|  |
| --- |
| Assume that you are a **consultant** to large telecommunications businesses in Australia.  The Board of Directors for two different carriers/service providers has asked you to advise them on the networking regulations and legislation for the telecommunications industry, including their impact and factors influencing them.  You have been contracted by both businesses to develop:  **Carrier/Service provider 1:**   * one comprehensive report that evaluates the economic and political influences on the networking industry in Australia and describes the impact of regulations and legislation on the networking industry. * one summary report that evaluates the impact of legislation on planning processes and accessibility to networks.   **Carrier/Service Provider 2:**   * one comprehensive report that evaluates the economic and political influences on the networking industry in Australia and describes the impact of regulations and legislation on the networking industry. * one summary report that evaluates the impact of legislation on planning processes and accessibility to networks. |
| Choose any two carriers/service providers in Australia and complete page 4 of your Project Portfolio before starting the assessment.  **Carrier 1:** Optus Networks Pty Ltd  **Service provider 1:** Lebara |

**Carrier:** Entity that **owns or operates physical telecommunications infrastructure** used to supply services to the public.

**Examples:**

Must hold a **Carrier Licence** issued by the Australian Communications and Media Authority (ACMA).

* **Telstra Corporation Limited** (owns copper, fibre, mobile towers)
* **Optus Networks Pty Ltd**
* **NBN Co Limited** (wholesale broadband network)
* **TPG Telecom Ltd** (owns fibre, towers, submarine cables)

**Service Provider**: (Carriage Service Providers (CSPs)) Entity that **uses a carrier’s network** to offer telecommunications services to the public.

**Examples:**

Do **not** need a carrier licence. Must comply with the **Telecommunications Act 1997** and register with ACMA if supplying carriage services to the public.

* **Aussie Broadband** (uses NBN and some own backhaul)
* **Lebara** (resells Telstra/Optus services)
* **iiNet** (resells and partially owns infrastructure but mostly operates as a service provider)
* **Boost Mobile** (resells Telstra network)

ANSWERS

## 4.1 Keep your legislative and regulatory knowledge up to date:

Key telecommunications laws, regulations and policies:

<https://www.dlapiperintelligence.com/telecoms/index.html?t=laws&c=AU>

Rules for carriers and service providers:

<https://www.infrastructure.gov.au/media-communications-arts/internet/rules-carriers-and-service-providers>

### Ways available to keep your legislative and regulatory knowledge up to date

1. Subscribe to newsletters, courses, and webinars

2. Following governmental and specialised associations

3. Company training about legislative and regulatory changes

4. Be aware of the news on social media

5. Social gatherings with colleagues

### The ones I like the most are:

1. Subscribe to newsletters: I usually subscribe to newsletters from my company and suppliers to stay informed of the latest or most important changes.

2. Company training: I usually have to take refresher courses where I've worked.

3. Social gatherings with colleagues: Some colleagues have more knowledge and are more involved in legal issues.

## 4.2 Identify the telecommunications carriers and service providers in Australia

### List the carriers and service providers in Australia:

Register of licensed carriers: <https://www.acma.gov.au/register-licensed-carriers>

**Some telecommunications carriers:**

- 5G Network Operations Pty Ltd

- A.C.N. 625 580 332 Pty Ltd

- AAPT Limited (formerly AAP Telecommunications Pty Ltd)

- Amazon Kuiper Australia Pty Ltd

- Datawave Internet Pty Ltd

- DGTEK Pty Ltd

- EscapeNet Pty Ltd

- Jaisaben Enterprises Pty Ltd

- Optus Mobile Pty Ltd (formerly Mobilcom (Australia) Pty Limited)

- Telstra Corporation Limited (formerly Australian and Overseas Telecommunications Corporation Limited)

- TPG Telecom Limited (formerly Hutchison 3G Australia Pty Limited)

- Verizon Australia Pty Limited (formerly WorldCom Australia Pty Ltd)

**Some carriage service providers:**

- Amaysim

- Aldi Mobile

- Dodo,

- iiNet,

- Lebara Mobile

- Felix Mobile

- Tangerine

- Vodafone

## 4.3 Summarise legislation relevant to the networking industry.

### 1. What are the legislative requirements?

- CARRIES must have a licence

- Carries and service providers could need:

- Nominated Carrier Declarations

- Spectrum Licences

- Apparatus Licence

- Class Licence

- Any carrier corporation must comply Telecommunications Act 1997 and any related standards and codes

