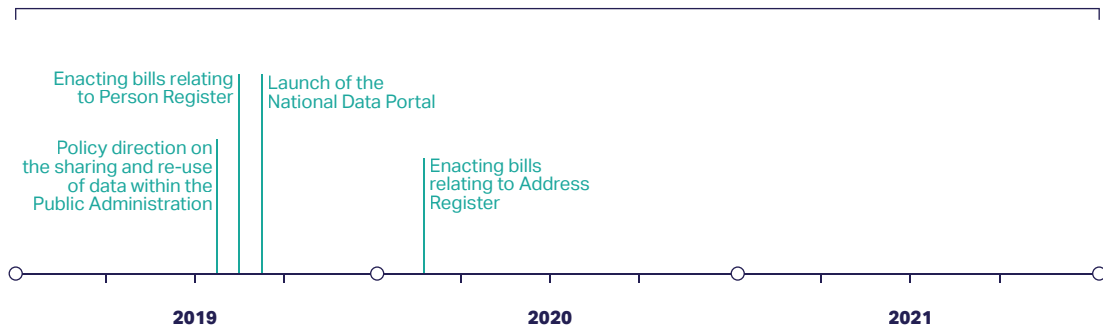
The availability of official data for download and re-use both within, and outside of the Public Administration, is a key enabler of the Once-Only Principle, which is made possible through the proper management of government information systems, registers and records across the whole Public Administration. This will require rigorous policy direction about the use and sharing of information within Government, and the migration of systems to align to such policy.

The National Data Portal will serve two purposes. It will enable the publication of datasets which have been classified as Open Data by the respective business owner of the official registers, meeting the obligations created by Cap 546 of the Laws of Malta which transpose the European Commission's Public Sector Information Directive. It will also serve as the one-stop shop for the discovery of Government-held data that has a legal basis and as included and published in the Register of Registers.

The system will facilitate other enterprise level registers which represent the Administrative and Data Governance domains. It will also permit for the maintenance of the administrative registers which need to be made visible to various stakeholders and data owners.

Enterprise data is the fuel for Government Artificial Intelligence algorithms and is therefore a critical element that will enable the use of Artificial Intelligence in public services.

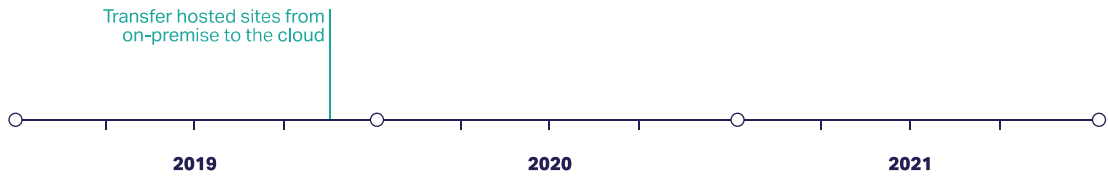
Ongoing: Changes to line of business systems to align to the use of central registers



4.4.5 Enterprise Collaboration Platform

The Enterprise Collaboration Platform is a tool that allows the Public Administration to manage documentation and workflow-based processes. It promotes standardisation and provides features such as management of documents and content, search, authentication and auditing. Additionally, it makes it possible for public employees to collaborate. All this is provided within the context of managing the integrity of data and ensuring that all access is authorised.

The Platform also empowers clients to create and maintain their own internal sites that can be extended to address complex requirements.



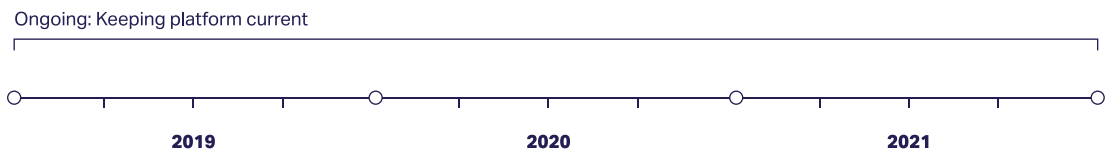
4.4.6 Payment Gateway

The Government Payment Gateway is a technological platform that makes it possible for citizens and businesses, interacting with Public Administration service providers, to make online payments in a coherent and secure manner. Clients can make 3D secure payments and have the facility of an eWallet for mobile based services.

Clients making payments through any Government website are directed to a centrally hosted payment page to enter their details. To keep the user experience as uniform as possible, the payment page is aesthetically consistent with the Government website accessed. The status of the processed payment is then communicated in real-time to the web application and to the client.

The Gateway also empowers service providers with a dashboard regarding all payments, including status of the merchant accounts, full transaction visibility and audit trail.

The service is brokered by MITA and is hosted by a service provider that adheres to the Payment Card Industry Data Security Standard, therefore ensuring confidentiality of all the details submitted.



4.4.7 User Authentication Services

Electronic identity (eID) is a means for Maltese citizens and residents to access eGovernment services in a secure manner, based on personal credentials.

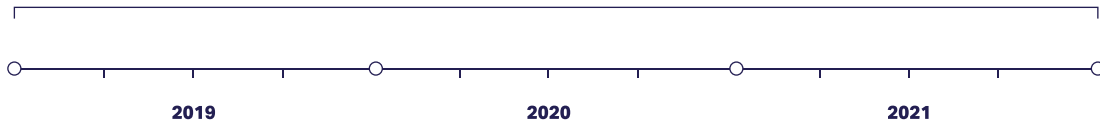
The Service uses a single sign-on screen, provides a consistent interface to facilitate usability, and adopts robust communication protocols to ensure security. The screen offers an easy way for clients to reset their password or regain access to their account. The eID mechanism affords a choice of usability and security tools for subscribers and service providers. Currently, the basic level of assurance is by using an eID account and password, and a higher level is offered through an ID Card Chip and PIN.

