

# COUNTRY: MALAYSIA

## SCORE: 59.26 | RANK: 14/24

Malaysia has modern electronic signature laws, and electronic commerce laws in place. These measures provide good level of protection for computing in Malaysia.

Malaysia has data protection regulation in place that is generally compatible with globally recognized frameworks. However, the law does not include data breach notification provisions and data controllers are required to register with the Personal Data Protection Department.

Malaysia has specific provisions in place for law enforcement access to encrypted data that, in some instances, may act as de facto mandate for the use of specific security technology.

Malaysia’s copyright laws are aligned with international standards, although enforcement remains patchy.

Malaysia has a moderate level of broadband penetration. In 2015, the government committed to new broadband targets: by 2020, 100 percent of households in capital cities and high-impact growth area to have access to speeds of 100 Mbps and 50 percent of households in suburban and rural areas to have access to speeds of 20 Mbps.

Malaysia fell slightly in the Scorecard rankings — from 13th place in 2016 to 14th place in 2018.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
<b>DATA PRIVACY (SCORE: 6.5/12.5   RANK: 16/24)</b>		
1. Is a data protection law or regulation in place?	✓	The Personal Data Protection Act 2010 is in force.
2. What is the scope and coverage of the data protection law or regulation?	Sectoral	The Personal Data Protection Act 2010 covers only the private sector. Government agencies are exempt.
3. Is a data protection authority in place?	✓	A Personal Data Protection Commissioner (Commissioner) has been appointed, advised by a Personal Data Protection Advisory Committee. The Department of Personal Data Protection (JPDP) <www.pdp.gov.my>, an agency under the Ministry of Communications and Multimedia (KKMM) <www.kkmm.gov.my>, has been established to administer the Act.
4. What is the nature of the data protection authority?	Other government official	The regulator is a government department.
5. Is the data protection authority enforcing the data protection law or regulation in an effective and transparent manner?	ⓘ	Enforcement is undertaken by a government department, and this arrangement is not as independent as the structure in place for most data protection authorities. The regulator has been active in issuing guidance and advice for organizations covered by the law, but has not yet engaged in active enforcement activities (the Personal Data Protection Act 2010 is relatively recent, as it came into force in late 2013).
6. Is the data protection law or regulation compatible with globally recognized frameworks that facilitate international data transfers?	APEC framework & EU framework	The Personal Data Protection Act 2010 closely mirrors the principles in the EU Directive, with some variations that appear to adopt parts of the APEC Privacy framework.  The Act does not cover the government sector.
7. Are data controllers free from registration requirements?	✗	Data controllers are required to register with the Personal Data Protection Department <www.pdp.gov.my> if they are involved in specific classes designated by the Minister of the Malaysian Communications and Multimedia Commission (MCMC) <www.mcmc.gov.my>. These classes include processes that involve communications, banking and finance, insurance, healthcare, tourism and hospitality, transportation, education, direct sales, services, real estate and utilities sectors.
8. Are there cross-border data transfer requirements in place?	Detailed requirements	Under the Personal Data Protection Act 2010 cross-border data transfers can generally only be made to countries deemed by the Commissioner to have adequate privacy protections in place.  However, other exceptions are available, including consent, contractual arrangements and “reasonable steps and due diligence” to ensure that the recipient protects the information.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
9. Are cross-border data transfers free from arbitrary, unjustifiable, or disproportionate restrictions, such as national or sector-specific data or server localization requirements?	✓	In April 2017, the Personal Data Protection Commissioner issued a Public Consultation Paper (PCP) No. 1/2017 on Personal Data Protection (Transfer of Personal Data to Places Outside Malaysia) Order 2017. The draft order lists a large number of countries deemed adequate for the transfer of personal data, including European countries, countries deemed adequate by the EU, numerous local countries (e.g., Australia, Japan) and also the United States. Key markets that are not on the list include China and India. The public consultation period on the draft order closed in May 2017.  The proposed order, if enacted, would facilitate simple and widespread data transfers.  There are no data localization requirements in place in Malaysia that are likely to have an effect on cloud computing.
10. Is there a personal data breach notification law or regulation?	✗	Malaysia does not have a data breach notification provision or law.