- CSPs (Carriage service providers) do not need a licence

- CSPs must comply Telecommunications Act 1997 and Telecommunications (Consumer Protection and Service Standards) Act 1999

- Carries and carriages must comply with service providers rules

- Compliance with industry standards is mandatory

- Data collectiong and retention are under data retention scheme into Part 5-1A of the TIA Act

- Any carrier must comply Telecommunications Industry Ombudsman scheme

- Emergency Call Services Requirements Industry Code

- Reducing Scam Calls and Scam SMS

### 2. What is the purpose of the legislation?

- Guarantee universal service

- Provide regulation

- Ensure fair competition

- Establishing Rights and Responsibilities

- Creating a Legal Framework

- Enacting Government Policy

- Providing Legal Certainty

- Addressing Social Issues

- Establishing consumer protection mechanisms

- Protect infrastructure from criminals

### 3. How is the legislation implemented for large telecommunications businesses?

<https://business.gov.au/planning/industry-information/information-media-and-telecommunications-industry>

In summary, large corporations must comply with stricter legislation, acquire special licenses and permits, comply with a special tax regime, comply with employee regulations, intellectual property regulations, and have mandatory insurance.

Large corporations must comply with laws, standards, and initiatives that apply to the media and telecommunications industries, primarily imposed by the ACMA and ACCC.

They must also acquire licenses and permits to operate. These are some of the industries:

- Television license

- Radio license

- Commercial filming licensing

- Broadcast of copyright material

- Filming and photography permits

These licenses are granted by ABLIS (Australian Business License and Information Service).

Regarding taxes, large industries comply with different obligations under GST (Goods and Services Tax).

Finally, large industries have specific insurance policies that they must purchase, for example:

- Business interruption

- Professional indemnity

- Public liability

- Telecommunications

These are some laws that apply:

- Compliance with business indrustry legislation:

- Competition and Consumer Act 2010

- Australian Consumer Law (ACL)

- Copyright Act 1968

- Broadcasting Services Act 1992

- Radiocommunications Act 1992

- Telecommunications Act 1997

- Telecommunications (Consumer Protection and Service Standards) Act 1999

- Do Not Call Register Act 2006

- Spam Act 2003

- Privacy Act 1988

- Disability Discrimination Act 1992: World Wide Web Access

- Public Lending Right Act 1985

- Compliance with business indrustry schemes, standards and conde

- National Classification Scheme

- Broadcasting codes & schemes

- Telecommunications Consumer Protections (TCP) Code

- Compliance with ACCC guides (Australian Competition & Consumer Commission)

- Telecommunications Competition Notice Guidelines

- Review of transmission regulation

### 4. What are the rights of carriers and service providers in installing facilities in Australia?

<https://www.acma.gov.au/local-councils-and-network-facilities#low-impact>

The rights of carriers and service providers at facility sites are known as "powers and immunities," which allow companies certain freedoms depending on the impact as long as they follow the law (Telecommunications Act 1997). Carriers decide whether a facility falls into one of the two categories.

- Low-impact: These are telephone networks and internet network structures

- Not-low-impact: These are primarily networks or infrastructure that can affect a large area, for example, communication towers and overhead lines

These are some rights that the law grants companies when they are low-impact facilities:

- A company can enter the property to inspect it

- Install

- Maintain

Companies must request approval from the local or state government to work on not-low-impact facilities:

### 5. What is the impact of legislation on planning processes and accessibility to networks?

The impact of legislation on network planning and access processes is fundamental, as it defines the rules of the game for all companies, promoting competition. It also guarantees (by ACCC) essential access to infrastructure. It also investigates and intervenes in anti-competitive behaviour.

### 6. How does the legislation address data security and safety?

"Encryption Act, • The Privacy Act 1988, • Telecommunications (Interception and Access) Act 1979, • National Broadband Network Companies Act 2011"

<https://www.dlapiperdataprotection.com/index.html?c=AU>

Data security and protection legislation primarily defines data retention, critical infrastructure protection, and legal access to data.

Under the legal framework for data retention known as the "Data Retention Scheme" service providers are required to retain and store certain metadata for at least two years. This scheme also stipulates that certain government agencies may be authorized to access retained data. Furthermore, through the "Encryption Act," the government can require assistance companies to intercept encrypted data or access encrypted information for investigations, for example, involving messaging applications.

The government seeks to protect critical infrastructure, so service providers are required to report any cybersecurity incidents that have a significant impact under the "Security of Critical Infrastructure Act 2018."

