

COUNTRY: VIETNAM

SCORE: 36.36 | RANK: 24/24

Vietnam continues to work on the development relevant cyberlaws that could enhance confidence in the digital economy and facilitate cloud computing. However, gaps still exist in key areas.

Vietnam has laws and regulations in place for electronic commerce and electronic signatures. However, only very limited laws are in place for cybercrime and Vietnam has not developed a national cybersecurity strategy yet.

Vietnam’s privacy laws are not comprehensive, but a patchwork of sectoral provisions provide some protection.

Vietnam continues to impose severe censorship and restrictions on Internet content. An additional risk is that Vietnam has not yet developed appropriate laws and policies on interoperability and government procurement. Also, some trade barriers may hamper the development of cloud computing and the digital economy.

There is also a gap in intellectual property protection and enforcement in Vietnam. Broadband penetration in Vietnam remains low, although there has been strong growth in a number of key infrastructure indicators in recent years.

Due to the many legal and policy gaps existing in Vietnam, as well as the poor performance in IT readiness and broadband development, the country has remained entrenched in last place — 24th — since the Scorecard was first launched.

# VIETNAM	RESPONSE	EXPLANATORY TEXT
DATA PRIVACY (SCORE: 4.8/12.5 RANK: 18/24)		
1. Is a data protection law or regulation in place?		<p>Vietnam does not have comprehensive privacy legislation, but it does have short privacy sections in both its Law on E-Transactions (Law No. 51/2005/QH11) and its Law on Information Technology (Law No. 67/2006/QH11). The Law on Protection of Consumers’ Rights 2010 (Law No. 59/2010/QH12) also includes a brief section on privacy.</p> <p>This approach was strengthened in 2013 by the passage of the Government Decree on E-Commerce (Decree No. 52/2013/ND-CP). This Decree clarifies the rights of individuals and expands the obligations of businesses. It includes a relatively comprehensive set of privacy principles.</p> <p>These three laws are all restricted to specific activities and sectors, and the Decree on E-Commerce is limited to online transactions (including Internet and mobile communications). As a result, some significant gaps remain in Vietnam’s approach to privacy protection.</p> <p>The Network Information Security Law (Law No. 86/2015/QH13) <english.mic.gov.vn/Pages/VanBan/13715/Law-No.-86_2015_QH13.html>, which came into effect in mid-2016, also contains some brief privacy requirements but raises a number of concerns, including an overly broad definition of personal information.</p>
2. What is the scope and coverage of the data protection law or regulation?	Sectoral	Privacy law in Vietnam is limited in scope. There is strong coverage of online commerce and partial coverage of the general IT and consumer sectors. Full coverage will not be achieved until further laws and regulations are developed.
3. Is a data protection authority in place?		There is no data protection authority, although the Ministry of Information and Communications has broad responsibility for e-commerce law and regulation. The Ministry of Industry and Trade also plays a limited role in the regulation of privacy, and the 2013 Decree on E-Commerce (Decree No. 52/2013/ND-CP) requires the two agencies to coordinate their activities.
4. What is the nature of the data protection authority?	Not applicable	There is no data protection authority in place.
5. Is the data protection authority enforcing the data protection law or regulation in an effective and transparent manner?	Not applicable	There is no data protection authority in place.
6. Is the data protection law or regulation compatible with globally recognized frameworks that facilitate international data transfers?	Not applicable	Vietnam’s privacy principles have limited sectoral application, but they are broadly consistent with the principles in the EU Data Protection Directive. Vietnam is a member of the Asia Pacific Economic Cooperation (APEC). The privacy principles contained in the Decree on E-Commerce (Decree No. 52/2013/ND-CP) are broadly compatible with the APEC Privacy Framework, but their application is very limited at this stage.

