



**E-Government for Women's Empowerment
in Asia and the Pacific**

**A Gender Analysis of the
e-government Ecosystem:
State-of-the-art Review, Malaysia**



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Abbreviations

1MOCC	1Malaysia One Call Center
1MTC	1Malaysia Training Centre
ASEAN	Association of Southeast Asian Nations
DAG	Demonstrator Application Grant
DEL	Direct Exchange Line
EGDI	E-Government Development Index
EGSC	E-Government Steering Committee
EMP	Eleventh Malaysia Plan
EPI	E-Participation Index
EPU	Economic Planning Unit
ETP	Economic Transformation Program
GDI	Gender-related Development Index
GII	Gender Inequality Index
GIS	Geographic Information System
GITIC	Government IT and Internet Committee
GTP	Government Transformation Program
HDI	Human Development Index
ICT	Information and Communication Technology
ICTs	Information and Communication Technologies
ICU	Implementation and Coordination Unit
IDI	ICT Development Index
IS	Islamic State
ITU	International Telecommunication Union
JAKIM	Jabatan Kemajuan Islam Malaysia [Department of Islamic Development Malaysia]



1. Malaysia's E-Government through a Gender Lens: Introduction

The Malaysian Administrative, Modernisation and Management Planning Unit (MAMPU) in the Prime Minister's Department has been responsible for spearheading the country's e-government initiative since 1996.¹ The responsibility of MAMPU encompasses the planning, design, execution and implementation of various types of e-government initiatives for the country

The implementation of Malaysia's e-government began with the conceptualisation of the Multimedia Super Corridor (MSC)—a program for the creation of a Special Economic Zone, also in 1996 (Abdul Karim and Mohd Khalid 2003). The MSC seeks to improve the convenience, accessibility and quality of interactions with citizens and businesses, as well as to improve information flows and processes within government, to enhance the speed and quality of policy development, coordination, and enforcement. Following this, MAMPU, as lead agency for Malaysia's e-government initiative, developed the Electronic Government Blueprint as well as the Electronic Government IT Policy and Standard in 1997. In 2003, it developed the first Public Sector ICT Strategic Plan to align Information and Communication Technology (ICT) initiatives of various public agencies to the Malaysian government's ICT vision, and also to ensure the delivery of high-quality, efficient services to the Malaysian

citizen. In 2011, MAMPU developed the second Public Sector ICT Strategic Plan 2011–2015. This Plan emphasises the need to work towards the long-term vision of completely automated service delivery systems with zero face-to-face contact, whilst simultaneously recognising the need to maintain traditional, over-the-counter services to prevent exclusion of marginalised groups, in the current situation where there is a digital divide in access (MAMPU 2011: 33 and 17).

Broadly, the vision behind Malaysia's e-government initiatives has been one of leveraging the multimedia capabilities of ICTs to facilitate resource sharing between government agencies and the design of citizen-centric service delivery (MAMPU 2003: 6) thereby enhancing the relationship and quality of interaction between the government of Malaysia and its citizens. Public policy documents such as the Eighth Malaysian Plan (2001–2005), Knowledge-Based Economy Masterplan (2002–2010), Public Sector ICT Masterplan (2003) and the Ninth Malaysia Plan (2006–2010) have acknowledged the transformational role of ICTs in public service delivery and governance, and identified specific strategic directions towards this.

In addition to emphasising the need to improve internal management and effectiveness of government, Malaysia's e-government vision is also closely linked to its Vision 2020 of building *"a united (Malaysian) nation, with a confident Malaysian society, infused by strong moral and ethical values... a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous, and in full possession of*

¹ For more information on MAMPU, see www.mampu.gov.my.



an economy that is competitive, dynamic, robust and resilient” (cited in Deka, Zain and Mahanti 2012: abstract).² The primary instrument through which Vision 2020 is being implemented is the Eleventh Malaysia Plan 2016–2020 (EMP), which has six strategic areas:

- Enhancing inclusiveness towards an equitable society
- Improving wellbeing for all
- Accelerating human capital development for an advanced nation
- Pursuing green growth for sustainability and resilience
- Strengthening infrastructure to support economic expansion
- Re-engineering economic growth for greater prosperity

It is within this policy framework, which prioritises productivity and economic competitiveness, that Malaysia's e-government efforts are located. The thrust of e-government initiatives has thus been in the direction of developing seven innovative flagship applications for transforming Malaysia into a knowledge-based society, as summarised below:

- a. Electronic Government (lead agency: MAMPU): Under the e-government flagship, seven main projects were identified that constitute the core of Malaysia's e-government applications – Electronic Procurement, Project Monitoring System, Electronic

Services Delivery, Human Resource Management Information System, Generic Office Environment, JobsMalaysia, and E-Syariah.³

- b. Multipurpose Smart Card (lead agency: Central Bank of Malaysia; now known as the MyKad): Objective is to provide a secure identification platform for private and government transactions and processes.
- c. Smart School (lead agency: Ministry of Education): The Smart School flagship application aims to ensure that every school has the necessary computer lab facilities to enable students' access to the Internet. These computer lab facilities are also meant to develop and deliver content for students' learning.⁴
- d. Telehealth (lead agency: Ministry of Health): The telehealth flagship application is meant to ensure that the Multimedia Super Corridor (MSC) becomes a central regional hub for telehealth facilities and virtual medical consultations.
- e. Research and Development Clusters (lead agency: Ministry of Science, Technology and Innovation): The objective is to ensure that the MSC becomes an attractive location for companies to develop next generation multimedia technologies and innovations.

² The full text of Mahathir Mohamad's speech can be read here, <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan003223.pdf>. Accessed 23 December 2015.

³ A case management system that integrates the processes related to management of cases for the Syariah Courts. It aims to improve the quality of services of the Syariah Courts and the productivity and efficiency of the management of the Syariah courts throughout the country (for more information, see www.esyariah.gov.my)

⁴ Some productivity and social gains have been achieved from improved administration of schools and reduction of paperwork. Exam-oriented curriculum, lack of technical support, and change management of teachers are key challenges in the implementation of the smart school project.



- f. Electronic Business (lead agency: Ministry of Finance): The objective is to promote the adoption of ICT in the business sector.
- g. Technopreneur Development (lead agency: Multimedia Development Corporation): The objective is to spawn and nurture the growth of SMEs in the strategic areas of ICT and multimedia industries.