11. Are personal data breach notification requirements transparent, risk-based, and not overly prescriptive?	Not applicable	Malaysia does not have a data breach notification provision or law.
12. Is an independent private right of action available for breaches of data privacy?	✗	An independent right is not available in Malaysia.  There is no express right under the provisions in the Personal Data Protection Act 2010 (PDPA) that allows aggrieved data subjects to pursue a civil claim against data users for breaches of the PDPA.
<b>SECURITY (SCORE: 8.8/12.5   RANK: 11/24)</b>		
1. Is there a national cybersecurity strategy in place?	①	Malaysia does not have a dedicated, up-to-date cybersecurity strategy in place. A National Cyber Security policy (NCSP) was issued in 2006, with a focus on critical infrastructure, but it is now out of date <cnii.cybersecurity.my/main/ncsp/index.html>.  Cybersecurity Malaysia <www.cybersecurity.my> refers to the collation of publications and strategies associated with cybersecurity as Malaysia's Cyber Security Policy. Although it is not a dedicated cybersecurity strategy, it does include recent documents and initiatives.
2. Is the national cybersecurity strategy current, comprehensive, and inclusive?	①	Cybersecurity Malaysia <www.cybersecurity.my> is the national cybersecurity specialist agency under the Ministry of Science, Technology and Innovation (MOSTI) <www.mosti.gov.my>. The role of CyberSecurity Malaysia is to provide specialized cybersecurity services to prevent or minimize disruptions to critical information infrastructure.  It coordinates programs and strategies associated with cybersecurity as Malaysia's Cyber Security Policy.  In April 2017 the Malaysian government issued an ICT Security Policy <www.mosti.gov.my/en/policies-roadmaps>. The policy represents a major expansion and update of Malaysian policy and guidance on many aspects of cybersecurity.
3. Are there laws or appropriate guidance containing general security requirements for cloud service providers?	✓	The security principle contained in the Personal Data Protection Act 2010 states: "Security Principle: A data user shall take practical steps to protect the personal data from any loss, misuse, modification, unauthorized or accidental access or disclosure, alteration or destruction."  In April 2017 the Malaysian Government issued an ICT Security Policy <www.mosti.gov.my/en/policies-roadmaps>. The policy contains detailed rules and guidance on security requirements and security certifications.
4. Are laws or guidance on security requirements transparent, risk-based, and not overly prescriptive?	①	The security principle contained in the Personal Data Protection Act 2010 is supported by the Personal Data Protection Standard issued in December 2015 <www.pdp.gov.my/index.php/en/akta-709/standard>. The standard includes physical security measures, the management of access controls, the maintenance of a register of individuals with access to the data, and specific data retention and destruction periods.  Some of the specific requirements may be considered overly prescriptive.  In addition, the ICT Security Policy (2017) <www.mosti.gov.my/en/policies-roadmaps> contains further detailed security requirements. As of June 2017, this is a new policy, and its effect and implementation is uncertain.
5. Are there laws or appropriate guidance containing specific security audit requirements for cloud service providers that take account of international practice?	①	The ICT Security Policy (2017) <www.mosti.gov.my/en/policies-roadmaps> contains a requirement for annual security audits. As of June 2017, this is a new policy, and its effect and implementation is uncertain.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
6. Are international security standards, certification, and testing recognized as meeting local requirements?	✓	In 2011 Malaysia was accepted as a Certificate Authorizing Member (the highest level) of the Common Criteria Recognition Agreement (CCRA) <www.commoncriteriaportal.org>. Certifications have been required in a small number of national flagship projects.
