

COUNTRY: INDIA

SCORE: 56.08 | RANK: 18/24

The law in India has not entirely kept pace with developments in cloud computing, and some gaps exist in key areas of protection; notably, India has not yet implemented effective privacy legislation.

India's cybercrime legislation also requires updating to conform to international models. Some laws and standards in India are not technology neutral (e.g., electronic signatures), and these may be a barrier to interoperability.

This year's report notes that India imposes some local security testing requirements in addition to international testing requirements. These local testing arrangements

have been the subject of criticism by India's trading partners, including the European Union.

However, copyright laws have improved in recent years, although India still has not ratified the WIPO Copyright Treaty.

The development of India's technology sectors remains challenging, with low levels of broadband and personal computer penetration.

Overall, India's ranking in 2015 is 18th. India fell one place (from 17th in 2013) due to its poor results in relation to promoting free trade and international standards.

Q INDIA	RESPONSE	EXPLANATORY TEXT
DATA PRIVACY (SCORE: 5.6/10 RANK: 18/24)		
1. Are there laws or regulations governing the collection, use, or other processing of personal information?		India does not have a stand-alone data protection law, and the protections that are available are contained in a mix of statutes, rules and guidelines. The most prominent provisions are contained in the Information Technology Act 2000, as amended by the Information Technology Amendment Act 2008. In particular Section 43A, which addresses "reasonable security practices and procedures" and is complemented by the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules 2011. However, the scope and coverage of these rules is limited: <ul style="list-style-type: none"> • The majority of the provisions only apply to "sensitive personal information"; • The provisions are restricted to corporate entities undertaking the automated processing of data; and • Consumers are only able to take enforcement action in relation to a small subset of the provisions. For these reasons, India receives a "partial" result in this year's study. As of November 2015, a draft Right to Privacy Law 2014 law was being considered, but its progress is uncertain.
2. What is the scope and coverage of privacy law?	Sectoral	The relevant provisions of the Information Technology Act 2000 (as amended) apply only to the private sector, not to government.
3. Is the privacy law compatible with the Privacy Principles in the EU Data Protection Directive?		India does not have a comprehensive privacy law. The limited provisions that are available are often unique and do not follow any international model. Some specific principles under Article 43A of the Information Technology Act 2000 can be mapped to the EU Data Protection Directive.
4. Is the privacy law compatible with the Privacy Principles in the APEC Privacy Framework?		India is not a member of APEC. The limited provisions are unique, and do not follow any international model.

Q INDIA	RESPONSE	EXPLANATORY TEXT
5. Is an independent private right of action available for breaches of data privacy?	Available	<p>The Indian Constitution does not contain a specific right to privacy, but Indian courts have interpreted some of the other provisions broadly, including the right to liberty and the right to freedom of speech. In one significant case, Naz Foundation v. Government of NCT of Delhi WP(C) No.7455/2001 (July 2, 2009), the Delhi High Court found a clear right to privacy did exist:</p> <p>“The right to privacy thus has been held to protect a ‘private space in which man may become and remain himself.’ The ability to do so is exercised in accordance with individual autonomy.”</p> <p>In August 2015, the Supreme Court established a special panel to determine whether the right to privacy is indeed a fundamental right of Indian citizens. This is part of an ongoing case concerning the national identity card.</p>
6. Is there an effective agency (or regulator) tasked with the enforcement of privacy laws?	Sectoral regulator	<p>India does not have a central, national regulator or complaints body for data protection (although one does exist for freedom of information).</p> <p>36 local adjudication officers operate at the state and territory levels, and these officers can receive complaints regarding breaches of the Information Technology Act. However, there are only a few reported cases relating to privacy as of November 2015 <it.maharashtra.gov.in/1121/Statement-of-Cases?ID=3>.</p> <p>The draft Right to Privacy Law being considered would establish a national Data Protection Authority of India (DPA).</p>
7. What is the nature of the privacy regulator?	Not applicable	<p>India does not have a central, national regulator. 36 local adjudication officers operate at the state and territory level.</p> <p>The Data Protection Authority of India (DPA), as proposed in the draft Right to Privacy Law, would consist of a chair and up to two other members.</p>
8. Are data controllers free from registration requirements?	✓	<p>India has no registration requirements for any parties under the Information Technology Act 2000.</p> <p>The draft Right to Privacy Law contains no registration requirements.</p>
9. Are cross-border transfers free from registration requirements?	✓	<p>India has no registration requirements for any parties under the Information Technology Act 2000.</p> <p>However, some rules are in place for the transfer of sensitive data offshore. It can be transferred only to a country where it is clear that the sensitive data will be adequately protected (Information Technology [Reasonable Security Practices and Procedures and Sensitive Personal Data or Information] Rules 2011). Sensitive data is defined under the 2011 rules as information relating to a data subject’s password, financial information, health, sexual orientation, medical records, and biometric information.</p> <p>Some limited restrictions on cross border data transfers are likely to be included in the draft Right to Privacy Law that is being considered.</p>
10. Is there a breach notification law?	No	<p>India does not have a data breach notification law, although significant rules and requirements are in place for general security, including mandatory compensation for security breaches that cause loss.</p>
SECURITY (SCORE: 4.8/10 RANK: 17/24)		
1. Is there a law or regulation that gives electronic signatures clear legal weight?	✓	<p>The Information Technology Act 2000 includes provisions that enable the use of electronic signatures in most transactions.</p> <p>Section 5 states: “Legal recognition of digital signatures. — Where any law provides that information or any other matter shall be authenticated by affixing the signature or any document shall be signed or bear the signature of any person, then, notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied, if such information or matter is authenticated by means of digital signature affixed in such manner as may be prescribed by the central government.”</p>

