



Member States Questionnaire (MSQ) for the United Nations E-Government Survey 2020

The objective of this questionnaire is to gather information from the Member States in preparation of the United Nations E-Government Survey 2020. Please note that these responses do not directly affect the UN E-Government Development Index (EGDI), which is a composite index of Online Service Index (OSI), Telecommunications Infrastructure Index (TII) and Human Capital Index (HCI). UNDESA¹ assesses national portals with the assistance of independent researchers to construct OSI, requests data from the International Telecommunications Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) to construct TII and HCI respectively. For any questions about this questionnaire, please contact dpidg@un.org.

Malaysia

29/03/2019

I/We hereby authorize UNDESA to publish my/our responses as deemed necessary.

I. Institutional Framework

1. What is the official **e-government**² portal at the national level? If more than one, please list all.

<https://www.malaysia.gov.my>

2. Please also provide **URLs** for below **specific portals**, if exists:
a. E-services³:

<https://www.malaysia.gov.my/portal/digitalservices>

¹ This questionnaire is conducted by the Division of Public Institutions and Digital Government (DPIDG) of the UNDESA.

² **E-government or digital government** will be used interchangeably in this survey and is defined as delivering services online and engaging people by using Information and Communication Technologies (ICTs)

³ A specific portal where you can see the list of all online services available for the public

b. [E-participation⁴](#):

<https://www.malaysia.gov.my/portal/category/658>

Employment:

https://www.mohr.gov.my/index.php/en/?option=com_content&view=article&id=950

Social Protection:

<https://www.kpwkm.gov.my/kpwkm/index.php?r=portal/soalSelidik>

<http://inhouse.imi.gov.my/limesurvey/index.php/983817?lang=ms>

Education

<https://www.moe.gov.my/index.php/my/suara-anda>

Health

<http://www.moh.gov.my/index.php/pages/view/1673>

Energy and Environment

<https://www.mestecc.gov.my/web/en/survey-public-feedback/>

Water

<http://www.kats.gov.my/en-my/e-Participation/Pages/default.aspx>

Housing

<http://www.kpkt.gov.my/index.php/pages/view/487>

Industry/Trade

<https://grp.miti.gov.my/>

⁴ **E-Participation** is about fostering civic engagement and open, participatory governance through Information and Communications Technologies (ICTs).

c. [Open government data](#):

<http://www.data.gov.my/>

d. Public procurement:

<https://www.eperolehan.gov.my/>

e. Other major portals at the national level:

<https://malaysiabiz.mampu.gov.my>
<http://www.bless2.gov.my/>

3. Please provide **name(s) and URL(s)** of the government agency/department/ministry at the national level in charge of e-government.

Malaysian Administrative Modernisation And Management Planning Unit (MAMPU)
<http://www.mampu.gov.my>

4. Does your country have a **Chief Information Officer (CIO)**⁵ to manage national cross-agency e-government programs/strategies?

Name: Dr. Suhazimah binti Dzazali

Title: Government CIO and Deputy Director General (Information Communication & Technology)

Organization: MAMPU, Prime Minister's Department, Malaysia

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⁵ CIO or a similar senior official with a leadership role, sometimes referred as Chief Technology Officer (CTO) or Chief Digital Officer (CDO)

5. Please provide **names and URLs** of the government agencies/ministries/departments at the national level in charge of the following:

a. Planning and Development

<http://www.mea.gov.my>

b. Education

Lower Education (<https://www.moe.gov.my>); Higher Education (<http://www.mohe.gov.my>)

c. Health

<http://www.moh.gov.my/>

d. Social Protection and Welfare

<https://www.kpwkm.gov.my/>

e. Employment and Decent Work

<http://www.mohr.gov.my>

f. Environment

<https://www.mestecc.gov.my>

g. Energy/Water

Energy (<https://www.mestecc.gov.my>); Water (<http://www.kats.gov.my>)

h. Finance/Taxation

Finance (<http://www.treasury.gov.my>); Taxation (<http://www.hasil.gov.my>)