A standard, consistent, usable and secure mechanism is important for increasing the take-up of eGovernment services. Single sign-on also provides a better user experience, giving simultaneous access to multiple services.

Ongoing:

Maintain platform

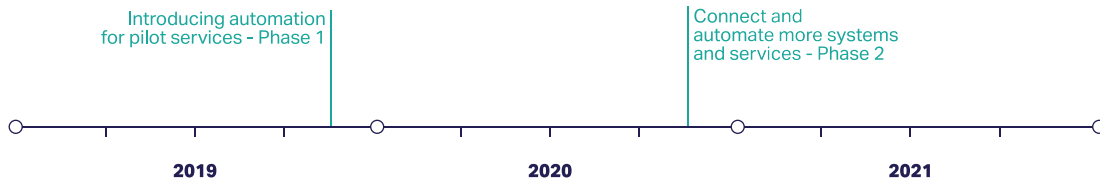
Migrate Service Providers to the eID Single Sign-On Screen



4.4.8 User and Access Management Solution

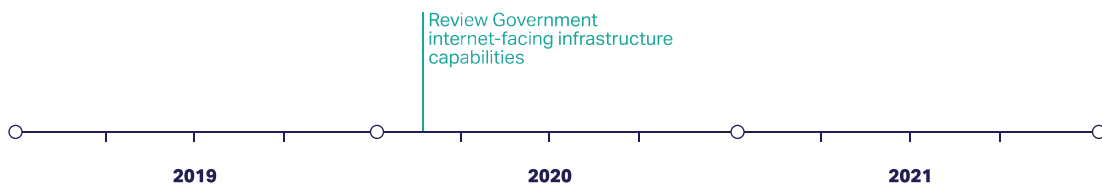
The process that allows public employees to apply for services provided by MITA will be re-engineered to enable efficient service provisioning. A new information system will be implemented to centrally manage user identities and allow access to services to be granted, modified and revoked centrally. More than 700 officers who are designated to apply for new services, as well as all public employees using the services, will benefit from automation, faster turnaround time and simpler processes.

The introduction of this system will generate additional benefits. Reports, including information on who has access to managed services, can be generated faster and directly by designated clients. Security shall be enhanced with an audit trail of all identity and access management actions performed. Moreover, certain routine, manual and error-prone activities can be eliminated, freeing up human resources to carry out more value-added duties.



4.4.9 ICT Infrastructure

The Public Administration's dependency on the internet has become critical. mServices, eServices and websites are prevalent delivery channels for Government. This reliance will be heightened even further by the drive towards digitalisation. The ICT industry itself is moving towards software solutions being available only through online provisioning. Facilities, such as those for writing documents, number crunching, collaboration and communication, that are used on a day-to-day basis by public employees, are increasingly being made available only online. Consequently, improving and securing the Government's internet-facing infrastructure is vital.

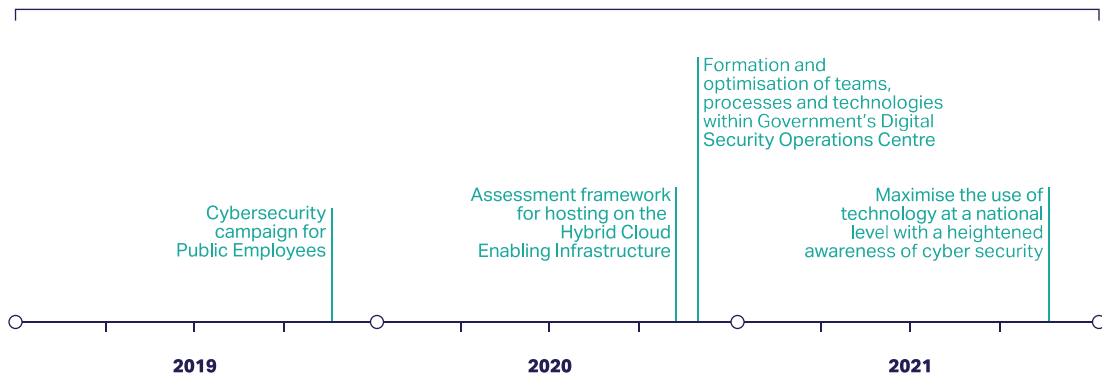


4.4.10 Security

The digitalisation process will bring extensive benefits but there are challenges around security that must be addressed. The Public Administration is strengthening its digital infrastructure and information systems continuously by adopting innovative methodologies to improve its security posture and the readiness of IT solutions. It is guided by information security industry standards and best practices and is benefiting from machine learning algorithms which provide for comprehensive and proactive detection of security threats.

Cyber security tools built on holistic Artificial Intelligence, particularly machine learning, big data analytics, and behavioural analytics, aid in the detection of advanced threats. And they provide security teams with streamlined workflow and automation to enable rapid response to and triage for qualified threats and incidents. Clients are being educated, in line with the National Cyber Security Strategy launched in 2016. The second phase of the cyber security awareness and education campaign has begun, focusing also on public employees and aiming to ensure a more conscious use of cyber space.

