

Digital Public Administration Factsheet 2020

Malta

Table of Contents

1	Country Profile	4
	Digital Public Administration Highlights	
	Digital Public Administration Political Communications	
	Digital Public Administration Legislation	
	Digital Public Administration Governance	
	Digital Public Administration Infrastructure	
	Cross Border Digital Public Administration Services for Citizens and Businesses	



1 Country Profile

1.1 Basic data

Population: 493 559 inhabitants (2019)

GDP at market prices: EUR 13 208 million (2019)

GDP per inhabitant in PPS (Purchasing Power Standard EU 27=100): 99 (2019)

GDP growth rate: 4.4% (2019) **Inflation rate**: 1.5% (2019) **Unemployment rate**: 3.4% (2019)

General government gross debt (Percentage of GDP): 43.1 (2019) General government deficit/surplus (Percentage of GDP): 0.5 (2019)

Area: 315.36 km² Capital city: Valletta

Official EU language: Maltese, English

Currency: Euro (EUR)

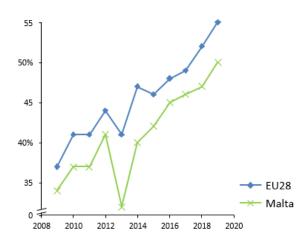
Source: NSO and Eurostat (last update: 24 April 2020)

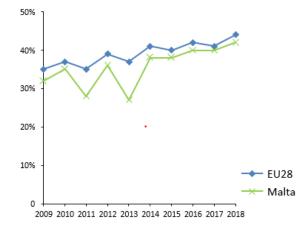
1.2 Digital Public Administration Indicators

The following graphs present data for the latest Generic Information Society Indicators for Malta compared to the EU average. Statistical indicators in this section reflect those of Eurostat at the time the Edition is being prepared.

Percentage of individuals using the internet for interacting with public authorities in Malta

Percentage of individuals using the internet for obtaining information from public authorities in Malta



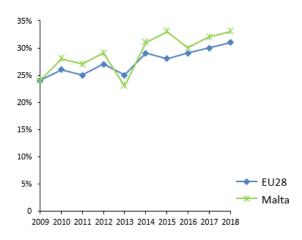


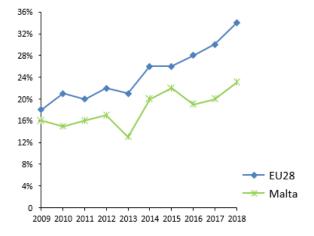
Source: Eurostat Information Society Indicators

Source: Eurostat Information Society Indicators

Percentage of individuals using the internet for downloading official forms from public authorities in Malta

Percentage of individuals using the internet for sending filled forms to public authorities in Malta



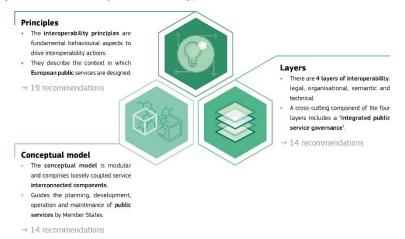


Source: Eurostat Information Society Indicators

Source: Eurostat Information Society Indicators

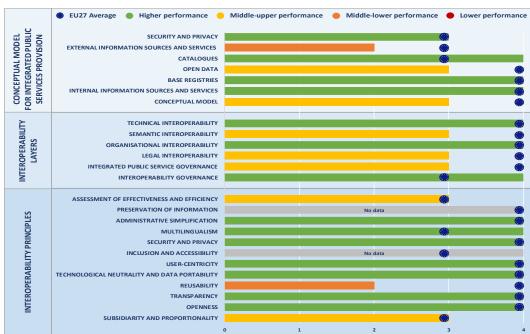
1.3 Interoperability State of Play

In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations. The picture below represents the three pillars of the EIF around which the EIF Monitoring Mechanism was built to evaluate the level of implementation of the EIF within the Member States. It is based on a set of 68 Key Performance Indicators (KPIs) clustered within the three main pillars of the EIF (Principles, Layers and Conceptual model), outlined below.



Source: European Interoperability Framework Monitoring Mechanism 2019

For each of the three pillars, a different scoreboard was created to breakdown the results into their main components (i.e. the 12 principles of interoperability, the interoperability layers and the components of the conceptual model). The components are evaluated on a scale from one to four, where one means a lower level of implementation, while 4 means a higher level of implementation. The graph below shows the result of the first EIF Monitoring Mechanism data collection for Malta in 2019. It is possible to notice positive results within the scoreboard related to Interoperability principles. The areas of improvement are linked to the principle of reusability and the use of external information sources and services. Not enough data was collected to measure the principle of preservation of information and inclusion and accessibility.



Source: European Interoperability Framework Monitoring Mechanism 2019

1.4 eGovernment State of Play

The graph below is the result of the latest eGovernment Benchmark report, which evaluates the priority areas of the eGovernment Action Plan 2016-2020, based on specific indicators. These indicators are clustered within four main top-level benchmarks:

- User Centricity indicates the extent to which a service is provided online, its
 mobile friendliness and usability of the service (in terms of available online support
 and feedback mechanisms).
- **Transparency** indicates the extent to which governments are transparent about (i) the process of service delivery, (ii) the responsibilities and performance of public organisations and (iii) the personal data processed in public services.
- **Cross-Border Mobility** indicates the extent to which users of public services from another European country can use the online services.
- **Key Enablers** indicates the extent to which technical and organisational preconditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

The 2020 report presents the biennial results, achieved over the past two years of measurement of all eight life events used to measure the above-mentioned top-level benchmarks. More specifically, these life events are divided between six 'Citizen life events' (Losing and finding a job, Studying, Family life, all measured in 2012, 2014, 2016 and 2018, and Starting a small claim procedure, Moving, Owning a car, all measured in 2013, 2015, 2017 and 2019) and two 'Business life events' (Business startup, measured in 2012, 2014, 2016 and 2018, and Regular business operations, measured in 2013, 2015, 2017 and 2019).



Source: eGovernment Benchmark Report 2020 Country Factsheets



2 Digital Public Administration Highlights

Digital Public Administration Political Communications

In 2019, the Malta Information Technology Agency organised a cyber security training course for the public sector. On 23 October 2019, the Malta Technology Agency through Cyber Security Malta organised its first Cyber Security Summit. More recently, on 5 February 2020, the eSkills Malta Foundation organised a conference on Cyber Security. Finally, the B Secure Scheme, an initiative by the Maltese Government to instil cyber hygiene culture on a national level, was launched in 2019.

To undertake business opportunities offered by new technologies, a key requirement is the carrying out of business process re-engineering (BPR) to enable the Public Service to drive more dynamic business processes to boost performance. Through the Structural Reform Support Programme (SRSP), a BPR Toolkit has been designed and developed with the aim to provide Public Employees an opportunity to obtain new knowledge and skills in BPR. The BPR Toolkit will help Public Employees to:

- Relate the scope and objectives of Business Process Reengineering;
- Apply the methodology for carrying out Business Process Reengineering;
- Identify business requirements;
- Identify benefits, and measure their realisation;
- Choose appropriate technologies for the delivery of the service/ process;
- De-compose larger processes into smaller processes (process mapping) by using process mapping tools;
- Organise and determine simplification options for processes by drawing on technologies and other redesign drivers;
- Design processes based on user-centricity principles;
- Outline the key principles required to manage people through change;
- Analyse how to manage Business Process Reengineering projects effectively.

The Business Process Re-Engineering Toolkit has been offered in the Institute for Public Services training prospectus of 2020.

Digital Public Administration Legislation

Under the revised Data Protection Act (Cap 586), subsidiary legislation related to specific processes in varying sectors was also enacted or reviewed for alignment with the GDPR, including the Law Enforcement Directive (EU) 2016/280 and, the Processing of Child's Personal Data in relation to the Offer of Information Society Services Regulations.

Digital Public Administration Governance

The Malta Information Technology Agency (MITA) is the central driver of Government's Information and Communications Technology (ICT) policy, programmes and initiatives in Malta.

MITA's role is to deliver and implement the assigned programmes as set out in the Digital Malta National ICT Strategy 2014 - 2020, and as directed by the Parliamentary Secretariat for Financial Services, Digital Economy from time to time. MITA manages the implementation of IT programmes in Government to enhance public service delivery and provides the infrastructure needed to execute ICT services to Government. MITA is also responsible to propagate further use of ICT in society and economy and to promote and deliver programmes to enhance ICT education and the use of ICT as a learning tool.

Digital Public Administration Infrastructure

The new Maltese National Data Portal was launched in March 2019. The new platform is based on Microsoft SharePoint 2016 and aims to offer an out-of-the-box solution to the Government for the address of non-standard branded sites.



3 Digital Public Administration Political Communications

3.1 Specific political communications on digital public administration

Digital Malta Strategy (2014-2020)

Digital Malta is the national ICT strategy for the years 2014-2020. It aims to provide a vision for the country to prosper as a digitally enabled nation in all sectors of society. The core principles underpinning the implementation of the Digital Malta vision are:

- Ensuring all citizens are offered the possibility to benefit from ICT as a fundamental right.
- Advocating proactive leadership and delivering programmes that meet needs.
- Supporting national priorities in line with the government policy, the National Reform Programme and EU obligations.
- Engaging the private sector as an important player in the delivery of the Strategy.
- Optimising value and accountability.
- Ensuring collaboration between stakeholders to make the best use of national strategic information assets, encourage synergies and minimise fragmentation.
- Encouraging a more environmentally friendly society through greener procurement, implementation and application of ICT.
- Supporting and enabling Research and Innovation (R&I) in identified areas of strength, capability and centres of excellence (smart specialisation).
- Adopting an open and experimental mindset, capitalising on the lessons learned from success stories and respecting best practices and international standards.
- Maximising opportunities from multiple funding sources, including European and international funding programmes and the private sector.

Building on past and present successes, the strategy will, above all, focus on the challenges needed to address the gaps towards becoming a universally digitised society. From the citizens' perspective, this will translate in enhancing their digital capability to better and more efficiently access healthcare and social services, connect the elderly and socially excluded, improve education for all, and create higher quality jobs. From an economic perspective, digital competence and specialist ICT skills need to be widened, and national policy and strategies adjusted to strengthen Malta's workforce and make its businesses more innovative and competitive.

Within this context, the strategy outlines three strategic themes:

- Digital Citizen;
- Digital Business; and
- Digital Government.

The above themes are supported by three strategic enablers:

- Regulation and Legislation;
- Infrastructure; and
- Human Capital.

In support of this transformation, the goals are that ICT becomes the underlying infrastructure and driver behind every economic activity. ICT should make public administration more responsive, use of natural resources more sustainable, the legal and regulatory environment more business-friendly, and the SME and NGO communities more connected. Above all ICT should become an empowering tool for young entrepreneurs and a major source of impetus for the creation of more jobs and growth in Malta's key and emerging economic sectors.

The Parliamentary Secretariat responsible for Financial Services, Digital Economy and Innovation within the Ministry for Finance is responsible for the implementation of a Digital Economy for Malta, and has the overall governance of the eGovernment vision, strategy and associated programmes. The Parliamentary Secretariat provides leadership and has ultimate responsibility for the successful delivery of the ICT programme.

