Macau Cybersecurity Law
General Introduction and Impact Analysis
General overview

Macau Cybersecurity Law outline

Governance Structure of Cybersecurity

Obligation of critical infrastructure operators and internet service providers

Impact of Macau Cyber Security Law on corporations

How can Deloitte help
The Macau government enacted the Macau Cybersecurity Law (MCSL) to regulate the Cybersecurity System within Macau Special Administrative Region. This is for the protection of information networks, computer systems and data of critical infrastructure operators.

**Key milestones of the MCSL**

- **MCSL was announced**
  - 24 Jun 2019
- **MCSL come into force**
  - 22 Dec 2019
  - 180 days
- **20 Apr 2020**
  - 120 days

- Additional: Customer personal detail is required to register for prepaid SIM cards.

**Scope and Definition**

**Definition of critical infrastructure:** Information networks and computer systems that are important to the normal functioning of society. If disrupted may jeopardize/disturb and threaten to social well-being, public safety, order and interests.

**Overview of Operators / Providers that fall under the scope of Macau Cybersecurity Law:**

**Public critical infrastructure operators:**
- Office of Chief Executive and Office of Principal Officials
- Macao Special Administrative Region Public Sector
- Public legal person and autonomous fund

**Private critical infrastructure operators:**
- Private entities that are qualified to operate and provide services to the administration and operate in the following areas:
  - Banks, Financial Entities and Insurance Institutions, Games of Fortune operators, Sea / Land / Air Transportation Operators, some Utilities Operators, Healthcare Operators, Public Capital Companies, etc.

**Internet service providers:**
- An entity that is qualified to operate a fixed or mobile public telecommunications network and provides Internet access services.
Macau Cybersecurity Law outline

MCSL comprise of five chapters, below is an overview of the key objectives and coverage of each chapter.

**Chapter 1 General Provisions (Articles 1 - 5)**
Explains the Objective, Definition of terms and Scope of the law.

**Chapter 2 Institutional Provisions (Articles 6 - 9)**
New offices, i.e. Committee for Cybersecurity (CPC) and Cybersecurity Incidents Alert and Response Center (CARIC) are set up to provide supervision. Existing public institutions and departments will collaborate to provide support.

**Chapter 3 Cybersecurity Obligations (Articles 10 - 14)**
High-level obligations of public and private critical infrastructure operators are described. The obligation is mainly related to governance and reporting obligations to the Macau Government.

**Chapter 4 Penalty System (Articles 15 - 23)**
Penalty of non-compliance with the MCSL can be categorized by two levels (i.e. minor and severe). The maximum fine can be up to MOP 5 million.

**Chapter 5 Transition and Other Provisions (Articles 24 - 28)**
Specification on the grace period of the rules (180 days) and explanation of the obligation of Internet Service Providers (ISPs).
Regulatory oversight

In the MCSL, the Cybersecurity oversight is maintained by a composition of the Committee for Cybersecurity (CPC), Cybersecurity Incidents Alert and Response Center (CARIC), and supervisory entities.