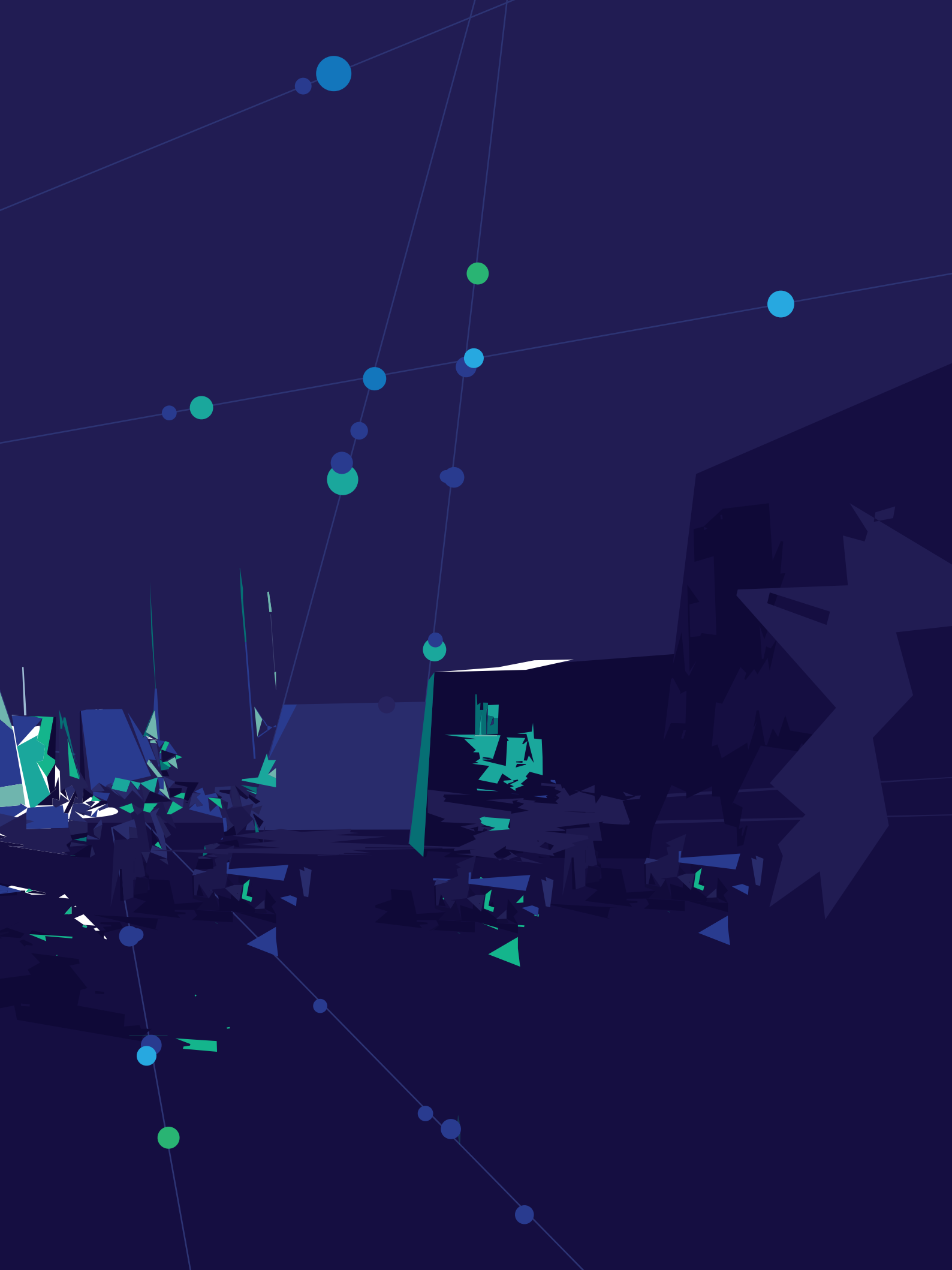
Ongoing: Maintain a state of continuous security assessment of MITA's critical infrastructure





5

Governance &
Implementation



5.1 Critical Success Factors

The success of this Strategic Plan is dependent on key factors which promote a goal-oriented, integrated, comprehensive, consistent approach towards its effective realisation.

- **Leadership and Accountability**

Strategy delivery must be underpinned by strong leadership. The Principal Permanent Secretary will set out clear overall direction for the digital transformation of the Public Administration.

In each Ministry, the Permanent Secretary and Senior Management are accountable for the implementation of the measures in this Strategic Plan.

- **Commitment and Collaboration**

The Public Administration must act holistically, collectively and coherently.

Business owners will be required to work in close liaison with internal clients down the service line, to collaborate effectively with other public officers, and to create the necessary linkages with other relevant departments and Officially Appointed Bodies.

- **Regulation and Legislation**

Certain measures will necessitate legislative changes or new regulations, before they can be affected.

Legislation will be used to enable such measures, and not the contrary. It must be enacted in a timely manner, with the involvement of relevant stakeholders and, where possible, through the re-use of similar charters.

- **Financing**

Adequate funding is essential, and funds must be prioritised towards the attainment of set goals. Alternative sources of funding, including those from EU programmes, will be sought.

- **Communication Strategy**

Campaigns will be organised to ensure that citizens and businesses are well informed of new digitalised services and their benefits, and to involve them in the selection, design and implementation of these services.

Likewise, line-of-business owners within the Public Administration need to transform their services to align to set goals, and to anticipate levels of demand.

- **Organisational Structures and Resources**

Adequate structures and resources need to be determined, based on prioritisation criteria such as benefits to the public and ease of digitalisation. Directors need to be involved in horizontal processes that cut across various businesses.

Specific entities that play a major role in the achievement of the goals or that carry out activities that support their attainment – such as process re-engineering and project management – may need to have resources strengthened.

- **Training**

Training needs to be provided to public officers of different levels.

They need to learn how digital and emerging technologies can be used to simplify and improve processes with a clear understanding of the set goals, and how these can be achieved, not only within one's respective area, but also with others.