The implementation of a digital economy requires the involvement and collaboration of various key players and entities. Amongst these, the Malta Communications Authority (MCA) and the Malta Information Technology Agency (MITA) are considered the main actors.

Mapping Tomorrow – A Strategic Plan for the Digital Transformation of the Public Administration (2019-2021)

Mapping Tomorrow is a strategic plan for the public administration. The public administration will enter a new era of further simplification of public services to reduce the administrative burden on its clients and to provide client-centred public services through digital transformation. The document sets a clear vision with well-articulated goals and an ambitious implementation plan.

The government's vision aspires to take public services to the next level of improvement through the adoption of digital technologies. The vision is to have: A Public Administration Empowered by Digital Transformation.

This Plan does not exist in isolation but builds on previous achievements, such as the drive to provide services which are available 24/7. Based on past achievements, this Strategic Plan sets three goals which build upon each other and form a continuum of improvement in service delivery.

Goals:

- Take-up;
- Once-only; and
- Service of Excellence.

The first goal links to previous strategies and aims to introduce simplified services, which are digital end-to-end, to increase take-up.

Once-only is the core goal, aiming at internal sharing and re-use of data and information that has been previously provided by a citizen or organisation. The aim is to stop asking for information which already exists within government.

The third goal brings public services in line with social trends and demands, and to the quality levels expected by citizens and businesses. It looks at the adoption of emerging technologies, such as AI, to offer public services that are personalised, user-friendly and timely. The goal is to exceed client expectations.

The goals are ambitious and require a coordinated and collective approach from all ministries. Stakeholders need to embrace a number of key-enabling concepts, principles, and technologies that are designed to bring the whole of government together.

The specific concepts at the heart of this Strategic Plan are:

- client-centricity;
- one government;
- sharing and re-use;
- end-to-end services;
- digital by default; and
- process re-engineering.

The generic principles to be adopted throughout this digital transformation are:

- trust;
- stronger awareness;
- security and privacy;
- agility and continuous improvement;
- accessibility;

- availability;
- ongoing investment and celebrating success;
- interoperability and cross-border adoption of emerging technologies in order to meet and exceed clients' expectations;
- AI;
- Internet of Things;
- distributed ledger technologies;
- business intelligence and analytics; and
- immersive technologies.

The implementation plan is based on four strategic pillars which bring together different elements of the public administration, so that work can be coordinated with clear authority and responsibility.

Pillar 1: A Client-Centric Public Administration

A number of major milestones to strengthen the relationship which has been built between the government and its clients, bringing the latter closer to the design of digital services, including also those who are not so tech-savvy.

Pillar 2: Sector-Specific Programmes

Services that are specific to their sectors, without detracting from the notion that for clients the public administration is a whole entity.

Pillar 3: Internal Solutions for the Public Administration

Empowering employees and modernising internal (user and corporate) solutions are equally important. The Plan aims to provide the public administration with the right tools and corporate solutions for use across government.

Pillar 4: Technological Platforms and Solutions

Digital transformation requires a technological platform to enable the implementation of solutions. The current infrastructure will be upgraded with avant-garde technologies, giving more autonomy to ministries in a secure environment.

Governance and Implementation

The Plan also identifies a number of governance elements for a successful implementation. The advocacy of critical success factors calls for a re-engineering exercise to adopt a horizontal approach; it mandates careful investments in both human capital, and systems and technologies; and while it sets clear governing structures, it invites further action to keep the plan current.

Centralised Digital Enabling Services Policy

The policy published in December 2019 aims to encourage the use of centralised digital enabling services within the public administration and guide the adoption of alternative services in order to ensure data security. The policy recommends that all government bodies and agencies should, unless they have specific needs, give priority to the following centralised digital enabling services provided by the government:

- cloud services, especially for storing, processing, transmitting or sharing classified information;
- electronic payment service (Government Payment Gateway);
- Notifications Service.

CONVERGE Project

In 2017, the Prime Minister officially launched the CONvErGE Project with an investment of EUR 40 million, of which EUR 28.5 million were co-financed by the EU as part of the ERDF 2014-2020. Through this project, which is led by the Office of the Permanent Secretary (Strategy & Implementation) within the Office of the Prime Minister, the government continues to strengthen public services through the development of its ICT systems. The aim is to create new services that provide more benefits to citizens and businesses. This project enables the development of new ICT systems in various sectors,

namely the health, social services, justice, public finance, tourism, education and business sectors.

The project is divided into the development of eService applications and a horizontal underlying infrastructure to enable such eServices. The core part of the enabling underlying infrastructure is the Hybrid Cloud, which was set up to strengthen the government's IT infrastructure and provide an integrated delivery experience for the government of Malta. The Hybrid Cloud solution is a key technology enabler towards achieving the CONVErGE main objectives of one-government and economies of scale. It is a prime building block of the CONVErGE horizontal layer which will service the CONVErGE eService applications, as well as other information systems implemented across the government of Malta.

Another part of the underlying infrastructure includes the National Data Portal. This forms part of the national data infrastructure and represents the visible and tangible aspects of the Foundation Data Layer which, in essence, is mainly about the government-wide implementation at the national level of a data governance and enterprise data management system.

The implementation of the new eService applications includes:

- a new accounting system for the government;
- a new electronic system for customs;
- the modernisation of the taxation system;
- national eHealth services (including Electronic Patient Records for Primary Health Care, and National Electronic Health Records);
- a digital platform for the tourism sector;
- a new system for the management of activities related to national disasters;
- an integrated information system for forensics;
- new information systems for Maltese laws, the legal profession and notarial archives;
- an electronic system for social services;
- a project analysing the need for and development of a portal for businesses;
- a new information system for the department of elderly & community care;
- the modernisation of the information system of the Department of Social Security;
- a new automated reporting system to better regulate the gaming sector;
- a portal for the new Institute for Education offering online courses to educators;
- an online customer relationship management system for the screening of any delays in developmental milestones;
- a new Land Registry information system;
- a new online system for inspections; and
- an analytical and feasibility study for the development of a portal for businesses.

3.2 Interoperability

National ICT Interoperability Framework (NIF)

Malta has acknowledged the importance of interoperability and is working decisively towards making its public services interoperable. In the process of defining a formal National ICT Interoperability Framework (NIF), the Malta Information Technology Agency (MITA) formulated new guiding principles which brought public services one step closer to achieving full interoperability.

One of the primary goals of Malta's NIF is to facilitate the strong vision of a connected government through the alignment of departmental business processes and the standardisation, discovery and reuse of ICT assets. In addition, Malta's NIF applies continuous rigour in strengthening the level of trust in services provided by the public

sector. The NIF is currently being revised to ensure its continued alignment with the European Interoperability Framework, and sharing and reuse initiatives.

GMICT policies are a collection of ICT policies of the government of Malta, centrally managed by MITA, that regulate the adoption and use of technology within the public administration to facilitate the achievement of the government's objectives. More specifically, an Enterprise Architecture Policy for Interoperability and Reuse regulates architecture building blocks and complements the NIF. GMICT policies have recently undergone a rationalisation exercise to ensure their currency.

3.3 Key enablers

3.3.1 Access to public information

No political communications have been reported to date.

3.3.2 eID and Trust Services

National Identity Management System (NIDMS)

The National Identity Management System (NIDMS) provides the functionality necessary to consolidate eID Account information and seamlessly associate them with the eID, eRP and ePassport lifecycle. The solution provides access management tools to determine the access level to be granted to administrators/operators.

The NIDMS system consists of a number of distinct components operating together to deliver eID cards, eResidence cards, ePassports to applicants. The electronic cards contain qualified electronic signatures compliant to EU Regulation No 910/2014 (eIDAS Regulation).

3.3.3 Security aspects

Malta Cyber Security Strategy

Following the issue of a Green Paper for a National Cyber Security Strategy in late 2015, that led to a nation-wide consultation process during the first half of 2016, the Government of Malta launched the first National Cyber Security Strategy. The Strategy served as a framework to protect information systems, networks and information on the internet, together with the respective users of the services that they provide; namely government, the private sector and civil society. The strategy was one of the action items proposed by Digital Malta - National Digital Strategy for the years 2014-2020. The key principles of the National Cyber Security Strategy aimed to reflect the various facets of cybersecurity and the essential underlying complex nature of cyberspace. Under the direction of the National Cyber Security Strategy Steering Committee, MITA launched a campaign focusing on all strata of civil society to instil a culture towards cybersecurity awareness. The target audience included the general public, SMEs, public sector, students and IT professionals. To achieve this, a variety of communication media were used, mainly social media, traditional media such as television, radio and news portals, together with a dedicated website. Activities included drama via TV and theatres, training, surveys, focus groups, workshops, competitions and awards.

Information Security Policy

With regards to cybersecurity within the public sector, MITA launched an Information Security Policy that was articulated, published and communicated. This was based on ISO27001 Information Security International Standard, and that was applicable to everyone within the public sector. As part of this framework, MITA started scanning all

government websites that utilised MITA's infrastructure for the identification of vulnerabilities and subsequent rectification by the respective owners. This governance framework was extended to cover the protection of environments that migrated to or were newly commissioned on MITA's new Hybrid Cloud Enabling Infrastructure. This was an innovative project which re-designed the way MITA sought to provide assurance to its clients that the infrastructure on which government data resided was adequately safeguarded from the ever-increasing threats defining today's cyberspace. MITA heavily invested in cutting edge technology to provide its clients with the ability to continuously scan for vulnerabilities and obtain real-time visibility on the operational health and security posture of environments hosted on this platform. Information security included three main dimensions: confidentiality, availability and integrity, and involved the application and management of appropriate security measures for a wide range of threats, with the aim of ensuring sustained business success and continuity, and minimising impacts of information security incidents (reference ISO/IEC 27000). Additionally, MITA invested in tools to aid in the detection and prevention of cybersecurity incidents, including adequate training of its employees throughout the organisation, and collaboration with other governmental departments to ensure a centralised and cohesive approach in this domain.

Messages to the public pertaining to cybersecurity are channelled through Malta's cybersecurity page, stemming from a national cybersecurity strategy that the government had appointed MITA to draft, subsequently followed by the Malta Information Technology Agency (MITA) 2018-2020 Strategy.

Launch of the National Cybersecurity Awareness and Education Campaign

On 16 October 2018, the Parliamentary Secretary for Financial Services, Digital Economy and Innovation, in the presence of the Minister for National Security and Home Affairs, launched the National Cybersecurity Awareness and Education Campaign. As stated, the Campaign, which was one of the key goals of the National Cybersecurity Strategy published in 2016, was based on the government's belief in the need for all Maltese society to be fully aware of cyber risks and the security measures to be taken. The Campaign targeted the general public, the private sector as well as the public sector - as the largest holder of critical and sensitive information - through practical training and promotional initiatives.

Public Sector Cybersecurity Training

In 2019, the Malta Information Technology Agency organised a cybersecurity training course for the public sector. The primary goal of these sessions was to inform the trainees about the latest cybersecurity threats, such as social engineering, and to give an explanation of the government GMICT Policies that are based on ISO 27001 security standards.

Launch of Malta's first Cybersecurity Summit

On 23 October 2019, the Malta Technology Agency through Cyber Security Malta organised its first Cybersecurity Summit that aimed to bring cyber enthusiasts, professionals, policy makers, the public sector and the private sector under one roof. A series of debates on various cybersecurity themes were organised such as the regulatory aspects, information sharing, efficient cybersecurity protection, accessibility and much more. The Summit also featured prominent national and international guest speakers.

