



REGULATING PUBLIC WI-FI IN AUSTRALIA

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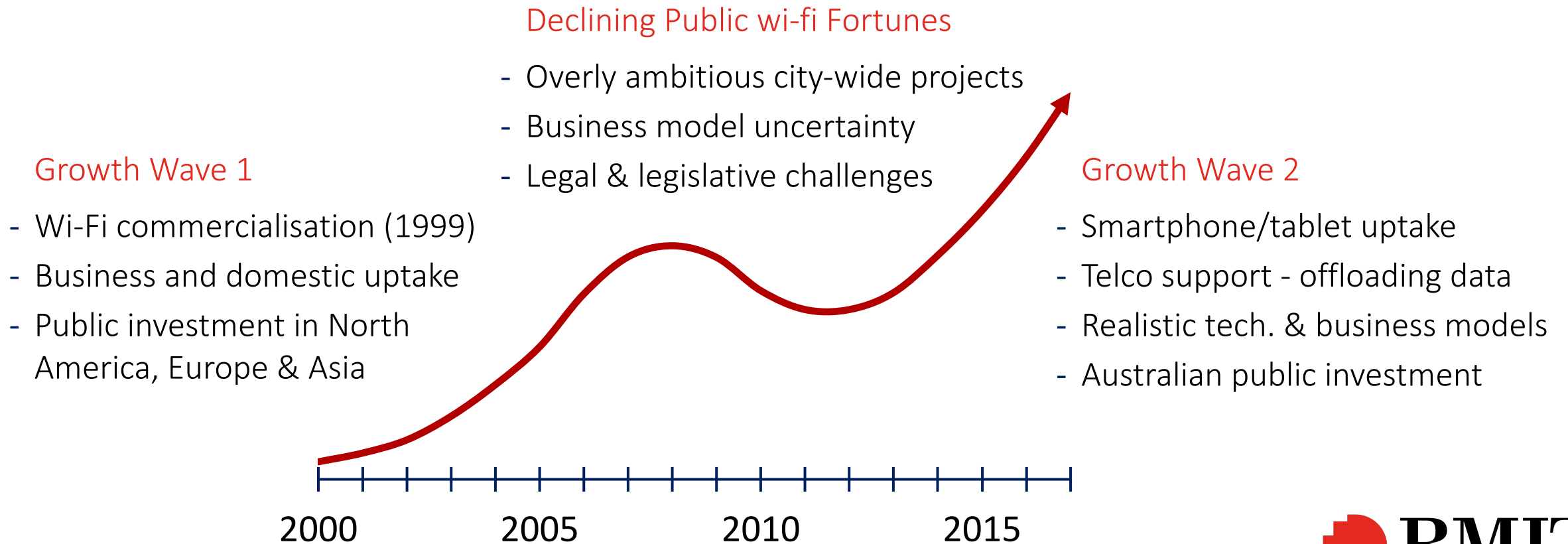
RMIT Technology, Communication & Policy Lab



OC Overview

- + Development and diversification of public wi-fi in Australia
- + Regulation of Public Wi-Fi as radio communication
- + Regulation of Public Wi-Fi as a telecommunications service

Development of Public Wi-Fi in Australia



Diversification of Public Wi-Fi in Australia

- + Varying organisation types: large & small commercial, state & local government, universities, community organisations...
- + Varying provision models: hotspot, mesh, indoor/outdoor, transport vehicles
- + Varying funding models: paid access, advertising, taxpayer funded ...
- + **First** engagement with the highly regulated telecommunications sector
- + Challenge for new providers
AND a challenge for the regulators



1. Ensure your Wi-Fi setting is turned on. Find 'Airport Free Wi-Fi'.
2. Enter details and accept the terms and conditions.
3. Accept Privacy Statement and click 'Start Browsing'. You're connected.