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7. Are data controllers free from registration requirements?	✓	There are no registration requirements in Vietnamese privacy law.
8. Are there cross-border data transfer requirements in place?	Brief requirements	There are no cross-border data transfer requirements in place in Vietnam. The data localization requirements in the Decree on Management, Provision and Use of Internet Services and Online Information (Decree No. 72/2013/ND-CP) act as a de facto restriction on cross-border data transfers.
9. Are cross-border data transfers free from arbitrary, unjustifiable, or disproportionate restrictions, such as national or sector-specific data or server localization requirements?	✗	The Decree on Management, Provision and Use of Internet Services and Online Information (Decree No. 72/2013/ND-CP) requires some organizations to have "at least one server system in Vietnam serving the inspection, storage, and provision of information at the request of competent state management agencies, and settlement of customers' complaints about the service provision according to regulations of the Ministry of Information and Communications" < www.vnnic.vn/sites/default/files/vanban/Decree%20No72-2013-ND-CP.PDF >. The provisions cover companies that provide Internet enabled services.
10. Is there a personal data breach notification law or regulation?	🕒	Article 72 of the Decree on E-Commerce (Decree No. 52/2013/ND-CP) includes a limited breach notification requirement.
11. Are personal data breach notification requirements transparent, risk-based, and not overly prescriptive?	🕒	Article 72 of the Decree on E-Commerce (Decree No. 52/2013/ND-CP) includes a limited breach notification requirement. In the case of an external attack, an organization must report the attack to the relevant authorities. There is no requirement to report the incident to data subjects. The Decree on E-Commerce has limited application; it is restricted to online transactions and electronic communications.
12. Is an independent private right of action available for breaches of data privacy?	✓	Vietnam offers some limited privacy rights under the November 2015 Civil Code (Law No. 91/2015/QH13). Article 38 of the Civil Code covers the right to "private life, personal secrets and family secrets."
SECURITY (SCORE: 1/12.5 RANK: 24/24)		
1. Is there a national cybersecurity strategy in place?	✗	Vietnam does not have an officially recognized national or sector-specific cybersecurity strategy. The Ministry of Information and Communications (MIC) announced in August 2016 it will develop a strategic plan on cyber information security < english.mic.gov.vn/mra/Pages/TinTuc/tinchitiet.aspx?tintucid=132600 >. In May 2017, the government also released a list of 11 areas to be prioritized in the development of the cybersecurity strategy < english.mic.gov.vn/Pages/TinTuc/134395/Network-information-security-of-11-key-areas-prioritized.html >.
2. Is the national cybersecurity strategy current, comprehensive, and inclusive?	✗	The Network Information Security (Law No. 86/2015/QH13) < english.mic.gov.vn/Pages/VanBan/13715/Law-No.-86_2015_QH13.html >, which passed in November 2015 and came into effect in mid-2016 contains some measures commonly contained in cybersecurity strategies such as enhancing cybersecurity training and capacity-building.
3. Are there laws or appropriate guidance containing general security requirements for cloud service providers?	✓	Vietnam's Law on Network Information Security (Law No. 86/2015/QH13) (LONIS) was passed in November 2015 and came into effect in mid-2016. It has a broad scope and sets out detailed security requirements for information system owners.
4. Are laws or guidance on security requirements transparent, risk-based, and not overly prescriptive?	✗	The security requirements contained in the Law on Network Information Security (Law No. 86/2015/QH13) < english.mic.gov.vn/Pages/VanBan/13715/Law-No.-86_2015_QH13.html > (LONIS) are detailed and prescriptive, and rely heavily on certificates to be issued by the Vietnamese government. The law is recent and came in to force in mid-2016 and its exact implementation in practice is uncertain, but the law appears to depart from international practice in certain key areas (such as cryptography and security certifications).
5. Are there laws or appropriate guidance containing specific security audit requirements for cloud service providers that take account of international practice?	✗	The Law on Network Information Security (Law No. 86/2015/QH13) (LONIS) does not contain a clear audit requirement for cloud service providers. However, there is a requirement for information system owners to make an annual report to the government on their business and their security arrangements.
6. Are international security standards, certification, and testing recognized as meeting local requirements?	✗	Vietnam is not a participant in the Common Criteria Recognition Agreement (CCRA) < www.commoncriteriaportal.org >. Certifications are generally not used in Vietnam.