It is also pertinent to note that the eSkills Malta Foundation, partnered up with various stakeholders, namely Keith Cutajar, an information security consultant and court expert, MITA, the University of Malta, MDIA, Cyber Security Malta and BCS, to organise a conference on cybersecurity on 5th February 2020.

Launch of the B Secure Scheme

The B Secure Scheme is an initiative by the Maltese government to instil a cyber hygiene culture on a national level. Through this scheme, the private sector is entitled to apply for internationally recognised training, such as CISA and CISSP, and fully sponsored risk assessments on their digital infrastructure, such as penetration tests and vulnerability assessments. A total of EUR 250 000 has been dedicated to this scheme that directly contributed to the improvement of Malta's cybersecurity posture within the private sector. The training under this scheme is being delivered at the Malta Information Technology Agency. The scheme also includes cybersecurity awareness courses for executives. These are specifically aimed at increasing board level members' and decision takers' awareness of the latest threats and consequences of a cybersecurity incident. Experienced and certified cybersecurity professionals have been selected to carry out the training whilst an internationally renowned company was tasked with the responsibility to carry out risk assessments.

3.3.4 Interconnection of base registries

Registry of Base Registers

The Register of Registers is a comprehensive list of legally based official lists and registers which includes all the national registers and also a section which comprises the Foundation Data Layer, namely the main Base Registers for Persons, Locations (Addresses) and Organisations, and also a set of Administrative Registers which reflect the public organisations and the organisational structures of the government of Malta, as well as the list of Public Services.

The quality and governance aspects of the Master Data is first and foremost regulated through a new raft of specific legal notices and new subsidiary legislation under Cap. 546 of the Laws of Malta (PSI Directive transposition) with the intention to give legal basis to data sharing and re-use both within and beyond the public administration. These new legal notices shall eventually be covering the Person Register, the Business Register and the Address Register which includes several subsidiary registers of Post Codes, Streets, Localities and Buildings.

3.3.5 eProcurement

eProcurement System

Malta has implemented its eProcurement System since 2011 and has now completed the transition from traditional procurement. Public Procurement Regulations passed in 2016 obliged contracting authorities to publish all procurement calls above EUR 5 000 on the eProcurement System. During 2018, one initiative was embarked upon with the aim of increasing transparency, namely the implementation of a Contracts Register. A second initiative was to simplify processes and encourage wider cross-border participation, notably implementation of the European Single Procurement Document, and its integration with eCERTIS and the National Registers in the eProcurement System.

3.4 Domain-specific political communications

National eSkills Strategy (2019-2021)

Emerging information and communications technologies are assuming increasing importance in our lives. This importance is not connected solely to our professional life but also to our quality of life in its entirety. Whilst ensuring that society at large develops the right competence and capability to secure a better future, the need to revisit the effectiveness of strategies leading to acquisition of digital skills by individuals, society,

industry and Malta as a nation state is clear. This Strategy, launched by the eSkills Malta Foundation in March 2019, aims to complement initiatives at both the local and EU level to address the need for existing and new digital skills that shall be required in nearly all jobs in the medium term. The digital market will completely transform several business models that Malta is accustomed to. This is expected to bring major changes within the labour market in a relatively short time. Despite general positive developments in the digital literacy, the need for a continued effort to narrow the digital gap further is key to the eSkills Malta Foundation.

The digital skills strategy is formed of twelve main recommendation areas. The recommendations aim to support the business needs for the development of the Foundation to match the rapid pace of change led by market needs. The Strategy also aims to develop a number of measures to support a decision-making process that is more evidence based. In addition, the Strategy puts forward several specific recommendations to address a number of currently developing market trends identified as part of the fieldwork done over the past year.

The development of digital skills in compulsory schooling

The Directorate for Digital Literacy and Transversal Skills (DDLTS), within the Ministry for Education and Employment, identifies gaps in educators' digital competence and supports them accordingly. The DDLTS coordinates support for educators to make use of various technologies that are available in schools and include them in their lessons in order to engage the students and facilitate learning. Students foster their critical and confident use of technologies as well as their digital competence development. The DDLTS organises many initiatives in education to promote digital literacy, coding and computational thinking (like family coding sessions and the Code Week), internet safety, eTwinning, SELFIE and the implementation of DigComp within the compulsory schooling setting.

The Ministry for Education and Employment is investing in digital skills in compulsory education curricula through in the creation of ICT infrastructures in classrooms.

In primary schools, digital skills have been strengthened through the "One Tablet per Child" (OTPC) scheme where tablets were distributed to all students and educators in year 4, 5 and 6 in all schools. The tablet is aimed to be an educational tool that helps students to go into deeper learning in literacy, digital literacy, numeracy, science and other areas. Students can learn anytime, anywhere because the tablet facilitates collaboration, communication, creativity, character education, digital citizenship, critical thinking and computational thinking. These competences are pushed forward through the digital learning outcomes which are aligned with DigComp. The OTPC project aims to increase the skills and competences of students and future graduates; and to ensure that all children will be given a fair and equal opportunity to be closer to technology. Digital skills are cross-curricular at all compulsory levels and students are expected to use technology across all the subjects.

The Directorate for Learning and Assessment Programmes (DLAP) launched a new ICT programme in middle schools, entitled ICT C3, which has been introduced in year 7, to replace ECDL. The new ICT C3 programme will go up till year 11 to ensure that students learn about safety on the net, robotics, coding and other new technologies. This is a compulsory subject in lower and upper secondary. Computing, VET IT and applied IT are optional subjects which students can study at secondary level.

With regard to transforming teaching and learning of digital skills in a lifelong learning perspective, including the training of teachers, the DDLTS is mainstreaming the EU's digital competence framework DIGCOMP (JRC, 2017) focusing on digital literacies and 21st century skills. The Institute for Education offers a whole range of CDP courses, including courses related to digital competences, in collaboration with the DDLTS. In the framework of the national project "One Tablet per Child" (OTPC), all educators in year

4, 5 and 6 have to follow the mandatory course "Award in the use of tablets in primary classrooms". Professional development is also provided to all the teachers involved in the ICT C3 programme, computing, VET IT and applied IT.

Digital education at further and higher education level

The Malta College of Arts, Science and Technology (MCAST) and the University of Malta teach digital and media literacy classes.

At the University of Malta, the artificial intelligence (AI) department gives lectures to more than 5000 students in secondary schools; a new syllabus has been launched whereby 5000+ students will be trained during the summer months with regards to AI concepts.

The National Skills Council collaborated with MCAST on the strategy for AI in VET education. MCAST has launched its AI strategy that includes an update for all the ICT and non-ICT courses to cover relevant content on AI.

MCAST is launching a programme for the community that specifically targets the learning of basic skills including IT at Level 3. Classes will be offered in the morning and in the evening to target different audiences, including mothers and working adults who are in low skilled jobs because they still lack the basic skills.

The National Commission for Further and Higher Education (NCFHE) has also launched an IT Sector Skills Unit to create National Occupational Standards for the digital sector. The Institute for Education is currently offering awards in the digital skills area. Anyone who meets the eligibility requirements can attend these courses. Such courses aim to upskill or help educators develop new competences.

The Commonwealth Centre for Connected Learning (3CL) operates as a knowledge hub for a global network of groups, agencies, institutions, educators and activists interested in the rapid deployment of programmes for connected learning in the Commonwealth and the EU. The Centre is an international foundation set up by the government of Malta in collaboration with the Commonwealth of Learning, and is conducting research on the impact of blockchain, artificial intelligence, augmented reality and big data on digital education. The Centre's objectives are underpinned by three inter-related strategies:

- Action research: The Centre engages with academic and professional researchers worldwide and brokers participation in research areas. Strategic alliances are being developed with universities, higher education institutions, consulting firms and the labour market, primarily in the Commonwealth and EU Member States. The Centre will commission action research in strategic and ideally high-profile areas of interest that resonate with target stakeholders. Research findings will be published through peer-reviewed, third-party publications as well as 3CL-branded research reports to be published online under the most current version of the Creative Commons Attribution International (CC BY) licence.
- Praxis: The Centre facilitates, develops and shares high-profile pilots that can be replicated as use case studies. This process involves the activation and management of three interconnected pathways: peer-learning networks; connected learning principles and open education resources. Energised forms of digital scaffolding can shift the emphasis from policy discourse to praxis, helping learning institutions, teachers and learners acquire digital skills and learning methods. Providing learning support through the creation of relevant case studies can encourage education institutions to re-evaluate and implement much-needed change in curricula and modes of assessment.
- Advocacy for capacity building: The Centre is an advocate for connected learning and more inclusive approaches to education. In the process it builds capacity as

a virtual incubator, integrating skills from different institutions and collaborating on strategic projects with clear 'needs' and 'wants'.

Local tertiary-level education updated their curricula to include emerging technologies across all ICT curricula. There were also introductions of new curricula. This includes a new Master's Programme on Distributed Ledger Technology (DLT) at the University of Malta run by the Centre for Distributed Ledger Technology. This programme includes streams for ICT, business and legal experts. MCAST introduced a programme on business analytics. Various general public sessions are being done about blockchain and championed by the University of Malta. General public groups include students, accountants, game designers and other DLT stakeholder groups. In 2018, a course was also launched by the University of Malta on DLT which includes the technical, legal, business and application aspects of blockchain.

Malta Information Technology Agency (MITA) Strategy (2018-2020)

The new MITA Strategy provided the purpose, focus and direction that the Agency has adopted for the period 2018-2020. It set out a vision for MITA to be "the digital driver for the transformation of government." With the view that transformation requires more than digital solutions, this vision placed the Agency in a position to serve as the "digital driver" to help the public administration to transform through the digitalisation of public services.

The Strategy introduced four corporate drivers which explained changes in the modus operandi of the organisation, and which were required to achieve the desired states set for 2020. The Agency needed to transform itself to innovate in existing core business areas and introduce new services. It had to adopt an innovative approach in which employees were given the opportunity to enhance their knowledge, apply new ideas and continuously learn and research on the application of new technologies. This enabled the Agency to spearhead the digitalisation of public services through a direct contribution in ICT infrastructure, solutions and outreach activities. The Agency intends to work in tandem with the Ministry CIOs to safeguard the government's digital assets, and prioritise and align digital strategies to help the government achieve its strategic goals.

The Strategy established a clear direction with 10 desired states that the organisation aimed to reach by the end of 2020, and 32 corresponding actions to lead MITA from where it was to where it wanted to be. These desired states covered the necessary focus which the Agency must embrace and tackle: ICT direction, application of new technologies, security, digital transformation, community engagement, cybersecurity, operational stability and effectiveness, focus on core, client-centric service provision and continuous human resource development. Through these desired states, the Agency aimed to go through the necessary internal changes, improve collaboration across government and bring about a holistic approach to achieve its vision of becoming the digital driver for the transformation of government.

3.5 Emerging technologies

Scholarships on Blockchain and DLTs

On 28 August 2018, a scholarship, forming part of an agreement between the University of Malta and MITA, was launched in the presence of the Parliamentary Secretary for Financial Services, Digital Economy and Innovation. The scholarship covers a EUR 300 000 fund launched by the government over a three-year period, and which shall enable interested students to pursue their studies in blockchain and distributed ledger technologies (DLTs). This initiative is seen as a pillar in education to build upon the amount of skilled workforce that will be required to sustain the large number of DLT companies which have shown their interest in investing in Malta and which are willing to base their companies in Malta, following the country's legislative developments on DLT. During the first two years of the scheme 19 students have been granted the scholarship. Students granted the scholarship span multiple disciplines including law, business and ICT.

