Singapore has an ambitious program of cyberlaw development and has some of the most modern digital economy laws in the region. For example, the Electronic Transactions Act 2010 implements the UN Convention on Electronic Contracting, which Singapore has ratified.

Singapore also has up-to-date cybercrime laws and intellectual property laws.

One unexpected gap is that there is no privacy law in Singapore, and therefore no protection for personal information in cloud computing and the digital economy.

However, Singapore recently published a public consultation paper on a proposed privacy law and appears to be making progress toward filling this gap.

Singapore has some minor Internet censorship in place but generally promotes innovative business practices that are free from tariffs and government intervention.

Singapore has excellent ICT infrastructure in place and is developing a national high-speed fiber to the home network.

### Q SINGAPORE | RESPONSE | EXPLANATORY TEXT

<table>
<thead>
<tr>
<th>DATA PRIVACY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are there laws or regulations governing the collection, use or other processing of personal information?</td>
<td>✗</td>
</tr>
</tbody>
</table>

2. What is scope & coverage of privacy law? | Not Applicable | Singapore has no privacy law in place. However, the proposed privacy law (September 2011 discussion paper) would be comprehensive and cover all sectors. |

3. Is the privacy law compatible with the Privacy Principles in the EU Data Protection Directive? | ✗ | Singapore has no privacy law in place. However, the proposed law (September 2011 discussion paper) is intended to be compatible with the EU Data Protection directive. |

4. Is the privacy law compatible with the Privacy Principles the APEC Privacy Framework? | ✗ | Singapore is a member of APEC, but it has no relevant law in place at this stage. The proposed law is intended to be compatible with the APEC Privacy Framework. |

5. Is an independent private right of action available for breaches of data privacy? | Not Available | No private right of action is available for privacy breaches in Singapore. |

6. Is there an effective agency (or regulator) tasked with the enforcement of privacy laws? | None | No privacy regulator is in place in Singapore at this time. However, the proposed privacy law (September 2011 discussion paper) would include the establishment of a Data Protection Commission. |

7. What is the nature of the privacy regulator? | Not Applicable | No privacy regulator is in place in Singapore at this time. However, the proposed Data Protection Commission would be an independent authority, with oversight provided by a new appeals tribunal. |

8. Are data controllers free from registration requirements? | ✓ | There are no registration requirements in Singapore. The proposed law does not include registration requirements. |

9. Are cross border transfers free from registration requirements? | ✓ | There are no registration requirements in Singapore. However, the proposed privacy law (September 2011 discussion paper) does envisage the development of some cross-border transfer rules — the exact nature of these rules is still under consideration. |

10. Is there a breach notification law? | ✗ | There are no data breach notification requirements in Singapore. The September 2011 discussion paper proposing new privacy law in Singapore is silent on the issue of data breach notification requirements. |
**Q SINGAPORE** | **RESPONSE** | **EXPLANATORY TEXT**
---|---|---
**SECURITY**
1. Is there a law or regulation that gives electronic signatures clear legal weight? | ✅ | The Electronic Transactions Act 2010 replaces the previous Electronic Transactions Act 1998. It provides for the recognition of electronic signatures and digital signatures in Singapore. Section 8 provides that where a rule of law requires a signature, an electronic signature satisfies that rule of law, subject to some simple requirements.

2. Are ISPs and content service providers free from mandatory filtering or censoring? | ✖ | Singapore’s Media Development Authority (MDA) [www.mda.gov.sg](http://www.mda.gov.sg) maintains license and registration requirements that subject Internet content and service providers to penalties for non-compliance with restrictions on prohibited material. The MDA is charged with ensuring that ‘nothing is included in the content of any media service which is against public interest or order, or national harmony, or which offends good taste or decency.’ The core of this framework is a class license scheme stipulated under the Broadcasting Act and by industry policies and regulations issued by the MDA.

Under the class license scheme, all Internet service providers (ISPs) and those Internet content providers (ICPs) determined to be political parties or persons ‘engaged in the propagation, promotion or discussion of political or religious issues relating to Singapore’ must register with the MDA. As licensees, ISPs and ICPs are also bound by the MDA’s Internet Code of Practice. The Code defines ‘prohibited material’ broadly, specifying only a few standards for sexual, violent, and intolerant content. Where filtering is not mandated at the ISP level, the Code requires that ICPs deny access to material if so directed by the MDA. Licensees that fail to comply with the Code may face sanctions, including fines or license suspensions or terminations.