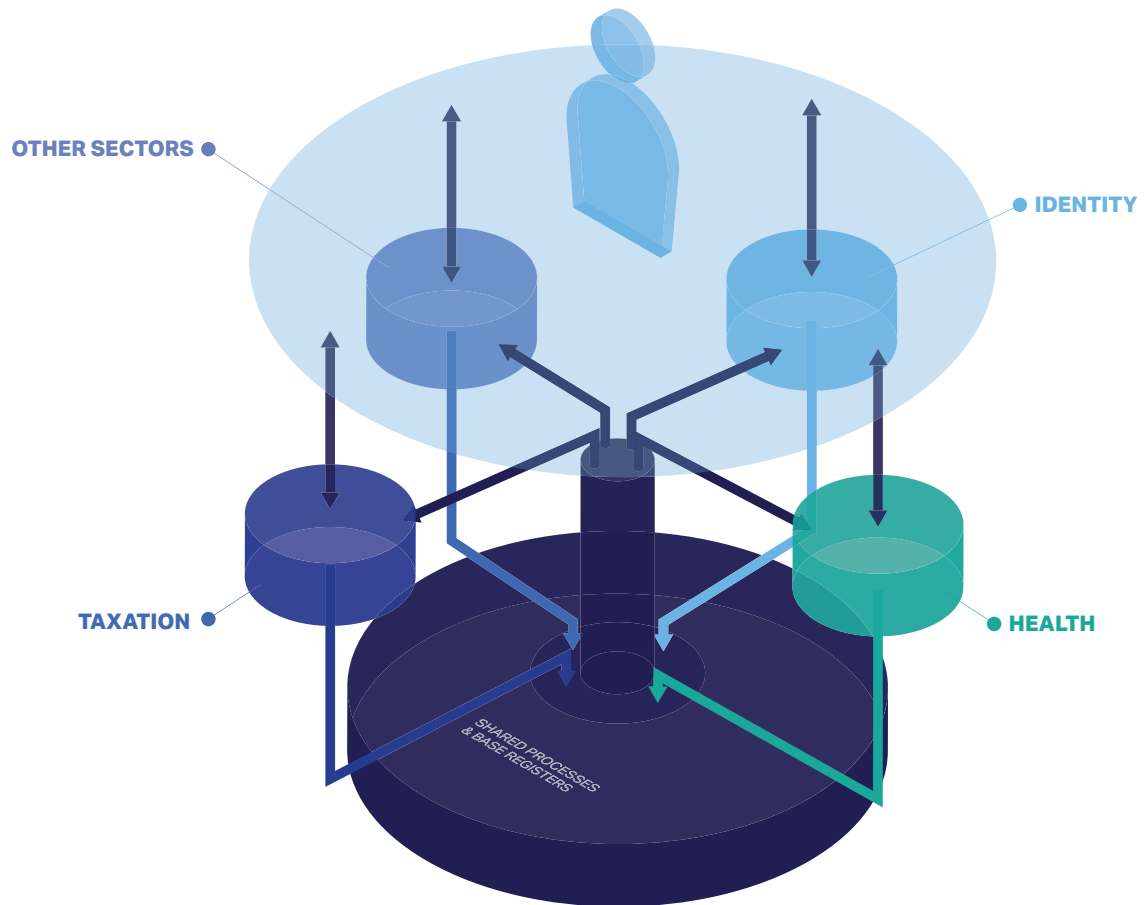


5.2 Horizontal Approach

To attain Once-Only, a further shift in mindset away from a silo mentality and towards more horizontal services is required. Ministries must re-engineer their business processes and respective information systems to place the client at the centre.

Data that is acquired by a Ministry must be made available, with appropriate consent or legal basis, for other functions within the same Ministry and across Ministries and other Officially Appointed Bodies. To achieve this, information systems must be linked in a way that makes use of shared data and such that their data is made available to other systems.

This common approach is being adopted across the whole of Government, i.e. across Ministries and Officially Appointed Bodies, through several measures spearheaded by the Data Governance Council within the Office of the Prime Minister, as depicted in the figure shown.



Public Administration functions, especially those that operate a front-office for clients, need to use data which is often already available within Government. Likewise, such systems often store data which may be required by other line-of-business applications. A shared data platform, inclusive of base registers (e.g. person and address), will be set-up and given legal basis so that it can serve to supply shared data. Interfaces will be set up for line-of-business systems to store data into the base registers and for these registers to supply data to consumer information systems.

This approach will be adopted by the Public Administration not only for citizens and non-nationals acquiring public services, but also for visitors to Malta, whether on holiday or on business, and for business organisations.

5.3

Investment in Information Systems

For Public Administration information systems to align to the goals of this strategy, investment in new applications, or in modernising current ones, will be steered to utilise this horizontalisation concept. Ministries are required to submit a business case in which they:

- Specify the information system's high-level data requirements to render service to the client. In general, the system must be designed to contribute towards the Once-Only Principle. This may be achieved by using data already available within the Government's shared data platform. Only if such data is not available, will it be requested directly from the client. Additionally, the business case must indicate whether or not the information system would feed into the shared data platform.
- Stipulate any opportunities for process re-engineering, self-service, automation, and adoption of Artificial Intelligence and other emerging technologies to enable simplification, efficiency and a shift towards service of excellence.
- Explain alignment to enterprise architecture and utilisation of shared Government infrastructures.