Launch of the Emerging Technologies Lab

Following the launch of the MITA Emerging Technologies Lab in October 2018, with an investment of EUR 250 000, the Lab has provided an opportunity to explore and learn emerging technologies. With the purpose of promoting the various technologies available at the Lab and increasing the knowledge on the these technologies, during the first year of operations more than 50 events have been organised at the Lab. MITA employees, government employees, students, as well as private sector start-ups have the opportunity to develop their ideas in areas such as virtual and augmented realities; robotics and IoT through the use of 3D printing and microcontrollers; artificial intelligence and distributed ledger technologies.

Malta Government's vision on Artificial Intelligence

In November 2018, the Parliamentary Secretary for Financial Services, Digital Economy and Innovation announced the establishment of a task force entrusted to design a National Strategy on Artificial Intelligence (AI). Following the success with the Blockchain Island, the government embarked on another mission, this time for Malta to become one of the top countries in the world with the highest impact AI strategy, and to become the ultimate AI launchpad where companies and start-ups can develop, test, implement and scale their products locally and then springboard them into the world. The policy, published on 21 March 2019, was a basis for public consultation that lasted until 22 April 2019. The National AI Strategy was based on three strategic pillars: investment, start-ups and innovation, and the public and private sector adoption. It also included three strategic enablers: education and workforce, legal and ethical framework, and infrastructure.

This document highlighted the vision, objectives and policy considerations to guide the development of Malta's National AI Strategy.



4 Digital Public Administration Legislation

4.1 Specific legislation on digital public administration

No specific legislation on digital government has been adopted in this field to date.

4.2 Interoperability

Electronic Filing of Official Documentation

The electronic filing of official documentation is necessary for processing by the public administration and judicial authorities.

From a judicial process point of view, the possibility to submit judicial acts by electronic means commenced in 2013 in the Small Claims Tribunal. This was followed, in 2015, by acts filed with the Administrative Review Tribunal and, in 2016, by judicial letters filed with the Courts of Malta and Gozo. Since 2015, summons issued by the Commissioners for Justice could be served through electronic mail. In August 2017, the necessary regulations were issued for the electronic filing of applications in the Court of Magistrates:

- S.L.490.05: Filing of Acts before the Administrative Review Tribunal by Electronic Means Regulations;
- S.L.380.04: Small Claims Tribunal (Filing of Acts by Electronic Means) Rules;
- S.L.12.30: Filing of Applications by Electronic Means in the Court of Magistrates (Malta) and the Court of Magistrates (Gozo) in its inferior jurisdiction Regulations;
- S.L. 12.29: Filing of Judicial Letters by Electronic Means in the Courts of Malta and Gozo Regulations; and
- S.L.291.07: Service of Summons by Electronic Mail Regulations.

The electronic filing of official documentation necessary for processing by the public administration has progressed steadily. An early example of filing by electronic means was Article 239 of the Civil Code which followed on the electronic signature reforms introduced through the Electronic Commerce Act. Sub-article 2 was included in the Code in 2012 and provided that the copy of an Act registered in accordance with sub-article 1, and transmitted to the Director by any electronic means, or any true copy thereof, shall be deemed a true and authentic copy for all purposes of law provided this copy was signed by the Director receiving it. In 2016, the electronic submission of income tax related documentation was consolidated and updated through Legal Notice 284 of 2016 (Electronic Communications Rules 2016).

4.3 Key enablers

4.3.1 Access to public information

Freedom of Information Act

The Freedom of Information Act aims to establish a right to documents held by public authorities to promote transparency and accountability in government. Specifically, the Freedom of Information Act (Cap. 496) granted citizens more rights to access documents held by the government. The law drew upon elements of similar acts established in other countries. The government of Malta published in the summer of 2009 Law No 218, a commencement notice that paved the way for the Maltese Freedom of Information Act of 2008 to come fully into force on 1 September 2012. The commencement notice established the Information and Data Protection Commissioner

as the regulatory body (change of name and extended responsibilities), and furthermore gave all public sector bodies (including local government) one year to prepare and publish their information asset lists, as defined by the Freedom of Information Act 2008.

Re-use of Public Sector Information

The Legal Notice 20 of 2007 on the Re-Use of Public Sector Information Order, issued under the European Union Act (Chapter 460 of the Laws of Malta), transposed into Maltese law the general principles governing the re-use of public sector information, in line with the provisions of the relevant EU Directive 2003/98/EC on the re-use of public section information.

This Legal Notice was replaced by the Re-Use of Public Sector Information Act of 2015 (Cap. 546 of the Laws of Malta), which transposed the provisions of Directive 2003/98/EC of the European Parliament and the Council of the 17 November 2003 on the re-use of public sector information, the provisions of Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information into national law. The new rules emphasised that, subject to specific conditions, all content that can be accessed should, by default, be re-usable. The new Act built on the provisions and the procedures already in place through the Freedom of Information Act (Cap. 496 of the Laws of Malta).

4.3.2 eID and Trust Services

eID Regulation

Malta was one of the first Member States to legislate in eCommerce by transposing the eSignatures Directive into national law in 2001. The eCommerce Act was subsequently updated over the years to maintain its applicability to the digital market context, and most importantly was overhauled in 2016 to align with the Regulation No 910/2014 on electronic identification and trust services for electronic transactions in the internal market (the EIDAS Regulation). Today the national legislation on eID and trust services is in line with the EIDAS Regulation and permits Malta to benefit from cross-border authentication and digital signing in eGovernment services.

4.3.3 Security aspects

Data Protection Act

The GDPR became applicable EU-wide on 26 May 2018, and concurrently the new Data Protection Act (Cap. 586) was passed through Parliament.

The Data Protection Act passed through Parliament on 14 December 2001 and came fully into force in July 2003. It was introduced in order to render Maltese law compatible with EU Data Protection Directive (95/46/EC), even though Malta was not yet an EU Member State. It outlined principles of good information/data handling to guarantee the protection of personal information. Data controllers, such as educational institutions, employers and banks, were obliged to inform individuals of the reasons for collecting information about them. Furthermore, individuals were assured that the data collected would not be used for any other reason than the purpose for which it was collected and were granted rights of access to the personal information held by the data controller. The Act provided grounds for processing personal data but made special provisions for processing sensitive personal data, a sub-set of personal data, in very specific stipulated circumstances.

Under the revised Data Protection Act (Cap. 586), subsidiary legislation related to specific processes in varying sectors was also enacted or reviewed for alignment with

the GDPR, including the Law Enforcement Directive (EU) 2016/280 and the Processing of Child's Personal Data in relation to the Offer of Information Society Services Regulations.

Measures for High Common Level of Security of Network and Information Systems Order (NIS Directive)

Through the Measures for High Common Level of Security of Network and Information Systems Order of 2018 (LN 2016 of 2018) the NIS Directive was transposed at the national level.

4.3.4 Interconnection of base registries

Public Registry Act

The Public Registry is covered by the Public Registry Act, the Civil Code, the Marriage Act, the Civil Unions Act, the Gender Identity, Gender Expression and Sex Characteristics Act and the Cohabitation Act. According to Article 238 (1), the Public Registry Office in Malta and Gozo will keep four registry books: one for the registration of acts of birth, one for the registration of acts of marriage, one for the registration of civil unions and one for the registration of acts of death.

Motor Vehicle Registration and Licensing Act

The Vehicle Registry was established by the Motor Vehicles Registration and Licensing Act, Cap. 368 of the Laws of Malta.

Companies Act

The Register of Commercial Partnerships is regulated by the 1995 Companies Act and holds basic information on every commercial partnership (all types of commercial partnerships, including companies) registered in Malta. Information such as the name of commercial partnership, the date of incorporation, the registered office, information concerning the officers (including identification numbers and residential address) and the shareholders (including identification numbers and residential address) and all statutory forms and M&A of the commercial partnerships can be downloaded. In the register of commercial partnerships, one can also access information on the beneficial owners of commercial partnerships. The incorporation of a new private limited liability company can be done electronically by the officers of such private companies, subject persons and company service providers, who can also submit statutory forms electronically, authenticated by their electronic signature duly authorised by the Registrar, as provided by Article 82 of the Companies Act. The agency in charge of the mentioned register is the Malta Business Registry which has already started the process of developing a system based on the blockchain using a private hyper-ledger. Land Registry

The Land Registry was created with the Land Registration Act, Cap. 296 of the Laws of Malta in 1982. The Land Registration Act defined how registration areas were created (Art. 10), which documents were necessary for the registration of immovable property (Art. 12), how land was described, and how to issue Certificates of Title. The legislation prescribed to identify land in a standard way, which in turn proved a vital component in the simplification and standardisation efforts of the public administration.

4.3.5 eProcurement

Public Procurement Regulations

The new National Public Procurement Regulations were published on 28 October 2016, transposing Directive 2014/24/EU, Directive 2014/25/EU, and Directive 2014/26/EU on

public procurement. Besides the substantive provisions related to public procurement, and the provisions related to purely electronic tools such as the Dynamic Purchase Systems and the Electronic Auctions, the Regulations, and specifically LN352 of 2016, provide that all procurement procedures conducted by a contracting authority shall be performed using the government eProcurement system.

Subject to specific conditions, all communication and information exchange, including electronic submission, must be performed via electronic means of communication. The authority responsible for the tendering process shall, by electronic means, offer unrestricted and full direct access free of charge to the procurement documents from the date of publication of the notice or the date on which an invitation to confirm interest is sent.

eInvoicing Legislation

The eInvoicing Directive 2014/55/EU was transposed into local legislation via Legal Notices 403 and 404 of 2018 that were published on 30 November 2018. The Directive mandated central government, government entities, local councils and regional authorities to be able to receive and process invoices electronically. Whilst the central government was mandated to be able to receive and process eInvoices by April 2019, other government entities, local councils and regional authorities were mandated to comply with the Directive by April 2020.

As part of the process, the Ministry for Finance (MFIN) embarked on various local and EU participating initiatives. An eInvoicing Committee was chaired by MFIN with the participation of the Treasury, Malta Information Technology Agency (MITA) and other local representatives of the central government to oversee the smooth implementation of the Directive for central government, government entities and local councils. For government entities and local councils, MFIN, together with the Ministry for Economy Investments and Small Businesses (MEIB), launched a National eInvoicing Forum to promote and implement eInvoicing. At the EU level, Malta participated in the European Multi-Stakeholder Forum on Electronic Invoicing (EMSFEI).

The European Standard, emanating from the European Directive on electronic invoicing for public authorities (2014/55/EU), defines a semantic data model for a core invoice, compliant with this Directive. The data model of this European Standard contains many optional elements. However, specific countries, groups, or organisations may create individual specifications for the core invoice model, known as "Core Invoice Usage Specification" (CIUS), in their respective domains. One of the organisations that created an individual specification for the CIUS is OpenPEPPOL and it created the PEPPOL BIS Billing 3.0. Following a thorough business impact assessment of the core invoice data model as established by the European Standard, the government of Malta will be adopting the PEPPOL BIS Billing 3.0 as its own CIUS, with no changes. To be able to do this, government decided to became an OpenPEPPOL end-user member.