i. Industry/Trade

<https://www.miti.gov.my>

II. Strategy and Implementation

6. Is there a **national development strategy** incorporating the [Sustainable Development Goals \(SDGs\)](#)?

Yes. Currently Malaysia is implementing the Eleventh Malaysia Plan (11MP) <http://www.mea.gov.my/ms/rmk/rancangan-malaysia-kesebelas-2016-2020> which is a national-level five-year development plan. The Eleventh Malaysia Plan (11MP) was reviewed <http://www.mea.gov.my/ms/rmk/kajian-separuh-penggal-rancangan-malaysia-kesebelas-2016-2020> and aligned to the National SDG Roadmap which will provide direction for the adoption of the 2030 Agenda in three (3) phases, coinciding with the five-year Malaysia Plan periods, incorporating SDGs into the national development framework. The three (3) phases are (i) Phase 1: 2016 – 2020; (ii) Phase 2: 2021 – 2025; and (iii) Phase 3: 2026 – 2030. The document can be downloaded <http://www.mea.gov.my/sites/default/files/Kajian%20Separuh%20Penggal%20RMK11.pdf>.

Malaysia presented SDG's indicator at the 47th Session United Nations Statistical Commission (UNSC). The list and target of the document can be view at https://www.dosm.gov.my/v1/index.php?r=column/cone&menu_id=bEdTaUR1ejcrZUhGQIFtRVI4TG93UT09

On that notes, Malaysia is preparing Twelve Malaysia Plan (12MP) for 2021-2025 <http://www.mea.gov.my/ms/content/mesyuarat-penyediaan-rmke-12-2021-2025>

In the context related to SDG 16 Peace Justice and Strong Institution>16.6 Develop effective, accountable and transparent institutions at all levels, Malaysia has launched National Anti-Corruption Plan 2019-2023 on 29 January 2019. The plan can be viewed at <http://www.mea.gov.my/ms/content/pelancaran-pelan-antirasuah-nasional-2019-2023>

7. Is there a **national e-government strategy/digital readiness strategy** or equivalent?

Yes. The national e-government strategy for Malaysia is articulated in several plan: The Malaysian Public Sector ICT Strategic Plan 2016-2020 contains national e-Government strategy for Malaysia.

(http://www.mampu.gov.my/images/agensikerajaan/perkhidmatan/The-Malaysian-Public-Sector-ICT-Strategic-Plan-2016_2020.pdf)

Full document (available in Bahasa Malaysia) can be access via

<http://www.mampu.gov.my/ms/penerbitan-mampu/send/2-buku/680-pelan-strategik-ict-sektor-awam-2016-2020-versi-bm-2>

In addition to the main strategy, Malaysia has also develop Pelan Strategik e-Pembayaran Sektor Awam or Public Sector E-payment Strategic Plan which is can viewed at http://www.mampu.gov.my/images/pengumuman/PSPSA_2016-2020_Final.pdf.

For more holistic and comprehensive strategy to adopt Digital Transformation in public sector, Malaysia has also developed Pelan Pendigitalan Penyampaian Perkhidmatan Kerajaan or Public Sector Digitalisation Plan. The document can be downloaded at

<http://www.mampu.gov.my/ms/penerbitan-mampu/send/157-tahun-2017/995-pelan-pendigitalan-penyampaian-perkhidmatan-kerajaan>

On top of that, to empower and strengthen the Malaysian Communications and Multimedia sector as a leader in the region towards a people-centric communications and making full-fledged digital nation to a reality, Malaysia has proactively formulated the Communications & Multimedia Blueprint 2018-2025. The full document can be downloded at

https://www.kkmm.gov.my/images/171211_kkmm_blueprint2018_2025.pdf

Moreover, Malaysia has initiated a long term collaborating with World Bank Group to execute The Open Data Readiness Assessment (ODRA) programme starting from July 15, 2016 until January 31, 2017 and the Open Data Readiness Assessment report has been published in May 2017. This report was launched by the Minister of Prime Minister's Department during our Open Data Day on 25th May 2017.