Although many government services are available online, they are not well integrated. To address this gap, MAMPU launched the eKL project in 2007. eKL seeks to develop public services through an integrated and connected Klang Valley⁵ (MAMPU 2009a). Based on the theme *One Government—Many Agencies*, the eKL project sought to integrate service delivery across agencies in order to ensure that services are delivered in a standardised, systematic, and seamless manner (*The Edge*, 29 Dec, 2008; cited in Siddiquee and Mohamed 2015: 54). Under eKL, a number of innovations have already been introduced. *MyBayar* is the online payment gateway that offers citizens a convenient and secured way to making online payment to the government. *MyForms* is the centralised forms directory that makes forms available to citizens and businesses with downloadable and online submission options. *MySMS15888*, the short messaging system, is another channel that enables people on the move to stay connected to government services. It provides two-way communication between government agencies and citizens

where governmental information, news, and services are made available to mobile phone subscribers anytime and anywhere.

The government's target is to achieve digitalisation of 90 per cent of services by 2015 (Malaysiakini 2014). For the period 2011–2015, MAMPU has charted the strategies and directions for e-Government through the Public Sector ICT Strategic Plan. Projects that have been implemented include the consolidation of the Government Data Centre, Government Cloud Computing, and the Government Unified Communication and Telepresence services. MAMPU's assessment is that mobile-based delivery of services is preferred by citizens. This is where the myGov Mobile gateway comes into play. Launched in 2010, several government agencies have quickly taken advantage of the myGov Mobile gateway to provide users accessibility to useful information via mobile devices such as myHealth app by the Ministry of Health, myJakim by JAKIM (Department of Islamic Development Malaysia), and myTour by the Ministry of Tourism.

Malaysia's e-Government is not only meant to bring public services online, but is also focused on using the digital opportunity to generate social and economic benefits. The lead agency for e-government, MAMPU, adopts a gender-neutral perspective towards its work (Suhazimah Dzazali and Norhamimah Ibrahim, interview, 2016). Nevertheless, Malaysia's e-government efforts are part of a larger public policy push for reform, transparency, and enhanced openness in government, and should thus also work within the parameters of good governance, and by an extension of that, gender equality. One major stumbling block,

5 The heartland of Malaysia's industry and commerce area that is in Selangor, which comprises Kuala Lumpur and its surrounding areas and suburbs, as well as the Port Klang coastline.



however, is the lack of commitment to freedom of information issues. Freedom of information is not guaranteed in Malaysia, neither constitutionally nor through any specific legislation. However, the states of Penang and Selangor have enacted laws to allow for citizens to ask for certain kinds of data to be released to them (Mok 2012; The Malaysian Insider 2011).

The lack of explicit attention to the gender equality agenda is a cause of concern considering that there is an urgent need to invest in women's equal participation in governance processes, especially the equitable participation of groups of vulnerable women such as indigenous women, women with disabilities, women victims and survivors of violence, poor women, and women at risk of impoverishment.⁶

2. Where does Malaysia stand on global rankings of commitment to gender equality, ICT development, and E-Government Development?

2.1 Gender Equality in Malaysia

The Government of Malaysia has made several commitments to promote gender equality and women's empowerment. It has ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the International Labour Organisation Convention No. 100, and the Equal Remuneration Convention. It has acceded to the Protocol to Prevent, Suppress and Punish Trafficking in Persons especially Women and Children in 2009.

At the national level, Malaysia has committed to furthering the gender equality agenda. In 1989, the Government formulated a National Policy on Women (EPU 2010: 48) and in 1997, it formulated its Plan of Action for the Advancement of Women. The National Policy on Women and the National Plan of Action for the Advancement of Women targeted the needs of women with disabilities, women heads of households, women whose husbands have been imprisoned, women who have been abandoned, sex workers, women survivors of domestic violence,

⁶ Some of these vulnerable groups of women have been identified in more detail as target groups under the National Policy on Women and the National Plan of Action for the Advancement of Women (see section 2.1 for further details).



indigenous women, women plantation workers, women with HIV and financial difficulties, and women senior citizens above 70 years old and who are at high risk of impoverishment (KPWKM undated).⁷ In 2001, the Government of Malaysia amended Article 8(2) of the Federal Constitution to prohibit any form of gender discrimination, but this article applies only narrowly to situations of employment, trade, business or profession, and the acquisition of property.⁸

In August 2009 the Government of Malaysia launched the National Policy on Women and the Plan of Action for the Advancement of Women (Ministry of Women, Family and Community Development undated: 37). The Government of Malaysia also committed to achieving the Gender Equality goal as part of the Millennium Development Goals (MDGs) by 2015 (EPU 2010: 48).

Additionally, the Malaysian government has issued Guidelines in Handling Sexual Harassment in the Workplace in Public Service and in 2005, amended the Employment Act 1955 with key improvements to address sexual harassment-specific criminal offenses in the workplace. On January 19, 2016, the Ministry of

Women, Family and Community Development announced that it would set up an online registry of convicted child abusers and sex offenders later in 2016 to facilitate checks by parents, guardians, and would-be employers (Achariam 2016: 1).

Women's development has often been narrowly framed as building women's potential to make economic contributions to the nation, society, and the family. For example, in the 2008 to 2012 plan of the Ministry of Women, Family and Community Development, the strategy identified for women's empowerment was the enhancement of women's socio-economic contributions. Although the subsequent strategic plan (2013 to 2017), expanded this focus to include the elimination of all forms of discrimination against women and of all forms of violence against women, as well as women's participation in decision-making (KPWKM 2013), concrete efforts towards addressing these issues appear to be ad-hoc in nature, and are proceeding at a slow pace. The strategic plan of 2013 to 2017 also adopts a broader perspective, but tends to views 'women's development' as an issue of enabling women to become contributors to the productivity of the nation rather than a human rights issue of gender equality.

There have also been fluctuations in the political will to uphold the vision and mission laid out in the National Policy on Women and the National Plan of Action for the Advancement of Women. Malaysia continues to slide down in its rankings on addressing gender inequalities (see for example, Khoo 2014; Goh 2015). Despite being an upper middle-income country, Malaysia ranks 111 out of 145 countries measured for their gender gap in the

7 While the policy and plan appear be thorough, it is not clear how comprehensive and holistic they are in implementation, such as in the collection of necessary evidence for proper monitoring and evaluation and ensuring follow up (Sumitra Visvanathan, interview, 2016).

8 In interpreting this article, gender here is only understood as equality between the two biological sexes of male and female and does not take into account different gender identities. The article is also limited in scope and not very helpful in addressing gender inequality in the personal sphere, such as demands for the acknowledgment of women's right to transfer citizenship to children.



Global Gender Gap Report 2015 (World Economic Forum 2015a: 9).⁹ The Global Gender Gap Index examines the gap between men and women in four categories (sub-indices): *Economic Participation and Opportunity*, *Educational Attainment*, *Health and Survival*, and *Political Empowerment*. For *Economic Participation and Opportunity* and *Political Empowerment*, among the eight member states of the ASEAN, all except Myanmar rank higher than Malaysia on these sub-indices.¹⁰

The Global Gender Gap Report 2015 observes that: "Malaysia (111) slightly improves in score despite falling four places in rank (when compared to its ranking in 2014). Improvements across *Economic Participation and Opportunity* could account for the overall increase in score. However, the country has slightly regressed on *Educational Attainment*, *Health and Survival* and *Political Empowerment* (World Economic Forum 2015a: 27).