**Commission for Cybersecurity (CPC)**

**Cybersecurity Incidents Alert and Response Center (CARIC) – Coordinated by Judiciary Police (PJ)**

<table>
<thead>
<tr>
<th>Public Administration and Civil Service Bureau (SAFP)</th>
<th>Judiciary Police (PJ) - Coordinate the CARIC</th>
<th>Macao Post and Telecommunications Bureau (CTT)</th>
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</thead>
<tbody>
<tr>
<td><strong>Public critical infrastructure operators</strong></td>
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</tr>
<tr>
<td>1. The Office of the Chief Executive, the Offices of the Principal Officials, the Secretariat of the Legislative Assembly, the Office of the President of the Court of Final Appeal and the Office of the Prosecutor General</td>
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<td>2. The public sector of the Macao Special Administrative Region</td>
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<td>3. Any form of Public institutions and autonomous funds</td>
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<tr>
<td><strong>Private critical infrastructure operators</strong></td>
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<tr>
<td>1. Entities governed by private law, headquartered in Macao or abroad, entitled to carry on business in the fields specified below, whether by way of operating concession, providing services to the Administration and licensing, or alike.</td>
<td>2. Companies wholly-owned by the government</td>
<td>3. Administrative Public Welfare Legal Person whose activity is related to the scientific and technological area</td>
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<tr>
<td><strong>SAFP (Public Administration and Civil Service Bureau)</strong></td>
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<td>IAM (Municipal Affairs Bureau)</td>
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<td>AMCM (Monetary Authority of Macao)</td>
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<td>DICJ (Gaming Inspection and Coordination Bureau)</td>
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<td>DSE (Macao Economic Bureau)</td>
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<td>SS (Health Bureau)</td>
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<td>DSAMA (Marine and Water Bureau)</td>
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<td>DSAT (Transport Bureau)</td>
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<td>GDSE (Office for the Development of the Energy Sector)</td>
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<td>DSPA (Environmental Protection Bureau)</td>
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<td>AACM (Civil Aviation Authority)</td>
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<td>CTT (Macao Post and Telecommunications Bureau)</td>
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<td>Other Departments and Agencies</td>
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<td><strong>Water supply</strong></td>
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<td>Banking, finance and insurance activity</td>
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<td>Provision of healthcare in hospitals</td>
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<td>Wastewater treatment and waste collection and treatment</td>
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<td>Wholesale public supply of fuels and foodstuffs subject to sanitary and phytosanitary inspection</td>
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<td>Slaughter of animals in legal slaughterhouses</td>
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<tr>
<td>Supply and distribution of electricity and natural gas</td>
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<tr>
<td>Provision of public service of maritime transport, inland and air transport performed with regularity, according to routes, frequency of trips, schedules and prices previously defined</td>
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<tr>
<td>Operation of port, ferry terminal, airport and heliport</td>
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<tr>
<td>Broadcasting</td>
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<tr>
<td>Operation of games of fortune</td>
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<tr>
<td>Operation of public fixed or mobile telecommunications networks and provision of internet access services</td>
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</tbody>
</table>
# Macau Cybersecurity Law | Obligation of operators and internet service providers

## Obligation of operators and internet service providers

<table>
<thead>
<tr>
<th>Key obligations</th>
<th>Private critical infrastructure operators</th>
<th>Public critical infrastructure operators</th>
<th>Internet service providers</th>
<th>Penalty and fine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational obligation</strong></td>
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<tr>
<td>• Establish a <a href="#">cybersecurity management unit</a></td>
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<tr>
<td>capable to implement internal security measures relating cybersecurity</td>
<td>Article 10</td>
<td>Article 14</td>
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<tr>
<td>• Appoint / set up delegated and competent <em>(cyber)</em> security officer and the alternate (habitual residence in Macau)</td>
<td>![Check]</td>
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<tr>
<td>• Ensure that the cyber security officer and the alternate are permanently contactable by CARIC</td>
<td>![Check]</td>
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<td>• Establish a <a href="#">complaint and reporting mechanism</a> for cybersecurity</td>
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<td><strong>Procedural, preventive and contingency obligations</strong></td>
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<tr>
<td>• Develop and adopt <a href="#">cybersecurity management system</a> and <a href="#">operational procedures</a>, and <a href="#">internal measures for security incident monitoring and response</a></td>
<td>![Check]</td>
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<tr>
<td>• Inform (CARIC / regulatory entity) about <a href="#">cybersecurity incidents</a>, including examination and recording of status of the information network</td>
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<td><strong>Self - assessment and reporting obligations</strong></td>
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<tr>
<td>• Engaged internal / external professional to conduct <a href="#">cyber security assessment</a></td>
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<tr>
<td>• <a href="#">Submit cybersecurity report</a>, including incident report (if applicable) to relevant regulatory entities annually</td>
<td>![Check]</td>
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<tr>
<td><strong>Cooperative obligation</strong></td>
<td>![Check]</td>
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<tr>
<td>• Cooperate with and provide support to <a href="#">CARIC / regulatory entity inspection and investigation</a></td>
<td>![Check]</td>
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</tbody>
</table>