3. Are there laws or enforceable codes containing general security requirements for digital data hosting and cloud service providers? | None | There is no general security requirement that covers infrastructure in Singapore.

4. Are there laws or enforceable codes containing specific security audit requirements for digital data hosting and cloud service providers? | None | There is no general security audit requirement that covers all information.

However, where the retention of electronic records comes under the jurisdiction and supervision of a government agency or statutory organization, it may impose additional requirements to ensure that it can continue to exercise proper supervision over the relevant activities and information which these records capture. For example, in order to keep electronic records for tax purposes, the prior approval of the Inland Revenue Authority of Singapore (IRAS) is required. Pursuant to the ‘Guide To Keeping of Records in Imaging Systems’ issued by IRAS, it will only approve the storage of business records in a taxpayer’s computer system if such system is an ‘approved process’ under the Evidence Act (Cap. 97).

5. Are there security laws and regulations requiring specific certifications for technology products? | Limited requirements | Singapore is a Certificate Consuming Member of the Common Criteria Recognition Agreement (CCRA) [http://www.commoncriteriaportal.org](http://www.commoncriteriaportal.org). In practice certification is not required for most Government procurement opportunities, although it has been included in some national infrastructure projects.

**CYBERCRIME**
1. Are there cybercrime laws in place? | ✅ | The Computer Misuse Act 1993 (Cap. 50A) includes provisions to protect computers, computer programmes and data stored in computers from unauthorized access, modification, interception and interference. The Act intentionally defines ‘computer’ very widely and is not technology-specific. It applies to any person, irrespective of his physical location, who does any act that relates to any computer, programme or data located within Singapore at the material time.

Section 3 of the Act states that any person who knowingly causes a computer to perform any function for the purpose of securing access without authority to any program or data held in any computer shall be guilty of an offence.

2. Are cybercrime laws consistent with the Budapest Convention on Cybercrime? | ✅ | The offences contained in the Computer Misuse Act are not as specific as the offences listed in the Convention on Cybercrime, but they do cover the majority of online criminal activity.
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

This is covered in the Criminal Procedure Code Act 2010:

Section 40 (Power to access decryption information)

(1) For the purposes of investigating an arrestable offence, the Public Prosecutor may by order authorize a police officer or an authorized person to exercise ... all or any of the powers under this section.

(2) The police officer or authorized person referred to in subsection (1) shall be entitled to —

(a) access any information, code or technology which has the capability of retransforming or unscrambling encrypted data into readable and comprehensible format or text for the purposes of investigating the arrestable offence;

(b) require —

(i) any person whom he reasonably suspects of using a computer in connection with an arrestable offence or of having used it in this way; or

(ii) any person having charge of, or otherwise concerned with the operation of, such computer,

to provide him with such reasonable technical and other assistance as he may require for the purposes of paragraph (a); and

(c) require any person whom he reasonably suspects to be in possession of any decryption information to grant him access to such decryption information as may be necessary to decrypt any data required for the purposes of investigating the arrestable offence.

4. How does the law deal with extraterritorial offenses?

Comprehensive coverage

The Computer Misuse Act provides that the Act shall have effect, in relation to any person, whatever his nationality or citizenship, outside as well within Singapore.

Section 11 (Territorial scope of offences under this Act):

(2) Where an offence under the Act is committed by any person in any place outside Singapore, he may be dealt with as if the offence had been committed in Singapore.

INTELLECTUAL PROPERTY RIGHTS

1. Is the country a member of the TRIPS Agreement? ✓ Singapore became a member of the TRIPS Agreement in 1995.

2. Have IP laws been enacted to implement TRIPS? ✓ Singapore has implemented the TRIPS agreement in local laws.

3. Is the country party to the WIPO Copyright Treaty? ✓ The WIPO Copyright Treaty entered into force in Singapore in 2007.

4. Have laws implementing the WIPO Copyright Treaty been enacted? ✓ Singapore has implemented the key provisions of the Treaty.

5. Are civil sanctions available for unauthorized making available (posting) of copyright holders’ works on the Internet? ✓ Section 26 of the Copyright Act protects the right of communication to the public.

6. Are criminal sanctions available for unauthorized making available (posting) of copyright holders’ works on the Internet? ✓ It is likely this is caught by the criminal provisions in Section 136 of the Copyright Act for ‘significant’ breaches:

(3A) Where, at any time when copyright subsists in a work —

(a) a person does any act that constitutes an infringement of the copyright in a work other than act referred to in subsection (1), (2), (3) or (6);

(b) the infringement of the copyright in the work by the person is wilful; and (c) either or both of the following apply:

(i) the extent of the infringement is significant;

(ii) the person does the act to obtain a commercial advantage,

the person shall be guilty of an offence and shall be liable on conviction to a fine not exceeding $20,000 or to imprisonment for a term not exceeding 6 months or to both and, in the case of a second or subsequent offence, to a fine not exceeding $50,000 or to imprisonment for a term not exceeding 3 years or to both.

7. Are there laws governing ISP liability for content that infringes copyright? ✓ Part IXA of the Copyright Act sets out a comprehensive regime for ISP liability in relation to copyright.

Note that Section 26 of the Electronic Transactions Act 2010 also exempts ISPs from any liability for copyright infringement if their participation is limited to ‘merely providing access’
### 8. Is there a basis for ISPs to be held liable for content that infringes copyright found on their sites or systems?

- **Response:** Yes
- **Explanatory Text:** Generally under Section 193D of the Copyright Act, ISPs will only be held liable if they receive a financial benefit from the infringing content and they fail to meet the following tests:
  - Section 193D(2)(b) if the network service provider —
    - (i) acquires actual knowledge that the copyright in the material has been infringed in, or in the course of, making available the electronic copy of the material on the primary network;
    - (ii) acquires knowledge of such facts or circumstances which would lead inevitably to the conclusion that the copyright in the material has been infringed in, or in the course of, making available the electronic copy of the material on the primary network; or
    - (iii) is furnished in the prescribed manner with a notice in, or substantially in accordance with, the prescribed form relating to the electronic copy of the material on the primary network —
      - (A) purportedly made by the owner of the copyright in the material or under the owner's authority; and
      - (B) stating the prescribed matters,
  - the network service provider expeditiously takes reasonable steps to remove or disable access to the copy of the material on the primary network.

### 9. What sanctions are available for ISP liability for copyright infringing content found on their site or system?

- **Response:** Civil
- **Explanatory Text:** The ISP liability regime is civil.

### 10. Must ISPs takedown content that infringes copyright, upon notification by the right holder?

- **Response:** Yes
- **Explanatory Text:** Section 193D of the Copyright Act requires the ISP to expeditiously take reasonable steps to remove the copy from the network or disable access to the material on the network after being furnished with a notice, failing which it will lose its protection.

### 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?

- **Response:** Yes
- **Explanatory Text:** Notification must be provided under Section 193DA of the Copyright Act.

### 12. Is there clear legal protection against misappropriation of cloud computing services, including effective enforcement?

- **Response:** Comprehensive protection
- **Explanatory Text:** Although there are no specific references to cloud computing in Singapore law, they still provide a strong level of protection for cloud computing services through a combination of comprehensive cybercrime and IP legislation. The absence of privacy legislation remains a significant gap.

## Interoperability

### 1. Are there laws, regulations or policies that establish a standards setting framework for interoperability and portability of data?

- **Response:** No
- **Explanatory Text:** There is no comprehensive coverage of interoperability and portability of data in Singapore standards development policy. However, Singapore is in the late stages of developing several national policy frameworks for interoperability.

### 2. Is there a regulatory body responsible for standards development for the country?

- **Response:** Yes
- **Explanatory Text:** The Standards, Productivity and Innovation Board (SPRING) establishes and publishes Singapore Standards, by notification in the Government Gazette. It is commonly known as SPRING Singapore, and also acts as the enterprise development agency responsible for helping Singapore enterprises grow. SPRING is a statutory board under the Ministry of Trade and Industry.

## International Harmonization of Rules

### 1. Are e-commerce laws in place?

- **Response:** Yes
- **Explanatory Text:** Singapore has a comprehensive Electronic Transactions Act 2010 in place.

### 2. What international instruments are the e-commerce laws based on?

- **Response:** UN Convention on E-Contracting
- **Explanatory Text:** Singapore has repealed the earlier Electronic Transactions Act 1998 and replaced it with the Electronic Transactions Act 2010 to more closely match the provisions of the UN Convention on Electronic Contracting—a Convention that Singapore has both signed and ratified.

### 3. Is the downloading of applications or digital data from foreign cloud service providers free from tariff or other trade barriers?

- **Response:** Yes
- **Explanatory Text:** There are currently no government tariffs or other trade barriers imposed on the foreign sources whose software or applications are downloaded in Singapore.

### 4. Are international standards favored over domestic standards?

- **Response:** Yes
- **Explanatory Text:** Singapore has signed the WTO TBT Code of Good Practice for the Preparation, Adoption and Application of Standards <http://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm#annexIII> and therefore considers international standards carefully.

### 5. Does the government participate in international standards setting process?

- **Response:** Yes
- **Explanatory Text:** Singapore participates in relevant ISO and IEC standard setting processes and is a full member of the ISO.
<table>
<thead>
<tr>
<th>Q SINGAPORE</th>
<th>RESPONSE</th>
<th>EXPLANATORY TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROMOTING FREE TRADE</strong>&lt;br&gt;1. Are there any laws or policies in place that implement technology neutrality in government?</td>
<td>✔️</td>
<td>The Intelligent Nation 2015 (IN2015) &lt;www.in2015.sg&gt; (described as a 10-year Masterplan with the vision to build Singapore into an Intelligent Nation) includes a commitment to technology neutrality.</td>
</tr>
<tr>
<td>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?</td>
<td>✔️</td>
<td>There are no mandatory product requirements in Singapore.</td>
</tr>
<tr>
<td>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?</td>
<td>✔️</td>
<td>There are no product preferences in Singapore.</td>
</tr>
<tr>
<td>4. Are cloud computing services able to operate free from laws that discriminate based on the nationality of the vendor, developer or service provider?</td>
<td>✔️</td>
<td>Singapore is a member of the WTO plurilateral Agreement on Government Procurement, which includes rules guaranteeing fair and non-discriminatory conditions of international competition. These rules cover most large contracts. In practice, many Government procurement opportunities require a joint venture with a local firm or the establishment of a local agency arrangement. Singapore provides additional market access concessions to its trading partners under its bilateral FTAs.</td>
</tr>
<tr>
<td><strong>INFRASTRUCTURE, STATISTICS AND INDICATORS</strong>&lt;br&gt;1. Is there a National Broadband Plan?</td>
<td>✔️</td>
<td>• By 2015, the Next-Generation National Broadband Network (Next-Gen NBN) to deliver 1 Gbps downstream and 500Mbps upstream broadband access to every home, office and school. Singapore has required the provision of FttH, with customers able to select from a range of suppliers and speeds of access. Singapore, partly due to its compact size and high urbanization, is one of the few countries that has mandated a very high speed broadband connection to every home. Singapore is progressing with the implementation of its national broadband plan. In 2008, the Singapore Infocomm Development Authority (IDA) &lt;www.ida.gov.sg&gt; announced (as a project under Intelligent Nation 2015) the allocation of USD 750 million to support the build and operation of a national optical fiber-based network as part the Next Generation National Infocomm Infrastructure (Next Gen NII) — the strategy also included a wireless network. One of the programmes under Next Gen NII is the Next Generation Broadband Network (Next Gen NBN) <a href="http://www.ida.gov.sg/Infrastructure/20060919190208.aspx">http://www.ida.gov.sg/Infrastructure/20060919190208.aspx</a> and a number of targets have been set: • By mid 2012, network coverage is expected to reach 95 per cent of homes and offices • By 2015, the Next-Generation National Broadband Network (Next Gen NBN) to deliver 1 Gbps downstream and 500 Mbps upstream broadband access to every home, office and school. The Singapore Government has established an industry structure with 3 layers (Network, Operations/Wholesale and Retail) with structural separation requirements on the Next Gen NBN Network Company (NetCo) and operational separation requirements on the Next Gen NBN Operating Company (OpCo). <a href="http://www.ida.gov.sg/Infrastructure/20090731125844.aspx">http://www.ida.gov.sg/Infrastructure/20090731125844.aspx</a>.</td>
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</table>
## Country Report: Singapore

**Q Singapore**

<table>
<thead>
<tr>
<th>RESPONSE</th>
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<tbody>
<tr>
<td>Limited Regulation and limited public debate</td>
</tr>
</tbody>
</table>

**Explanatory Text**

ISP are able to apply differential charging and/or block different types of traffic over their networks and there are no net neutrality regulations at this stage.

However, to provide Voice Over IP services in Singapore a specific telecommunications licence is required. Licensees must comply with regulations on provision of directory and emergency services, calls to/from other telecommunication networks, quality standards, number portability, and other technical requirements.


- **No blocking of legitimate Internet content**
  - ISPs and telecom network operators are prohibited from blocking legitimate Internet content
  - ISPs and telecom network operators cannot impose discriminatory practices, restrictions, charges or other measures which, while not outright blocking, will render any legitimate Internet content effectively inaccessible or unusable
- **Comply with competition & interconnection rules**
  - ISPs and telecom network operators must comply with IDA's competition and interconnection rules in the TCC
- **Provide Information Transparency**
  - ISPs and telecom network operators must comply with IDA's information transparency requirement and disclose to end-users their network management practices and typical Internet broadband download speeds
- **Meet Minimum QoS standards**
  - ISPs must meet the minimum broadband QoS standards to ensure a reasonable broadband Internet experience for end-users
  - Reasonable network management practices are allowed, provided that the minimum Internet broadband QoS requirements are adhered to, and that such practices will not render any legitimate Internet content effectively inaccessible or unusable
- **Niche or differentiated Internet services allowed**
  - ISPs and telecom network operators are allowed to offer niche or differentiated Internet service offerings that meet IDA's information transparency, minimum QoS and fair competition (including on interconnection) requirements

IDA will undertake further reviews in 2012–2013.

### 3. Base Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>5,086,418</td>
</tr>
<tr>
<td>Urban Population (%) (2010)</td>
<td>100%</td>
</tr>
<tr>
<td>Number of Households (2009)</td>
<td>1,124,000</td>
</tr>
<tr>
<td>Population Density (people per square km) (2010)</td>
<td>7252</td>
</tr>
<tr>
<td>Per Capita GDP (USD 2010)</td>
<td>$43,117</td>
</tr>
<tr>
<td>ICT expenditure as % of GDP (2008)</td>
<td>7%</td>
</tr>
<tr>
<td>Personal Computers (% of households) (2010)</td>
<td>84%</td>
</tr>
</tbody>
</table>

### 4. ICT and Network Readiness Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITU ICT Development Index (IDI) (2010)</td>
<td>7.08</td>
</tr>
</tbody>
</table>

Singapore has an ICT Development Index (IDI) score of 7.08 (out of 10), resulting in a rank of 19 (out of 152 economies). The 2010 IDI for Singapore has improved from a rank of 15 since 2008.
<table>
<thead>
<tr>
<th>Q SINGAPORE</th>
<th>RESPONSE</th>
<th>EXPLANATORY TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3. International Connectivity Score (2011) (Score is out of 10 and includes 50 countries)</td>
<td>6.40</td>
<td>Singapore has a Connectivity Score of 6.4 (out of 10), resulting in a rank of 10 (out of 25) in the Innovation-driven grouping of countries/economies. [Nokia Siemens, Connectivity Scorecard (2011) <a href="http://www.connectivityscorecard.org">http://www.connectivityscorecard.org</a> ]</td>
</tr>
<tr>
<td>4.4. IT Industry Competitiveness Index (2011) (Score is out of 100 and includes 66 countries)</td>
<td>69.80</td>
<td>Singapore has an IT Industry Competitiveness Index Score of 69.8 (out of 100), resulting in a rank of 3 (out of 66 countries/economies included in the index). The 2011 index score is a 9.4% increase on the 2009 score. Singapore has moved up the ranking by 6 places since 2009. [Business Software Alliance (BSA) / Economist Intelligence Unit (EIU), IT Industry Competitiveness Index (2011) <a href="http://globalindex11.bsa.org">http://globalindex11.bsa.org</a>]</td>
</tr>
<tr>
<td>5. Internet Users and International Bandwidth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1. Internet Users (2010)</td>
<td>3,560,493</td>
<td>[calculated from 8.3.1. and 8.5.2.]</td>
</tr>
<tr>
<td>5.4. International Internet Bandwidth (2010) (total gigabits per second (Gbps) per country)</td>
<td>622</td>
<td>[calculated from 8.5.3 and 8.5.1]</td>
</tr>
<tr>
<td>6. Fixed Broadband</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2. Fixed Broadband Subscriptions as % of households (2010)</td>
<td>112%</td>
<td>Note: this is skewed by business usage (refer to OECD comments about this) [calculated from 8.3.3. and 8.6.1.]</td>
</tr>
<tr>
<td>6.4. Fixed Broadband Subscriptions as % of Internet users (2010)</td>
<td>35%</td>
<td>[calculated from 8.5.1 and 8.6.1]</td>
</tr>
<tr>
<td>7. Mobile Broadband</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.1. Mobile Cellular Subscriptions (2010)</td>
<td>7,307,300</td>
<td>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) [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (June 2011) <a href="http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx">http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx</a> ]</td>
</tr>
<tr>
<td>7.2. Active mobile-broadband subscriptions per 100 inhabitants (2010)</td>
<td>70%</td>
<td>Singapore has increased the number of Active Mobile-Broadband Subscriptions (as a % of the population) by 10% since 2008.</td>
</tr>
</tbody>
</table>