# VIETNAM	RESPONSE	EXPLANATORY TEXT
CYBERCRIME (SCORE: 7/12.5 RANK: 23/24)		
1. Are cybercrime laws or regulations in place?	✓	<p>Vietnam is in the process of amending and updating its Penal Code. Implementation of the revised Penal Code 2015 has been delayed for a lengthy period while the government consults on further amendments.</p> <p>In the meantime, cybercrimes are covered by the Management and Use of Internet Services Decree (Decree No. 55/2001/ND-CP) <english.mic.gov.vn/Pages/VanBan/11222/55_2001_ND-CP.html>.</p> <p>Offenses under the decree include:</p> <ul style="list-style-type: none"> • Use of software tools, passwords, encryption codes or personal information to access Internet services illegally; • Stealing a password, access code, or private information of an organization and publishing it; • Using the Internet with the intention to harass, threaten or defame another person; and • Creating and disseminating computer viruses on the Internet. <p>Fines under the decree can range from VND200,000 (approx. US\$ 12.60) to VND20,000,000 (approx. US\$ 1,260).</p>
2. Are cybercrime laws or regulations consistent with the Budapest Convention on Cybercrime?	ⓘ	<p>Cybercrime laws in Vietnam cover a limited range of activities and are not as extensive as the offenses contained in the Convention on Cybercrime.</p>
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>Under the Law on National Security (Law No. 32/2004/QH11 passed by the National Assembly on December 3, 2004), the state agency in charge of the protection of national security has the right to examine communication equipment or computers and computer networks and materials of individuals and organizations if there is any reasonable suspicion of a breach of national security. It is therefore very likely that this security agency shall have the right to access all information, including encrypted data, in case of a suspected violation of national security.</p> <p>In addition, Decree 55 and Decision 71 require Internet service suppliers to arrange necessary technical and material facilities for the relevant state authorities to take measures to protect national security as well as to protect information and network security. Although the measures are not described in specific detail, they likely include access to encrypted data stored or used on the Internet and in the network.</p> <ul style="list-style-type: none"> • Decree No. 55/2001/ND-CP dated August 23, 2001, of the Government on the management, provision and use of Internet services <english.mic.gov.vn/Pages/VanBan/11222/55_2001_ND-CP.html>; and • Decision No. 71/2004/QD-BCA(A11) dated January 29, 2004, of the Ministry of Public Security promulgating the regulation on ensuring safety and security in activities of managing, providing, and using Internet services in Vietnam <english.mic.gov.vn/Pages/VanBan/11231/71_2004_QD-BCA-A11-.html>. <p>Vietnam's Law on Network Information Security (Law No. 86/2015/QH13) was passed in November 2015. Article 36 states that users of cryptographic products and services must provide necessary information relating to cryptographic keys for competent state agencies upon request. In addition, all users other than diplomatic missions and intergovernmental agencies are required to declare their use of civil cryptographic products to the Government Cipher Committee.</p> <p>In July 2016, these provisions were further strengthened by the Decree on Civil Cryptography (Decree No. 58/2016/ND-CP), which allows the government to access encrypted information, with a fine imposed on any person or organization that does not cooperate with requests to access information.</p>
4. Are arrangements in place for the cross-border exchange of data for law enforcement purposes that are transparent and fair?	✓	<p>Vietnam has specific legislation in place — the Law on Legal Assistance (Law No. 08/2007/QH127). The law is the subject of current debate in Vietnam, including proposals for a major update and overhaul of the provisions. Vietnam is party to a large number of regional and bilateral mutual assistance agreements.</p>