- Fine MOP 50,000 to 5,000,000
- Additional penalties:
  - Deprivation of the right to participate in public procurement
  - Deprivation of the right to subsidies or benefits granted by public entities

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### Notes
- [cybersecurity management unit](#)
- [cybersecurity management system](#)
- [operational procedures](#)
- [internal measures for security incident monitoring and response](#)
- [cybersecurity incidents](#)
- [cyber security assessment](#)
- [Submit cybersecurity report](#)
### Macau Cybersecurity Law | Obligation of operators and internet service providers

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</tr>
</thead>
</table>
| **Obligation of staff of critical infrastructure public operators** | | | | • Disciplinary action  
| | • Review and monitor the private third party cybersecurity services vendor **performance against the contract** | | | • Forced retirement, dismissal or suspended duty  
| | | | | Article 14 |
| **ISPs obligation** | | | | • Fine MOP 50,000 to 150,000  
| | • Register the prepaid SIM card users identity (within 120 days after the law becomes effective), or terminated the services | | | Article 24,25,26  
| | • Check and register customer identity | | |  
| | • Retain the **record of converting private IP address** to public IP address for 1 year | | |  

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### Article 14

- **Review and monitor** the private third party cybersecurity services vendor **performance against the contract**

### Article 24,25,26

- **Register the prepaid SIM card users identity** (within 120 days after the law becomes effective), or terminated the services

- **Check and register customer identity**

- **Retain the record of converting private IP address** to public IP address for 1 year

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Impact of Macau Cyber Security Law on corporations

There is no doubt that the impact of MCSL on company is significant. Although some regulations are still in the process of legislation and reform, companies will face legal consequences if the MCSL is breached.

Meanwhile, the management of company, and related personnel of security, law and IT needs to resolve the following problems:

Do we *meet the fundamental requirements* of the MCSL?

- What is the **MCSL’s impact** to the company?
- Does the companies have **risks associated** with systems affecting social and public stability, data leakage?

**What**

- What is the main content of the MCSL applicable to my organization?
- Are there any (other) relevant regulations e.g. industry specific ones?
- What is the impact of the requirements to the company?

**Who & What?**

- Which departments and personnel within my organization are affected by the MCSL?
- What systems and information need to be considered?

**How**

- What is the potential compliance risk?
- What are remediation for non-compliance of security organization?
- How to comply and where to start?

**Awareness & Understanding**

- The management’s awareness of the MCSL.
- The understanding of the impact of related departments on the MCSL.
- The staff’s awareness of MCSL.

**Scope & Impact**

- The scope of a corporation (business, area, organization).
- Impact to departments (business processes), personnel, systems, and information.
- Which business and IT might be affected?

**Risk & Control**

- Currently existing compliance risks.
- Other potential risks for uncertain regulations.
- Other risks besides compliance risks: financial, reputational and people risks.
- Corresponding controls and remediation.
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Our objective is to help clients develop and implement strategies for IT risk management and aim to help clients find the appropriate balance between risk management and cost containment. Our integrated solutions covering:

- **Cyber Strategy**
  - Cyber Strategy, Transformation, and Assessments
  - Cyber Risk Management and Compliance
  - Cyber Training, Education and Awareness

- **Secure**
  - Infrastructure Protection
  - Vulnerability Management
  - Application Protection
  - Identity and Access Management
  - Information Privacy and Protection

- **Vigilant**
  - Threat Intelligence
  - Threat Monitoring and Analytics
  - Attack Surface and Vulnerability Management

- **Resilient**
  - Cyber Incident Response
  - Cyber War - gaming

Given MCSL introduces new and more stringent regulatory requirements, a **four phased - approach compliance program** is designed with reference to the above 4 areas. The law will be effective by end of 2019, companies that fall within its scope should start as soon as possible!
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