Between 2006 to 2015, the education gender gap in Malaysia increased by more than ten per cent, across both secondary and tertiary education (World Economic Forum 2015a: 33). In

the area of *Health and Survival*, the ratio of females to males in the country has been decreasing since the 1980s (a national sex ratio of 106 males to 100 females for a population of 28.3 million in 2010). Life expectancy is still higher for women (66) compared to men (63) (World Economic Forum 2015a: 62), but the difference in life expectancy between females and males decreases with age (Department of Statistics Malaysia 2015).

Women's estimated earnings did not shift much in 2015, with women earning USD18,218 (based on 2011 PPP USD) while men's earnings continue to be almost twice as much as women's earnings at USD31,596 (World Economic Forum 2015a: 246). Yet, the Female Labour Force Participation Rate in Malaysia increased from 46.4 per cent in 2009 to 53.6 per cent in 2014, and is estimated to reach 55 per cent in 2015 (EPU 2015b: 37).¹¹ In the area of women's political participation, there is still progress to be made. In 2015, only ten per cent of parliamentary seats were held by women parliamentarians, with only six women in ministerial positions compared to 94 men (World Economic Forum 2015a: 63 and 64).

The Malaysian experience demonstrates how economic advancement alone cannot ensure that gender inequalities will be addressed in the country.

9 The Index benchmarks measures national gender gaps on economic, political, education, and health criteria, and provides country rankings that allow for effective comparisons across regions and income groups. It captures gaps in outcome variables rather than gaps in input variables. It ranks countries according to gender equality rather than women's empowerment. The Global Gender Gap Index is constructed to rank countries on their gender gaps rather than their development level. Thus, in the case of education, the Index ranks countries based on the size of the gap between male and female enrollment rates, but not for the overall levels of education in the country (World Economic Forum 2015a: 3–4). For more information on how the Global Gender Gap Index is calculated, refer to The Global Gender Gap Report.

10 See <http://www.asean.org/asean/asean-member-states> for member states of ASEAN.

11 Labour Force Participation Rate includes those who are employed and those who are actively looking for work.



2.2 Level of E-Government Development

The 2014 United Nations E-Government Survey classified Malaysia as having a high E-Government Development Index (EGDI), with Malaysia scoring 0.6772 for provision of online services, 0.4455 for telecommunication connectivity, and 0.7119 for human capacity (on a scale of 0 to 1). In terms of performance ranking in Asia, Malaysia ranked 52 in 2014 with its EGDI of 0.6115, slipping from its higher ranking of 40 in 2012.¹² One explanation for this low ranking is the channeling of energy and resources to other Government programmes. In addition, although MAMPU remains responsible for spearheading e-government programs, it has lost its prominence amid the rising clout of the Performance Management and Delivery Unit (PEMANDU) within the Prime Minister's Department (Siddiquee and Mohamed 2015: 57–58).

As an upper middle-income nation with a gross national income per capita of USD9820,¹³ the example of Malaysia, reinforces the 2014 United Nations E-Government Survey's assertion that, "national income certainly does not, by itself, constitute or

guarantee advanced e-government development...The main enabler of good e-government progress is often putting in place an effective governance framework to support and manage a citizen-centric service delivery model, including a national ICT policy and e-government strategy, as well as strengthening institutions and building the capacities of public servants" (United Nations 2014: 19 and 20 and Figures 1.5 and 1.6).¹⁴

2.2.1 E-Participation Index

Malaysia's E-Participation Index (EPI) is 0.5294.¹⁵ on a scale of 0 to 1. "As with the EGDI, the EPI attempts to capture the e-participation performance of countries relative to one another at a particular point in time" (United Nations 2014: 196). As data on e-participation is otherwise unavailable at national level, data and information is collated from assessments, such as those conducted annually by the Multimedia Development Corporation (MDeC) on government portals and websites,¹⁶ internal reviews by MAMPU (Suhazimah Dzazali and Norhamimah Ibrahim, interview, 2016), or requests for data to individual ministries and agencies.

12 In 2015, the Waseda-IAC 11th International E-government ranking placed Malaysia at 25 among 63 countries, with Singapore holding top spot (see <https://www.waseda.jp/top/en-news/28775>). In 2014, Malaysia ranked 27 with a score of 63.71 (Waseda University and International Academy of CIO 2014: 3). The approach employed by Waseda University Institute of e-Government, Japan, focused on core administrative and financial reforms. This specifically focused on effectiveness, productivity, and benefits to the citizens. The study covered 6 areas as well as an analysis of 28 indicators. For more information, see Alhabshi 2008: 251–252.

13 According to the Eleventh Malaysia Plan 2016–2020, Malaysia's national per capita income expanded more than 25-fold from US\$402 (1970) to US\$10,796 (2014) and is well on track to surpass the US\$15,000 threshold of a high-income economy by 2020 (EPU 2015b: 1 - 3).

14 For online service delivery, Spain (tied at 4th), Uruguay (14th), New Zealand (15th), and Chile (16th) have all made their way into the top twenty of 2014 in their e-government efforts, pushing ahead of former 2012 leaders Denmark, Norway, Sweden and Malaysia (United Nations 2014: 46)

15 The EPI is a supplementary index of the UN E-government Development Index that focuses on the use of online services to facilitate provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes ("e-decision making"). A country's EPI reflects on e-participation facilities that are deployed by the government as compared to all other countries. The purpose of this measure is to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all.

16 Except the year 2008 (Multimedia Development Corporation 2013).



Table 1
Criteria According to 7 Pillars of User Expectation

Criteria	Pillar1: Site performance	Pillar 2: Functionality	Pillar 3: Content	Pillar 4: Navigation	Pillar 5: Search	Pillar 6: Online transparency	Pillar 7: Look & appeal
Mandatory	1. Loading time (5 Seconds) 2. Downtime	3. Mobile web/version	4. Updated content	5. Active hyperlink		6. Responsiveness to enquiries	
Non-Mandatory		7. Mobile apps 8. Number of online services 9. Notification of transaction 10. Aid, tools & help resources 11. Online service security 12. Broadcast 13. Electronic archive 14. W3C disability accessibility 15. Frequently asked questions (FAQ) 16. Feedback form 17. Feedback auto-notification 18. User opinion features 19. Updates via email or RSS	20. Audio/ Video 21. Multi-language for Content 22. Multi-language for online Services 23. Publicising an agency or CIO equivalent 24. Contract details 25. Presence of datasets 26. Dataset guidelines 27. About us 28. Publications	29. Personalisation 30. Sitemap 31. Links to other websites 32. Find information within 3 clicks	33. Search function 34. Advanced search 35. Searchable database 36. Find website using search tool	37. Client charter 38. Achievement of client charter 39. Statistic of online services 40. Freedom of information legislation 41. Privacy policy statement/data protection act 42. Online procurement announcement 43. Online e-participation policy/guideline 44. Promotion of e-participation 45. Presence of e-participation initiative 46. Presence of e-consultation mechanisms 47. Presence of e-decision-making tools	48. Look & feel

Source: MDEC 2012.