Q INDIA	RESPONSE	EXPLANATORY TEXT
2. Are ISPs and content service providers free from mandatory filtering or censoring?	✘	<p>The Indian Computer Emergency Response Team (CERT-IN) <www.cert-in.org.in> was set up by the Department of Information Technology under the Information Technology Act 2000 to implement India's filtering regime. This includes administering the prohibition against publishing obscene content and the filtering of websites. CERT-IN was empowered in 2003 to review complaints and act as the sole authority for issuing blocking instructions to the Department of Telecommunications.</p> <p>In March 2015, the Supreme Court of India ruled Section 66A of the Information Technology Act 2000 unconstitutional. Section 66A imposes punishment for sending offensive messages through a communication service. Section 67 of the same act includes an offense of "publishing of information which is obscene in electronic form." This is a very broad provision as it covers "any material which is lascivious or appeals to the prurient interest." The constitutionality of Section 67 has not been questioned before the court.</p> <p>In 2011, further rules — the Information Technology (Due Diligence Observed by Intermediaries Guidelines) Rules 2011 — were introduced by the Ministry of Communications and Information Technology. They require websites to provide a response to takedown notices on objectionable content, including anything "grossly harmful" or "harassing" within 36 hours of being notified. They also require Internet service providers and social networking sites to bar certain types of content under terms-of-service agreements with users. Intermediaries are not required to act on objectionable content prior to official notification by a government authority or court.</p> <p>In May 2011, the government issued a clarifying notice relating to these rules, stating that any questions of interpretation would be resolved by the courts and not by government <deity.gov.in/sites/upload_files/dit/files/PressNote_25811.pdf>.</p>
3. Are there laws or enforceable codes containing general security requirements for digital data hosting and cloud service providers?	Detailed legislation	<p>The Information Technology Amendment Act 2008 includes Section 43A on "Compensation for failure to protect data," which states:</p> <p>"Where a body corporate, possessing, dealing or handling any sensitive personal data or information in a computer resource, which it owns, controls or operates, is negligent in implementing and maintaining reasonable security practices and procedures and thereby causes wrongful loss or wrongful gain to any person, such body corporate shall be liable to pay damages by way of compensation to the person so affected."</p>
4. Are there laws or enforceable codes containing specific security audit requirements for digital data hosting and cloud service providers?	Code of conduct	<p>Although the Information Technology Act 2000 contains a mandatory compensation requirement for security breaches, it does not contain any other requirements on security audits.</p> <p>As per the Information Technology Act, the government is required to notify / empanel a list of agencies to deal with security audits and to prescribe independent standards. However, no such notification has happened to date.</p> <p>The Data Security Council of India (DSCI) <www.dsci.in>, a self-regulatory body set up by the National Association of Software and Services Companies (NASSCOM) <www.nasscom.in>, issues best-practice security guidance, but compliance is voluntary.</p>
5. Are there security laws and regulations requiring specific certifications for technology products?	Limited requirements	<p>In 2013, India was accepted as a Certificate Authorizing Member (the highest level) of the Common Criteria Recognition Agreement (CCRA) <www.commoncriteriaportal.org>. There is growing interest in certifications in India, although no comprehensive laws or requirements are in place at this stage.</p> <p>India imposes some local security testing requirements in addition to international testing requirements. These local testing arrangements have been the subject of criticism by India's trading partners, including the European Union (EU) <madb.europa.eu/madb/barriers_details.htm?barrier_id=115396&version=3>.</p>
CYBERCRIME (SCORE: 7.8/10 RANK: 14/24)		
1. Are cybercrime laws in place?	✔	<p>The Information Technology Act 2000 contains a range of standard computer crime provisions, many of which are applicable to cybercrimes.</p> <p>The Information Technology Act 2000 was also amended in 2008 to include a range of new more-specific cybercrime provisions. However, many of these provisions require enabling regulations before they come into force, and the relevant ones are not yet in place.</p>