<b>CYBERCRIME (SCORE: 8/12.5   RANK: 20/24)</b>		
1. Are cybercrime laws or regulations in place?	✓	<p>The Computer Crimes Act 1997 prohibits four relatively limited categories of activities related to unauthorized entry into computer systems, which are:</p> <ul style="list-style-type: none"> <li>• Section 3. Acts committed with intent to secure unauthorized access to programs or data stored in any computer;</li> <li>• Section 4. Unauthorized access with intent to commit or facilitate commission of further offense;</li> <li>• Section 5. Acts committed with the knowledge that the act will cause unauthorized modification of the contents of any computer;</li> <li>• Section 6. Wrongful communication of any password, code or means of access to a computer to any person who is not authorized to receive the same.</li> </ul> <p>Also, any person who has in his custody or control any computer program or data that he is not authorized to hold is presumed to have obtained unauthorized access to such program or data.</p> <p>These provisions cover most, but not all cybercrime activity.</p>
2. Are cybercrime laws or regulations consistent with the Budapest Convention on Cybercrime?	ⓘ	The provisions in the Computer Crimes Act 1997 are more aligned with computer crimes, than cybercrimes. They do not follow the Convention closely. However, provisions contained in e-commerce laws and copyright laws (updated and amended in 2012) complement Malaysia's cybercrime legislation and make it more compatible with international standards.
3. Do local laws and policies on law enforcement access to data avoid technology-specific mandates or other barriers to the supply of security products and services?	✗	<p>Malaysia has specific provisions in place for law enforcement access to encrypted data that, in some circumstances, may act as de facto mandates for the use of specific security technology.</p> <p>The Digital Signature Act 1997 gives powers of search and seizure of documents and computerized data to the police or a duly authorized officer where there is reasonable cause to believe that an offense under the Digital Signature Act is being committed. In such an event, they additionally have the right of access and the right to require the production of computerized data. "Access" here includes being provided with the password, encryption and decryption codes, software or hardware necessary for comprehension of the computerized data.</p> <p>Such powers are normally exercised pursuant to a warrant issued by a magistrate. The police may, however, search any premises without a warrant if they have reasonable cause to believe that the delay in obtaining such a warrant will adversely affect investigations or is likely to lead to the tampering or destruction of evidence.</p> <p>When a subscriber uses a pseudonym, the certification authority is required to transmit data on the subscriber's identity if so requested by the proper authorities, where this is necessary to prosecute offenses or maintain public order.</p> <p>Apart from the above, various statutes give powers of search and seizure and powers to compel the production of evidence for investigations into offenses committed thereunder. Examples of such legislation include the Criminal Procedure Code, the Banking and Financial Institutions Act 1989, Anti-Money Laundering Act 2001, and the Communications and Multimedia Act 1998.</p> <p>These search, seizure, and access powers are to be exercised for the purposes of investigations into offenses to which the statutes in question relate, and do not confer any general authority for access to information or the conduct of general searches and seizures.</p>
4. Are arrangements in place for the cross-border exchange of data for law enforcement purposes that are transparent and fair?	✓	Malaysia is party to numerous Mutual Legal Assistance Treaties (MLATs) and other international agreements for sharing data for law enforcement cooperation, both directly and via regional agreements (such as the ASEAN Treaty on Mutual Legal Assistance in Criminal Matters, 2004). These agreements are up-to-date and follow international best practice.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
<b>INTELLECTUAL PROPERTY RIGHTS (SCORE: 5.3/12.5   RANK: 22/24)</b>		
1. Are copyright laws or regulations in place that are consistent with international standards to protect cloud service providers?	📌	Malaysian law was updated by the Copyright (Amendment) Act 2012 and is now compliant with key international standards.  There is no specific copyright "safe harbor" protection in place in Malaysia, but Malaysian law has such high thresholds for copyright liability (arising from years of common law cases) that intermediary liability is very minimal. In addition, Section 263 of the Malaysian Communications and Multimedia Act (CMA) has a "best endeavors" requirement in relation to limiting copyright infringement, and this provision does include a specific "safe harbor." However, this provision only provides protection from criminal prosecution (not civil liability), so it is a very unusual and limited form of protection.
2. Are copyright laws or regulations effectively enforced and implemented?	📌	Malaysia has an active enforcement culture and a well-regarded track record of updating and improving both its copyright laws and its copyright enforcement regime.  The Malaysian implementation of intellectual property "safe harbors" is very limited, but cloud service providers are protected in practice by Malaysia's strict approach to intermediary liability.
3. Is there clear legal protection against misappropriation of trade secrets?	✖	Malaysia does not have a specific law on the protection of trade secrets. Organizations must rely on the broader duty of confidence or contractual protections.