In 2012, a set of criteria for assessment of the quality of user experience on governmental websites was developed. The criteria comprised 7 pillars: content, usability, security, participation, services, and what is termed as “bonus” (number

of online services, e-payment, and digital certificate/trust mark). Some criteria were mandatory and others optional as outlined in Table 1.¹⁷

¹⁷ See <http://www.websitekerajaan.com/>.



As can be seen from Table 1, despite the interest in moving towards meeting users' expectations of the government's portals and websites, mandatory measurements for performance are still very much dependent on what is supplied rather than how these are received. As pointed out by the Executive Director of the Women's Aid Organisation (a civil society organisation contacted for this research) when reflecting on the user-friendliness of the Ministry of Women, Family and Community Development's portal:

"It's three things, you want to know that it's there, you want it to be presented in a way that is relevant to you, and also you want it to be accessible, easily accessible...it's not about women fitting in within our programs, it's about us fitting in with their lives...it's really about meeting the challenge to make information accessible and practical, and I don't think we're there yet...what we should be asking ourselves is, "How come you don't know? How can I make sure that you know? How could I have reached you?"(Sumitra Visvanathan, interview, 2016)."

2.2.2 An Overall Assessment Based on the Readings of Malaysia's Global Index Rankings

Malaysia's ranking on the Global Gender Gap Index, the E-Government Index, Networked Readiness Index, ICT Development Index, and E-Participation Index do not fully reflect the gender inequalities on the ground. These indices are insufficient as standalone measures to capture the gendered realities and challenges in a country when it comes to the

planning, implementation, and evaluation of e-government initiatives.

National statistical systems also seem to lag behind in providing sex-disaggregated data that could guide analyses as to why gendered differences remain in the access, use, and participation of women and girls in e-government programs and projects. There is also a need to look deeper into the statistics and data that we are able to collect. For example, women's ownership of, or access to, mobile phone technology does not necessarily mean that they have the same quality of access to the Internet as men. Moreover, despite the higher percentage of women users of e-services, the overall numbers of users of e-services are generally low, as is the case with the MyHealth portal's "Ask the Expert" service (Amiruddin Hisan, interview, 2016). This is an indication that the particular service is not sufficiently gender-responsive, and that a targeted outreach of women and girls would be required.



3. A Gender Analysis of E-Service Delivery in Malaysia

Since 1996, government agencies have been taking a number of steps to transition to online service delivery. At present, more than 56 per cent of government services are available online through various channels, such as the myGovernment portal (www.malaysia.gov.my), mobile devices, and kiosks. The myGovernment portal, designed by MAMPU, is a single window gateway (one-stop source) to information and services provided by the Government of Malaysia via the Internet. Through myGovernment, the public is linked to more than 900 government agencies and websites nationwide¹⁸ and to a range of services which address the needs of children, adults, persons with disabilities, youth, senior citizens, and Malaysians who are residing outside the country at the time of access.

According to the United Nations E-government Survey 2014, Malaysia provides more than 86.6 per cent of its e-services to disadvantaged and vulnerable groups, which include older persons, people with disabilities, women, and youth.

One of the main factors that contribute to a large number of e-services being available for poor and marginalised groups is the eKasih National Poverty Data Bank, an online database that enables mapping and monitoring of poor and hardcore poor households and individuals across the nation, and integrated

and coordinated design and delivery of poverty alleviation measures. This data system developed by the Implementation and Coordination Unit (ICU) has enabled the inclusion of low-income and vulnerable households in the implementation of development programs by a range of ministries including the Ministry of Women, Family and Community Development and Ministry of Rural and Regional Development.

One instance of how this database has been used for the effective targeting of women from low-income households is 1AZAM. Introduced in 2010, the 1AZAM is a series of income-generation programs aimed at productive low-income households. Institutionally, each of the 1AZAM programs is run by a particular agency and may include collaboration with NGOs. The Ministry of Women, Family and Community Development (MWFCDD) leads the coordination and implementation of all the programs, and uses the eKasih database system (National Poverty Data Bank) for determining eligible recipients (classified as extremely poor, poor, vulnerable or low-income groups). Between January 2011 to March 2014, 140,976 people participated in the 1AZAM program, of which 65 per cent are women beneficiaries. Nevertheless, the initiative has faced some challenges, which are provided below:

- Despite the high percentage of women beneficiaries, further efforts are required to effectively targeting women. Field research conducted for this study revealed that two key informants who were representatives of two local NGOs that work with survivors of domestic violence and single mothers respectively, had no knowledge of 1AZAM (Sumitra Visvanathan, interview,

18 myGovernment is an initiative undertaken by MAMPU.



2016; Aliah Ali, interview, 2016). The two NGOs were also not on any communication alert facility that would inform them of such programs, which they could, in turn, share with their constituencies. Despite being supported by ICT platforms, government initiatives are still unable to effectively implement strategies to “reach the unreached”.

- Targeting mechanisms have not been standardised across all social protection programs in Malaysia. For example, e-Kasih's procedures to determine the beneficiaries of targeted programs, in terms of the unit of targeting (individual, household, and nuclear family), the method of determining eligibility, and thresholds for eligibility are very different from other programs that seek to provide aid to the poorest households – e-Bantuan (e-Aid) and BR1M (Bantuan Rakyat 1Malaysia or 1Malaysia People's Aid). This creates a lot of pressure on individual households in applying for government benefits, and also increases the risk of exclusion from the social security net.

There is no clear effort to integrate a gender-inclusive perspective in the overall design of e-services. The Ministry of Women, Family and Community Development is involved only in the digitalization of its own services, and is not consulted for any larger discussion/deliberation on how the shift to online services may affect women's e-participation.¹⁹ In fact, most e-services, especially the flagship applications discussed above, were largely designed by policy makers and possibly the private sector partners where concerned, but with little input from those who would be directly affected by their implementation. When

greater emphasis is placed on *what is supplied* rather than how well such a supply meets the needs of those these are meant to serve, gender considerations are often ignored.