The adoption of the PEPPOL CIUS guaranteed a high degree of interoperability since several Member States adopted this CIUS or based their local CIUS on the PEPPOL one. It means that the government will incorporate the PEPPOL CIUS in its systems and will be able to receive eInvoices through the PEPPOL eDelivery network. Joining OpenPEPPOL was an important part of Malta's strategy to support compliance with the European eInvoicing Directive (2014/55/EU), making it easier for businesses to engage with government online.

The Maltese government promoted the adoption of eInvoicing in its Digital Malta National Strategy 2014-2020. There is currently no eInvoicing platform in place in Malta. The Treasury Department within the Ministry for Finance (MFIN) is working on implementing a new Corporate Financial Management Solution (CFMS) across central

government, alongside an eInvoicing PEPPOL-compliant platform linking suppliers to the Solution. The first phase of the end-to-end process of eInvoicing to central government was expected to go live in 2020.

Electronic Invoicing in Public Procurement Regulations

The Electronic Invoicing in Public Procurement Regulations was adopted in 2018 by Malta (LN 404 of 2018).

4.4 Domain-specific legislation

Legal Notice on Justice

Through a legal notice entering into force in December 2018, the government of Malta continued to implement further reforms related to information in the justice sector. Furthermore, online services are offered by the Department of Justice, through its website.

Filing of Acts by Electronic Means in the Land Arbitration Board Regulations

The Filing of Acts by Electronic Means in the Land Arbitration Board Regulations were implemented in 2018.

Electronic Commerce Act (Chapter 426 of the Laws of Malta)

The Electronic Commerce Act provided for the application of legal requirements to electronic communications and transactions, including electronic contracts. The Act, as originally enacted, transposed into Maltese law EU Directive 1999/93/EC on a community framework for electronic signatures, plus the EU Directive 2000/31/EC on certain legal aspects of information society services, in particular electronic commerce, in the internal market. The competent regulator appointed to enforce the Electronic Commerce Act was the Malta Communications Authority (MCA).

In 2016, this Act was amended whereby the national provisions implementing Directive 1999/93/EC were deleted or amended, and new provisions introduced empowering the Malta Communications Authority, as the competent regulator, to act as the supervisory body for the purposes of Regulation (EU) No. 910/2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC. The Regulation harmonised the norms governing secure electronic interactions between citizens, businesses and public authorities in order to ensure that secure electronic identification and authentication was possible for access to cross-border online services offered by Member States. This created a common understanding for the regulation of electronic trust services such as electronic signatures, electronic seals, time stamps, electronic delivery services and website authentication.

4.5 Emerging technologies

Distributed Ledger Technology (DLT) and Innovative Technology Regulation

In July 2018, three new DLT Acts were unanimously approved by Parliament to regulate the industry. They included the:

- Malta Digital Innovation Authority (MDIA) Act;
- Innovative Technology Arrangements Act; and
- Virtual Financial Asset Act.

The MDIA Act provided for the establishment of the Authority (MDIA) to certify innovative technologies and introduce a new level of communication between national competent authorities. The MDIA plays a vital role in promoting government policies

that favour the development of Malta as a centre of excellence for technological innovation by implementing the best standards in the sector to position Malta at the forefront of technological innovation and create a cutting-edge hub for the digital economy. The MDIA acts as a conduit for the development of new economic sectors, whilst working in tandem to support other National Competent Authorities such as the MFSA and the MGA, from a technological perspective.

The MDIA's regulatory regime, the Innovative Technology Arrangements and Services (ITAS) Act, dressed up the technology making sure it meets criteria for safe use and an element of accountability. The ITAS Act facilitated the regulatory framework required for the MDIA to operate, in terms of review and assessment of requirements of legality, integrity, transparency, compliance and accountability of the related technology arrangements.

The MDIA published a set of guidelines after holding numerous meetings with businesses, technologists, policy makers and a multitude of different professionals which came into force on 1 November 2018. This was the general course of action which the MDIA also planned to take in the future for other initiatives in order to accommodate the ever-increasing pace at which technology is updated and developed. To maintain an overall consistent level of effectiveness, this required the adoption of a mindset which was both open to change when required and was quick to react when such a change was needed. It was for this reason that the MDIA had a unit with the main aim of keeping an eye on emerging technologies and developments which may very often prompt the need to update relevant guidelines.

The MDIA was a key player in establishing Malta as the Blockchain Island, the first jurisdiction to come up with a regulatory framework that made it possible to certify innovative technology. The MDIA set new technological standards that were not available anywhere and were aimed at instigating innovation.

The MDIA issued the accreditation of the first Systems Auditors (SAs) which applied for registration on 3 April 2019. The accreditation of SAs served as a seal of approval that certified they were fit and proper, and had the necessary technical skills, aptitude, capability as well as experience to handle systems audits related to Innovative Technology Arrangements (ITAs).

A SA is a service provider under the ITAS Act. Accredited Systems Auditors carry out system reviews and come up with an opinion on the management, security and functional correctness of ITAs. The SAs abide by the guidelines and control objectives published by the MDIA. These objectives are designed with the aim to assist the SA through an Audit Framework for ITAs. Furthermore, they build upon five key principles: security, processing integrity, availability, confidentiality and protection of personal data. It is through such certification by MDIA, which is not mandatory on the applicant, that a new service is being provided to operators, giving them the additional peace of mind.

The opinion of the Systems Auditors is key for the MDIA to issue a certification to ITAs. ITA applicants may approach the MDIA on a voluntary basis to certify their products, to promote them to the world and to prove that they are fit for purpose and meeting the standards of the MDIA. Through certification, the Authority aims to foster safer usage, protect users of innovative technology and thus increase adoption, whilst at the same time increasing the prospects for investment in innovative technology and therefore creating solid opportunities.

Further details on the established MDIA can be found on https://mdia.gov.mt/. The Virtual Financial Assets Act establishes the regulatory system for the Malta Financial Services Authority to manage the Virtual Financial Assets Market.



5 Digital Public Administration Governance

5.1 National

5.1.1 Policy

Office of the Prime Minister

eGovernment in Malta forms part of the remit of the Office of the Prime Minister. The development and implementation of the eGovernment policy is coordinated centrally by the Office of the Principal Permanent Secretary. The strategy is developed with broad stakeholder involvement; services are delivered through a mix of in-house and trusted third parties serving as service-delivery agents and implementation is done in both a matrix and in a decentralised manner through Ministerial Chief Information Officers (CIOs). The CIO Forum is chaired by the OPM and serves to ensure interoperability, scalability of initiatives and a "one government" approach.

Malta Information Technology Agency (MITA)

MITA, which falls under the remit of the Parliamentary Secretariat for Financial Services, Digital Economy and Innovation within the Ministry for Finance (MFIN), was established in July 2008. MITA is the central driver of the government's Information and Communications Technology (ICT) policy, programmes and initiatives. MITA's role is to deliver and implement the assigned programmes as set out in the Digital Malta National ICT Strategy 2014-2020, and as directed by the Parliamentary Secretariat for Financial Services, Digital Economy and Innovation from time to time. MITA manages the implementation of IT programmes in government to enhance public service delivery and provides the infrastructure needed to execute ICT services to government. MITA is also responsible for propagating further use of ICT in society and economy, and to promote and deliver programmes to enhance ICT education and the use of ICT as a learning tool.

5.1.2 Coordination

Malta Information Technology Agency

MITA serves as the central driver and coordinator of the ICT policy in Malta by becoming the means through which the government determines its ICT priorities. Thus, MITA prioritises national ICT targets, and embraces open standards and technologies as a matter of policy. Its main strategic goals are to deliver and manage the execution of all programmes, to serve as the central driver of information and communication technology policy, programmes and initiatives in Malta, to promote and deliver programmes aimed at enhancing ICT education and the use of ICT as a learning tool, and to proliferate the further application of information and communication technologies in society and the economy.

The Agency is dedicated to assisting the government in transforming technological innovations into real business solutions. Its unique approach combines an innovative array of ICT and project management services with focused delivery capabilities, using tried and tested methodologies to help fulfil government's strategies and projects and maximise the benefits of investment in technology.

Parliamentary Secretariat for Financial Services, Digital Economy and Innovation

The Parliamentary Secretariat for Financial Services, Digital Economy and Innovation within the Ministry for Finance (MFIN) coordinates the development and implementation

of eGovernment policy in the sense that both Malta Information Technology Agency (MITA) and Malta Communications Authority (MCA), the two eGovernment executive agencies, fall under the Parliamentary Secretariat's portfolio.



Hon. Clayton Bartolo

Parliamentary Secretary for Financial Services and Digital Economy

Contact details:

Parliamentary Secretary for Financial Services and Digital Economy
Ministry for Finance and Financial Services,
Cavalier House
Old Mint Str.,
Valletta VLT 1515

E-mail: clayton.bartolo@gov.mt **Source:** http://www.mfin.gov.mt

Digital Malta Governing Board

The Digital Malta Governing Board allows for strong governance which in turn supports the country's political leadership. The Governing Board is entrusted to enable management of the dependencies and interactions between players and mitigate the risks associated with adopting different policies and implementing various actions. The Governing Board represents primary stakeholders and reports to the Parliamentary Secretary responsible for Financial Services, Digital Economy and Innovation.

5.1.3 Implementation

Malta Information Technology Agency

MITA implements IT programmes in government to enhance public service delivery and provides the infrastructure needed to execute ICT services to government. MITA officially took over the operations of MITTS Ltd, with an extended role to cover projects and services on a national scale. MITA continues to excel in providing ICT infrastructure and services, professional project management and consulting services to the government.

eGovernment and Corporate Solutions Department, MITA

The eGovernment and Corporate Solutions Department (ECSD) within MITA aims to be a leader in the provision of services and solutions that enable the implementation of a whole-of-government approach to public service delivery. ECSD creates, operates and promotes the good use of shared platforms and reusable components to transform the way government operates, from front-end to back-office, in a modern and efficient way. Furthermore, the department provides government back-office solutions that improve efficiency and effectiveness through the standardisation of activities and procedures, provides a holistic and integrated view to senior public officials and maximises the economies of scale.

ECSD is organised into six functional units: Corporate Finance Programme, Corporate Solutions Support, Digital Transformation Programme, Mobile Government Programme, Payroll & HR Programme and the Workflow Automation Programme.



Ms. Priscilla Bugeja

Head – eGovernment & Corporate Solutions Department - Malta Information Technology Agency (MITA)

Contact details:

Malta Information Technology Agency (MITA)

Gattard House, National Road

Blata l-Bajda HMR 9010 Tel.: +356 2123 4710 Fax.: +356 2123 4701

E-mail: priscilla.bugeja@gov.mt **Source:** https://www.mita.gov.mt/en/

Programme Management Department, MITA

The Programme Management Department (PMD), within the Malta Information Technology Agency (MITA), is committed to delivering digital services that are first-rate by implementing a sound architecture, driven by real business transformation and software development excellence, and resulting into digital services and mission critical systems having a more modern technological footing.

PMD is organised into several Programme Units, some of which are focused on Internal Bespoke Development of Solutions and others on Project Management, Consultancy and Contract Management, Procurement and Implementation of procured solutions mainly Health, Funding, Customs, Justice and Home Affairs, Land and Public Registry, Social Policy and Taxation.



Pierre Vella

Head - Programme Management Department - Malta Information Technology Agency (MITA)

Contact details:

Malta Information Technology Agency (MITA)

Gattard House, National Road Blata I-Bajda HMR 9010

Tel.: +356 2123 4710
Fax.: +356 2123 4701
E-mail: pierre.vella@gov.mt

Source: https://www.mita.gov.mt/en/

Malta Communications Authority (MCA)

Since July 2008, the MCA has been responsible for the direct implementation of the actions to upgrade Malta's external ICT environment, to eliminate the digital divide and to promote eCommerce. In 2014, the MCA's legal mandate was extended to promote and facilitate ICT-driven innovation. The MCA is placed under the leadership of the Minister for Finance. The MCA's work aims to facilitate the development of an environment that is conducive to investment, innovation, social inclusion and economic growth.



Jesmond BugejaChief Executive Officer – Malta Communication Authority

Contact details:

Malta Communications Authority Valletta Waterfront, Pinto Wharf, Floriana, FRN1913

Tel.: +356 2133 6840 **Fax.:** +356 2133 6846 **E-mail:** info@mca.org.mt **Source:** http://www.mca.org.mt

Government Departments and Officially Appointed Bodies

Government Departments and Officially Appointed Bodies are responsible for the implementation of the eGovernment projects and initiatives falling under their respective jurisdiction.

5.1.4 Support

Malta Communications Authority (MCA)

The MCA is the statutory body responsible for the regulation of the electronic communications sector (telecommunications, radio communications and broadcasting transmission), eCommerce, eSignatures, eInclusion, eBusiness and the postal sector. The MCA's mission, mandate and functions derive from the Malta Communications Authority Act (Cap. 418). The MCA is the National Regulatory Authority (NRA) for these sectors in accordance with EU law as transposed into Maltese legislation.

Management Efficiency Unit (MEU)

The Management Efficiency Unit (MEU) is constituted as a separate organisational entity within the Office of the Prime Minister (OPM) and is primarily tasked with policy review initiatives and generally assisting government ministries and departments in the development and implementation of effective change management strategies intended to lead to improved government services.

In delivering its remit, the Unit works closely with and through the public administration to ensure that corporate principles and procedures are applied consistently throughout the public sector and that the key performance indicators of the ministries are met. Furthermore, the MEU operation-level reviews also directly/indirectly contribute to strengthening the eGovernment service portfolio, design and/or performance.

Department of Information

The Department of Information manages the government portal and the public service intranet.

Better Regulation Unit

The government of Malta, and especially its Better Regulation Unit, remains committed to simplifying the processes of the public administration for the benefit of citizens, businesses and the public administration management and staff, without affecting public interests. Work has been progressing steadily in a number of areas such as:

• **Governance and Policy** though the expansion of the better regulation agenda to encompass reduction of bureaucracy on citizens, businesses and Maltese

public administration and the creation of the Office of Commissioner for Simplification and Reduction of Bureaucracy within the Office of the Prime Minister.

- Simplification and Administrative Burden Reduction through the introduction and operation of a multi-channel citizen one-stop-shop service entitled servizz.gov, re-engineering of the business one-stop shop, entitled BusinessFirst, and continued implementation of simplification initiatives with regular annual reporting on simplification measures.
- Better Policy Making/Development through the introduction of the SME test, and the introduction of social impact assessment where major economic decisions or proposals are put forward.
- **Stakeholder Consultation** by means of expanding the consultation mechanisms including the use of social media and eHearings, launching an online public consultations web portal, and updating the directive and guidelines on consultation.

5.1.5 Interoperability coordination

Malta Information Technology Agency (MITA)

MITA, which falls under the remit of the Parliamentary Secretariat for Financial Services, Digital Economy and Innovation within the Ministry for Finance (MFIN), was established in July 2008. MITA is the central driver of the government's Information and Communications Technology (ICT) policy, programmes and initiatives. MITA's role is to deliver and implement the assigned programmes as set out in the Digital Malta National ICT Strategy 2014-2020, and as directed by the Parliamentary Secretariat for Financial Services, Digital Economy and Innovation from time to time. MITA manages the implementation of IT programmes in government to enhance public service delivery and provides the infrastructure needed to execute ICT services to government. MITA is also responsible for the coordination of interoperability activities in Malta.

5.1.6 Base registry coordination

Office of the Principal Permanent Secretary

A cohesive effort spearheaded by the Office of the Principal Permanent Secretary through the Data Governance Council brought together several significant stakeholders to establish the operational and legal requirements for setting up the first base registers, the person register and the address register. These are important steps towards the aim to instil the much sought once-only principle within the public administration.

5.1.7 Audit

National Audit Office of Malta

The National Audit Office's mandate consists of carrying out the full annual financial and compliance audit of all government offices and other public entities. Its mandate was extended to cover independent advisory and investigative powers, the examination of any financial matter concerning the use of public funds, and the performance/value for money evaluation audits of government offices, public entities and companies where the government is a majority shareholder.

5.1.8 Data Protection

Office of the Information and Data Protection Commissioner

The Office of the Information and Data Protection Commissioner is tasked with ensuring the respect of the individual's right to privacy with regard to personal information, and the enforcement of the relevant legislation in accordance to Data Protection legislation.

5.2 Subnational (federal, regional and local)

5.2.1 Policy

Local Councils

The government considers local government as a main vehicle to attainment and promote digital services at a local level. In view of this, local government aligns its policies with the National Digital Strategy 2014-2020 with the aim of offering accessibility to technology and service delivery via the front offices of Local Councils. To achieve strategic alignment, the central government through the Local Government Division provides the necessary technical support to Local Councils with a view to attain the Strategy's objectives.

5.2.2 Coordination

Department for Local Government

The Department for Local Government ensures that Local Councils have the legislative authority to respond to local needs and offers administration management. It also acts as a stimulant to the devolution and decentralisation processes. Furthermore, it now serves as a regulatory mechanism for Local Councils' operations.

5.2.3 Implementation

Local Councils

Local Councils are in charge of the policymaking and the implementation of eGovernment-related policies at the local level. In close cooperation with the central government and in particular the Local Government Division, local councils' targets are aligned with the National Digital Strategy 2014-2020 aiming to offer accessibility to technology and service delivery via the front offices of Local Councils.

5.2.4 Support

Department for Local Government

The Department for Local Government ensures that Local Councils have the legislative authority to respond to local needs and offers administrative support, along with statutory funding, to 68 Local Councils. It also acts as a stimulant to the devolution and decentralisation processes.

5.2.5 Interoperability coordination

No responsible organisations have been reported to date.

5.2.6 Base registry coordination

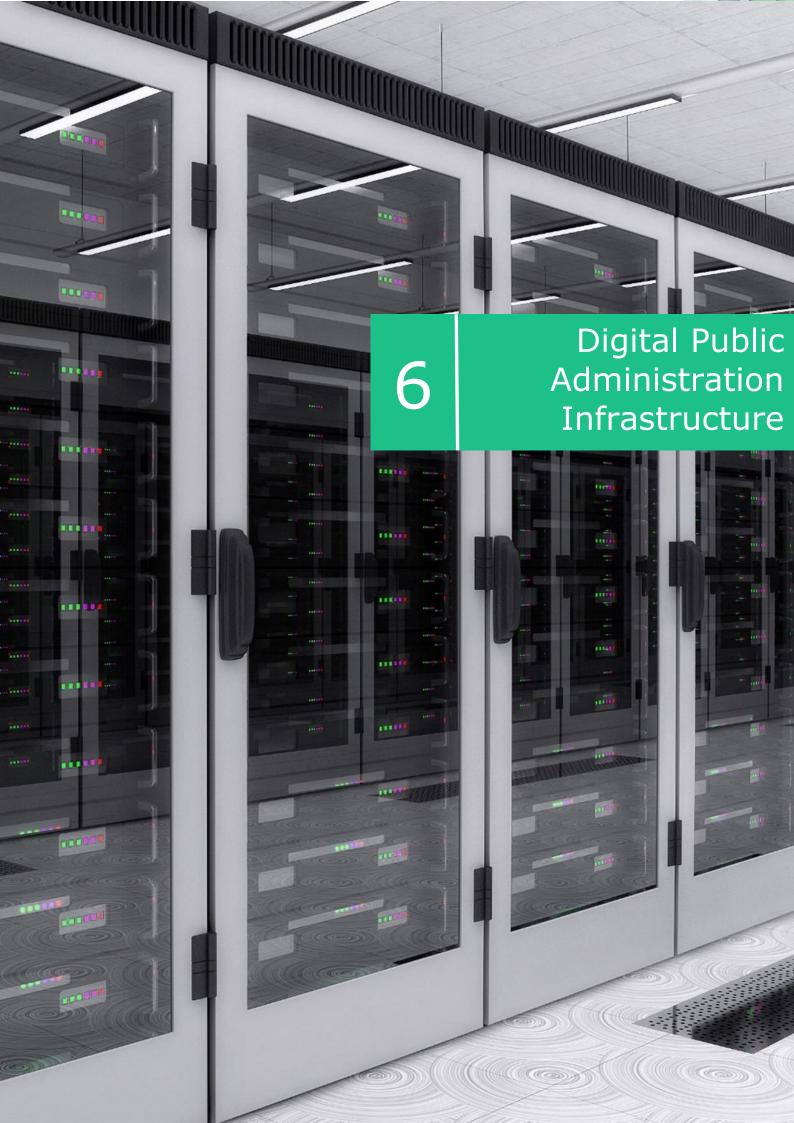
No responsible organisations have been reported to date.

5.2.7 Audit

No responsible organisations have been reported to date.

5.2.8 Data Protection

No responsible organisations have been reported to date.



6 Digital Public Administration Infrastructure

6.1 Portals

6.1.1 National portals

Government Portal

The portal is a crucial service for the government of Malta, because it is the electronic interface between the government and the public. In this regard, the government of Malta, through the Malta Information Technology Agency (MITA), has continued to invest heavily in this sector. This was done in order to continue providing the best infrastructure for the hosting of the government's public-facing portals. A new portal hosting platform was launched in 2019. The new platform is based on Microsoft SharePoint 2016 and aims to offer an out-of-the-box solution to the government for the address of non-standard branded sites.

The government of Malta's portal is an institutional site providing comprehensive and meaningful information on government ministries, policies and services. Government services and information are structured according to the needs of specific citizen groups/events. An A to Z list of government websites can be accessed through the portal. In late 2018, the gov.mt website and the sub site doi.gov.mt, were reorganised and relaunched with a new brand. The government of Malta has its official pubic-facing website at www.gov.mt. In the past this website used to be a gateway for all the necessary information and links about public administration services. This role has now been taken over by the website servizz.gov.mt.

Servizz.gov.mt website

The Servizz.gov Agency is the government's one-stop shop for the general public, and www.servizz.gov.mt is now the central website for public administration services. Through this website, citizens can look up services categorised under 12 super sectors. The purpose of establishing such sectors was to simplify the categorisation of services, since now they are linked to a sector which is not bound to change, rather than to a specific ministry which is highly subject to change. The website also offers the possibility for citizens to report complaints and excessive bureaucracy, give suggestions and request information. A customer relationship management system is the infrastructure of the IT system where all cases are processed against service level agreements and investigated in the most efficient manner. Services currently provided on www.mygov.mt will feature on www.servizz.gov.mt.