4. Is the law or regulation on trade secrets effectively enforced?	✖	In practice it is very difficult to pursue a legal case for misappropriation of trade secrets in Malaysia. There is no codified law, and the courts have traditionally been very reluctant to enforce breach of confidence laws in relation to theft of business secrets.
5. Is there clear legal protection against the circumvention of Technological Protection Measures?	✅	Malaysia's Copyright Act was amended in 2012 and now contains detailed provisions on the circumvention of technological protection measures.
6. Are laws or regulations on the circumvention of Technological Protection Measures effectively enforced?	✅	Malaysia's provisions relating to circumvention devices are regularly enforced, and Malaysia has a good overall track record of copyright protection.  There is some concern that Malaysia's copyright law limits the prohibition on circumvention devices to copyright control measures, rather than also applying to access control measures. However, there have been no specific cases on this topic, and the extent of this issue is uncertain.
7. Are there clear legal protections in place for software-implemented inventions?	✖	Section 13 of the Malaysian Patents Act 1983 limits the ability to patent software related inventions in Malaysia.
8. Are laws or regulations on the protection of software-implemented inventions effectively implemented?	✖	It is very difficult to secure patent protection for computer-related inventions in Malaysia. Few patents for such inventions have been granted. Organizations are generally discouraged from relying on patent protection to protect software-enabled inventions in Malaysia.
<b>STANDARDS AND INTERNATIONAL HARMONIZATION (SCORE: 10/12.5   RANK: 13/24)</b>		
1. Is there a regulatory body responsible for standards development for the country?	✅	The Department of Standards Malaysia < <a href="http://www.standardsmalaysia.gov.my">www.standardsmalaysia.gov.my</a> > is an agency established by the Ministry of Science, Technology and Innovation (MOSTI) < <a href="http://www.mosti.gov.my">www.mosti.gov.my</a> >. Its role is to develop and promote the use of Malaysian standards and ensure compliance with international standards.
2. Are international standards favored over domestic standards?	✅	Malaysia prioritizes compliance with international standards.
3. Does the government participate in international standards setting process?	✅	Malaysia participates in relevant International Standards Organization (ISO) and International Electrotechnical Commission (IEC) standard setting processes and is a full member of the ISO. Malaysia is a participant in the top-level ICT standards committee (JTC-1) < <a href="http://www.iso.org/isoiec-jtc-1.html">www.iso.org/isoiec-jtc-1.html</a> >.
4. Are e-commerce laws or regulations in place?	✅	The Electronic Commerce Act 2006 is the key source of electronic commerce regulation for the private sector.  It is complemented by the Electronic Government Activities Act 2007, which applies similar rules to the public sector.
5. What international instruments are the e-commerce laws or regulations based on?	UN Convention on E-Contracting	The Electronic Commerce Act 2006 closely mirrors the UN Convention on Electronic Contracting. This convention came into force in March 2013.
6. Is there a law or regulation that gives electronic signatures clear legal weight?	✅	Under the Digital Signature Act 1997, digital signatures are to be the equivalent of signatures in the traditional sense. The legal framework of the Act was strengthened to encourage future use, by way of the Digital Signature (Amendment) Act 2001.  In addition, the Electronic Commerce Act 2006 contains broad (technology neutral) provisions on electronic signatures.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
7. Are cloud service providers free from mandatory filtering or censoring?	✘	<p>The Communications and Multimedia Act 1998 established the Malaysian Communications and Multimedia Commission &lt;<a href="http://www.mcmc.gov.my">www.mcmc.gov.my</a>&gt;, which is empowered to regulate the information technology and communications industries. The Act empowers the commission with broad authority to regulate online speech, providing that “no content applications service provider, or other person using a content applications service, shall provide content which is indecent, obscene, false, menacing, or offensive in character with intent to annoy, abuse, threaten or harass any person.” Publishers of media content in violation of this provision may face criminal penalties.</p> <p>From 2015 to 2017 the Malaysian Government blocked numerous online sites that criticized the government or drew attention to corruption investigations. This development followed a long period where online censorship was rare in Malaysia. The government has also proposed a significant extension of censorship laws, although as of June 2017 the details of these changes had not yet been submitted to parliament.</p>
<b>PROMOTING FREE TRADE (SCORE: 7.3/12.5   RANK: 14/24)</b>		
1. Is a national strategy or platform in place to promote the development of cloud services and products?	✘	Malaysia previously had a strategy in place for the promotion of cloud services known as the MSC Malaysia Cloud Initiative (MMCI). However, this initiative has expired and as of June 2017 had not been replaced.