Many crucial issues/concerns of women are not yet being addressed through existing e-services. In fact, no concrete e-service has yet been developed in the areas of tackling violence against women, and general safety services that can alert/notify women and girls of reportedly dangerous areas and other safety issues. It was only recently in January 2016, that a discussion has been initiated on setting up a child abusers and sex offenders registry. It is still unclear about how a balance will be struck in this initiative between privacy rights of offenders and the public interest of protecting children (Sumitra Visvanathan, interview, 2016)

There are also instances of gender-neutral design adversely impacting women and transgender people whose human rights are elaborated upon in General Recommendation Nos. 27 and 28 of CEDAW. As explained in Box 1, this has been the case with the Multipurpose Smartcard/ MyKad, which has become the backbone in the digitalization of Malaysian citizens' identities.

¹⁹ Interviews with MAMPU and Ministry of Health staff.



Box 1 Multipurpose Smartcard—The MyKad

In 2000, the government aimed to create a seamless system for service delivery, which required the establishment of an interconnected network between public sector agencies for effective interaction, coordination, and information-sharing. This was implemented through cross-cutting policies and programs under the *No Wrong Door Policy*, and the use of a single reference number in dealings between individuals and government agencies through the national birth registration. This was the MyID initiative, which uses the National Registration Identity Card (*Kad Pengenalan Malaysia*) number as the sole reference for individual Malaysians in their transactions with government agencies. The *Kad Pengenalan Malaysia*, commonly known as MyKad (*Malaysia Kad Akaun Diri* or sometimes also referred to as *Malaysia Kad Aplikasi Digital*) is the compulsory identity document for Malaysian citizens aged 12 and above.¹ Introduced by the National Registration Department of Malaysia on 5 September 2001 as one of seven Multimedia Super Corridor (MSC) Malaysia flagship applications and a replacement for the former High Quality Identity Card (*Kad Pengenalan Bermutu Tinggi*), Malaysia became the first country in the world to use an identification card incorporating both photo identification and fingerprint biometric data on an in-built computer chip embedded onto a plastic card. The main purpose of the card is to provide a validation tool and proof of citizenship other than the birth certificate. In addition, MyKad may also serve as a valid driver's license, an automatic teller machine (ATM) card, an electronic purse,² and a public key,³ among other applications, as part of the Malaysian Government Multipurpose Card initiative if the bearer chooses to activate these functions.

The MyKad has attracted many private applications to-date—as many as 30 applications that facilitate government services, border control, electronic payments, user authentication, loyalty programs, education, and mobile applications as of 2009 (Hisan 2009), but uptake of public applications, for example, driver's license, has been minimal. Some factors accounting for its low uptake include access to infrastructure (for example, card readers), lack of buy-in from other agencies, and poor public perception of security limits public usage of other applications on the MyKad. There has been some social impact through reduction of fraud and minimisation of paperwork (NITC 2015). The participation of multiple agencies such as the National Registration Department (NRD), MAMPU, Pos Malaysia, and the National IT Council (NITC) is required to ensure that the MyKad application achieves full potential.

The MyKad adopts a 12-digit numbering system⁴ with odd numbers at the end of the last of the four digits representing biological males and even numbers representing biological females. While this may facilitate the collection and disaggregation of statistics by biological sex, it has often affected the wellbeing of transgender people as they continue to face stigma and discrimination in obtaining official acknowledgment of their gender dysphoria (Human Rights Watch 2015). In addition, as religious affiliation is indicated on the MyKad, this can compromise the privacy of transgender persons. The former system of randomised numbers for identification cards could help reduce the stigma and discrimination targeted at transgender people since biological sex was not stated on the card but only encoded in the electronic chip.

Another issue with the MyKad is the unreliability of biometric authentication systems – specifically fingerprint based authentication. With older people, the skin becomes too dry and cracked especially for women who are often the ones



who do the washing of clothes, dishes, and so on, making recognition of the thumb print difficult. While some government authorities are aware of this issue, other service providers are not necessarily as sensitised. Banks, for example, may ask for other types of identification such as the driver's license or the Malaysian passport to verify a person's identity, documents which not everyone possess.

Source: See NITC (2015), <http://nitc.kkmm.gov.my/index.php/key-ict-initiatives/msc-flagship-applications>; Human Rights Watch (2015), <https://www.hrw.org/news/2015/10/08/malaysia-court-ruling-sets-back-transgender-rights>

Another instance of gender-blind design is evidenced by the Malaysian Youth Development Research Institute's GIS-based portal that was launched in 2013, with the intention of helping organizations effectively plan and implement their youth development programs. The portal (<http://petabelia.kbs.gov.my/>) provides users with access to 49 types of interactive maps based on the following categories: number of youth associations, number of sports centres, involvement of youth in society clubs, engagement of youth in anti-social behaviour, economic well-being, overall health, and other social and psychological indicators.²⁰ The purpose of the portal was to create a catalyst to influence policy and human resource development in the country and increase the provision of funds allocated to youth development by presenting the data to policymakers.²¹ But the data on the interactive maps are not sex-disaggregated (see for

example the interactive map for youths aged 15 to 24 years old at <http://petabelia.kbs.gov.my/petabeliav2/framesetup.asp>).²²

Demand-side data on gender-differentiated patterns in access and use of e-services are not collected. The lack of sex-disaggregated data on citizen uptake of e-services is a cause for concern as access to Internet and online services is a deeply gendered experience, with affordability barriers hindering many women from going online.

Interviews with informants from key NGOs working on women's rights indicate that sufficient attention is not being paid by government agencies to raise awareness among women and marginalised groups of existing e-services. As one key informant observed:

"Generally, when it comes to services available to women from the government, whether it is federal government or state government, it's always a situation where we find out about services and facilities and programs etcetera, by the way. Somehow we find out about it. The distribution [of information on these services] and the [public] awareness is very poor" (Sumitra Visvanathan, interview, 2016).

Another factor that hinders progress in online service delivery is resistance among governmental staff to digitalisation (Hazman and Maniam 2006; West 2004; cited in Wan Abdullah, Mansor

²⁰ See <http://petabelia.kbs.gov.my/home.asp?en=list-map> for more information.

²¹ For more information, see <http://petabelia.kbs.gov.my/>.

²² See <http://petabelia.kbs.gov.my/home.asp?en=reports>.



and Hamzah 2013: 562). Some staff have negative perceptions about IT, viewing its use as an additional job responsibility. Even though the government has spent a lot of money purchasing and upgrading IT-related infrastructure under the National IT Policy of 2005, the acceptance and use of these services is often limited to e-mails, Internet, and intranet, and has not necessarily extended to active support for online participation or online services.

A further challenge is the non-transparency of the emerging digitalised service delivery systems, in part due to the lack of a Freedom of Information Act. Access to data contained on such systems controlled by the user's identification card number (MyIdentity), and a limited amount of related data, is allowed. Other types of information are not accessible. For example, if women's human rights defenders want to check the status of child alimony cases in the Syariah courts, requests for data have to be submitted either to the Department of Statistics which will then charge search fees accordingly. Requests sent directly to the e-Syariah portal are not likely to be entertained as data from this portal is accessible only to state Syariah prosecutors.