Q INDIA	RESPONSE	EXPLANATORY TEXT
2. Are cybercrime laws consistent with the Budapest Convention on Cybercrime?	✓	Although India is not a signatory to the Convention on Cybercrime, the core criminal provisions contained in the Information Technology Act 2000 closely follow the prohibitions contained in the Convention. Some provisions regarding international cooperation in investigations and enforcement that are present in the Convention are not present in Indian law. Also, requirements for data retention during an investigation that are contained in the Cybercrime Convention are also not present in Indian law. These inconsistencies do not detract from the general alignment between the Convention and the Information Technology Act.
3. What access do law enforcement authorities have to encrypted data held or transmitted by data hosting providers, carriers or other service providers?	Access with a warrant	<p>Access to encrypted data in India is subject to some limited oversight. The procedure for interception and decryption of information is set out in the Information Technology (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009.</p> <p>Under the draft Right to Privacy Law, law enforcement and intelligence services would be exempt from a large number of the privacy requirements in the law, including privacy principles for the collection and processing of personal data. It is unclear whether the draft will pass Parliament.</p> <p>In September 2015, the Department of Electronics and Information Technology released a draft National Encryption Policy. The proposed policy stated that applications using encryption would need to store plain text versions of all data for 90 days so that the content could be examined by the police if required. However, the proposal was the subject of immediate criticism and controversy and was withdrawn by the government after only a few days. The government has asked the department to develop a completely new encryption policy <deity.gov.in>.</p>
4. How does the law deal with extraterritorial offenses?	Comprehensive coverage	<p>Section 75 of the Information Technology Act 2000 provides that the act shall apply to an offense (under the act) or contravention of the act committed outside India if the act or conduct involves a computer, computer system or computer network located in India.</p> <p>Section 75. Act to apply to offense or contravention committed outside India:</p> <p>(1) Subject to the provisions of subsection (2), the provisions of this act shall apply also to any offense or contravention committed outside India by any person irrespective of his nationality.</p> <p>(2) For the purposes of subsection (1), this act shall apply to an offense or contravention committed outside India by any person if the act or conduct constituting the offense or contravention involves a computer, computer system or computer network located in India.</p>
INTELLECTUAL PROPERTY RIGHTS (SCORE: 12.4/20 RANK: 19/24)		
1. Is the country a member of the TRIPS Agreement?	✓	India became a member of the TRIPS Agreement in 1995.
2. Have IP laws been enacted to implement TRIPS?	✓	India has updated its intellectual property laws to comply with the main provisions of the TRIPS Agreement. Enforcement remains patchy in India.
3. Is the country party to the WIPO Copyright Treaty?	✗	India has not signed the WIPO Copyright Treaty. However, the 2012 amendments to Indian copyright law pave the way for India to comply with the treaty, and India may consider signing and ratifying it in the near future.
4. Have laws implementing the WIPO Copyright Treaty been enacted?	✓	The Copyright (Amendment) Act 2012 [No 27 of 2012] came into force in June 2012. It includes definitions and new provisions that help Indian law align with the treaty.
5. Are civil sanctions available for unauthorized making available (posting) of copyright holders' works on the Internet?	✓	The Copyright Act 1957, as amended in 2012, contains provisions that would cover unauthorized making available of copyright holders' works online. Section 51 considers "unauthorized reproductions or communication to the public" to constitute copyright infringement. Further, Section 55 provides for civil remedies by means of an injunction, damages, accounts or otherwise in case of any copyright infringement.
6. Are criminal sanctions available for unauthorized making available (posting) of copyright holders' works on the Internet?	✓	Section 63 of Copyright Act 1957 provides for criminal sanctions for copyright infringements in general.