# VIETNAM	RESPONSE	EXPLANATORY TEXT
INTELLECTUAL PROPERTY RIGHTS (SCORE: 5.5/12.5 RANK: 21/24)		
1. Are copyright laws or regulations in place that are consistent with international standards to protect cloud service providers?	📌	Vietnam has enacted the Law on Intellectual Property (Law No. 50/2005/QH11). Vietnam has not signed the WIPO Copyright Treaty. Intellectual Property law in Vietnam is largely compliant with the key provisions in the treaty. Vietnam became a member of the TRIPS Agreement in 2007. Vietnam has significant gaps in its implementation of TRIPS and implementation of the key provisions has been slow. Copyright "safe harbor" protection for intermediaries such as cloud service providers is contained in Sections 16 (4) and 17 (2) of Law No. 67/2006/QH11 on Information Technology 2006. As long as they have not been "proactive" in relation to the copyright infringement an exemption applies for intermediaries. However, it is not a comprehensive safe harbor arrangement as there are no notice or take down provisions for infringing content.
2. Are copyright laws or regulations effectively enforced and implemented?	📌	Vietnam has a poor track record of enforcing intellectual property rights. Vietnam has very low financial penalties for breaches of the Law on Intellectual Property (2005), and these fail to deter infringing activity. A partial intellectual property "safe harbor" is available for cloud service providers, but the provisions are very limited compared to other jurisdictions.
3. Is there clear legal protection against misappropriation of trade secrets?	📌	Limited protection of trade secrets is provided by Article 4.23 of the Law on Intellectual Property (2005). Some minor additional protection is provided by employment law and competition law.
4. Is the law or regulation on trade secrets effectively enforced?	✖	There have only been a small handful of trade secrets cases in Vietnam. The law is not well understood or applied in Vietnam.
5. Is there clear legal protection against the circumvention of Technological Protection Measures?	✅	Article 28 of the Law on Intellectual Property (2005) states that a copyright infringement includes the act of "willingly canceling or deactivating technical solutions applied by copyright holders to protect copyright to their works." The law also includes a prohibition on: "manufacturing, assembling, transforming, distributing, importing, exporting, selling or leasing equipment when knowing or having grounds to know that such equipment may deactivate technical solutions applied by copyright holders to protect copyright to their works."
6. Are laws or regulations on the circumvention of Technological Protection Measures effectively enforced?	✖	Vietnam has a very poor track record of enforcing intellectual property rights, and this includes preventing the spread of circumvention devices. In particular, Vietnam has very low financial penalties for breaches of the Law on Intellectual Property (Law No. 50/2005/QH11), and these fail to deter infringing activity.
7. Are there clear legal protections in place for software-implemented inventions?	✅	The Law on Intellectual Property (2005) specifically excludes computer programs from eligibility for patent protection, but it does contain broad provisions that allow patent protection for computer implemented inventions.
8. Are laws or regulations on the protection of software-implemented inventions effectively implemented?	📌	Vietnam's Guidelines for Patent Examination specifically clarify that computer-implemented inventions may be patented < www.noip.gov.vn/web/noip/home/en >. In practice there is considerable complexity and ongoing debate about the application of the guidelines, with many commentators noting that it has become more difficult to obtain a patent in recent years.
STANDARDS AND INTERNATIONAL HARMONIZATION (SCORE: 9/12.5 RANK: 16/24)		
1. Is there a regulatory body responsible for standards development for the country?	✅	The Directorate for Standards, Metrology, and Quality (TCVN) < www.tcvn.gov.vn > is a government agency (at the level of General Department, the head of which bears ranking of quasi-vice minister) under the Ministry of Science and Technology (MOST) < www.most.gov.vn > having responsibility for advising the government in the field of standardization, metrology, and quality management and representing Vietnam in international and regional organizations. Standards are developed and published by the Vietnam Standard and Quality Institute < vsqi.gov.vn >.
2. Are international standards favored over domestic standards?	📌	Recent standards development processes have favored international standards. The National Program "Enhancing Productivity and Improving Product Quality for Vietnamese businesses up to 2020" approved by Prime Minister on May 2010 (Decision No. 712/2010/QĐ-TTg) commits Vietnam to adopting 60% international standards by 2020.
3. Does the government participate in international standards setting process?	✅	Vietnam participates in relevant International Standards Organization (ISO) and International Electrotechnical Commission (IEC) standard setting processes and is a full member of the ISO. Vietnam is an observer in the top-level ICT standards committee (JTC-1) < www.iso.org/isoiec-jtc-1.html >.