While there is a move by the Malaysian government to push for Ministries and agencies towards the sharing of their data through the Open Data Malaysia initiative (data.gov.my; Suhazimah Dzazali and Norhamimah Ibrahim, interview, 2016), it is unclear if this initiative will succeed in enhancing transparency in governance and bring forth a culture where people's right to

information is upheld. Most government portals do have links to privacy and security policies as well as some which highlight the client's charter. However, assurances of privacy and protection of data are also compromised by the little knowledge shared with users as to how they can identify privacy violations and to whom they can report it. Such information would be very useful and have gendered impacts on women and girls.



4. Connectivity Architecture in Malaysia through a Gender Lens

The UN E-government survey 2014 breaks down Malaysia's Telecommunication Infrastructure Index (TII) and its components as shown in Table 2.

With a projection of a population size of 30.49 million²³ and 7,435 households²⁴ at the end of the second quarter of 2015, the penetration rates for broadband per 100 inhabitants was 91.7 per cent and per 100 households was 72.2 per cent (MCMC 2015a: 3). The broadband penetration rate per 100 households was 61.9 per cent in the second quarter of 2015, however, with wide variations among states (MCMC 2015a: 6). The penetration

rate for cellular phones per 100 inhabitants was 144.8 per cent and the fixed Direct Exchange Line (DEL) penetration rate per 100 households was 28.4 per cent (MCMC 2015a: 3). In addition to these, there are facilities for community access: 562 Malaysia Internet Centres that serve 471,855 members, 120 Mini Community Broadband Centres, 44 Community Broadband Libraries, and 5,860 Community Wifi centres (MCMC 2015a: 8). These community centres are provided under the Universal Service Provision (USP) Program of the MCMC.²⁵ One of the most significant and widely acclaimed e-government projects in Malaysia is *e-Bario* which was implemented in 2001. *e-Bario* started out as a smart school project and eventually played a significant role in connecting a remote community to the Internet (see Box 2).

Table 2
Malaysia's Telecommunication Infrastructure Index (TII) and Its Components 2014

Country	TII	Percentage of individuals using the Internet	Fixed-telephone subscriptions per 100 inhabitants	Mobile-cellular telephone subscriptions per 100 inhabitants	Fixed (wired)-broadband subscriptions per 100 inhabitants	Wireless broadband subscriptions per 100 inhabitants
Malaysia	0.4455	65.80	15.69	141.33	8.41	13.59

²³ Based on Malaysian Population Census 2010.

²⁴ Number of households derived by dividing populations by average household size.

²⁵ For more information on these different community centres, see MCMC 2015a: 9, [http://www.mcmc.gov.my/skmmgovmy/media/General/pdf/CM-Q2-2015-BI-\(pdf\).pdf](http://www.mcmc.gov.my/skmmgovmy/media/General/pdf/CM-Q2-2015-BI-(pdf).pdf).



Box 2 e-Bario

The remote district Bario in the Borneo State of Sarawak is located about 400 km Southeast of Miri. It is inhabited by a small farming community of 1,000 people mostly of Kelabit ethnic group. Because of its poor communication infrastructure and the rough and rugged terrain, the district is only accessible by air from Miri. It takes a minimum of four to five days to reach Bario from Miri on land and water routes. The district lacks basic amenities such as regular electricity, piped water, and telecommunications infrastructure. Bario remained virtually untouched until a decision was made to introduce the smart school project in the area.

The school children in Bario are disadvantaged both economically and socially and have little or no exposure to the outside world. (Zen et al 2004). It is against this backdrop that a group of researchers from the Universiti Malaysia Sarawak (UNIMAS) conceptualised the e-Bario project seeking to connect the community to the Internet with the ultimate objective of promoting their socio-economic development in a sustainable manner. Supported by the State government of Sarawak, the Ministry of Communications and Multimedia Malaysia, the International Development Research Centre (IDRC), Canada, and the National IT Council, the project led to the establishment of two computer labs in local schools (ten personal computers at a primary school and 12 personal computers at the secondary school) and a publicly accessible telecaster with four computers, thus connecting the Bario population to the global information network. Due to a lack of regular electricity supply, diesel generators were used to power the computers at the school.

In the second phase of development of the smart school project, the computers at the schools also formed the community's

telecentres. These are solar-powered and Internet access is provided through a satellite using the solar powered VSAT system. The computer labs have allowed the school children to get access to the Internet and the telecentres have enabled the villagers to communicate and share information with people outside. The initial costs were borne by the project with revenue generated through the telecentres, which in turn has helped sustain the project. eBario serves as an example of innovation in bridging the digital divide, and demonstrates how public and private sectors can work together to improve the lives of marginalised communities. The success of e-Bario has earned it several awards locally and internationally and inspired similar projects elsewhere.⁵ However, it remains unclear as to how women and girls were included from the Kelabit community in the decision-making and consultation processes for this project.

The Internet Users Survey 2014 conducted by Malaysian Communications and Multimedia Commission (MCMC) identified an increase in the percentage of Internet users across Malaysia. There are 66.6 per cent Internet users against 33.4 per cent of non-users.²⁶ Use distribution among the states appears to be proportionate to population density (MCMC 2014: 14). The ratio of male users against female users of the Internet increased to 1.4 from 1.3, where males accounted for 58.3 per cent of Internet users compared to 41.7 per cent of female users (MCMC 2014:

²⁶ The survey adopted the confidence level of 95% and precision of $\pm 5\%$. As on March 31, 2014, the reference date, there were 144.2 hand phone subscriptions per 100 inhabitants, a high enough penetration for the subscriber base to be treated as a virtual frame of individuals. The survey reached a sample of 2,402 Internet users and 1,205 non-users. Together they form the sample size of 3,607 (MCMC 2014: 6).



4 and 13). This ratio is higher than the sex ratio for Malaysia and hence indicates a more prevalent use of the Internet among males in the country over females (MCMC 2014: 13). Although there is a rural-urban divide, the gap between urban and rural use of the Internet is decreasing (MCMC 2014: 19). This indicates an improvement in Internet use in rural areas in the country and a general improvement in Internet penetration rates. This is likely to be further enhanced through the roll-out of the government's National Broadband Initiatives project which focuses on the development of wireless villages and 1Malaysia Internet Centres in rural areas.