## 4.3 Identify the regulators of the networking industry.

1. The Australian Communications and Media Authority (ACMA)

2. The Australian Competition and Consumer Commission (ACCC)

3. The Office of the Australian Information Commissioner (OAIC)

4. Australian Security Intelligence Organisation (ASIO)

<https://www.directory.gov.au/portfolios/infrastructure-transport-regional-development-communications-and-arts/australian-communications-and-media-authority#:~:text=The%20Australian%20Communications%20and%20Media,communications%20and%20certain%20online%20content>.

## 4.4 Summarise the regulatory requirements.

### 1. What are the implications of government regulation and deregulation for Optus (carrier) and Lebara (service provider)?

**Optus (carrier):**

- Regulation:

- Requires a license to operate

- Must comply Telecommunications Act 1997 and any related standards and codes

- Compliance with industry standards is mandatory

- Is required to respond to ACMA, ACCC, and OAIC

- Is required to follow USO (Universal Service Obligation) regulations

- Must comply with Emergency Call Services Requirements Industry Code (Industry Ombudsman scheme)

- Must comply with Emergency Call Services Requirements Industry Code (Industry Ombudsman scheme)

- It is required to follow the "Data Retention Scheme"

- It is required to provide assistance regarding encrypted information to government agencies (Encryption Act)

- Deregulation:

- It benefits from the advantages of "powers and immunities"

**Lebara (service provider):**

- Regulation:

- Must comply with Telecommunications Act 1997 and any related standards and codes

- CSPs must comply Telecommunications Act 1997 and

- Must comply with Emergency Call Services Requirements Industry Code (Industry Ombudsman scheme)

- Must comply with Emergency Call Services Requirements Industry Code (Industry Ombudsman scheme)

- It is required to follow the "Data Retention Scheme"

- It is required to provide assistance regarding encrypted information to government agencies (Encryption Act)

- Deregulation:

- It benefits from the advantages of "powers and immunities"

### 2. What are the licensing requirements for Optus (carrier) and Lebara (service providers)?

Optus:

- Carrier Licence

- Nominated Carrier Declarations: Operate other networks and act as a carrier.

- Spectrum Licences: Operate spectrum frequencies.

Lebara:

- Does not require a license as it is not a carrier

- Spectrum Licence

- Apparatus Licence: Use equipment to work with frequencies.

- Class Licence: Access to shared spectrum.

### 3. What method is used by the Australian Competition and Consumer Commission (ACCC) to enforce competitive provisions between service providers?

<https://www.globalcompliancenews.com/antitrust-and-competition/antitrust-and-competition-laws-in-australia/>

The ACCC refers cases to the Commonwealth Director of Public Prosecutions (CDPP), who is responsible for enforcing the law. By law, the ACCC can also require access to infrastructure and data.

Penalties for anti-competitive conduct can include:

- Fines of up to $10 million

- 10% of annual profits

- For boycotts, fines of up to $750,000

- Criminal cartel offenses are punishable by imprisonment of up to 10 years or a fine of $340,000 to $500,000

By law, companies are prohibited from compensating their officers for the payment of fines or any associated legal costs.

### 4. What are the policies and procedures of the ACCC (at least one)?

<https://www.accc.gov.au/about-us/accc-priorities/compliance-and-enforcement-priorities#:~:text=Accountability%20%E2%80%93%20the%20ACCC's%20decision%2Dmaking,the%20resulting%20or%20potential%20harm>.

This policy establishes priorities to be achieved during the current year and also prioritizes long-term conduct, for example:

- Cartel conduct

- Anti-competitive conduct

- Product safety

- Consumers experiencing vulnerability or disadvantage

- Conduct impacting First Nations Australians

- Small business

- Scams

Policy principles:

- Accountability

- Transparency

- Confidentiality

- Timeliness

- Proportionality

- Fairness

The ACCC has several enforcement measures:

1. Administrative Resolution: Mandates the conduct to be stopped

2. Infringement Notices: Notice and infringement

3. Enforceable Undertakings (Section 87B): An administrative resolution and infringement notice are issued.

4. Court Cases: Imposition of judicial sanctions

5. Debarment: Officials of the offending company are debarred

The ACCC also takes other, less aggressive actions and collaborates with other agencies.

### 5. What are the planning obligations of USO?

<https://www.acma.gov.au/about-universal-service-obligation>

<https://www.telstra.com.au/consumer-advice/customer-service/universal-service-obligation>

<https://www.lgaq.asn.au/News-and-Media/News-articles/The-Universal-Service-Obligation-History-and-future>

The USO is a company's obligation to guarantee basic access to essential telecommunications services. Telstra, as the largest company, must comply with the USO; the government funds its implementation.