1. 确保您的Wi-Fi设置已开启。找到“Airport Free Wi-Fi”。
2. 输入相关信息并接受条款协议。点击“Connect to free Wi-Fi”。
3. 接受隐私声明并点击“Start Browsing”。开始上网吧。



AdelaideFreeWiFi



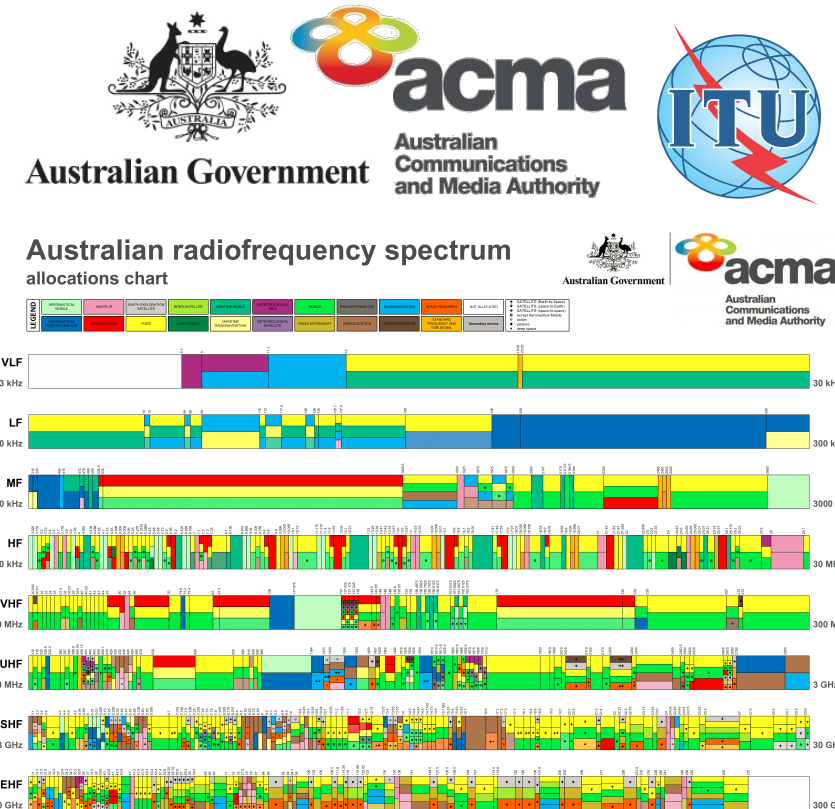
Two regulatory areas:

- + Regulation of Public Wi-Fi as radio communication
- + Regulation of Public Wi-Fi as a telecommunications service



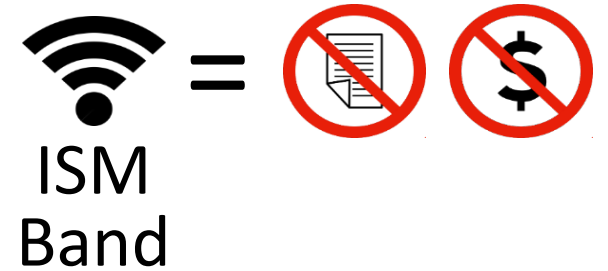
Public Wi-Fi as radio communication

- + Radiocommunications Act 1992 (Cth)
- + Australian Communications and Media Authority (ACMA)
- + International Telecommunication Union (ITU)
- + Access to **all** spectrum in Australia is governed through a licensing regime
- + The three licences in this regime posit different rights and obligations on holders
- + Spectrum, Apparatus, Class



Wi-Fi class licence, 'public park' regulation

- + Class licences designate a band of spectrum that may be freely used by anyone operating equipment that meets a set of technical and operational standards
- + No individual licence, no fees
- + Wi-Fi operates in Industrial Scientific and Medical (ISM) Band (ITU:1947) (a reason for wi-fi proliferation)
- + ISM operates as a public park – sharing, no interference protection
- + HOR 2002 recommended that “the requirement for carrier licences on the ISM bands be eliminated for both commercial and non-commercial operation”