<http://www.data.gov.my/article/readiness#11>

8. Please check whichever applies.

National e-government strategy or equivalent:

- has an implementation plan.
- is aligned with the national development strategy
- is aligned with the Sustainable Development Goals (SDGs).
- is aligned with sub-national/local digital development strategy.
- has an emphasis on digital-first principle
- has an emphasis on digital by default; digital by design; mobile-first principle
- has an emphasis on once-only (data) principle
- has an emphasis to ‘leave no one offline’ or to ‘leave no one behind’; or other specific measures to ensure e-government is accessible by the most vulnerable groups⁶
- makes specific reference to e-participation, digital inclusion and/or engagement.
- makes specific reference to the use of social media in the government.
- makes specific reference to the use of new technologies⁷ such as artificial intelligence, blockchain, big data

Please refer to APPENDIX 1

III. Legal Framework

9. Is there any legal framework on:

- access to information such as Freedom of Information Act
- personal data protection including digital security
- open government data
- digital identity
- digital certification/signature
- e-procurement
- digitally publishing government expenditure⁸

⁶ Poor, immigrants, older persons, persons with disabilities, women, youth, indigenous people

⁷ Also referring to emerging technologies

⁸ Related to SDG Indicator 16.6.1

- data interoperability
- digital government as a right

Please refer to APPENDIX 2

IV. Usage of online services

10. Do you collect usage statistics of e-government services?

- Yes No

11. If yes, do you publish results online and share those with the public institutions concerned?

Usage statistics of e-government services publish online via <https://splask.mampu.gov.my/dashboard> and all Ministries/Agencies also published statistics of online transaction via their main portal and our national portal www.malaysia.gov.my

V. User satisfaction

12. Do you measure satisfaction of citizens on e-government services?

- Yes No

13. If yes, do you publish results online and share those with the public institutions concerned?

The results of user satisfaction can be obtained via <https://splask.mampu.gov.my/dashboard>

VI. Social Media

14. How does your government use social media at the national level to interact with and engage people in e-government activities? Please also explain if there were any guidelines for government officials on the use of social media.

Government is using social media as a delivery channel and information dissemination channel at all ministries and agencies portal.

Malaysia has also developed a Malaysia Government Call Centre (MyGCC) which is one stop call centre for the Government of Malaysia which provides multichannel communications https://www.facebook.com/MyGCCMalaysia/?_rdc=1&_rdr

We also provide a guideline on the use of social media for the government officials:- Directives of the Director-General of MAMPU on “Amalan Terbaik Penggunaan Media Jaringan Sosial” <http://www.mampu.gov.my/en/circulars/category/133-2011>

VII. New Technologies

15. Does your government have a **specific national strategy** on one or more of following new technologies?

- Artificial Intelligence (AI) Blockchain Big data Smart cities
 Robotics Internet of Things (IOT) Quantum computing Virtual reality
 Augmented reality Other:

Please refer to APPENDIX 3

16. Does your government have any government body⁹ at the national level working specifically related to the new technologies?

Yes. Among the agencies are:

1. Ministry of International Trade and Industry (www.miti.gov.my)
2. MIMOS Berhad (www.mimos.my),
3. SIRIM Berhad (www.sirim.my),
4. MARii (www.marii.my),
5. MIGHT (www.might.org.my).

⁹ This can be an agency, cabinet, commission, committee, initiative etc.

VIII. Indicators

17. What is the percentage of the population¹⁰ satisfied with their last experience of online public services?

In 2018, government online service satisfaction stands at 89%, out of which 34% as “Satisfied” and 55% deemed as “Very Satisfied”.