Q INDIA	RESPONSE	EXPLANATORY TEXT
7. Are there laws governing ISP liability for content that infringes copyright?	✓	<p>The Copyright (Amendment) Act 2012 [No 27 of 2012] introduces a basic Internet service provider (ISP) liability scheme, including appropriate safe harbor provisions for intermediaries that follow basic due diligence.</p> <p>Section 52(1)(c) of the Copyright Act 1957, as amended in 2012, provides a safe harbor for “transient or incidental storage of works for the purpose of providing electronic links, access or integration.” The procedure for takedown of such content is further provided for under Rule 75 of the Copyright Rules, 2013.</p> <p>Further, Clause 33.3 of the ISP License Agreement (issued by the Department of Telecom to various ISPs) requires licensees to take necessary measures to prevent any content that infringes copyright from being carried on their networks.</p> <p>In practice, the rights of copyright holders have been further strengthened by local case law (for example, Star India Pvt. Ltd v. Haneeth Ujwal (CS(OS) 2243/2014, which held that ISPs have an obligation to ensure that no violation of third-party intellectual property rights takes place through their networks).</p>
8. Is there a basis for ISPs to be held liable for content that infringes copyright found on their sites or systems?	✓	<p>Section 52(1)(c) of the Copyright Act 1957, as amended in 2012, provides a safe harbor for “transient or incidental storage of works for the purpose of providing electronic links, access or integration.” The notice and takedown procedure is provided for under Rule 75 of the Copyright Rules, 2013. Failure to comply with these provisions may attract primary or secondary liability under the Copyright Act.</p> <p>Violation of Clause 33 of the ISP License, which requires the ISP to prevent content that infringes copyright from being carried on its network, could result in termination of the ISP’s license.</p>
9. What sanctions are available for ISP liability for copyright infringing content found on their site or system?	Civil	<p>It is unlikely that criminal sanctions would apply to ISPs unless they were found to be abetting an infringement.</p> <p>However, the courts have been willing to impose civil sanctions on ISPs that do not meet their obligations to manage copyright infringements on their networks.</p> <p>In addition, violation of Clause 33 of the ISP License, which requires the ISP to prevent content that infringes copyright from being carried on its network, could result in termination of the ISP’s license.</p>
10. Must ISPs take down content that infringes copyright, upon notification by the right holder?	🔵	<p>Section 52(1)(c) of the Copyright Act 1957, as amended in 2012, provides a safe harbor for “transient or incidental storage of works for the purpose of providing electronic links, access or integration.”</p> <p>The takedown procedure is further elaborated under Rule 75 of the Copyright Rules, 2013, which states that the copyright owner may file a written complaint under Section 52(1)(c), on the receipt of which the person responsible for storage of the infringing copy of work is required to take steps to refrain from facilitating access to the alleged infringed copy.</p> <p>The takedown provisions are complex, and their use is not yet widespread. The law provides the intermediary with considerable discretion as to whether it is “satisfied” that an underlying copyright infringement has occurred.</p> <p>For these reasons, India receives a “partial” result in this year’s study.</p>
11. Are ISPs required to inform subscribers upon receiving a notification that the subscriber is using the ISP’s service to distribute content that infringes copyright?	🔵	<p>The Copyright (Amendment) Act 2012 introduces a limited notice requirement. Although there is no explicit requirement to send a notice to the subscriber, the ISP would be expected to give notice to the subscriber if it was applying the 21-day takedown action envisaged by Section 52(1)(c).</p>
12. Is there clear legal protection against misappropriation of cloud computing services, including effective enforcement?	Comprehensive protection	<p>Recent legislation in India, such as the Copyright (Amendment) Act 2012, has helped to extend Internet protocol (IP) protection to cloud services. The laws are still the subject of some confusion in India. There remain some weaknesses and gaps in both IP law and cybercrime law that may be relevant to cloud computing services.</p>
SUPPORT FOR INDUSTRY LED STANDARDS & INTERNATIONAL HARMONIZATION OF RULES (SCORE: 9.4/10 RANK: 11/24)		
1. Are there laws, regulations or policies that establish a standards setting framework for interoperability and portability of data?	✓	<p>Standards-setting processes in India are governed by the Bureau of Indian Standards (BIS) Act 1986 and BIS Rules 1987. Although information technology (IT) is not covered in detail in the rules, the BIS has established a comprehensive work program in relation to IT standards, managed by an Electronics and Information Technology Division Council.</p> <p>Refer to <www.bis.org.in>.</p>

Q INDIA	RESPONSE	EXPLANATORY TEXT
2. Is there a regulatory body responsible for standards development for the country?	✓	The Bureau of Indian Standards (BIS) < www.bis.org.in > has comprehensive management and regulatory responsibilities for standards setting in India.
3. Are e-commerce laws in place?	✓	The Information Technology Act 2000 is an omnibus law that includes provisions on e-commerce, e-signatures, cybercrime, and privacy.
4. What international instruments are the e-commerce laws based on?	UNCITRAL Model Law on E-Commerce	Parts of the Information Technology Act 2000 closely follow the UNCITRAL Model Law on E-Commerce. However, as the law is an omnibus law, it also includes a wide range of additional technology provisions.
5. Is the downloading of applications or digital data from foreign cloud service providers free from tariff or other trade barriers?	ⓘ	No customs duty is levied on the import of software into India by electronic means. However, delivery of "off-the-shelf" software in certain physical mediums (such as installation discs) would be subject to import duties. Note, however, that requirements relating to encryption (discussed above) may act as a potential trade barrier for some mobile applications. India also imposes some local IT product-testing requirements in addition to international testing requirements. These local testing arrangements have been the subject of criticism by India's trading partners, including the European Union < madb.europa.eu/madb/barriers_details.htm?barrier_id=115396&version=3 >.
6. Are international standards favored over domestic standards?	ⓘ	India has traditionally prioritized compliance with international standards. However, in recent years, India has introduced additional local testing requirements for some key IT products and services.
7. Does the government participate in international standards setting process?	✓	India participates in relevant ISO and IEC standard-setting processes.
PROMOTING FREE TRADE (SCORE: 5.4/10 RANK: 15/24)		
1. Are there any laws or policies in place that implement technology neutrality in government?	ⓘ	A National E-Governance Plan is in place that promotes interoperability through the establishment of common services, but it does not include a detailed commitment to technology neutrality. < www.mit.gov.in/content/national-e-governance-plan >
2. Are cloud computing services able to operate free from laws or policies that mandate the use of certain products (including, but not limited to types of software), services, standards or technologies?	ⓘ	Although the Indian government has generally taken a technology-neutral approach, it is important to note that the 2008 amendments to the Information Technology Act included a provision that would allow the government to determine what modes of encryption companies and individuals may use: Section 84A: "The government may, for secure use of the electronic medium and for promotion of e-governance and e-commerce, prescribe the modes or methods for encryption." At the time of writing, no rules have been issued under Section 84A.
3. Are cloud computing services able to operate free from laws or policies that establish preferences for certain products (including, but not limited to types of software), services, standards or technologies?	✗	In March 2015, the Indian government adopted a formal preference for open-source solutions for e-government procurement opportunities related to its digital agenda, the Policy on Adoption of Open Source Software for Government of India < deity.gov.in/sites/upload_files/dit/files/policy_on_adoption_of_oss.pdf >. The policy states that the "government of India shall endeavour to adopt open-source software in all e-governance systems implemented by various government organizations, as a preferred option in comparison to closed source software (CSS)." The policy applies to "all government organizations under the central governments and those state governments that choose to adopt this policy for the following categories of e-governance systems: <ul style="list-style-type: none">• All new e-governance applications and systems being considered for implementation.• New versions of the legacy and existing systems." The policy is one of the most far-reaching and restrictive preference schemes that has been implemented to date, and is likely to have a discriminatory impact on cloud service providers.
4. Are cloud computing services able to operate free from laws that discriminate based on the nationality of the vendor, developer or service provider?	ⓘ	There are multiple, complex layers of government procurement in India. Many of the state and local procurement practices give preferences to local suppliers (although these may not necessarily be relevant to cloud computing). India is an observer, but not a member of the World Trade Organization (WTO) plurilateral Agreement on Government Procurement.

Q INDIA	RESPONSE	EXPLANATORY TEXT
IT READINESS, BROADBAND DEPLOYMENT (SCORE: 10.7/30 RANK: 24/24)		
1. Is there a national broadband plan?	<ul style="list-style-type: none"> By 2016, fiber network to reach 250,000 local government areas. 	<p>The Telecommunications Regulatory Authority of India (TRAI) <www.trai.gov.in> revisited its previous plan for the rollout of the National Optic Fiber Network (NOFN), subsequent to the release of the Digital India program in 2014 <www.digitalindia.gov.in/content/broadband-highways>. The revisited plan was addressed in detail in the report released by the Department of Telecommunication's Committee on the National Optic Fiber Network <www.dot.gov.in/reports-statistics/report-committee-nofn> in March 2015. The report details the intention to work in partnership with private organizations to build the optic fiber network, in particular, targeting nonmetropolitan communities in all states and union territories. The new timeline extended the goal to reach 250,000 local government areas (gram panchayats) by two years to 2016.</p>
2. Are there laws or policies that regulate the establishment of different service levels for data transmission based on the nature of data transmitted?	No regulation and extensive public debate	<p>There has been considerable public debate in India on the topic of net neutrality. After campaigning from Indian telecommunication providers that were seeking government clarification and support on the issue of charging for VoIP and similar "over-the-top" (OTT) services, the Telecom Regulatory Authority of India (TRAI) <www.trai.gov.in> in April 2015 released a consultation paper on OTT services <www.trai.gov.in/Content/ConDis/10743_0.aspx>. This was followed in May 2015 by a report issued by a government telecommunications panel <www.documentcloud.org/documents/2167977-net-neutrality-committee-report.html>, which called for certain levels of net neutrality protections but also for VoIP calls to attract a tariff. The consultation period for this report ended in August 2015. Both of these reports received high amounts of public feedback after online media campaigns, particularly in support of net neutrality, gathered public attention. In particular, there has been strong criticism of services offering fast-lane services to paying clients.</p> <p>The Telecom Regulatory Authority of India (TRAI) released a consultation paper on differential data pricing on 10th December 2015 <tra.gov.in/WriteReaddata/ConsultationPaper/Document/CP-Differential-Pricing-09122015.pdf>.</p>
3. Base Indicators		
3.1. Population (millions) (2014)	1,252	<p>In 2014, the population of India increased by 1.2%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/ITU-D/ict/publications/world/world.html>]</p>
3.2. Urban Population (%) (2014)	32%	[World Bank, Data Catalog, Indicators, Urban Population (2015) < data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS >]
3.3. Number of Households (millions) (2014)	256	<p>In 2014, the number of households in India increased by 1.2%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/ITU-D/ict/publications/world/world.html>]</p>
3.4. Population Density (people per square km) (2014)	436	[World Bank, Data Catalog, Indicators, Population Density (2015) < data.worldbank.org/indicator/EN.POP.DNST >]
3.5. Per Capita GDP (US\$ 2014)	\$1,596	<p>In 2014, the per capita gross domestic product (GDP) for India increased by 7.4% to US \$1,596.</p> <p>[World Bank, Data Catalog, Indicators: GDP per capita, current US\$ (2015) <data.worldbank.org/indicator/NY.GDP.PCAP.CD> and GDP growth, annual % (2015) <data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>]</p>
3.6. IT Service Exports (2014) (billions of US\$)	102.97	<p>In 2014, the value of IT service exports for India increased by 3.8% to US \$102.97 billion. The five-year compound annual growth rate (CAGR) from 2009-2014 was 10.8%.</p> <p>[World Bank, Data Catalog, Indicators: ICT Service Exports US\$ (Dec 2015) <data.worldbank.org/indicator/BX.GSR.CCIS.CD>]</p>
3.7. Personal Computers (2014) (% of households)	13%	<p>In 2014, 13% of households in India had personal computers. This is an increase of 8.9% since 2013 and ranks India 136 out of 183 countries surveyed. The growth from 2013 is below the five-year CAGR from 2009 to 2014 of 19.5%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>

Q INDIA	RESPONSE	EXPLANATORY TEXT
4. IT and Network Readiness Indicators		
4.1. ITU ICT Development Index (IDI) (2015) (Score is out of 10 and covers 167 countries)	2.69	India's ITU ICT Development Index (IDI) for 2015 is 2.69 (out of 10), resulting in a rank of 131 (out of 167 countries). The 2015 IDI for India increased by 6.3%, and the IDI ranking declined by two places from a rank of 129 since 2013. [International Telecommunication Union (ITU), Measuring the Information Society (Dec 2015) < www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2015.aspx >]
4.2. World Economic Forum Networked Readiness Index (NRI) (2015) (Score is out of 7 and covers 143 countries)	3.73	India has a Networked Readiness Index (NRI) score of 3.73 (out of 7), resulting in a rank of 89 (out of 143 countries) and a rank of 13 (out of 36) in the lower middle income grouping of countries. The 2015 NRI for India decreased by -3% and declined from a rank of 83 since 2014. [World Economic Forum, Global Information Technology Report (2015) < reports.weforum.org/global-information-technology-report-2015/ >]
4.3. International Connectivity Score (2014) (Score is out of 10 and covers 52 countries)	2.14	India has an International Connectivity Score of 2.14 (out of 10), resulting in a rank of 15 (out of 26) in the resource-driven grouping of countries. [International Connectivity Scorecard (2013) < www.connectivityscorecard.org >]
5. Internet Users and International Bandwidth		
5.1. Internet Users (millions) (2014)	189	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >]
5.2. Internet Users as Percentage of Population (2014)	15%	In 2014, 15% of the population in India used the Internet, resulting in a ranking of 154 out of 199 countries surveyed. This represents an increase of 20% since 2013. The growth from 2013 is below the five-year CAGR from 2009-2014 of 28.1%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < 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.
5.3. International Internet Bandwidth (2014) (bits per second per Internet user)	5,677	The International Internet Bandwidth (per Internet user) of India has decreased by -13% since 2013. The decrease from 2013 is below the five-year CAGR from 2009-2014 of 6.4%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >]
5.4. International Internet Bandwidth (2014) (total gigabits per second [Gbps] per country)	1,295	India has increased its International Internet Bandwidth by 5% since 2013 to 1,295 Gbps and is ranked 28 out of 215 countries surveyed. The growth from 2013 is below the five-year CAGR from 2008-2013 of 38.5%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >]
6. Fixed Broadband		
6.1. Fixed Broadband Subscriptions (millions) (2014)	15	India has increased the number of fixed broadband subscribers by 0% since 2013 to 15 million, and is ranked 10 out of 215 countries surveyed. The growth from 2013 is below the five-year CAGR from 2009-2014 of 22.5%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >]
6.2. Fixed Broadband Subscriptions as % of households (2014)	6%	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >] Note: This may be skewed by business usage in some countries.
6.3. Fixed Broadband Subscriptions as % of population (2014)	1%	India has increased its fixed broadband subscriptions (as a % of the population) by 4.2% since 2013, which is below the five-year CAGR from 2009-2014 of 13.8%. This ranks India 147 out of 215 countries surveyed. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) < www.itu.int/ITU-D/ict/publications/world/world.html >]
6.4. Fixed Broadband Subscriptions as % of Internet users (2014)	8%	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (June 2014) < www.itu.int/ITU-D/ict/publications/world/world.html >]

Q INDIA	RESPONSE	EXPLANATORY TEXT
7. Mobile Broadband		
7.1. Mobile Cellular Subscriptions (millions) (2014)	944	<p>In 2014, India increased the number of mobile cellular subscriptions by 6.5% and is ranked 2 out of 215 countries surveyed. The number of subscriptions account for 75% of the population.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/ITU-D/ict/publications/world/world.html>]</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>
7.2. Active Mobile Broadband Subscriptions per 100 inhabitants (2014)	6	<p>India has increased the number of active mobile-broadband subscriptions (as a % of the population) by 72% since 2013. This ranks India 162 out of 215 countries surveyed.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/ITU-D/ict/publications/world/world.html>]</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>
7.3. Number of Active Mobile Broadband Subscriptions (millions) (2014)	70	<p>In 2014, India increased the number of active mobile-broadband subscriptions by 74% and is ranked 7 out of 215.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec 2015) <www.itu.int/ITU-D/ict/publications/world/world.html>]</p>