Public Wi-Fi as telecommunications service

- + Telecommunications Act 1997: Two types of organisations provide telecommunication carriage services to the public, each with specific regulatory rights and obligations:
 - + **Carriers** are defined as those persons who **own** a telecommunications **network unit** used to supply carriage **services to the public**. Carrier licences are granted by the ACMA under section 56 of the Act. Carriers must comply with carrier licensing **obligations**.
 - + **Carriage Service Providers** (CSPs) **use** a telecommunications **network unit** to supply carriage **services to the public**. CSPs are not required to obtain a licence from the ACMA to supply a carriage service to the public, but must comply with service provider rules.

Carriage Service is a no brainer: **any communications service**

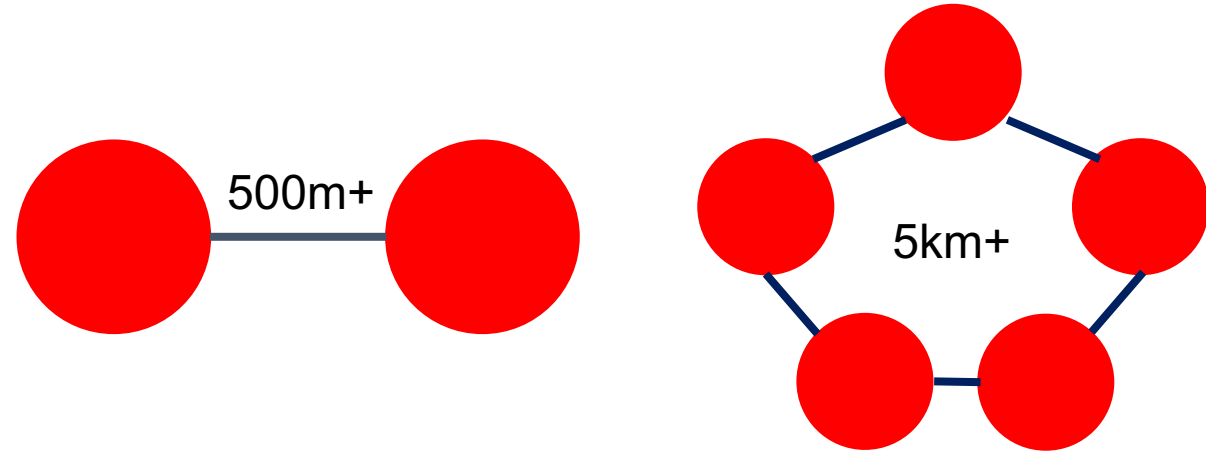
Question of C/CSP for public Wi-Fi: **Network unit?** **Public service** ? Other **exemption?**

Do public wi-fi operators own/use a network unit?

Three types of network unit (S.26-29)

+ Two are wired:

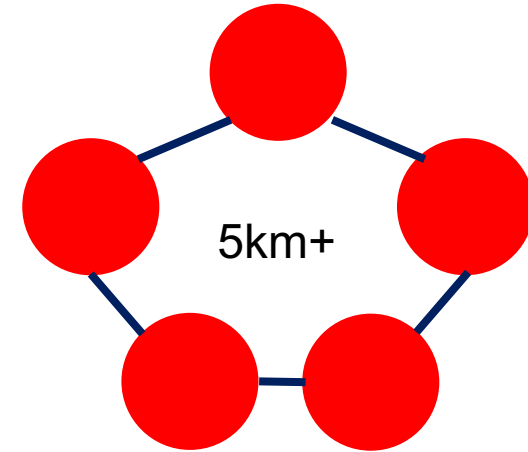
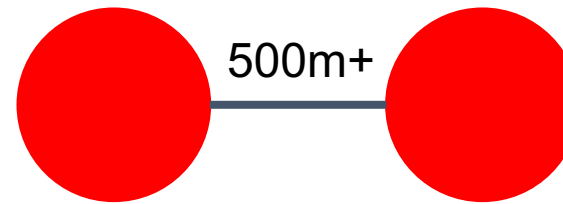
- (1) A single line link connecting **distinct places**
- (2) Multiple line links connecting **distinct places**