The Government Online Services (GOS) e-Rating is an initiative by the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) to assess the level of satisfaction for government online services. GOS e-Rating is the real-time transactional measurement that measures individual experience in using government online services within the agencies. The customers/users will have to answer a short pop-up questionnaire upon completion of online services. For example, Status Enquiry for International Travelling (SSPI) online services that can be accessed via <https://sspi.imi.gov.my/sspi/index.php>

Overall user satisfaction 2015 - 2018

Year	Satisfaction status	Number of Services Involved
2015	75%	34
2016	77%	99
2017	82%	112
2018	89%	304

Real time result of 2019 User Satisfaction for online services can be monitored via <https://splask.mampu.gov.my/dashboard>.

18. What percentage of your GDP is allocated for ICT investment in the public sector?

0.17% for the year 2018

19. What is the proportion of persons employed in central government organizations routinely using ICTs?

100% person employed in central government are using ICTs in daily operation such as application, finance, administrative and other matters

¹⁰ Related to SDG Indicator 16.6.2 Proportion of population satisfied with their last experience of public services. See for all indicators: https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%20refinement_Eng.pdf

20. What is the proportion of persons employed in central government organizations routinely using the Internet?

100% employee in central government organizations are using Internet related to daily work and everyday life such as getting transport, food, vacation, social media communications, etc and most of the application are web based.

Practically, public servants have access to the Internet using the central government provision via MyGov*Net (The Government Integrated Telecommunications Network, managed centrally to support the delivery of public services).

Number of Ministries and States: 26

Number of Agencies: 201

Number of connections: 10,041

For more details <https://www.mygovnet.gov.my/>

21. If any, what kind of indicators do you collect/use to track digital literacy at the national level?

Digital literacy at national level has been tracked by Department of Statistics, Malaysia (DOSM). The document can be access via <https://newss.statistics.gov.my/newss-portalx/ep/epProductFreeDownloadSearch.seam>

- i. Information and Communication Technology Satellite Account 2017 (penawaran dan permintaan produk ICT)
- ii. Laporan Penyiasatan Penggunaan & Capaian ICT oleh Individu dan Isi Rumah 2017 (pendekatan isi rumah)

In addition, Malaysian Communications and Multimedia Commission (MCMC) has published Internet User Survey 2018 which depicts the statistic of Internet Access, devices, online activities, content sharing, demographic and socio-economic of internet user in Malaysia [https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018-\(Infographic\).pdf](https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018-(Infographic).pdf) and <https://www.skmm.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf>

IX. International and Regional Cooperation¹¹

22. Is your government part of any sub-regional, regional or international cooperation on e-government?

¹¹ WSIS Action Line C.11 - International and regional cooperation - <https://publicadministration.un.org/wsis10/WSIS-Action-Lines-and-Facilitators>

General:

e-ASEAN framework Agreement

https://asean.org/?static_post=e-asean-framework-agreement

Collaboration with Japan International Cooperation Agency (JICA)

<http://www.intanbk.intan.my/iportal/ms/hubungan-strategik>

<https://www.jica.go.jp/malaysia/english/index.html>

Malaysia's free trade agreements (FTAs). Malaysia has implemented 7 bilateral FTAs and 6 regional FTAs.

<https://fta.miti.gov.my/?mid=49>

<https://fta.miti.gov.my/index.php/pages/view/4?mid=23>

Data:

Open Data Government

Asia Open Data Partnership (AODP) <http://www.data.gov.my/event/92>

World Bank Group (WBG)

<http://documents.worldbank.org/curated/en/529011495523087262/Open-data-readiness-assessment-Malaysia>

Open Contracting Partnership (OCP)

<http://www.data.gov.my/event/89>

International Open Data Charter (ODC)

<https://opendatacharter.net/>

Open Government Partnership (OGP)

<http://www.data.gov.my/event/89>

Organisation for Economic Co-operation and Development (OECD), Korea

<http://www1.napa.vn/en/asia-public-governance-forum-2018-at-napa.napa>

Security

Asia Pacific Computer Emergency Response Team (APCERT)

Organisation of Islamic Cooperation - Computer Emergency Response Team (OIC-CERT)

http://www.cybersecurity.my/en/our_services/ge_me/main/detail/2336/index.html

23. Is your government offering (or planning to offer) support to other countries in the area of e-government?

Malaysia has provide briefing and knowledge sharing about implementation on e-Government to other countries in various International Platform as below