The former eForm landing pages were also consolidated within the servizz.gov portal in a homogeneous and consistent manner. The servizz.gov portal relies on the eForms platform to load the various services that the public requires. The forms on the eForms platform enable information to be collected once at source and are subsequently electronically distributed to the respective government entities. The eForms platform is also integrated with other electronic services, namely the Government Payment Gateway (GPG), electronic identity (eID), SMS notifications and Microsoft Exchange for email notifications.

Data.gov.mt website

The new Maltese government's National Data Portal has two main sections namely (1) the Open Data Portal and (2) the Internal Data Sharing services. A structured approach to the sharing of data is being implemented through the facilities being developed under the National Data Portal specifically to replace the present data-related facilities currently served by the Corporate Data Repository (CDR) intranet. The National Data Portal will be used for the harvesting of metadata for the European Data Portal.

The Open Data Portal is the one-stop shop for the discovery, viewing, downloading and online usage of data which responds to all the requirements of the open data definition. The data services available in this part of the National Data Portal do not require any user registration or authentication and all the functionalities are available to any user, whether a previous registration has been made or not. If a voluntary registration is made, this can only be to enable "push" notifications that are of benefit to the user and should in no way serve as a discriminatory tool.

The internal data sharing section of the National Data Portal is restricted to public administration officers and any other person who is authorised and involved the processes relating to the dissemination and consumption of data services.

Government Intranet for the Public Service

Additionally, MITA offers a collaborative platform, which is also based on Microsoft SharePoint, for document management, collaboration and intranets. This platform is widely used within government but most notably it is used for the government Intranet for the Public Service – intra.gov.mt. The Intranet for the Public Service is available to all government departments/entities and their employees. Through a collaboration site, intra.gov.mt provides any participating government department/entity the facility to share activities such as document management and workflows that address the internal business requirements of the specific department orentity. The platform holds information in the form of circulars, news, events, directives, newsletters, vacancies, management resources, courses and scholarships and is restricted to public service officials.

Data Protection Portal

This portal, accessible through the government intranet, came into operation in February 2006, and enabled data protection officers to have access to guidelines and templates to ensure that government processes are compliant with the GDPR. As of May 2018, the Data Protection Unit within the Ministry for Justice, Culture and Local Government (MJCL) took the decision to open up this portal to all officers with access to the intranet, so that all guidelines were available to all and not limited to data protection officers.

Judiciary of Malta Portal

The portal of the Judiciary of Malta provides the public with extensive information resources on the Maltese judicial system, the judiciary, the judges and magistrates, as well as the courts they sit in. It offers a latest news section and an insight on the history of the Maltese judiciary and the important judgements that have been pronounced.

eCourts Portal

Improvements to the eCourts portal were made to provide more services online both for citizens and for legal professionals, including new modules for civil cases and judgements as well as a judicial sales component. Work is in progress on a new legislation website based on Electronic Legislation Identifier (ELI) standards which, together with a content management system, will eventually digitise the workflow from the drafting stage to publication. Work on an electronic system for the online provision of notarial acts continued until the system was launched in 2019. Work on a technology refresh of the Malta Courts of Justice Network infrastructure continued through 2019. By the end of 2019, all computers at the Courts of Justice were expected to be modern computers with at least i3 processors.

Legislation Portal

The Legislation Portal is the main portal that makes all Maltese legislation available online, including the consolidated chapters of the laws of Malta, and primary and secondary legislation amongst others. Legislation.mt currently conforms to Pillar 1 of the European Legislation Identifier (ELI). The portal is currently available online and will soon be officially launched.

Notarial Acts Portal

The Notarial Acts Portal provides the ability for the general public and notaries to procure public deeds online from the comfort of their home. The portal is currently available online and will soon be officially launched.

Freedom of Information Portal

The Freedom of Information Portal provides online facilities to make Freedom of Information Reguests.

Kultura Malta Portal

The Kultura.mt Portal acts both as a cultural calendar for all public cultural events and as a common online ticketing platform for all public cultural organisations, providing a harmonised user experience to customers.

myHealth Portal

The national myHealth Portal gives patients and the doctors they choose to link with access to specific electronic health records. The following data can be accessed: case summaries (inpatient discharge letters from 2008 onwards for Mater Dei Hospital and other government hospitals); medicines entitlement, prescription and dispensing records at a pharmacy of choice; laboratory results and medical image reports; vaccination records; future outpatient/clinic appointments at government hospitals and health centres; copies of notifiable infectious disease forms sent by doctors through myHealth. A functionality for online ordering of lab tests and medical images by private doctors has been added to the myHealth Portal.

Use of the portal has grown steadily, with more than 85 000 patients now linked with doctors through myHealth. The portal is evolving to become the front-end for the National Electronic Health Records that are currently under implementation.

Recruitment Portal

In 2018 a new Recruitment Portal, featuring the Public Service website design, was launched. This new responsive website replaced the previous legacy recruitment portal, which was later decommissioned following an extensive backup process. A mobile app titled Join the Public Service, which is connected to the new recruitment portal, was launched in mid-2018. Its aim was to alert the general public about job opportunities related to areas of their interest within the public administration.

6.1.2 Subnational portals

Local Councils Portal

The Local Government Portal aims at providing holistic information about the local government in Malta. With a view to empower the role of Local Councils and assist citizens in easily accessing the councils' services, a dedicated sub-portal provides information specific to individual Local Councils and Regional Committees. The main objectives for the creation of this web portal were to encourage Local Councils to effectively interact with the community in general and to provide international users

with a valuable tool allowing them to better understand the geo-cultural composition of the Maltese Islands, with their different specificities that prevail in each locality. The portal also promotes the advantages of standardisation, opening the channels of locality-based prioritisation and differentiation.

6.2 Networks

Next Generation Access (NGAs)

Malta is the European leader in NGA broadband access as confirmed through European DESI reports. The Malta Communications Authority plays an important role in facilitating and nurturing a healthy and competitive business environment and infrastructure-based competition.

MAGNET

MAGNET was implemented in 1995 as the MAlta Government NETwork that connects all government ministries, departments and agencies, as well as Local Councils, police stations, libraries, hospitals, health centres, social services offices and embassies. This network enabled the government to proliferate IT and information society applications such as email, the internet, and corporate applications like the Common Database (CdB) and the Departmental Accounting System (DAS) to help facilitate and improve the efficiency of the public service. The availability of this network enabled the government to launch its eGovernment services. A new network, "MAGNET II", was launched in July 2005 and partly replaced MAGNET. This new state-of-the-art network presented a number of benefits for users compared to its predecessor. In particular, MAGNET II provided enhanced bandwidth per site, offered better reliability through strict service level agreements (SLAs), guaranteed 99.8% minimum site availability and was fully secure through extensive encryption.

In 2015, MAGNET III was launched to provide cost effective connectivity services to government. By the end of 2016, all MAGNET II sites migrated to the MAGNET III infrastructure. Whilst retaining the strongholds of MAGNET II, the MAGNET III infrastructure offered flexible bandwidths in accordance with client business needs. Another major benefit of MAGNET III was the network's ability to transport Voice over IP (VoIP) calls efficiently and effectively between all connected organisations. A government-wide intranet became available to all entities connected to the network. Malta Public Service Intranet allowed document exchange and sharing across ministries and departments. During 2019, 21 new MAGNET III sites were commissioned.

Government Core Network Upgrade

The Malta Information Technology Agency (MITA) core network infrastructure is the junction through which all network traffic originating from any government remote site gets transported to its intended recipient. The core network infrastructure is a fundamental building block on which MITA can provide a wide variety of government services, thanks to its robustness, high availability, high speed, high capacity and security measures.

Trans European Services for Telematics between Administrations (TESTA)

Malta uses the Trans European Services for Telematics between Administrations (TESTA) network as the main cross border infrastructure to communicate digitally among the EU agencies, institutions and Member States.

6.3 Data Exchange

Maltese Government Common Database

The Maltese Government Common Database (CdB) was enhanced with some minor amendments. An ongoing effort is being made for the simplification of processes by internally sharing data and re-use previously gathered information, in line with the once-only principle.

National Data Portal

A beta version of the Portal was soft-launched in April 2019. It enabled a shared data management platform for the finalisation of the Administrative Registers which will eventually serve as the backbone for all data governance services.

Cybersecurity Digital Service Infrastructure (DSI)

The Cybersecurity Digital Service Infrastructure (DSI) is underpinned by the European Strategy for Cybersecurity: it provides an information sharing platform ('MeliCERTes') facilitating operational cooperation among Computer Security Incident Response Teams (CSIRTs), as well as funding for CSIRTs to effectively take part in its activities. It implements the following activities:

- establishes a direct access point between CSIRTMalta (a national CSIRT) and MeliCERTes. The other beneficiaries - MT-CSIRT and CIS - will share information through CSIRTMalta;
- increases the preparedness of CSIRTMalta, CIS, and MT-CSIRT for the requirements and tasks arising from the NIS Directive, including training of beneficiaries' personnel.

The action is in line with Malta's National Cybersecurity Strategy.

Notifications Service

As part of the eGovernment strategy to enhance citizen communication, the government of Malta invested in an eGovernment Shared Service (eGSS), the Notifications Service, to enable a one-way communication channel between government, citizens and businesses. The Notifications Service provides a gateway for messaging both by SMSs and emails, allowing citizens to be notified on various governmental services instantly.

Through a purpose-built web-based portal, public entities and ministries are able to send notifications to citizens using their services. Messages can be sent either individually or in bulk, using SMS or email as delivery channels.

6.4 eID and Trust Services

eIDAS Node

In 2018, Malta was one of only four Member States that successfully met the regulatory deadline for the recognition of other Member States' eID schemes under the eIDAS Regulation. As the operator of Malta's eIDAS Node, MITA, was successfully certified following a TickITplus ISO9001 and ISO27001 audit, the Node was set in full production mode in July. The German middleware was successfully integrated in the environment in September, enabling the mandatory recognition of the notified German electronic identity scheme. This placed Malta as one of the top-running Member States in the adoption of the eIDAS Regulation and facilitated the early development of cross-border services. In 2019, Malta succeeded in integrating with its eIDAS Node Infrastructure all those notified Member States for which the deadline for recognition by Malta was October 2019, namely Belgium, Luxembourg, Estonia, Croatia, Spain and Portugal. In 2020, preliminary work will start for the implementation of the Single Digital Gateway.

National Identity Management System (NIDMS)

The existing National Identity Management System aims to support the core identity management processes, including the issuance of electronic identity cards (eID Card), ePassports, biometric visas and residence documents. The government operates a number of identity management systems, the most important of which are: core database systems, electronic identity (eID) infrastructure, an electronal system, a national identity card system and the passport system. However, it should be noted that these and other disparate information systems are not entirely interoperable.

Electronic Identity (eID)

To keep the eID solution secure, robust and stable for eGovernment service continuity, the Malta Information Technology Agency (MITA) approved in 2014 a technology upgrade for the solution that included a migration to a newer and fully supported hosting platform, and an alignment of the software development platform to recent versions. The technology upgrade included the first phase of simplification of the authentication mechanism through the introduction of a new single sign-on screen for a harmonised user experience and additional security. In parallel, several high-level consultations were held to discuss the potential successive phases of simplification.