2. Are there any laws or policies in place that implement technology neutrality in government?	🕒	<p>The Malaysian Government Interoperability Framework (MyGIF) 2003 encourages technology neutrality.</p> <p>MyGIF has been supplemented by the Malaysian Government Interoperability Framework for Open Source Software (MyGIFOSS) 2008, which contains information on open source software (OSS), open standards, and technical specifications recommended for adoption in Malaysia &lt;<a href="http://www.osdec.gov.my">www.osdec.gov.my</a>&gt;.</p>
3. Are cloud computing services able to operate free from laws or policies that either mandate or give preference to the use of certain products, services, standards, or technologies?	✔	<p>There are no mandatory product requirements or product preferences in Malaysia.</p> <p>The Open Source Development and Capabilities (OSDEC) unit &lt;<a href="http://www.osdec.gov.my">www.osdec.gov.my</a>&gt; promotes open source options, but does not impose and preferences or mandates.</p>
4. Are cloud computing services able to operate free from laws, procurement policies, or licensing rules that discriminate based on the nationality of the vendor, developer, or service provider?	🕒	Preferential government procurement policy favors locally owned businesses in some sectors. International tenders are sometimes invited if goods and services are not available locally.
5. Has the country signed and implemented international agreements that ensure the procurement of cloud services is free from discrimination?	✘	Malaysia is an observer, but not a full member, of the World Trade Organization (WTO) plurilateral Agreement on Government Procurement < <a href="http://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm">www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm</a> >.
6. Are services delivered by cloud providers free from tariffs and other trade barriers?	✔	No relevant tariffs are in place and Malaysia takes active steps to encourage foreign ICT investment and development.
7. Are cloud computing services able to operate free from laws or policies that impose data localization requirements?	✔	There are no data localization requirements in place in Malaysia that are likely to have an effect on cloud computing.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
<b>IT READINESS, BROADBAND DEPLOYMENT (SCORE: 13.5/25   RANK: 14/24)</b>		
1. Is there a National Broadband Plan?	<p>By 2020:</p> <ul style="list-style-type: none"> <li>100% of households in capital cities and high-impact growth areas to have access to speeds of 100 Mbps</li> <li>50% of households in suburban and rural areas to have access to speeds of 20 Mbps</li> </ul>	<p>As part of the whole of government strategy announced by the Malaysian government in July 2015, the 11th Malaysia Plan 2016–2020 &lt;epu.gov.my/en/rmk/eleventh-malaysia-plan-2016-2020&gt; made national broadband commitments in Chapter 7: Strengthening Infrastructure to Support Economic Expansion that:</p> <ul style="list-style-type: none"> <li>95% of populated areas to be covered by broadband infrastructure</li> <li>1% of GNI per capita for fixed broadband cost</li> </ul> <p>In the 11th Malaysia Plan the government committed to two broadband programs:</p> <p>The High-Speed Broadband 2 (HSBB 2) deployment covers capital cities and designated high-impact growth areas. This is a secondary phase to the HSBB 2 deployment that followed the 10th Malaysia Plan. The targets for the HSBB 2 deployment are:</p> <ul style="list-style-type: none"> <li>250,000 ports to be installed by end of 2016, passing through 410,000 premises</li> <li>100 megabits per second (Mbps) broadband made available to all households in state capitals and high-impact growth areas by 2020</li> <li>The Suburban Broadband (SUBB) deployment covers suburban and rural area. Its targets are: <ul style="list-style-type: none"> <li>Additional 420,000 ports through 750,000 premises to be installed within five years of project start</li> <li>20 Mbps broadband made available to 50% of households in suburban and rural areas by 2020</li> </ul> </li> </ul>
2. Is the National Broadband Plan being effectively implemented?	📌	<p>Information on implementation is limited.</p> <p>At the end of 2016 (latest data available) the Malaysian Communications and Multimedia Commission (MCMC) &lt;www.mcmc.gov.my&gt; reported that 78% of households had some form of access to broadband, meaning that Malaysia appears to be making slow progress toward its targets.</p>
3. Are there laws or policies that regulate “net neutrality”?	No regulation	<p>There are no specific net neutrality rules in place in Malaysia, although the Minister of Communications and Multimedia &lt;www.kkmm.gov.my&gt; has a theoretical power to set tariffs for Internet traffic under the Communications and Multimedia Act (this power has not been used).</p>
<b>4. Base Indicators</b>		