Teltra's obligations are:

1. Provide Standard Telephone Services (STS)

2. Provide payphones

3. Offer access to 24-hour emergency numbers

The current planning obligations are:

1. Universal Access Planning (Modernising Services): Guarantee access to both broadband and voice services for all Australians via NBN.

2. Network Maintenance & Expansion: Ensure access to a standard telephone service (STS) and payphones nationwide.

3. Emergency & Priority Services: Call emergency numbers anytime, anywhere, free of charge.

4. Forward-Looking Plans: Update USO to keep it ahead of new technologies.

Next planning:

The current government wants to take advantage of new technologies, so it wants to ensure that USO in the future meets the following requirements:

- Broadband services are available to 100% of Australian premises, on request, at the completion of the NBN rollout in 2020

- Voice services are available to 100% of Australian premises on request

- Any proposed new service delivery arrangements are more cost effective than the existing USO contract (including any transitional costs) and,

- A new consumer safeguards framework is in place following a review and associated public consultation process.

### 6. What are the policies and procedures of the USO?

<https://www.infrastructure.gov.au/media-communications-arts/phone/phone-services/universal-service-obligation-voice-services>

<https://www.anao.gov.au/work/performance-audit/management-contract-telephone-universal-service-obligations>

<https://www.acma.gov.au/rules-telstra-payphones>

Telstra is committed to ensuring USO standard telephone services (STS) and payphones are under policies to ensure that the service is reasonably accessible to all Australians anywhere in Australia.

The policies that Telstra complies with are:

* Payphones
* Standard telephone service

The "Universal Access to Broadband Services" framework describes the obligations that the infrastructure must meet:

- Universal Service Guarantee (USG): Access for Australians to both broadband and voice services, anywhere in Australia

- Universal Access to Voice Services: Access for Australians to fixed voice services and payphones

- Modernizing Universal Telecommunications Services: The government seeks to update voice and broadband services to the latest technology

The procedures that Telstra must follow, which are defined by ACMA, are:

* where to locate payphones.
* the criteria to install, remove and maintain payphones.
* their consultation process.
* install or removing payphone

Other services and procedures are also described by Telstra:

* Payphone enquiries & applications
* Reporting faults
* Telstra Smart Payphone
* TTY payphones (payphones for deaf people)
* Making a complaint about a payphone

The Department of Infrastructure, Transport, Regional Development, Communications and the Arts monitors and oversees the implementation of the USO.

Plan and summarise additional research required for your reports.

## Australian economic conditions

<https://www.abs.gov.au/articles/9-facts-about-economy-march-quarter>

[https://www.oecd.org/en/topics/sub-issues/economic-surveys/Australia-Economic-Snapshot.html](https://www.oecd.org/en/topics/sub-issues/economic-surveys/Australia-Economic-Snapshot.html?utm_source=chatgpt.com)

Data from the first quarter of 2025 show that the Australian economy has shrunk, primarily due to lower public spending and inflation. GDP is also down 0.2% compared to 2024.

First, the Australian economy has suffered losses in imports, exports, and tourism due to weather events in Western Australia and Queensland. However, gold exports were not affected, increasing by $2.1 billion.

The construction sector is also being affected due to delays in public projects, which has caused public investment to fall. The affected sectors are: energy, telecommunications, road, and rail.

Although underlying inflation (excluding volatile services) is down, and in fact is the lowest since 2021, it reflects that the economy is contracting at a steady pace.

Finally, employment grew by 2.2% annually, largely due to a 3.4% annual increase in wages due to investment in the public sector.

## Economic factors that can affect growth (x5)

<https://www.oecd.org/en/publications/oecd-economic-outlook-volume-2025-issue-1_83363382-en/full-report/australia_b563f928.html>

<https://programsandcourses.anu.edu.au/course/pols2094>

1. Weather events

2. Public investment

3. GDP, Inflation

4. International political economy

5. Household consumption

## Political influences on public and commercial enterprises that provide services in networking markets. “*Describe at least one political influence on public and commercial network services.*”

<https://www.homeaffairs.gov.au/cyber-security-subsite/files/factsheet-ransomware-payment-reporting.pdf>

The government created the "Cyber ​​Security Act 2024" in response to the lack of a legal framework for cybersecurity.