The technology upgrade for the eID solution was completed in 2016. The migration to the new environment resulted in a noticeable improvement in performance and stability and was achieved with no disruption to the subscribers and the relying parties. The new single sign-on screen was also launched, following a complete re-engineering of the user interface and functionality to achieve the desired simplification. This simplification in the user experience was accompanied by a complete overhaul of the registration and activation processes where the reliance on the PIN letter was removed in favour an electronic activation process. Several eGovernment services, notably servizz.gov, eForms, myHealth, taxation, ARMS and social security have since lined up to integrate with the new screen to achieve the desired outcomes.

In 2017, MITA completed the final phase of the simplification of the eID authentication mechanism, which envisaged an alignment of the assurance levels to achieve a basic assurance level using the eID account and password, and a high assurance level using the ID card and PIN. This provided a better choice of usability or security for subscribers and relying parties. The basic assurance level was intended to have a password with reduced mandatory complexity with an optional one-time password. The high assurance level potentially involved additional usability challenges in view of the initial set up and installation of the ID card, but still provided the additional security required.

In 2018, Identity Malta together with MITA addressed the priority technical gaps of the eID system with the GDPR.

In 2019, an optional two-factor authentication mechanism for eID based on a time-based one-time password (TOTP) mechanism was introduced, intended for specific eGovernment services which require a substantial level of assurance. Support for the OpenID Connect Protocol to facilitate better access from native mobile applications was also introduced. Identity Malta together with MITA are now working on introducing a new personal dashboard for eID in 2020 which will allow subscribers to manage all their functionalities from one location. The dashboard will be based on a latest generation user interface which will be responsive and accessible.

The achievements made and the on-going work on the eID system mean that the government has a stable and reliable platform for electronic authentication to enable eGovernment services at a local level, with different levels of assurance providing the required choice between usability and security. Future initiatives will include notifying

the Malta eID scheme/s, under the eIDAS Regulation, to facilitate cross-border authentication with other Member States.

Electronic Identity Cards (eID Card)

The eID Card is an identity card which, in addition to the traditional identification features, also includes an electronic component which allows the citizen to access an array of electronic services provided by the government and other third parties.

Maltese nationals who are 14 years of age and older are entitled to an eID Card. The card's electronic features are available to all card holders with one exception: the signature certificate is only available to citizens aged 18 years and older.

Residents who are not Maltese nationals, yet who are eligible for a residence document or a residence permit, will have, through electronic documents, the same eID features as the eID Card. Specifically, EU nationals, spouses of EU nationals and regular third country nationals residing in Malta have the same eID features and accesses as Maltese nationals.

The electronic chip of the eID card holds the same biographic data that is visible on the face of the card, including a digital image of the citizen. The chip includes two digital certificates for authentication and signatures, and applications for ticketing and electronic purse.

The digital certificate for authentication enables the citizen to log in securely to the eGovernment services. The digital certificate for signatures is an enabler for electronic signatures. These are qualified certificates under the eCommerce Act and the electronic signature will be equivalent to a hand-written signature. Both certificates are protected by different Personal Identification Numbers (PINs).

The eID Card can be used by citizens to securely access their health information through the eGovernment services but does not hold any sensitive health data on itself. An eID account is required to access health information through the myHealth Portal. No fingerprint biometric data is held on the eID Card and it does not replace the voting document issued by the Electoral Commission.

ePassports

Passports issued as from the 1 October 2008 are all ePassports. These first generations of electronic passports had a BAC (Basic Access Control) chip. The biometrics captured were photo image and signature. As from 1 July 2010, the ePassports' chip was upgraded to EAC (Extended Access Control). Fingerprints were added to the biometrics captured.

On 30 March 2015, the ePassports' chip was upgraded to SAC (Supplemental Access Control). However, the same biometrics were captured as the chip is the latest third generation to date.

The main reasons that led to the introduction of an ePassport were to:

- help fight passport fraud;
- reduce passport forgery;
- facilitate more robust border controls; and
- establish a link with the lawful owner.

6.5 eProcurement

Electronic Public Procurement System (ePPS) Platform

The eProcurement Solution procured by the government of Malta is the ePPS (electronic Public Procurement System) platform which is supplied by European Dynamics S.A. The platform was launched in July 2011 to facilitate the Maltese government's transition to online procurement, covering the full lifecycle of public procurement. The Solution constituted an eProcurement platform that comprised a core and a number of eProcurement-specific services, offering several parameterisation capabilities for meeting the exact needs of a Purchasing Authority.

The eProcurement solution enables actual tender bids to be submitted securely online using the most common procedures, such as the open procedure and framework agreements, as well as other more specific procedures, such as negotiated procedure, competitive dialogue, restricted procedure and concessions. The system also caters for new and unique procedures such as eAuctions and Dynamic Purchasing System. All procedures can be either evaluated using the lowest price, cost or best price-quality ratio mechanism. The platform is currently used by the Department of Contracts, the Ministerial Procurement Units which represent different Contracting Authorities within that Ministry and individual Contracting Authorities that form part of the public sector.

Department of Contracts Portal

Since the launch of the eProcurement platform for Malta, the Department of Contracts portal has taken a different role. Rather than being an interactive site for economic operators to learn about and participate in tender opportunities, it now serves as a window for procurement regulations and policies across government. Essentially, all the Public Procurement Regulations, Contracts Circulars, Procurement Policy Notes (PPNs) and Manuals of Procedures are available to all. Furthermore, there are also links to all the tenders published between 2008 and 2012, when the National eTenders portal took over as the site for tender opportunities, and other procurement resources like awards (1999-2017), plus the Department's annual reports on the workings of the GCC.

6.6 ePayment

ePayment Gateway

The eGovernment electronic payment gateway is part of the horizontal infrastructure supporting the Maltese eGovernment. It complements the electronic identity (eID) framework in providing a layer for the development of eServices to both citizens and businesses. The service is provided both as standalone, hence portals or mobile applications that directly integrate to the gateway, or through other set platforms, such as eForms.

The service grew from a mere 7 600 transactions in 2003 to 650 000 in 2018, a year that saw transactions worth a total of EUR 103 million and an increase of more than EUR 5 million over the previous year. The setup offers stability and security. Its contracted availability is 99.85% per month and handles eight transactions per second. In the past 12 months, the government of Malta continued to strengthen this vital setup through the following initiatives:

- 1. 3D secure enabling;
- 2. REST API stack provision to widen the services for mobile payments;
- 3. introduction of eWallets;
- 4. continued hardening of the infrastructure; and
- 5. facilitating integration through revised and refreshed documentation.

This was done to continue to instil trust in the payment gateway with the aim of increasing uptake and usage.

6.7 Knowledge Management

My Personal Kiosk

My Personal Kiosk is the eAdministration service launched in 2018 to provide public service employees with the opportunity to access their leave balances (sick and vacation), view their payslips and FS3 for the last three years. Additionally, employees can check their basic HR details as currently available at the People & Standards Division. The service is sourcing information from the back-end HR and payroll systems.

The Malta Public Service Intranet: Intra.gov.mt

The intranet for the public service is available to all government departments/entities and their employees. Intra.gov.mt, through a collaboration platform, provides any participating government department/entity the facility to share activities such as document management and workflows that address the internal business requirements of the specific department/entity. Amongst others, the intranet holds information such as circulars, news, events, directives, newsletters, vacancies, management resources, courses and scholarships and is restricted to public service officials. All the eAdministration services launched in 2018 are included on the intranet.

6.8 Cross-border platforms

Deployment of cross-border eHealth services

The CEF funding for the eHealth Digital Service Infrastructure (DSI) supports actions to set up the necessary infrastructure for the exchange of health data across national borders within the EU and for the provision of interoperable eHealth services.

It supports Malta's efforts to be part of this secure peer-to-peer network allowing the exchange of Patient Summaries (PS) between EU Member States. These services have been tested and went live in 2019, according to Malta's latest service implementation and deployment release plan.

The system developed during the implementation of this service is connected to the national eHealth infrastructure. Since December 2019, Malta is taking part in the exchange of Patient Summaries through its National Contact Point for eHealth (NCPeH); the first services deployed are with other "first wave" countries, i.e. Luxembourg, Portugal, Croatia and the Czech Republic. Services with other EU countries will start when these countries are ready for deployment.

6.9 Base registries

Contracts Register

The Maltese government has embarked on the implementation of a Contracts Register based on the World Bank's Open Contracting Data Standard and also the implementation of the European Single Procurement Document (ESPD) and integration with eCERTIS and National Registers. The first is a significant statement on transparency, whereas the second continues to automate processes and enshrines the once-only principle.



7 Cross Border Digital Public Administration Services for Citizens and Businesses

Further to the information on national digital public services provided in the previous chapters, this final chapter presents an overview of the basic cross-border public services provided to citizens and businesses in other European countries. Your Europe is taken as reference, as it is the EU one-stop shop which aims to simplify the life of both citizens and businesses by avoiding unnecessary inconvenience and red tape in regard to 'life and travel', as well as 'doing business' abroad. In order to do so, Your Europe offers information on basic rights under EU law, but also on how these rights are implemented in each individual country (where information has been provided by the national authorities). Free email or telephone contact with EU assistance services, to get more personalised or detailed help and advice is also available.

Please note that, in most cases, the EU rights described in Your Europe apply to all EU member countries plus Iceland, Liechtenstein and Norway, and sometimes to Switzerland. Information on Your Europe is provided by the relevant departments of the European Commission and complemented by content provided by the authorities of every country it covers. As the website consists of two sections - one for citizens and one for businesses, both managed by DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) - below the main groups of services for each section are listed.

7.1 Life and Travel

For citizens, the following groups of services can be found on the website:

- Travel (e.g. Documents needed for travelling in Europe);
- Work and retirement (e.g. Unemployment and Benefits);
- Vehicles (e.g. Registration);
- Residence formalities (e.g. Elections abroad);
- Education and youth (e.g. Researchers);
- Health (e.g. Medical Treatment abroad);
- Family (e.g. Couples);
- Consumers (e.g. Shopping).

7.2 Doing Business

Regarding businesses, the groups of services on the website concern:

- Running a business (e.g. Developing a business);
- Taxation (e.g. Business tax);
- Selling in the EU (e.g. Public contracts);
- Human Resources (e.g. Employment contracts);
- Product requirements (e.g. Standards);
- Financing and Funding (e.g. Accounting);
- Dealing with Customers (e.g. Data protection).

The Digital Public Administration Factsheets

The factsheets present an overview of the state and progress of Digital Public Administration and Interoperability within European countries.

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Informatics (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from Andrew Camilleri (Permanent Representation of Malta to the European Union).



The Digital Public Administration Factsheets are prepared for the European Commission by Wavestone

An action supported by ISA²

ISA² is a EUR 131 million programme of the European Commission which develops digital solutions that enable interoperable cross-border and cross-sector public services, for the benefit of public administrations, businesses and citizens across the EU.

ISA² supports a wide range of activities and solutions, among which is the National Interoperability Framework Observatory (NIFO) action.

ISA² solutions can be used free of charge and are open source when related to IT.

Contact ISA²

isa2@ec.europa.eu

Follow us



@EU_ISA2 @Joinup_eu



isa² programme