# VIETNAM	RESPONSE	EXPLANATORY TEXT
4. Are e-commerce laws or regulations in place?	✓	The Law on E-Transactions (Law No. 51/2005/QH11) contains functional equivalence provisions including for electronic signatures and electronic communications. The legislation also contains provisions creating legal rules that govern the circumstances surrounding when an electronic contract is formed, such as time and place of dispatch and receipt of an electronic message.
5. What international instruments are the e-commerce laws or regulations based on?	UNCITRAL Model Law on E-Commerce	The Law on E-Transactions (2005) is based on the UNCITRAL Model Law on Electronic Commerce (1996).
6. Is there a law or regulation that gives electronic signatures clear legal weight?	✓	The Law on E-Transactions (2005) includes provisions on e-signatures and certification of e-signatures and e-signature certificate services and management of e-signature services. On February 15, 2007, the government issued Decree No. 26/2007/ND-CP providing detailed regulations on the implementation of the Law on E-Transactions on digital signature and digital signature certification services, applicable to agencies and organizations providing digital signature certification services as well as agencies, organizations, and individuals seeking to use digital signature and digital signature certification services in electronic transactions.
7. Are cloud service providers free from mandatory filtering or censoring?	✗	Vietnam currently regulates access to both Internet infrastructure and content. Internet users in Vietnam are required to connect to the Internet via a licensed Internet Service Provider (ISP); Paragraph 3.2(c), Section II of Circular 04/2001/TT-TCBD on Internet prohibits any access to foreign ISPs by direct dialing international telephone numbers; and Internet users are not permitted to use Internet application services to the extent that the use of those services is prohibited or is not expressly permitted by law pursuant to paragraph 3.2(e), Section II of Circular 04/2001/TT-TCBD on Internet. Article 47 of the Law on E-Transactions (Law No. 51/2005/QH11) also contains a requirement for ISPs to cooperate with authorities in relation to online content regulation. A number of Decrees also impose restrictions on online speech and impose fines for anti-government expressions online. The two most prominent decrees are: <ul style="list-style-type: none"> • Decree No. 72/2013/ND-CP on the Management, Provision, Use of Internet Services and Information Content Online <english.mic.gov.vn/Pages/VanBan/11310/72_2013_ND-CP-.html>; and • Decree No. 174/2013 Regulating Administrative Sanctions for Violations Relating to Postal Services, Telecommunications, Information Technology, and Radio Frequencies.
PROMOTING FREE TRADE (SCORE: 0.5/12.5 RANK: 23/24)		
1. Is a national strategy or platform in place to promote the development of cloud services and products?	✗	A digital economy strategy for the period 2017–2020 is expected to be announced by Vietnam in the near future.
2. Are there any laws or policies in place that implement technology neutrality in government?	✗	Vietnam has a range of procurement decrees and circulars that set out government procurement policy. Although they promote an open and transparent system of procurement, they do not discuss technology neutrality.
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?	✗	In 2009, the Vietnam Minister of Information and Communications announced that it was mandatory that “100% of clients of IT divisions of government agencies must be installed with open source software.” Note that a lower limit (70%) applied to non-IT agencies. Further details are set out in Circular 20/2014/TT-BTTTT on Providing regulations on open-source software prioritized procurement and use in State agencies and organizations, issued in December 2014 <english.mic.gov.vn/Pages/VanBan/13548/20_2014_TT-BTTTT.html>. These commitments were reconfirmed in 2016.
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?	✗	The April 20, 2010, Prime Minister’s Directive No. 494/2010/CT-TTg on Public Procurement states that international bids will only be invited when local goods and equipment cannot meet the requirements of a tender. A preference for local suppliers is usually imposed, requiring 30% local involvement in any tenders for goods, and 50% local involvement in any tender for services.
5. Has the country signed and implemented international agreements that ensure the procurement of cloud services is free from discrimination?	📌	Vietnam is an observer, but not a full member, of the World Trade Organization (WTO) plurilateral Agreement on Government Procurement <www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm>.