4.1. Population (millions) (2015) • Total for all countries in this scorecard: 4,700 million	31	<p>In 2015, the population of Malaysia increased by 1.5%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) &lt;www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx&gt;]</p>
4.2. Urban Population (%) (2015) • Average for all countries in this scorecard: 73%	75%	<p>In 2015, the urban population of Malaysia increased by 0.9%.</p> <p>[World Bank, Data Catalog, Indicators, Urban Population (Jan. 2017) &lt;data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS&gt;]</p>
4.3. Number of Households (millions) (2015) • Total for all countries in this scorecard: 1,249 million	6	<p>In 2015, the number of households in Malaysia increased by 1.5%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) &lt;www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx&gt;]</p>
4.4. Population Density (people per square km) (2015) • Average for all countries in this scorecard: 471	92	<p>In 2015, the population density of Malaysia increased by 1.4%.</p> <p>[World Bank, Data Catalog, Indicators, Population Density (Jan. 2017) &lt;data.worldbank.org/indicator/EN.POP.DNST&gt;]</p>
4.5. Per Capita GDP (US\$ 2015) • Average for all countries in this scorecard: US\$ 22,649	\$9,768	<p>In 2015, the per capita GDP for Malaysia increased by 5% to US\$ 9,768. This was above the five-year compound annual growth rate (CAGR) from 2010–2015 of 1.5%.</p> <p>This ranks Malaysia 14th for value of per capita GDP and 11th for growth (CAGR) for this indicator in this scorecard.</p> <p>[World Bank, Data Catalog, Indicators: GDP Per Capita, Current US\$ (Jan. 2017) &lt;data.worldbank.org/indicator/NY.GDP.PCAP.CD&gt; and GDP Growth, Annual % (Jan. 2017) &lt;data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG&gt;]</p>
4.6. ICT Service Exports (billions of US\$) (2015) • Total for all countries in this scorecard: US\$ 978 billion	\$8	<p>In 2015, the value of ICT service exports for Malaysia decreased by 15.8% to US\$ 8.23 billion. This was below the five-year compound annual growth rate (CAGR) from 2010–2015 of 3.3%.</p> <p>This ranks Malaysia 18th for value of ICT service exports and 11th for growth (CAGR) for this indicator in this scorecard.</p> <p>[World Bank, Data Catalog, Indicators: ICT Service Exports US\$ (Jan. 2017) &lt;data.worldbank.org/indicator/BX.GSR.CCIS.CD&gt;]</p>

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
4.7. Personal Computers (% of households) (2015) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 63%</li> </ul>	68%	In 2015, 67.6% of households in Malaysia had personal computers. This is an increase of 6.8% since 2014 and ranks Malaysia 63rd out of 236 countries surveyed. The growth from 2014 is above the five-year compound annual growth rate (CAGR) from 2010 to 2015 of 1.8%.  This ranks Malaysia 14th for the number of personal computers (as a % of households) and 16th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
5. IT and Network Readiness Indicators		
5.1. ITU ICT Development Index (IDI) (2016) (score is out of 10 and covers 175 countries) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 6.58</li> </ul>	6.22	Malaysia's ITU ICT Development Index (IDI) for 2016 is 6.22 (out of 10), resulting in a rank of 61st (out of 175 economies). The 2016 IDI for Malaysia increased by 10.3%, and the IDI ranking improved by 5 from a rank of 66th since 2015.  This ranks Malaysia 15th in the ITU ICT Development Index and 9th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), Measuring the Information Society (Dec. 2016) < <a href="http://www.itu.int/net4/ITU-D/idi/2016">www.itu.int/net4/ITU-D/idi/2016</a> >]
5.2. World Economic Forum Networked Readiness Index (NRI) (2016) (score is out of 7 and covers 139 countries) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 4.77</li> </ul>	4.91	Malaysia has a Networked Readiness Index (NRI) score of 4.91 (out of 7), resulting in a rank of 31st (out of 139 economies) and a rank of 1st (out of 34) in the Upper middle income grouping of economies. The 2016 NRI for Malaysia increased by 1.2% and improved by 1 place from a rank of 32nd since 2015.  This ranks Malaysia 10th in the ITU ICT Development Index and 15th for growth (CAGR) for this indicator in this scorecard.  [World Economic Forum, Global Information Technology Report (2016) < <a href="http://reports.weforum.org/global-information-technology-report-2016">reports.weforum.org/global-information-technology-report-2016</a> >]
6. Internet Users and International Bandwidth		
6.1. Internet Users (millions) (2015) <ul style="list-style-type: none"> <li>Total for all countries in this scorecard: 2,330 million</li> </ul>	22	[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