<http://www.mampu.gov.my/ms/penerbitan-mampu/send/4-laporan-tahunan/1002-laporan-tahunan-mampu-2016> page 68-76

<http://www.mampu.gov.my/ms/penerbitan-mampu/send/4-laporan-tahunan/1158-laporan-tahunan-2017> page 106-118

Malaysia has also presented as keynote speakers in Maldives Civil Service Conference 2018 Theme: Reforming and Modernizing Civil Service By Civil Service Commission, Male, Republic of Maldives On 10th and 11th April, 2018.

Malaysia has presented as speakers in Open Government Partnership Asia-Pacific Regional Meeting 2018 , Data for Economy on 5-6 November 2018 <https://opendata.tca.org.tw/asia/news-article.php?id=14>

Malaysia has also table host Open Government Partnership in Asia-Pacific Regional Meeting 2018 related to Open Contracting Deep Dive Workshop and Open Contracting Innovations session from the Region on 5-6 November 2018.

CyberSecurity Malaysia has been playing a very active roles as Steering Committee member in Organisation of Islamic Cooperation - Computer Emergency Response Team (OIC-CERT) <http://www.oic-cert.org/>

Malaysia also initiated The Malaysian Technical Cooperation Programme (MTCP). The MTCP emphasises the development of human resources through the provision of training in various areas which are essential for a country's development such as public administration, good governance, health services, education sustainable development, agriculture, poverty alleviation, investment promotion, ICT and banking. Please refer to <http://mtcp.kln.gov.my/about-mtcp> for details.

24. Are there any ongoing public-private partnerships and multistakeholder partnerships, focusing on e-government?

“Yes. There are ongoing public-private partnership projects focusing on three focus areas namely:

(i) Networking and Connectivity:

(a) Government Integrated Telecommunication Network Services

(MyGov*Net)

(b) Government Integrated Radio Network (GIRN)

(ii) Application and Government Online Services:

(a) National Enforcement And Registration Biometrics System (NERS);

(b) Electronic Land Management System (e-Tanah)

<https://www.ptgwp.gov.my/etanah-awam/AwamLoginForm2.xhtml>

(c) e-Services (www.myeg.com.my, www.rilek.com.my)

(iii) Open Government Data:

(a) Asia Open Data Partnership (AODP)

<http://www.data.gov.my/event/92>

(b) World Bank Group (WBG)

<http://documents.worldbank.org/curated/en/529011495523087262/Open-data-readiness-assessment-Malaysia>

(c) Open Contracting Partnership (OCP)

<http://www.data.gov.my/event/89>

(d) Open Government Partnership (OGP)

<http://www.data.gov.my/event/89>

(e) International Open Data Charter (ODC)

<https://opendatacharter.net/>

(f) Open Data Institute (ODI)

<http://www.data.gov.my/event/58>

X.Contact and Additional Information

Name:

Title:

Email:

Organization:

1. Please select whichever applies:

- A group of government agencies responded to the questionnaire collectively.
- I am authorized and fully knowledgeable to respond to this questionnaire.
- I did not have the full information to respond to this questionnaire
- I mostly provided my own opinion/assessment rather than official information.
- Other:

2. How did you hear about this questionnaire?

- Directly from UN DESA
- From the Mission of my country to the United Nations
- United Nations E-Government Survey website
- LinkedIn
- Facebook
- Other:

Thank you for taking the time to fill out the Member States Questionnaire (MSQ) 2020.
We appreciate your participation.

Implementation Plan

The Malaysian Public Sector ICT Strategic Plan 2016-2020 is a national e-Government strategy for Malaysia. (http://www.mampu.gov.my/images/agensikerajaan/perkhidmatan/The-Malaysian-Public-Sector-ICT-Strategic-Plan-2016_2020.pdf)

Full document (available in Bahasa Malaysia) can be access via <http://www.mampu.gov.my/ms/penerbitan-mampu/send/2-buku/680-pelan-strategik-ict-sektor-awam-2016-2020-versi-bm-2>

All ministries has developed their own ICT Strategic Plan and must align with The Malaysian Public Sector ICT Strategic Plan. The Ministry's ISP can be downloaded via their portal.

National Development Strategy

The reviewed 11th Malaysia Plan <http://www.mea.gov.my/sites/default/files/Ringkasan%20Eksekutif.pdf> also mapping with the SDGs.

Sustainable Development Goals

<https://sustainabledevelopment.un.org/memberstates/malaysia>

Digital First Principle/Digital by Default

Architecture Principles in Malaysia Government Enterprise Architecture (MyGovEA) explain and emphasis on Digital First Principle and Digital by Default Principle.

<https://www.malaysia.gov.my/portal/content/30080>

Mobile First Principle

The Gallery of Malaysian Government Mobile Applications (GAMMA) can be accessed via <http://gamma.malaysia.gov.my>.

Once-Only (Data) Principle

Malaysia has developed myIDENTITY <https://www.myidentity.gov.my/>.

Vulnerable Groups for Women, Elderly, Poor and Disabled Person

Ministry of Women, Family and Community Development was launched "Pelan Tindakan Orang Kurang Upaya – 2016 -2020". The plan can be downloaded at

https://www.kpwkm.gov.my/kpwkm/uploads/files/Dokumen/Dasar/PelanTindakan_OKU.pdf

Others policies are:

- I. Dasar Warga Emas

https://www.kpwkm.gov.my/kpwkm/uploads/files/Dokumen/Dasar/Dasar%20Warga%20Emas_2011.pdf

- II. Pelan Tindakan Perkhidmatan Kesihatan Warga Emas,

<https://www.kpwkm.gov.my/kpwkm/uploads/files/Dokumen/Dasar/Dasar%20Kesihatan%20Warga%20Emas%20Negara.pdf>

- III. Pelan Tindakan Pembangunan Wanita 2009 (malay version only)

<https://www.kpwkm.gov.my/kpwkm/uploads/files/Dokumen/Dasar/PELAN%20TINDAKAN%20PEMBANGUNA>

[N%20WANITA%202009.pdf](#)

IV. Pelan Tindakan Pemerkasaan Ibu Tunggal

<https://www.kpwkm.gov.my/kpwkm/uploads/files/Dokumen/BUKU%20PELAN%20TINDAKAN%20PEMERKASAN%20IBU%20TUNGGAL.pdf>

Vulnerable Groups for Youth

Malaysia Youth Policy <http://www.kbs.gov.my/koleksi-akta-dasar.html>

E-Participation

Participation policy is currently in place. Kindly refer here:

<https://www.malaysia.gov.my/public/cms/epenyertaan/>

And also circular for e-participation in Public Administration Development Circulars : Pengurusan Laman Web Agensi Sektor Awam <http://www.mampu.gov.my/ms/pekeliling/category/67-2015>

Social media

Directives of the Director-General of MAMPU on “Amalan Terbaik Penggunaan Media Jaringan Sosial”.

<http://www.mampu.gov.my/en/circulars/category/133-2011>

Each ministries/agencies have actively using social media and can be access via their portal.

New Technologies

Reference to use new technologies <https://www.miti.gov.my/index.php/pages/view/industry4WRD>

and <http://www.mimos.my/driving-4ir/>

LEGAL FRAMEWORK

Access to information

We have Freedom Information Practice and Acts for federal level

- i. <http://www.data.gov.my/page/freedomofinformation>
- ii. <https://www.malaysia.gov.my/public/cms/article/page/725/>

In addition, Malaysia will collaborate with World Bank Group to develop Legal Framework to enact Access to Information/Freedom of Information starting from June 2019 until December 2020.