5.4

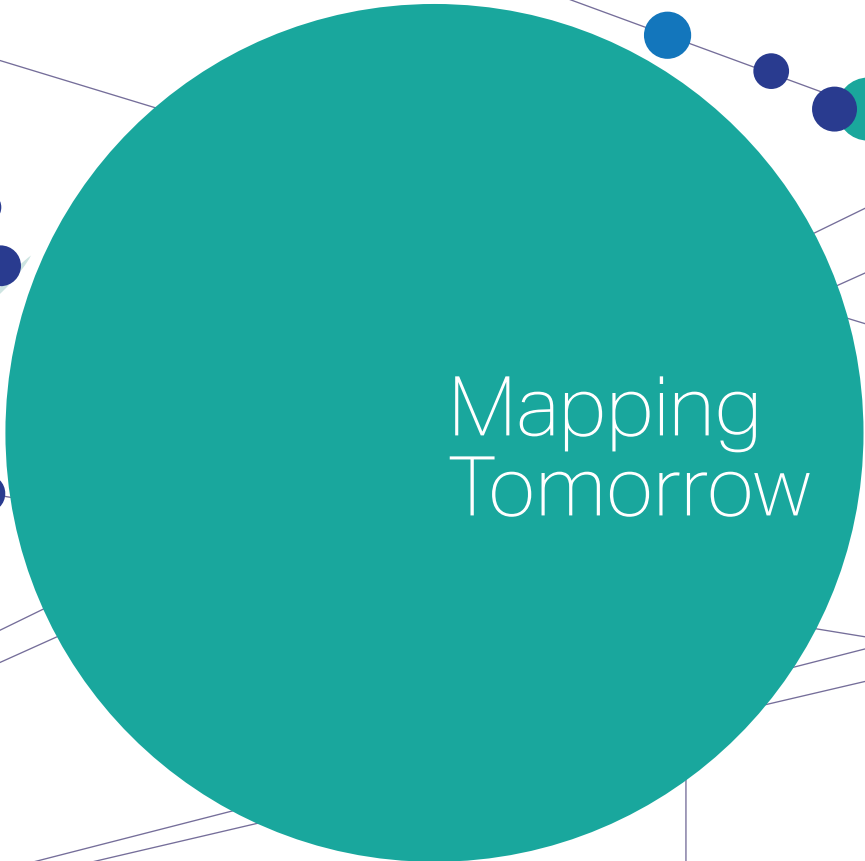
Governing the Strategy

To ensure the effective implementation of this Strategic Plan, the following governing measures will be taken:

- The Data Governance Council will be responsible to govern this strategic plan on an ongoing basis. It will evaluate the achievement of goals and recommend actions to tackle the gaps. It will have oversight of all new information systems and services being proposed within Government so as to help ensure their alignment. For new investments, the Council, supported by technical experts, will provide guidance on whether such information systems should be implemented at a Ministry or department level, or as a corporate system which will be shared across the Public Administration, following approval by the Principal Permanent Secretary.
- A suite of key performance indicators will be instituted to measure achievements. An exercise will be carried out to establish a baseline, and consequently, a target annual increase will be set.

5.5 Keeping the Plan Current

The measures listed in this document are supported by other detailed plans. These will be revisited and augmented on a regular basis as new services are developed and introduced by Ministries and Officially Appointed Bodies. This will keep the Strategic Plan current and reflective of these new services.



Mapping Tomorrow

A Strategic Plan
for the
Digital Transformation
of the Public Administration
2019 – 2021

Annex

June 2019



1

Plans for a Client-Centric Public Administration

• servizz.gov

	Major Milestones	End Date
1	Refurbish Birkirkara Hub	Q2 2019
2	Relocate Qawra Hub	Q4 2019
3	Open 2 new Hubs	Q4 2019
4	Identify new locations for Hubs	Q4 2021
5	Identify a new channel to increase customer reach	Q4 2021
6	Monitor existing channel usage and take-up	Ongoing

• Business Portal

	Major Milestones	End Date
1	Conduct a detailed Business Portal Analysis exercise - Phase 2	Q3 2019
2	Implement a Business Register	Q3 2019
3	Populate the Business Register	Q4 2020
4	Publish and award tender for implementing the Business Portal	Q4 2020
5	Commence implementation of the Business Portal	Q4 2020

• Mobile Services

	Major Milestones	End Date
1	Launch fourth set of mServices	Q4 2019
2	Launch fifth set of mServices	Q4 2020
3	Launch sixth set of mServices	Q4 2021

• Single Digital Gateway

	Major Milestones	End Date
1	Adopt Implementing Acts and develop IT tools in Beta version	Q4 2019
2	Launch online information and assistance services	Q4 2020

• eParticipation

	Major Milestones	End Date
1	Initiate Project	Q2 2019
2	Implement Scoping Study and Requirements Analysis	Q4 2019
3	Procure various systems	Q2 2020
4	Implement Policy and Process Design, Integration and Testing	Q1 2021
5	Carry out Soft Launch and Promotion Campaign	Q2 2021

• Mystery Shopping

Government has established project plans for the implementation, but in view of the nature of this system, these are not being published.

• Register of Public Services

	Major Milestones	End Date
1	Index services on CRM servizz.gov to provide government-wide Unique Identifier	Q3 2019
2	Align servizz.gov CRM database services with Ministries	Ongoing

• Take-up of Online Services

	Major Milestones	End Date
1	Implement web tool to speed-up the updating process for services information on servizz.gov.mt	Q4 2019
2	Business Process Re-engineering toolkit and pilot training	Q4 2019
3	Make a sample of services mandatory online	Q2 2020
4	Make the eID Single Sign-On Screen mandatory for all services consuming eID	Q2 2020
5	Set up Workflow Engine to host both new online applications and previous applications migrating from legacy platforms	Q4 2020
6	Decommission legacy portals and migrate services to servizz.gov.mt	Q1 2021



2

Plans for Sector Specific Programmes

• Identity Management

	Key Projects	End Date
1	Public Registry Searches – carry out pilot project to provide online searches instead of hard-copy searches	Q3 2019
2	New Public Registry system – upgrade and integrate with Person Register	Q4 2019
3	Person Register – replace Common Database (CDB) and connect business repositories on one platform	Ongoing
4	Identity Card – update eID middleware software, analyse blockchain technology and consider new security features	Ongoing
5	Passports – add security features	Ongoing
6	Residents Cards – continue 'Single permit online' project to enable employers to submit single permit applications on behalf of applicants, even those abroad	Ongoing