6.2. Internet Users (% of population) (2015) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 67%</li> </ul>	71%	In 2015, 71% of the population in Malaysia used the Internet, resulting in a ranking of 59th out of 236 countries surveyed by the ITU. This is an increase of 11.6% since 2014 and is above the five-year compound annual growth rate (CAGR) from 2010–2015 of 4.8%.  This ranks Malaysia 11th in the proportion of the population using the Internet and 12th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]  Note: There may be some variations as to how countries calculate this. Some countries base this upon all or part of the population — such as between 16 and 72 years of age.
6.3. International Internet Bandwidth (total gigabits per second (Gbps) per country) (2015) <ul style="list-style-type: none"> <li>Total for all countries in this scorecard: 117,736 Gbps</li> </ul>	743	Malaysia has increased its international Internet bandwidth by 29% since 2014 to 743 Gbps and is ranked 46 out of 236 countries surveyed by the ITU. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2009–2014 of 32.4%.  This ranks Malaysia 23rd for total international Internet bandwidth and 11th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
6.4. International Internet Bandwidth (bits per second (bps) per Internet user) (2015) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 97,747 bps</li> </ul>	34,119	The international Internet bandwidth (per Internet user) of Malaysia has increased by 14% since 2014. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 24.3%.  This ranks Malaysia 18th for international Internet bandwidth per user and 8th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
7. Fixed Broadband		
7.1. Fixed Broadband Subscriptions (millions) (2015) • Total for all countries in this scorecard: 697 million	3	Malaysia has increased the number of fixed broadband subscribers by 0.1% since 2014 to 3.06 million, and is ranked 36th out of 236 countries surveyed by the ITU. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 7.9%.  This ranks Malaysia 21st for the number of fixed broadband subscriptions and 9th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
7.2. Fixed Broadband Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 63%	48%	[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]  Note: This may be skewed by business usage in some countries.
7.3. Fixed Broadband Subscriptions (% of population) (2015) • Average for all countries in this scorecard: 21%	10%	Malaysia has decreased its fixed broadband subscriptions (as a % of the population) by -1.4% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 6.1%. This ranks Malaysia 100th out of 236 countries surveyed by the ITU.  This ranks Malaysia 19th for the number of fixed broadband subscriptions (as a % of the population) and 9th for growth (CAGR) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
7.4. Fixed Broadband Subscriptions (% of Internet users) (2015) • Average for all countries in this scorecard: 29%	14%	[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
7.5. Average Broadband Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) • Average for all countries in this scorecard: 12 Mbps • Average peak for all countries in this scorecard: 70 Mbps	9	In Malaysia the Q1 2017 average broadband data connection speed was 8.95 Mbps and is ranked 72nd out of 239 countries measured by Akamai.  This ranks Malaysia 16th for average broadband data connection speed in this scorecard.  Additional connection metrics for Q1 2017 in Malaysia include: • Average peak broadband connection speed: 64.06 Mbps (ranked 55th globally and 13th in this scorecard) • Above 4 Mbps: 72% (ranked 92nd globally and 20th in this scorecard) • Above 10 Mbps: 32% (ranked 68th globally and 14th in this scorecard) • Above 15 Mbps: 14% (ranked 68th globally and 14th in this scorecard) • Above 25 Mbps: 3% (ranked 69th globally and 15th in this scorecard)  [Akamai, The State of the Internet (1st Quarter, 2017) < <a href="http://www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/">www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/</a> >]
8. Fiber-to-the-home/building (FttX)		
8.1. Fiber-to-the-home/building (FttX) Internet Subscriptions (millions) (2015) • Total for all countries in this scorecard: 258 million	1.0	Malaysia has increased the number of FttX subscribers by 18% since 2014 to 1.017 million, and is ranked 19th out of 236 countries surveyed by the ITU.  This ranks Malaysia 12th for the number of FttX subscriptions and 14th for growth (from 2014) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]
8.2. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 18%	15.8%	Malaysia has increased the proportion of FttX subscribers to households by 18% (since 2014) to 15.82%.  This ranks Malaysia 8th for the proportion of FttX subscriptions to households and 14th for growth (from 2014) for this indicator in this scorecard.  [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < <a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a> >]  Note: This may be skewed by business usage in some countries.