From a connectivity architecture standpoint alone, Malaysia is poised for greater improvements in achieving its vision for e-government. This will no doubt be buoyed by the Malaysian government's commitment to the use of open source software (OSS). The Malaysian Public Sector OSS Master Plan was launched on July 16, 2004, to create and enhance value using OSS within the Public Sector ICT framework in providing efficient, secure, and quality services. The OSS Master Plan officially entered into Phase II—Accelerated Adoption on June 12, 2007, to accelerate OSS usage throughout the Public Sector, nation-wide. The objectives to implement this initiative are as follows:

- To reduce the total cost of ownership
- To increase freedom of choice of software usage
- To increase interoperability among systems
- To increase growth of ICT industry
- To increase growth of OSS industry

- To increase growth of OSS user and developer community
- To increase growth of knowledge-based society
- To reduce digital divide²⁷

MAMPU was tasked to establish and operate the Open Source Competency Centre (OSCC), which is the single point of reference to guide, facilitate, coordinate, and monitor implementation of OSS in the Public Sector.

²⁷ See <http://nitc.kkmm.gov.my/index.php/national-ict-policies/malaysia-public-sector-open-source-software-program>.



5. Citizen Uptake

The uptake of e-services has been limited because the fundamental problems of access, security, and privacy continue to hamper these services. Available data indicate that over time, there has been an increase in the uptake of e-services among citizens. In 2014, as many as 60.4 per cent of total Internet users in the country used online government services (MCMC 2014: 25), a significant increase from the 2011 figure of 38.4 per cent (MCMC 2014: 25). Nevertheless uptake is far from optimal. Less than half the taxpayers have adopted e-personal income tax filing in Malaysia, despite the promise of faster refunds by the Inland Revenues Agency (Nasr 2013, cited in United Nations 2014: 144). People are reluctant to trust the online tool with credit card details as the fraudulent use of credit cards is on the rise (Taylor Nelson-Flores 2002; Accenture 2004; cited in Kaliannan, Hazman and Raman 2009: 815). Taylor Nelson Sofres (2002), a market information services provider, found that 23 per cent of Malaysians surveyed were ready to release credit card and bank account numbers online to their government.

This reluctance is compounded by the fact that most online payment for services is executed via third party companies. The extent of controls, to ensure the integrity of the systems, over these companies is unknown to the public. While the Malaysian Communications and Multimedia Commission provides information as to which authority the public can make

complaints, this does not appear to help increase public trust and use of these services.²⁸

A study by Hussein *et al* on use of e-Filing highlights the importance of trust in engaging in e-services. The study found that among lecturers and administrative staff of five public universities: Universiti Teknologi Malaysia, Universiti Teknologi Mara, Universiti Malaya, Universiti Putra Malaysia, and Universiti Islam Antrabangsa Malaysia (411 out of 500 responses where 53 per cent are female and 47 per cent male), issues of trust in the government still prevail (2010: 67–68). Out of the six predictors of uptake of e-services, the third strongest predictor was trust in the government. Past experience in dealing with government agencies does help to build up confidence among Malaysians to use e-Filing. It is implied that if e-government initiatives are to be successful, the existing government should demonstrate its trustworthiness by safeguarding the interest of the public. In addition, trust in the Internet was found to be the weakest predictor influencing intention to use the service.

A consideration of the end-user in the design and delivery of e-services is important to ensure that the target group is accurately captured. The website of the Department for Women's Development shows a high fluctuation of users from 2012 to 2015, with single mothers being their largest clientèle of users.²⁹

²⁸ Visit <http://www.mcmc.gov.my/>. Accessed 16 April 2016.

²⁹ Department for Women's Development website, http://www.mywanita.gov.my/web/home/list_statistic/125/. Accessed 16 April 2016.



Yet, the definition of single mothers under the Department for Women's Development is narrowly conceived.

"Most of these mothers, they are women who are not legally divorced yet, because the process takes so long [but] the current definition of single mothers [under the Ministry of Women, Family and Community Development only considers] women who are divorced or whose husband is deceased, women who have become head of household because the husband is incapable because of his health and those things, and third, mothers with a child out of wedlock, [that is] they are not married [but have a child]." (Aliah Ali, interview, 2016; see also The Malaysian Insider 2015).

The website also highlights the importance of design and usability for targeted end-users who may not be so technically literate. For example, local NGOs such as Women's Aid Organisation and Sisters in Islam, whose staff tend to be more Internet savvy than their beneficiaries, did not find the portal useful (Sumitra Visvanathan, interview, 2016; Aliah Ali, interview, 2016).

MAMPU's own evaluation of Malaysia's e-government shows that while some e-government programs are not fully utilised, others are not user-friendly especially to new users. It also shows that the progress of e-initiatives is thwarted as they are facing high turnover of skilled and experienced staff, high

costs of development and implementation of new programs, and inadequate plans for knowledge transfer (MAMPU 2009b).³⁰

There are concerns that end-users have not been given any real opportunities to provide input or participation in the design and delivery process of e-government initiatives. One project that could be of reference for local government authorities with regards to public participation in governance, is the Kemaman Smart Community model.

The Smart Community project is based on the concept of transforming Malaysia into a Smart Nation using a building blocks approach – of creating an ICT ecosystem catering to the smallest geographic unit, and then integrating these 'smart communities' into larger building blocks of 'districts' and 'states'. This approach was piloted in Kemaman, a district on the east coast of Malaysia in 2008. Because of the political will of the concerned member of Parliament in establishing the Kemaman Smart Community, concrete efforts were made to ensure 100 per cent coverage of Kemaman. Not only were detailed studies and surveys carried out on connectivity architecture and needs of the community, but a blanket approval was given to set up the necessary infrastructure. As part of the project, in addition to internet connectivity and ensuring affordable access to ICT services and applications for rural and urban populations in

³⁰ According to MAMPU, data on women's uptake of services by other government ministries and agencies would have to be sought from each one (Suhazimah Dzazali and Norhamimah Ibrahim, interview, 2016). While a few of them may have statistics on their portals or websites on online transactions, these are often not gender disaggregated (for example, Ministry of Health's portal).



the district, some flagship initiatives were launched: a lifelong learning initiative, a 'smart' flood management system for the area, and an innovation centre to encourage creativity. However, the project faces challenges in advancing its agenda of inclusivity and participation because of the bureaucracy and need for approvals, and in getting the right partners who will work with the community (Nor Akmar Shah Minan, interview, 2016).

6. Conclusion and Recommendations

Despite the high potential of Malaysia's connectivity architecture and the clear impetus that investments in ICT have provided for e-government initiatives, further efforts are required for Malaysia's e-government to become gender-responsive. Malaysia's expressed commitment to gender equality requires a lot more attention in integration and follow through, with standardised systems in place to collect the necessary sex-disaggregated data and to process these accordingly for closer monitoring and gender analysis.