• Health

	Key Projects	End Date
1	Social Security Information – exchange information more rapidly and securely	Q4 2019
2	POYC Entitlement and ePrescriptions – administer entitlements, control cards, POYC schemes and other services online	Q4 2019
3	Out-patients System – automate out-patient referrals, booking and registration	Q4 2020
4	Health Professionals – digitalise processes at Regulatory Councils within the Superintendent of Public Health	Q4 2020
5	Cross-Border eHealth Service – share patient summaries with other European Union Member States	Q4 2020
6	Government Formularies, Medicines Protocols and Specifications System – digitalise processes in relation to medicines and treatments	Q4 2020
7	Primary Health Electronic Patient Records – move from paper-based system in Government Health Centres and Clinics to online	Q4 2021
8	National Electronic Health Record - Phase 1 – enable sharing of personal data from multiple Electronic Patient Records (EPRs) across health care	Q4 2021
9	Health Inspectorate System - Phase 1 – converge Registers onto one platform	Q4 2021
10	Robotic Dispensing System - Phase 1 – enable ePrescription capabilities	Q4 2021
11	Initiate infrastructure and information system upgrade for various departments across the Ministry, including HR and Payroll systems and improvements to Customer Relationship Management systems	Q4 2021

• Social Security

	Key Projects	End Date
1	Elderly Case Management System under Public-Private-Partnership - Phase 1 – roll out in Residential Homes, Dementia Intervention and Respite	Q4 2019
2	Elderly Case Management System - Phase 2 – roll out in second batch of units	Q3 2020
3	Elderly Case Management System - Phase 3 – roll out in third batch of units	Q1 2021
4	<i>Sistema għall-Amministrazzjoni ta' Benefiċċji Soċjali</i> modernisation project - Phase 1 – enable re-use and sharing of information through online collaborative data platforms such as the IRD, Jobs Plus, ARMS and POYC	Q4 2021
5	Management Information BI System – enable improved iterative design and monitoring of social policy	Q4 2021
6	Foundation for Social Welfare Services (FSWS) Case Management System – enhance security of case information, reporting capabilities and workflow management, and deploy Welfare Case Management System in various business units in FSWS and in other Governmental entities	Q4 2021
7	Housing Management System – integrate system for person and property data sharing across the Authority	Q4 2021
8	Elderly Case Management System - Phase 4 – roll out final batch of units	Q4 2021

• Education

	Key Projects	End Date
1	Roll out mobile app providing push notifications to parent/guardian on a child boarding and disembarking school transport	Q3 2019
2	Provision Map tool for an individual's education plan	Q4 2019
3	Introduce School Management Information System to standardise all schools' data	Q4 2019
4	Carry out pilot project in Middle and Secondary school to determine best model of device in relation to pedagogy needs	Q2 2020
5	Design new MEduNet with fiber connections in all sites	Q3 2020
6	BlockCerts – enable organisations to create and manage blockchain-based certificates	Q4 2020
7	Implement new identity management solution, MEduIdentity	Q4 2020
8	Implement a BYOD platform to enable studying on personal devices	Q1 2021
9	Implement Central Communication platform on IP protocol for voice (telephony) and imagery (CCTV) at all educational sites	Q4 2021

• Business

	Key Projects	End Date
1	Open Markets Reform – upgrade License Management System and develop tool to promote compliance, record attendance of licensees, caution transgressors and maintain stalls register	Q3 2019
2	Import/Export System – upgrade internal system to include other entities within approval workflow and allow online application for licenses	Q4 2019
3	Open Markets Reform – Develop mService	Q1 2020
4	Businesses Client Portal (Malta Enterprise) – further invest in this portal	Q2 2020
5	Intellectual Property – implement technology stack upgrade and architecture simplification	Q3 2020
6	Business Register – develop repository of information about Maltese businesses population	Q4 2020
7	Single Digital Gateway - Phase 1 – facilitate online access to information and assistance for citizens and businesses who need to get active in another EU country	Q1 2021
8	Start Up Malta – develop platform promoting startup entrepreneurs	Q2 2021
9	Intellectual Property – introduce User Area for clients to manage their portfolios of trademarks and designs	Q3 2021
10	Business Portal -Phase 1 – provide single point of reference with access to G2B services	Q4 2021

• Finance

	Key Projects	End Date
1	Tax Practitioners to submit and obtain access to taxpayers' accounts on-line	Q2 2019
2	Tax Clearance Certificates to be made available online	Q2 2019
3	Online facility to enable activation/deactivation of Permission to Employ (PE) number	Q2 2019
4	Customs – Establish ability to make online payment of taxes	Q2 2019
5	Customs – Track and Trace service put in place to view movement of goods, and improve detectability of the status and origin of goods	Q2 2019
6	Maltese Public Notaries to start submitting InterVivo's Contracts of Sales of Immovable Properties in Malta and Gozo	Q3 2019
7	Customs Uniform User Management and Digital Signature – Single Sign-On mechanism introduced to access all EU Customs systems	Q4 2019
8	Implementation on the E-Procurement System of a Contracts Register based on the World Bank's open contracting data standard	Q4 2019
9	Modernise the service for citizens to submit tax returns online	Q2 2020
10	Customs – e-Authorisations – digitalise and automate service applications or authorisations	Q2 2020
11	Explore potential of Artificial Intelligence in redesigning tax compliance systems	Q4 2020
12	Design information systems architecture to interface tax systems and leverage benefits of hybrid cloud infrastructure	Q4 2020
13	Customs – National Single Window to digitalise every operation from the filing of import and export declarations to release of goods	Q4 2021

• Tourism and Culture

	Key Projects	End Date
1	Digital Tourism Platform – Phase 1 link systems, introduce gamification techniques integrated with social platforms storing data and pilot MUŻA digital museum experience	Q3 2019
2	Tourism Zones Monitoring – enable reporting by the public of maintenance works, waste for collection, and cleansing issues	Q4 2019
3	Integrate Gozo specific tourism services into Digital Tourism Platform	Q4 2019
4	Digital Tourism Platform – Phase 2 introduce Augmented and Virtual Reality	Q1 2020
5	Introduce Marine Core Data Services Platform	Q3 2021
6	Artificial Intelligence in Tourism - combining AI with intelligent personalisation	Q4 2021