# MALAYSIA	RESPONSE	EXPLANATORY TEXT
8.3. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of fixed broadband subscriptions) (2015) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 23%</li> </ul>	33.2%	<p>Malaysia has increased the proportion of FttX subscribers to fixed broadband subscribers by 18% (since 2014) to 33.2%.</p> <p>This ranks Malaysia 6th for the proportion of FttX subscriptions to fixed broadband subscriptions and 14th for growth (from 2014) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) &lt;<a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a>&gt;]</p>
9. Mobile Broadband		
9.1. Mobile Cellular Subscriptions (millions) (2015) <ul style="list-style-type: none"> <li>Total for all countries in this scorecard: 4,823 million</li> </ul>	44	<p>In 2015, Malaysia decreased the number of mobile cellular subscriptions by -1.8% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 5.4%. Malaysia is ranked 30th out of 236 countries surveyed by the ITU. The number of subscriptions account for 144% of the population.</p> <p>This ranks Malaysia 21st for the number of mobile cellular subscriptions and 9th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) &lt;<a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a>&gt;]</p> <p>Note: This figure may be inflated due to multiple subscriptions per head of population, but excludes dedicated mobile broadband devices (such as 3G data cards, tablets, etc.).</p>
9.2. Number of Active Mobile Broadband Subscriptions (millions) (2015) <ul style="list-style-type: none"> <li>Total for all countries in this scorecard: 2,506 million</li> </ul>	28	<p>In 2015, Malaysia has increased the number of active mobile broadband subscriptions by 58%, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 60.9%. Malaysia is ranked 24th out of 236 countries surveyed by the ITU.</p> <p>This ranks Malaysia 20th for the number of active mobile broadband subscriptions and 6th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) &lt;<a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a>&gt;]</p>
9.3. Active Mobile Broadband Subscriptions (% of population) (2015) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 77%</li> </ul>	91%	<p>Malaysia has increased the number of active mobile broadband subscriptions (as a % of the population) by 55% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 58.3%. Malaysia is ranked 27th out of 236 countries surveyed by the ITU.</p> <p>This ranks Malaysia 6th for the number of active mobile broadband subscriptions (as a % of the population) and 6th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) &lt;<a href="http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx">www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx</a>&gt;]</p> <p>Note: This refers to the sum of standard mobile broadband and dedicated mobile broadband subscriptions to the public Internet. It covers actual subscribers, not potential subscribers, even though the latter may have broadband enabled-handsets.</p>
9.4. Average Mobile Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) <ul style="list-style-type: none"> <li>Average for all countries in this scorecard: 11 Mbps</li> </ul>	4	<p>In Malaysia the Q1 2017 average mobile data connection speed was 4.4 Mbps and is ranked 66th out of 70 countries measured by Akamai.</p> <p>This ranks Malaysia 24th for average mobile data connection speed in this scorecard.</p> <p>[Akamai, The State of the Internet (1st Quarter, 2017) &lt;<a href="http://www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/">www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/</a>&gt;]</p>