Recommendations are that the Government of Malaysia:

1. Adopts a gender analytical lens in e-government initiatives by considering the gendered realities of women and girls in the country. This can be done through close examination of the existing gender gaps and a thorough analysis of the reasons why these persist. E-government initiatives cannot risk perpetuating gender disparities that exist in Malaysian society as these will have larger negative socioeconomic implications in the longer term.
2. Strengthens integration of national commitment to gender equality and ICT and e-government policies. One way to do this is to ensure that Key Performance Indicators (KPIs) for each Ministry and their departments include a heavier emphasis



on inter-agency collaboration. The current use of the e-Kasih database to aid low-income households, for example, can be enhanced by a stronger collaboration to ensure one entry or access point to all forms of e-aid programs across sectors that the government may develop or implement. Standardised criteria that consider women's and girls' needs and their lived realities should be developed to ensure that women and girls do not fall through the cracks and loopholes of e-government initiatives as beneficiaries and end-users. These criteria should not be limited to income but to also consider issues of inequalities in access to opportunities in other areas such as education, continuing adult education, career advancement, legal issues commonly faced by women and girls (e.g. unwanted pregnancies, abandonment due to HIV and AIDS), and so on. Definition of categories of beneficiaries too, need closer scrutiny. The example of how "single mothers" omit women who have been abandoned but remain legally married shows how shortcomings in the definition of categories of beneficiaries can deny aid to those in most need.

3. Makes concerted efforts to change staff's attitude towards citizens and their input and participation in the design and delivery of e-government initiatives, paying special attention to include women and girls from vulnerable groups and communities. This could be facilitated by developing a policy of participation for government ministries and agencies, similar to the privacy and security policies that have been developed. A client's charter alone does not necessarily support and encourage input and participation of those who are meant to be served by

e-government initiatives as these tend to be provider-oriented rather than user-oriented.

4. In addition to facilitating one-stop shops for government services, develops a more comprehensive information distribution plan and system to ensure that knowledge of the existence of such services reach those in most need of these, paying special attention to informing potential users in rural areas, and vulnerable groups, especially women and children in both rural and urban areas. A closer work relationship could be forged in this regard with NGOs. Information should be accompanied with follow through in responding to queries and in facilitating applications. Educational outreach to potential users should also complement such an information distribution plan and system.
5. With the move towards open data, ensures that all measures are taken to protect the privacy of women and girls. An empowerment approach to this issue should be adopted, by informing women and girl users of e-government initiatives of how their privacy can be compromised, with illustrative examples, and how they can seek redress if violations occur.
6. Refrains from making assumptions about women's and girls' IT literacy. The popular use of Facebook and Whatsapp should not be interpreted as IT literacy. A level of knowledge, experience, and skill is required to be able to navigate portals and websites that are often less user-friendly in design compared to Facebook and Whatsapp. Hence, even a higher ownership of smartphones



among women and girls does not necessarily indicate high levels of IT literacy or assured access to e-government services.

7. Enhance legal framework on data protection and privacy rights in line with international norms and standards. This may also help enhance public perception of trust and use of digitalized public services.
8. Includes the Ministry of Women, Family and Community Development as a key member of the E-Government Steering Committee(EGSC). This would help ensure a better alignment of the gender equality commitments that the government has made and the goals and focus of the National Policy on Women with e-government initiatives, as well as better ensure a more gender-responsive implementation. As the Ministry's portfolio includes the wellbeing of vulnerable groups like persons with disabilities, senior citizens, and children, it would make sense for this ministry to join the core EGSC.
9. Recognises that misogynistic attitudes are huge barriers to achieving gender equality in the country. The government should make concrete efforts and take the necessary steps by law and through attitudinal change programs to counter and address misogynist attitudes online and offline, including among those in positions of authority. If political will and commitment to ensure redress is not forthcoming, then this could affect how women are eventually treated and discriminated, including through online interfaces for government services transactions. Effective measures to counter misogynist attitudes should also be implemented in cyberspace as many of the misogynist attacks on women in Malaysia have taken place over social media.
10. Considers how the MyKad as a multipurpose smartcard is becoming the backbone of all government transactions for G2C delivery and hence, should not in any way impede benefits to the people, but should only serve to enhance government services to them and their overall wellbeing. It is timely that the government shift the emphasis from a regulatory focus to ensuring that information on the MyKad is optimised to benefit Malaysians. In particular, health data information is pertinent for better health care, and all information on the MyKad should be freely accessible to the concerned individual to allow for assessment of accuracy by Malaysians. Changes to personal data due to personal health and psychological issues such as gender dysphoria should be facilitated rather than obstructed. The official recognition of gender dysphoria would also be in line with the EMP 2016–2020 goals of ensuring inclusive growth regardless of gender. All service providers who use the MyKad to ensure access to services for their clients should be made aware of the problems faced with the biometric system by older persons, transgender people and in general, people who suffer changes in their fingerprint biometric data due to health issues.
11. Takes steps to address VAW and the issue of ensuring safety of women and girls, following examples such as the establishment of a child sex offenders registry.



12. Uses the power of digitally enabled networks for women political leaders irrespective of political alignment, in line with the goals of the EMP 2016–2020, and Malaysia's commitment to ensuring 30 per cent of women in decision-making positions. This could be in the form of a policy-making portal that will allow for women to provide input to women members of Parliament on the policies they desire as well as to give feedback on any policies that the government may develop.
13. Enacts an Equality Act so that gender equality can be better integrated through legislation without the over reliance on the initiative and leadership of the Ministry of Women, Family and Community Development.
14. Enacts the Freedom of Information Act at federal government level to ensure greater transparency and accountability to the peoples of Malaysia in decision-making, related processes, and public expenditures.



Key Informants Interviewed

Dr. Suhazimah binti Dzazali, Mampu's Deputy Director General of ICT

Ministry of Women, Family and Community Development

Sumitra Visvanathan, Executive Director, Women's Aid Organisation

Nor Akmar Shah Minan, Head, Digital Communities and Program,
Coordination Division, Malaysian Communications and Multimedia
Commission

Team members, Malaysian Communications and Multimedia Commission's
team working on Kemaman Smart Community project

Norhamimah binti Ibrahim, Director, ICT Strategic Development and
Architecture Division, interview, 21 January 2016

Amiruddin Hisan, Director, Telehealth Division, Ministry of Health

Aliah Ali, Communications Officer, Sisters in Islam

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(Footnotes)

- 1 Similar identification cards are issued as well for children (MyKid), the police (MyPolis), the army (MyTentera) and Permanent Residents of Malaysia (MyPR).
- 2 An electronic wallet system intended for low-value, high-volume transactions.
- 3 Allows for the purchase of digital certificates for more secure Internet banking, online submission of tax returns, and e-mail.
- 4 The first six digits record the date of birth of the person and the next two digits denote their place of birth (usually by state, or if born outside of Malaysia, by region). Stateless persons are denoted by 98, and those who do not know the state they were born in or have no birth records but have Malaysian citizenship records, would be denoted with 82.
- 5 For more information on e-barrio, see <http://www.unimas.my/ebarrio> and <http://www.ebarrio.org>. See also <http://mikeb.inta.gatech.edu/UCDandIDWorkshop/papers/yeo.pdf>.