• Justice

	Key Projects	End Date
1	Notarial Archives Categorisation – digitise Notarial Archives and make available online	Q2 2020
2	Launch Legislation Website based on Electronic Legislation Identifier	Q4 2021
3	Electronic Courts Services – modernise eCourts portal	Q4 2021
4	Justice Complementary Systems – upgrade network infrastructure and AI Proof of Concept	Q4 2021

• National Emergency Services

	Key Projects	End Date
1	Reverse 112 – enable Emergency authorities to send notifications to citizens in danger	Q4 2019
2	Introduce Emergency Medical Computer Aided Design System	Q2 2020
3	Introduce Global Navigation Satellite Systems for detecting emergency location for use with 112 solution	Q2 2021
4	Introduce Police Computer Aided Design System	Q4 2021
5	Digital Radios – replace silo-based communication technologies with integrated services	Q4 2021

• Police and Immigration

	Key Projects	End Date
1	Launch mService with authentication and payment functions for the renewal of licenses	Q4 2019
2	Redesign 112mt app to meet accessibility needs and conform to European Electronic Legislation Code	Q4 2019
3	Allow several Ministries to access to the National Asylum Seekers Management System, so as to share data	Q1 2020
4	Strategy for Digital Transformation of Police Force	Q4 2020

• Transport

	Key Projects	End Date
1	Enhance Seafarer Certification Unit, facilitating Transport Malta to issue relevant certificates and identity cards online	Q2 2019
2	Launch Drivers' Online Portal for applications for a Learner Permit and Practical Test	Q3 2019
3	Launch Bumper to Bumper App for drivers to report accidents and attach photographs	Q1 2020
4	Smart parking in Xlendi	Q2 2020
5	Gozo Ferry boarding time prediction	Q2 2020
6	Initiate VERA Systems for vehicle registration, licensing and administration	Q4 2020
7	Expand Driving Licensing System portal for penalty points system, learner permit application and practical test booking/scheduling	Q4 2020
8	Launch Online Vehicle Registration System for registration of vehicles, information on vehicle's market value and other functionalities	Q2 2021

• Energy

	Key Projects	End Date
1	Launch new services on a dedicated website and app	Q4 2019
2	Carry out re-engineering exercise to upgrade equipment and business processes	Q4 2020

• Agriculture

	Key Projects	End Date
1	Improve systems to help farmers applying for EU funding	Q4 2019
2	Improve systems to enable farmers to use Augmented Reality	Q4 2019
3	Enhance system related to Laboratory Information Management System for plant protection	Q1 2020
4	Launch field-monitoring system using satellite images and algorithms	Q4 2020
5	Produce tools making use of satellite imagery, temperature and humidity data related to crops	Q1 2021
6	Launch Laboratory Information Management System (VRD)	Q2 2021
7	Launch new Veterinary and Phytosanitary Regulation Division system to cover Public Abattoir	Q4 2021

• Environment

	Key Projects	End Date
1	Launch new Environment and Resources Authority website – with optimised search engine and online payment facilities	Q2 2019
2	Release three new mobile services for Customer Care, Permits, and Flora and Fauna	Q3 2019
3	Launch online Geographical Information System	Q4 2019
4	Launch Green Public Procurement website and app	Q4 2019
5	Develop Online Environmental Application System with eID login function, dashboards, notifications and online payment facility	Q4 2020
6	Create Geo-Portal for the management of valleys and water catchment, using mapping carried out by drones, infrared technologies and satellite images	Q4 2021

• Infrastructure

	Key Projects	End Date
1	Launch new system for enabling Lands Registration Agency to manage registration and transfers of property	Q3 2020



3

Plans for Internal Solutions for the Public Administration

• Government Modern Workplace

Major Milestones	End Date
1 Complete rollout of MS Office365 across the Public Administration	Q4 2020

• Electronic Document Management System

Major Milestones	End Date
1 Tender formalisation, publication and award	Q3 2019
2 Develop System	Q4 2020
3 Commission Electronic Document Management System	Q1 2021

• Human Resources and Payroll

Major Milestones	End Date
1 Consolidate standalone Payroll systems into new central Payroll system	Q4 2019
2 Introduce Salaries Reporting System in the Ministry for Gozo and possibly other Ministries	Q4 2019
3 Migrate substantial subset of data from legacy systems to new software	Q4 2020
4 Outsource Data Warehouse	Q4 2020

• Corporate Financial Management Solution

Major Milestones	End Date
1 Go live with Corporate Financial Management Solution	Q2 2019
2 Extend to all Government sites	Q1 2020

• Corporate Travel Management System

Major Milestones	End Date
1 Implement system in all Ministries and Departments	Q2 2020
2 Implement system in all major Officially Appointed Bodies	Q4 2021

• Fleet Management System

Major Milestones	End Date
1 Upgrade web version of Fleet Management System to serve needs of respective fleet administrators	Q2 2019
2 Implement second batch of enhancements	Q3 2020
3 Delegate tasks to respective administrators	Q3 2021

• Inspections Online Solution

Major Milestones	End Date
1 Implement entire Solution functionality (workflows and business requirements) for specific business types	Q3 2019
2 Assess lessons learnt from implementation	Q1 2020
3 Implement and configure Business Intelligence layer on top of the entire Solution	Q3 2020

• Consent Management

Major Milestones	End Date
1 Commence gathering requirements and assessment	Q4 2019
2 Issue Tender / Procurement	Q2 2020
3 Start Implementation	Q4 2020
4 Configure and Integrate Systems	Q2 2021
5 Roll out	Q4 2021



4

Plans for Technological Platforms and Solutions

• Hybrid Cloud

Major Milestones

End Date

1	Go live with resources and services provided by the Hybrid Cloud Infrastructure	Q2 2019
2	Issue direction for its utilisation as the platform of choice for Government services	Q2 2019
3	Migrate Government Information Systems onto the platform	Ongoing