For State Level

Freedom of Information (State of Selangor) Enactment 2011

<https://www.selangor.gov.my/index.php/pages/view/97>

Penang Freedom of Information Enactment 2010

<https://www.penang.gov.my/foi>

Personal Data Protection Act (PDPA)

<http://www.pdp.gov.my/index.php/my/akta-709/personal-data-protection-act-2010>

Digital Security

- i. Computer Crimes Act 1997 (ACT 563)
<http://www.agc.gov.my/agcportal/uploads/files/Publications/LOM/EN/Act%20563.pdf>
- ii. Communications and Multimedia Act 1998 [Act 588]
<https://www.mcmc.gov.my/legal/acts/communications-and-multimedia-act-1998-reprint-200>
- iii. Malaysian Communications and Multimedia Commission Act (1998)
<https://www.mcmc.gov.my/legal/acts/malaysian-communications-and-multimedia-commission>

Open Government Data

There is a policy on open data guidelines to encourage easy access to public information.

Pelaksanaan Data Terbuka Sektor Awam PA Bil. 1 2015 (Public Sector Open Data Implementation)

<http://www.mampu.gov.my/en/circulars/category/138-2015>.

On top of that we have Open Government Data is published at <http://www.data.gov.my>

Digital Identity

Digital Identity is being used in many government online services application. Some of the digital identity utilize two factors authentication mainly id password dan digital certificate.

Digital Certification/Signature

Digital Signature Act 1997 [Act 562] <https://www.mcmc.gov.my/legal/acts/digital-signature-act-1997-reprint-2002>. Government sector PKI been managed centrally through Government Public Key Infrastructure (GPKI) program. GPKI as a digital certification/signature to access services to ensure the security and

the stability of the system. Please refer to https://gpi.mampu.gov.my/gpi_portal/ for details on GPI. GPI is used in a critical government online services such as procurement and financial.

E-procurement

In Malaysia all public sector government are using e-procurement system under Ministry of Finance via <http://www.treasury.gov.my/index.php/en/procurement/myprocurement.html>
<http://www.treasury.gov.my/index.php/en/procurement/government-procurement.html>

Digitally Publishing Government Expenditure

Government expenditure is published as estimated Federal Expenditure

<http://www.treasury.gov.my/index.php/en/budget/estimated-federal-expenditure.html>

In addition acts and federal constitution that in use for budget can be downloaded at

<http://www.treasury.gov.my/index.php/en/budget/acts-federal-constitution.html>

Some other government expenditure can get through from

Penerbitan Keluaran Dalam Negeri Kasar (KDNK) Tahunan bagi tahun 2010-2017 (rujuk Jadual 8 pada Harga Semasa dan Jadual 9 pada Harga Malar, no. 2)

<https://newss.statistics.gov.my/newss-portalx/ep/epDownloadContentSearch.seam?cid=29696>

Penerbitan Statistics Yearbook, Malaysia 2017 (Jadual 12.1)

<https://newss.statistics.gov.my/newss-portalx/ep/epDownloadContentSearch.seam?cid=29803>

Data interoperability

MyGDX is concentrating on the data schemes of the shared data and also Application Programming Interface (API) development from existing system and application. That can be access from

<https://mygdx.malaysia.gov.my/ms> .

Besides that Malaysia has also Malaysian Government Interoperability Framework (MyGIF) Version 1.0

<http://www.mampu.gov.my/en/circulars/category/96-2003> and The Malaysian Government Interoperability Framework For Open Source Software (MyGIFOSS) <http://www.mampu.gov.my/en/circulars/category/94-2006>

Digital government as a right

Digital government as a right is mention in Pelan Pendigitalan Penyampaian Perkhidmatan Kerajaan <http://www.mampu.gov.my/ms/penerbitan-mampu/send/157-tahun-2017/995-pelan-pendigitalan-penyampaian-perkhidmatan-kerajaan> where T1 Integrated Inclusive and Secure Government which is aspiration towards 100% end to end government online services.