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S.36-40 define a distinct place as follows:

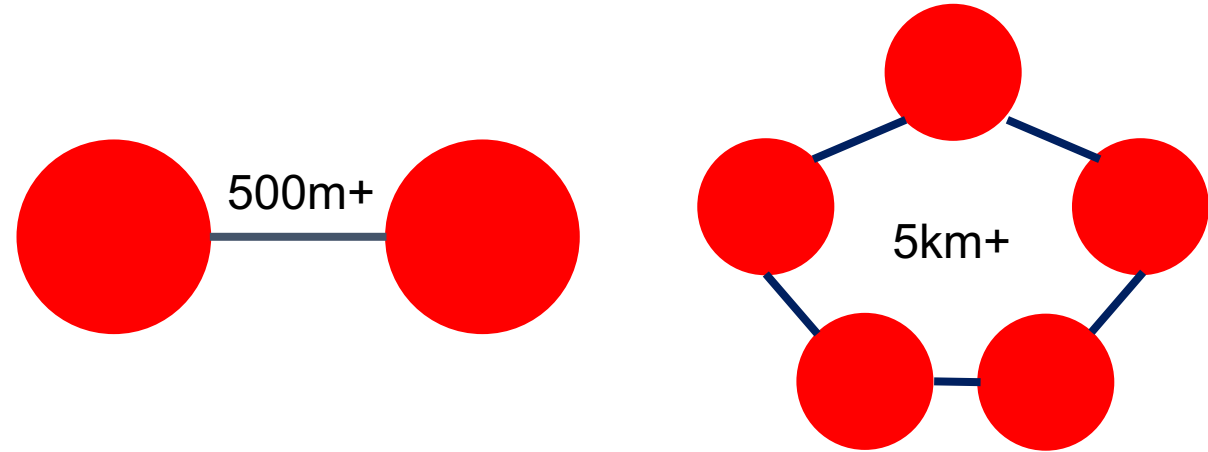
- + Places are **distinct unless** they are all in the same area
- + Places are in the **same area** if they are all situated in the **same property** [An area of land includes premises and a part of premises, but does **not include unalienated Crown land**]



Do public wi-fi operators own/use a network unit?

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- + Places are in the **same area** if they are all situated in the **same property** [An area of land includes premises and a part of premises, but **does not include unalienated Crown land**]
- + Or in the same **combined area** in the case of **2 contiguous properties** with the same users and primary property use





Do public wi-fi operators own/use a network unit?

Three types of network unit (S.26-29)

+ The third is wireless:

(3) If a **designated radiocommunications facility** is used, or is for use, to supply a carriage service **between a point in Australia and one or more other points** in Australia, the facility is a network unit

Wi-Fi Access Points are a designated radiocommunications facility

All connections **in the same place/area** OR **connecting distinct places** are network units



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+ So, prior 2002 providing Wi-Fi to people at an internet café in the same area required a Carrier Licence!

+ This seemed contrary to the intention of the Act - S89 exempts people providing a carriage service in the same area from being a carriage service provider!





Wireless network unit exemption 2002


Connecting Australia Wireless Broadband HOR Inquiry 2002

- + ACMA (then ACA) submission points to lack of technology neutrality:

“In relation to Internet cafes, hotels or airport lounges this means that if wireless access points are used instead of sockets to enable customers to access telephony or Internet services these wireless access points require a carrier licence even though the connecting cable does not.”
- + “A solution would be for the Minister to make a Determination of exemption under section 51 of the Act. The Determination would exempt wireless equipment from carrier licensing where the end users are on the **same premises** as the wireless equipment, **or alternatively**, for **alignment with cable**, within 500m or if relay radio links are involved, within maximum aggregate range of 5km”
(ACA submission).

2002+ Carrier Licence exemption for wireless network units

- + Minister determined that section 42 (Carrier Licence requirement) would NOT apply in relation to a Wireless Network Unit where:
 - + (a) the Wireless Network Unit is used to supply a carriage service to users where the users are not in a distinct place from the Wireless Network Unit; and
 - + (b) a carrier licence or a nominated carrier declaration is not, or would not be, required under section 42 of the Act for a fixed line network used to supply a service that is the same as the service described in paragraph (a) **in the same place as the place** referred to in paragraph (a)
[The latter is NEVER as fixed line networks in distinct places are NOT network units!]
- + Some confusion – eg. Communications Alliance (2012)
 - + “The Act allows up to 500m of cabling for a network unit before one requires a carrier license. So if the range of a Wi-Fi network does not exceed the equivalent of 500m of fixed network cabling then there may be an argument the network does not require a carrier license.”



Services to the public – NOT immediate circle

- + Inside the **immediate circle** of a relevant network unit owner are their:
 - + employees
 - + tertiary students
 - + body corporate officers
 - + defence or police force members
 - + parliamentarians and staff
 - + Some complications: tertiary systems providing access to ‘outsiders’ (Visitor determination 1998)? Contractors (Contractor determination 1998)?

If you provide a service **beyond same area** and **outside your immediate circle** you would need a **Carrier Licence**... BUT, there is one more exemption



Sole purpose non-commercial network unit exclusion

- + A Public Wi-Fi Access Point is **not a network unit** if the **network** it is are part of “is used, or for use, for the sole purpose of supplying carriage services on a **non-commercial** basis” (S34 3a).
- + If an AP is not a network unit the operator is not a Carrier or CSP
- + The Act provides no further definition of commercial/non-commercial or sole purpose

Early ACMA sole purpose non-commercial position

- + *Connecting Australia: Wireless Broadband HOR Inquiry 2002*
 - + ACA legal advice “non-commercial generally means supplied gratuitously and/or not pursuant to a contract or agreement and/or not for the purpose of profit”
 - + BUT, the ACA’s concern is with the addition of Sole Purpose.
 1. Broaden definition to include both **direct and indirect benefits**: “If the supply of carriage service was part of a business’s activities then this supply of carriage services was more likely than not to be commercial. This applied even though end users were not charged directly...”
 2. Commercial would include **any activity conducted by the provider on any of the network equipment**: “...if the wireless equipment in question forms any part of the overall network of a business, it would necessarily fall outside the exemption...”

“where an individual has joined with others in a non-commercial arrangement for carriage services, the fact that the individual uses his or her own equipment for a purpose other than that non-commercial supply, e.g. running a small business from home, is itself enough to take the equipment outside the exemption”
- + **ACA requested a change to the Act to clarify non-commercial but it never happened**

Current ACMA sole purpose non-commercial test (?)

- + Do you receive any **direct or indirect reward, monetary or other**, for use by others of your network equipment?
- + Do you have a contract or any other agreement (verbal or written) with parties involved in the use of the network, dealing, for example, with the payment of money and performance obligations?
- + Do you use the network for the purpose of making a profit?
- + Do you have an ABN for use in connection with the operation of the network?

Communications Alliance (2012) and MAV Tech (2014) confusion

- + “If a service provider asks merchandisers for advertising fees but did not charge the end users for Wi-Fi access then one might be able to argue this is a non-commercial service ...”
- + “If there is a charge at any stage for the service then the operator may be considered as a Carrier. A charge for merchandisers to advertise may be one way around this...”



So...

If your network **extends beyond one place** (doesn't matter how far)

and

the users are **not part of your immediate circle**

and

the **sole purpose** of your entire network infrastructure is **not non-commercial**

You may need a Carrier Licence