• Workflow Solution

Major Milestones

End Date

1	Commission Workflow Solution	Q3 2019
2	Migrate all public-facing services onto platform	Q4 2020

• Notifications Platform

Major Milestones

End Date

1	Keep platform current	Ongoing
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• Enterprise Data and National Data Portal

Major Milestones

End Date

1	Give policy direction on the sharing and re-use of data within the Public Administration	Q3 2019
2	Enact bills relating to Person Register	Q3 2019
3	Launch National Data Portal	Q3 2019
4	Enact bills relating to Address Register	Q1 2020
5	Change business systems to align to the use of Central Registers	Ongoing

• Enterprise Collaboration Platform

Major Milestones	End Date
1 Transfer hosted sites from on-premise to the Cloud (dependency on workshop with third party experts)	Q4 2019

• Payment Gateway

Major Milestones	End Date
1 Keep platform current	Ongoing

• User Authentication Services

Major Milestones	End Date
1 Keep platform maintained in accordance with business requirements	Ongoing
2 Migrate Service Providers to the eID Single Sign-On Screen	Ongoing

• User and Access Management Solution

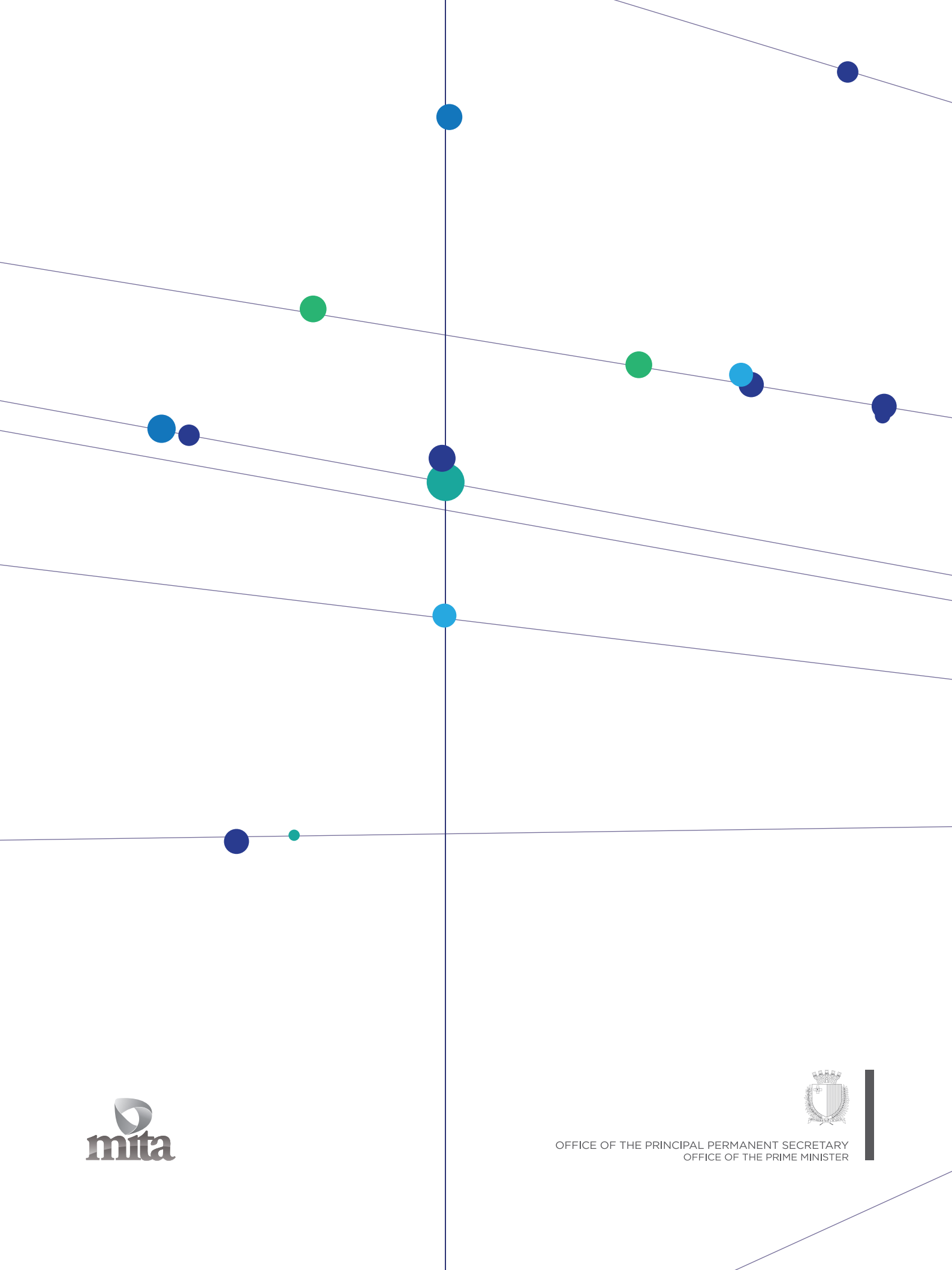
Major Milestones	End Date
1 Introduce automation for pilot services - Phase 1	Q4 2019
2 Connect and automate more systems & services - Phase 2	Q4 2020

• ICT Infrastructure

Major Milestones	End Date
1 Review Government internet-facing infrastructure so as to increase capacity, availability and security	Q1 2020

• Security

	Major Milestones	End Date
1	Launch Cybersecurity Campaign for Public Employees	Q4 2019
2	Establish framework to continuously assess applications hosted on Hybrid Cloud Enabling Infrastructure	Q4 2020
3	Maintain a state of continuous security assessment of MITA's critical infrastructure	Ongoing
4	Establish formation and optimisation of teams, processes and technologies within Government's Digital Security Operations Centre	Q4 2020
5	Maximise use of technology at a national level with a heightened awareness of cyber security	Q4 2021



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