Electronic Government Activities Act 2007 is an act to provide for legal recognition of electronic message in dealings between the government and the public

http://www.agc.gov.my/agcportal/index.php?r=portal2/lom&menu_id=VXIsMDIEchJVXI

Malaysia will collaborate with World Bank Group to develop Legal Framework starting from June 2019 until December 2020 comprising of act and policies on open data which will guarantee citizens' rights to access public data.

Artificial Intelligence (AI)

National Policy on Industry 4.0 was launched on 31 October 2018 to drive digital transformation of the manufacturing and related services sectors in Malaysia. The Policy's framework can be downloaded through https://www.miti.gov.my/miti/resources/National%20Policy%20on%20Industry%204.0/Industry4WRD_Final.pdf. This policy includes on Artificial Intelligence (AI), Big Data Analytics, Cyber Security, Cloud Computing, Augmented Reality, Internet of Things and Autonomous Robots.

National AI Strategy is on progress and will be launch in Q2 2019 which will include the AI Framework, governance, policies and regulations, opportunities, key success factors and future roadmaps. The study is spearheaded by Malaysia Digital Economy Corporation (MDEC).

Blockchain

Malaysia effort in blockchain has started since 2015 and grew enormously in fintech, over the counter market, trade facilitation, cryptography and distributed ledger technology involving government agencies, industries, non-profits organisations and academia. For details please refer <https://www.might.org.my/blockchain-at-might/>

Big Data

MAMPU is leading for Public Sector Big Data Analytics <http://www.mampu.gov.my/en/drsa> and for private sector was led by MDEC <https://mdec.my/digital-innovation-ecosystem/big-data-analytics>

Smart Cities

- Smart Selangor <http://mbiselangor.com/wp-content/uploads/2017/11/Smart-Selangor-Barcelona-Booklet-zoom-0.jpg>
- Malaysia City Brain https://mdec.my/newsletter/2018/02/City_Brain/
- Smart City Iskandar Malaysia <http://www.iskandarmalaysia.com.my/SCIM/index.html>

Other than that Malaysia also have National Energy Efficiency Action Plan <https://www.mestecc.gov.my/web/dasar-halatuju/>

Robotics

MARii engage and mobilize collective efforts among stakeholders in the Automotive, Robotics and IoT sectors, to plan and implement relevant industrial strategies with regard to the AR/VR technology, common data mining, analysis and analytic platform. For more details <http://marii.my/>

Internet of Things, Quantum computing, Virtual reality and augmented reality

The Internet of Things (IoT) is a convergence of smart devices that generate data through sensors to create new information and knowledge to boost human intelligence, efficacy and productivity to enhance the quality of life. Hence, [Malaysian Institute of Microelectronic Systems \(MIMOS\)](#), Malaysia's national Applied Research and Development Centre, then under the Ministry of Science, Technology & Innovation (MOSTI) was tasked to develop the National IoT Strategic Roadmap which was launched in 2015. The mission is to create a national

ecosystem enabling the proliferation of use and industrialisation of IoT as a new source of economic growth. MyTraceability solution is one of the successful IoT initiatives using the Quick Response (QR) Code for barcode system that contains information about the item to which it is attached. This solution is successfully applied in Track and Trace System for Exporting Frozen Durian and Edible Birdnest to China.

In 2015, the Ministry of Science, Innovation & Technology Malaysia launched the National IoT Strategic Roadmap, which forecasted opportunities to reach RM9.5 billion in 2020 and RM42.5 billion in 2025. IoT Strategic Roadmap can be downloaded (refer page 3 for IoT Strategic Roadmap 2014) <https://www.mestecc.gov.my/web/dasar-halatuju/?page=3&offset=10>

In response to the Fourth Industrial Revolution (4thIR), the [Industry4WRD: National Policy on Industry 4.0](#) was launched on 31 October 2018 by the Ministry of International Trade and Industry (MITI) to drive digital transformation of the manufacturing and related services sectors in Malaysia. With MIMOS currently being placed under MITI since mid 2018, it will accelerate the proliferation of IoT initiatives in Malaysia.