# VIETNAM	RESPONSE	EXPLANATORY TEXT
6. Are services delivered by cloud providers free from tariffs and other trade barriers?	✘	<p>Regulations relating to technology transfer and industrial property licensing may (in certain circumstances) apply to cloud products and services.</p> <p>Under Decree 45/1998/ND-CP and Circular 1254/1999/TT-BKHCHNMT (collectively the Technology Transfer Regulations), a contract for "technology transfer" must:</p> <ul style="list-style-type: none"> • Contain certain compulsory terms and conditions, including terms relating to price and duration; • Be approved by and/or registered with the Ministry of Science and Technology; and • Where applicable, be registered at the National Office of Industrial Property (NOIP). <p>The definition of "technology transfer" under the Technology Transfer Regulations is very widely drafted and is potentially broad enough in scope to cover almost any activity concerned with supply of technology or licensing of intellectual property rights whether within Vietnam or from overseas to Vietnam, and related services.</p>
7. Are cloud computing services able to operate free from laws or policies that impose data localization requirements?	✘	<p>The Decree on Management, Provision and Use of Internet Services and Online Information (Decree No. 72/2013/ND-CP) <english.mic.gov.vn/Pages/VanBan/11310/72_2013_ND-CP-.html> requires some organizations to have "at least one server system in Vietnam serving the inspection, storage, and provision of information at the request of competent state management agencies, and settlement of customers' complaints about the service provision according to regulations of the Ministry of Information and Communications." The provisions cover companies that provide Internet enabled services.</p>
IT READINESS, BROADBAND DEPLOYMENT (SCORE: 8.6/25 RANK: 22/24)		
1. Is there a National Broadband Plan?	<p>By 2020:</p> <ul style="list-style-type: none"> • Fixed-line broadband to reach 40% of households • 95% of residential areas with 3G/4G coverage at speeds of 4 Mbps for urban and 2 Mbps for rural • 60% of Internet subscribers have at least 25 Mbps • 100% of public access points to offer broadband, with half delivering 50 Mbps 	<p>In January 2016, it was announced that the Prime Minister had approved a new broadband development plan. It calls for 3G/4G networks to cover 95% of residential areas and fixed-line broadband to reach at least 40% of households by 2020. The plan also calls for at least 60% of Internet subscribers to have access to minimum download speeds of 25 Mbps and 100% of public Internet access points nationwide are to offer broadband service by 2020, with half of the access points delivering a minimum download speed of 50 Mbps.</p> <p>This updates earlier plans.</p> <p>In February 2011, the Vietnamese Prime Minister approved the Master Plan on Information Technology (Decision No. 1755/QĐ-TTg) <moj.gov.vn/vbqp/en/Lists/Vn%20bn%20php%20lut/View_Detail.aspx?ItemID=10749>, which sets a number of goals:</p> <ul style="list-style-type: none"> • By 2015: <ul style="list-style-type: none"> – Provide wireless broadband coverage to 85% of the population – 20-30% of households have access to broadband • By 2020: <ul style="list-style-type: none"> – Completion of the broadband network to almost all villages and hamlets – Provide wireless broadband coverage to 95% of the population – 50-60% of households have access to broadband, of which 20-30% access via fiber optic cable <p>In 2012, Vietnam adopted the ITU produced Wireless Broadband Masterplan for the Socialist Republic of Viet Nam <www.itu.int/en/ITU-D/Technology/Documents/BroadbandNetworks/WBB_MasterPlan_VietNam.pdf>. It contains goals to improve the quality and integrity of Vietnam's wireless mobile telecommunications infrastructure and resulting capabilities.</p>
2. Is the National Broadband Plan being effectively implemented?	Not available	Vietnam's Broadband Development Plan was launched in January 2016. It is too early to assess the implementation of the plan.
3. Are there laws or policies that regulate "net neutrality"?	No regulation	There has been limited formal and public consideration of net neutrality regulation in Vietnam at this stage.
4. Base Indicators		
4.1. Population (millions) (2015) • Total for all countries in this scorecard: 4,700 million	93	In 2015, the population of Vietnam increased by 0.9%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
4.2. Urban Population (%) (2015) • Average for all countries in this scorecard: 73%	34%	In 2015, the urban population of Vietnam increased by 1.9%. [World Bank, Data Catalog, Indicators, Urban Population (Jan. 2017) <data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>]

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4.3. Number of Households (millions) (2015) • Total for all countries in this scorecard: 1,249 million	19	In 2015, the number of households in Vietnam increased by 0.9%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
4.4. Population Density (people per square km) (2015) • Average for all countries in this scorecard: 471	296	In 2015, the population density of Vietnam increased by 1.1%. [World Bank, Data Catalog, Indicators, Population Density (Jan. 2017) <data.worldbank.org/indicator/EN.POP.DNST>]
4.5. Per Capita GDP (US\$ 2015) • Average for all countries in this scorecard: US\$ 22,649	\$2,111	In 2015, the per capita GDP for Vietnam increased by 6.7% to US\$ 2,111. This was below the five-year compound annual growth rate (CAGR) from 2010–2015 of 9.6%. This ranks Vietnam 23rd for value of per capita GDP and 2nd for growth (CAGR) for this indicator in this scorecard. [World Bank, Data Catalog, Indicators: GDP Per Capita, Current US\$ (Jan. 2017) <data.worldbank.org/indicator/NY.GDP.PCAP.CD> and GDP Growth, Annual % (Jan. 2017) <data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>]
4.6. ICT Service Exports (billions of US\$) (2015) • Total for all countries in this scorecard: US\$ 978 billion	—	This World Bank indicator for 2015 for Vietnam was not available at the time of publication. [World Bank, Data Catalog, Indicators: ICT Service Exports US\$ (Jan. 2017) <data.worldbank.org/indicator/BX.GSR.CCIS.CD>]
4.7. Personal Computers (% of households) (2015) • Average for all countries in this scorecard: 63%	22%	In 2015, 22% of households in Vietnam had personal computers. This is an increase of 7.4% since 2014 and ranks Vietnam 128th out of 236 countries surveyed. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010 to 2015 of 9.2%. This ranks Vietnam 21st for the number of personal computers (as a % of households) and 3rd for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
5. IT and Network Readiness Indicators		
5.1. ITU ICT Development Index (IDI) (2016) (score is out of 10 and covers 175 countries) • Average for all countries in this scorecard: 6.58	4.29	Vietnam's ITU ICT Development Index (IDI) for 2016 is 4.29 (out of 10), resulting in a rank of 105th (out of 175 economies). The 2016 IDI for Vietnam increased by 6.7%, and the IDI ranking declined by 1 from a rank of 104th since 2015. This ranks Vietnam 22nd in the ITU ICT Development Index and 3rd for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), Measuring the Information Society (Dec. 2016) <www.itu.int/net4/ITU-D/idi/2016>]
5.2. World Economic Forum Networked Readiness Index (NRI) (2016) (score is out of 7 and covers 139 countries) • Average for all countries in this scorecard: 4.77	3.93	Vietnam has a Networked Readiness Index (NRI) score of 3.93 (out of 7), resulting in a rank of 79th (out of 139 economies) and a rank of 9th (out of 35) in the Lower middle income grouping of economies. The 2016 NRI for Vietnam increased by 1.9% and improved by 6 places from a rank of 85th since 2015. This ranks Vietnam 22nd in the ITU ICT Development Index and 3rd for growth (CAGR) for this indicator in this scorecard. [World Economic Forum, Global Information Technology Report (2016) <reports.weforum.org/global-information-technology-report-2016>]
6. Internet Users and International Bandwidth		
6.1. Internet Users (millions) (2015) • Total for all countries in this scorecard: 2,330 million	49	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
6.2. Internet Users (% of population) (2015) • Average for all countries in this scorecard: 67%	53%	In 2015, 53% of the population in Vietnam used the Internet, resulting in a ranking of 99th out of 236 countries surveyed by the ITU. This is an increase of 9.1% since 2014 and is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 11.5%. This ranks Vietnam 19th in the proportion of the population using the Internet and 6th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] 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.

# VIETNAM	RESPONSE	EXPLANATORY TEXT
6.3. International Internet Bandwidth (total gigabits per second (Gbps) per country) (2015) <ul style="list-style-type: none"> Total for all countries in this scorecard: 117,736 Gbps 	1,200	<p>Vietnam has increased its international Internet bandwidth by 29% since 2014 to 1,200 Gbps and is ranked 36 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 54.9%.</p> <p>This ranks Vietnam 22nd for total international Internet bandwidth and 2nd for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
6.4. International Internet Bandwidth (bits per second (bps) per Internet user) (2015) <ul style="list-style-type: none"> Average for all countries in this scorecard: 97,747 bps 	24,374	<p>The international Internet bandwidth (per Internet user) of Vietnam has increased by 17% since 2014. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 37.7%.</p> <p>This ranks Vietnam 20th for international Internet bandwidth per user and 2nd for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
7. Fixed Broadband		
7.1. Fixed Broadband Subscriptions (millions) (2015) <ul style="list-style-type: none"> Total for all countries in this scorecard: 697 million 	8	<p>Vietnam has increased the number of fixed broadband subscribers by 27% since 2014 to 7.6 million and is ranked 17th out of 236 countries surveyed by the ITU. The growth from 2014 is above the five-year compound annual growth rate (CAGR) from 2010–2015 of 15.7%.</p> <p>This ranks Vietnam 16th for the number of fixed broadband subscriptions and 2nd for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
7.2. Fixed Broadband Subscriptions (% of households) (2015) <ul style="list-style-type: none"> Average for all countries in this scorecard: 63% 	41%	<p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p> <p>Note: This may be skewed by business usage in some countries.</p>
7.3. Fixed Broadband Subscriptions (% of population) (2015) <ul style="list-style-type: none"> Average for all countries in this scorecard: 21% 	8%	<p>Vietnam has increased its fixed broadband subscriptions (as a % of the population) by 25.5% since 2014, which is above the five-year compound annual growth rate (CAGR) from 2010–2015 of 14.6%. This ranks Vietnam 107th out of 236 countries surveyed by the ITU.</p> <p>This ranks Vietnam 21st for the number of fixed broadband subscriptions (as a % of the population) and 2nd for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
7.4. Fixed Broadband Subscriptions (% of Internet users) (2015) <ul style="list-style-type: none"> Average for all countries in this scorecard: 29% 	15%	<p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
7.5. Average Broadband Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) <ul style="list-style-type: none"> Average for all countries in this scorecard: 12 Mbps Average peak for all countries in this scorecard: 70 Mbps 	10	<p>In Vietnam the Q1 2017 average broadband data connection speed was 9.5 Mbps and is ranked 68th out of 239 countries measured by Akamai.</p> <p>This ranks Vietnam 14th for average broadband data connection speed in this scorecard.</p> <p>Additional connection metrics for Q1 2017 in Vietnam include:</p> <ul style="list-style-type: none"> Average peak broadband connection speed: 58.96 Mbps (ranked 68th globally and 14th in this scorecard) Above 4 Mbps: 86% (ranked 57th globally and 12th in this scorecard) Above 10 Mbps: 37% (ranked 62nd globally and 12th in this scorecard) Above 15 Mbps: 11% (ranked 77th globally and 16th in this scorecard) Above 25 Mbps: 2% (ranked 83rd globally and 18th in this scorecard) <p>[Akamai, The State of the Internet (1st Quarter, 2017) <www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/>]</p>

# VIETNAM	RESPONSE	EXPLANATORY TEXT
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	—	The ITU data for this indicator for Vietnam was not available at the time of publication. [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >]
8.2. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 18%	—	The ITU data for this indicator for Vietnam was not available at the time of publication. [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >] Note: This may be skewed by business usage in some countries.
8.3. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of fixed broadband subscriptions) (2015) • Average for all countries in this scorecard: 23%	—	The ITU data for this indicator for Vietnam was not available at the time of publication. [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >]
9. Mobile Broadband		
9.1. Mobile Cellular Subscriptions (millions) (2015) • Total for all countries in this scorecard: 4,823 million	122	In 2015, Vietnam decreased the number of mobile cellular subscriptions by -10.4% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 1.8%. Vietnam is ranked 11th out of 236 countries surveyed by the ITU. The number of subscriptions account for 131% of the population. This ranks Vietnam 8th for the number of mobile cellular subscriptions and 18th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >] 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.).
7. Number of Active Mobile Broadband Subscriptions (millions) (2015) • Total for all countries in this scorecard: 2,506 million	36	In 2015, Vietnam has increased the number of active mobile broadband subscriptions by 27%, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 38.9%. Vietnam is ranked 20th out of 236 countries surveyed by the ITU. This ranks Vietnam 17th for the number of active mobile broadband subscriptions and 9th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >]
9.3. Active Mobile Broadband Subscriptions (% of population) (2015) • Average for all countries in this scorecard: 77%	39%	Vietnam has increased the number of active mobile broadband subscriptions (as a % of the population) by 26% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 37.6%. Vietnam is ranked 112th out of 236 countries surveyed by the ITU. This ranks Vietnam 23rd for the number of active mobile 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) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >] 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.
9.4. Average Mobile Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) • Average for all countries in this scorecard: 11 Mbps	5	In Vietnam the Q1 2017 average mobile data connection speed was 5.3 Mbps and is ranked 59th out of 70 countries measured by Akamai. This ranks Vietnam 20th for average mobile data connection speed in this scorecard. [Akamai, The State of the Internet (1st Quarter, 2017) < www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/ >]