Between 2022 and 2023, the data theft scandals that rocked the country highlighted the lack of legal measures to respond to cybercriminals. In 2022, Optus suffered an attack that allowed the personal data of 40% of the population to be published. That same year, Medibank suffered a ransomware attack that compromised the personal data of 9.7 million people, resulting in the data being leaked to the dark web after the ransom was not received. Finally, in 2023, Latitude Financial suffered an attack that exposed the personal data of 14 million people online.

Prior to the Cyber ​​Security Act, the legal framework was provided by the Privacy Act 1988, on the protection of personal data, and the Security of Critical Infrastructure Act 2018, on the protection of critical sectors for the country. Despite the existence of these laws, there were no laws regarding the legal obligations of companies.

The Cyber ​​Security Act requires companies to report serious cybersecurity incidents and report ransom demands starting May 30 of this year. This response to cyber extortion also increased fines for security breaches from 2.2 million to 50 million, or more as determined by law.

In short, the law was created to protect Australians' data, increase transparency in the face of cyberattack incidents, and strengthen national resilience to cyber threats.

## Accessibility of networking services to individuals and organisations across Australia

1. Describe the accessibility of Optus

<https://www.optus.com.au/content/dam/optus/documents/about-us/inclusion-diversity/accessibility/optus-access-and-inclusion-action-plan-2024-2029.pdf>

Optus has an accessibility plan called the "Optus Access and Inclusion Action Plan 2024–2029," which describes industry-leading policies and best practices. It consists of:

- Respect and Rights: Optus is free from discrimination and all types of violence.

- Social Inclusion: Improves understanding of disability.

- Individualized: Optus understands that people with disabilities experience their environment differently.

- Confidence and Acceptance: Optus encourages building confidence in disability.

- Diversity as a Strength: Optus celebrates the strength of people with disabilities.

- Independence: Optus celebrates the freedom of choice.

- Accessible: Optus seeks to remove all barriers.

- In Partnership: At Optus, everyone makes decisions together.

1. Describe the accessibility of Lebara mobile

<https://www.lebara.com.au/support/accessibility/>

Lebara follows the best practices described in the "AMTA Mobile Phone Industry Good Practice Guide: Accessibility for People with Disabilities."

The services Lebara offers primarily focus on communication. Lebara provides a direct number to access the National Relay Service (NSR) for assistance to people with disabilities.

They also offer the option of requesting an interpreter for those seeking assistance in a language other than English.

## Issues that contravene relevant policies, procedures, and legal requirements “Identify issues associated with Optus/Lebara that contravenes relevant policies, procedures, and legal requirements (at least one).”

<https://www.acma.gov.au/sites/default/files/2024-11/Investigation%20report%20-%20Optus%20outage%201Nov23%20%28redacted%29.pdf>

<https://en.wikipedia.org/wiki/2022_Optus_data_breach>

In September 2022, Optus suffered a cyberattack where the personal data of around 10 million people was leaked on the dark web and offered for $400,000. This led to the OAIC (the Office of the Australian Information Commissioner) and ACMA (the Australian Communications and Media Authority) initiating an investigation into possible violations of the data privacy act. The AFP (the Australian Federal Police) is also investigating the data theft.

Class-action lawsuits were also filed against Optus seeking compensation for the damages incurred and to compensate customers for lost time and distress.

Optus had to cover $140 million in costs to replace documents, such as passports and licenses, whose data was leaked.

No fines have yet been imposed against Optus in this case. Due to this and other related cases, the government created the Cyber ​​Security Act in 2024.

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Lebara

<https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bId=r7317>

Lebara doesn't have any issues. So I'm going to talk about what will likely happen in the future, generally, for all carriers and service providers.

The new reform called the "Telecommunications Amendment (Enhancing Consumer Safeguards)" is underway. In short, if the reform is approved, three major changes are expected.

First, service providers would be required to register with the so-called "Carriage Service Provider Register," managed by ACMA. ACMA will now have the power to take action more quickly and impose much higher fines, increasing from $250,000 to $10 million.

Second, the creation of the Universal Outdoor Mobile Obligation (UOMO), which is the equivalent of USO but focused on mobile coverage. It is expected to guarantee mobile coverage throughout Australia using low-Earth orbit (LEO) satellites.

Finally, telecommunications providers will be required to implement a mandatory Telecommunications Security and Risk Management Program (TSRMP). Currently, some asset registrations were optional, so the new reform requires the registration of all critical assets and the reporting of all cyber incidents.

## Other research “If you require any further research, summarise it here.”

NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA N