

Optus Submission to

The Australian Communications and Media Authority

on

**Spectrum Planning Discussion Paper: the allocation of Public
Telecommunications Services (PTS) apparatus licences in the 2.1GHz
band**

23 November 2009

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1. Executive Summary

- 1.1 Optus supports the proposal to issue PMTS Class B licences in the 2GHz band in regional and remote area on a site coordinated basis via an administrative allocation process.
- 1.2 Optus will take advantage of the opportunity created by the proposed new spectrum allocation and is closely evaluating our network demand requirements.
- 1.3 Optus is concerned that there is no obvious remedy if prospective licensees are unable to successfully conclude negotiations with incumbent users to relocate incumbent services or to establish workable arrangements for the co-existence of new and incumbent services.
- 1.4 It is Optus' view that the Australian Communications and Media Authority (the ACMA) should make clear provision in its allocation process for a party to lodge a dispute with an independent arbitrator in the event that negotiations fail to reach a successful conclusion in a timely manner.
- 1.5 It is also Optus' view that:
 - the current proposal that no more than two 5GHz channels be assigned to a single licensee in the same geographic area is somewhat restrictive, and could prevent operators from obtaining sufficient spectrum to create a viable contiguous block;
 - the ACMA's proposal should be modified to ensure a spectrum cap of 20MHz per user in the same geographic location, inclusive of current holdings and new acquisitions.
- 1.6 Optus also considers that the proposed licensing arrangements exclude applicants who already hold spectrum in the 2GHz band and are not currently using this spectrum to deliver commercial services to the public.
- 1.7 Optus also requests the ACMA clarify how the proposed annual transmitter tax to PMTS Class B apparatus licences issued in the 2GHz band will apply in practice and proposes an alternate mechanism.

2. Optus' spectrum holdings and mobile broadband service trends

- 2.1 Optus' 3G network is based on 2100/900MHz frequency bands acquired via price and administrative based spectrum licensing processes and includes:
 - a spectrum licence for 2 by 10 MHz in the 2100 MHz band in metropolitan areas and 2 by 5 MHz in the 2100 MHz in regional areas to deliver 3G High Speed Packet Access (HSPA) services; and
 - an apparatus licence for 8.3 MHz in the 900MHz band Australia wide to deliver national GSM services that has recently been 'refarmed' in

regional and rural areas to facilitate the expansion of Optus' 3G HSPA network.

- 2.2 In December 2008, Optus completed its 3G mobile network rollout on schedule to reach 96% of the Australian population. Coverage will be extended to 98% of the Australian population with the mobile network footprint exceeding 97% coverage by 31 March 2010.

Growth in mobile broadband

- 2.3 Optus' investment to expand coverage and increase the speed of our mobile network, combined with smart phones, third party applications and new generous data plan offerings, is driving strong take up of mobile broadband services.
- 2.4 For example, as at 30 September 2009, Optus has 8.225 million (m) mobile customers, that includes 3.08m 3G subscribers (an 11% increase from a quarter ago) and a base of 688,000 wireless broadband subscribers. In addition, Optus' non SMS data revenue, (including premium content SMS) has grown to 12% of average revenue per user compared to 8% a year ago.
- 2.5 Optus' experience in the growth of demand for mobile broadband services is replicated across the mobile sector, both domestically and internationally.
- 2.6 Some recent research illustrates the domestic trend where:
- mobile broadband subscriptions in Australia increased by over 100% in 2008/09¹;
 - 97% of Australians use their mobile for more than just voice²; and
 - 73% of Australian businesses plan to increase the number of smart phones used and 67% plan to increase the number of wireless data cards used to increase employee effectiveness and productivity.³
- 2.7 Internationally, mobile broadband is predicted to comprise two-thirds of all broadband subscriptions by 2012; and users of mobile broadband services will grow from 181 million in 2008 to over two billion in 2014, a growth of 1024%.⁴
- 2.8 This growth is predicated to accelerate where analysts predict that there will be 5m mobile broadband subscribers by 2015 in addition to mobile handset data users. Analysts have also predicted that mobile broadband subscribers will grow at 15% compound annual growth rate (CAGR) from 2009 – 2015.⁵

¹ Goldman Sachs JB Were Research Estimates – Company data September 2009

² Global Study Shows Aussies using More Mobile Data Services, mNet Corporation, 30 March 2009

³ April 2009 research by Jones Donald Strategy Partners commissioned by Optus

⁴ <http://www.totaltele.com/view.aspx?C=0&ID=444434>

⁵ Australian Bureau of Statistics, Company Data, Credit Suisse estimates

3. Proposed licensing arrangements

Proposed licensing arrangements

- 3.1 Optus strongly supports the ACMA's proposed introduction of public telecommunications service (PTS) apparatus licenses in regional and remote areas in the 2GHz band.
- 3.2 Optus will take advantage of the opportunity created by the proposed new spectrum allocation and is closely evaluating our network demand requirements.
- 3.3 Optus considers that the proposed new allocations are closely aligned with the ACMA's Spectrum Management Principle One, 'to allocate spectrum to the highest value use or uses' as it will:
 - assist meet both short and medium term growth in demand and significantly increase competitive access to mobile voice and broadband services outside metropolitan markets;
 - provide the means to improve mobile network coverage and capacity; and
 - facilitate quick access to spectrum that is currently underutilised and does not have a technical or regulatory framework.
- 3.4 Optus also considers that the proposed new regional and remote spectrum allocations are aligned with the ACMA's Spectrum Management Principle Three, 'use the least cost and least restrictive approach to achieving policy objectives'; and Principle Five: 'balance the cost of interference and the benefits of greater spectrum utilisation'.

The PTS Licensing Option

- 3.5 Optus is supportive of the ACMA's proposed amendments to the applicable regulatory arrangements for PTS licences so that the PMTS Class B licensing option enables the operation of terrestrial public mobile telecommunications services in the 2GHz band, and any other frequency bands allocated for IMT technologies.

Allocation mechanisms

- 3.6 Optus is also supportive of the proposal to issue PMTS Class B licences in the 2GHz band on a site coordinated basis via an administrative allocation process.
- 3.7 However, Optus is concerned that there is no obvious remedy if prospective licensees are unable to successfully conclude negotiations with incumbent users to relocate incumbent services or to establish workable arrangements for the co-existence of new and incumbent services.
- 3.8 There is likely to be an imbalance of bargaining power between prospective licensees and incumbents, since prospective licensees are likely to be subject to time constraints and have limited alternative options, whereas incumbents may have few incentives to cooperate. Optus is particularly concerned that

prospective licensees may need to reach an agreement with a direct competitor before arrangements can be finalised.

- 3.9 This clearly raises the risk that incumbents will have the incentive to refuse to relocate or make negotiations unnecessarily protracted for anti competitive reasons; that is, with the intent of frustrating or limiting the ability of a competing player to grow their business in a given area.
- 3.10 In such circumstances it is well recognised that there should be provision for independent and binding arbitration. Optus submits that the ACMA should make clear provision in its allocation process for a party to lodge a dispute with an independent arbitrator in the event that negotiations fail to reach a successful conclusion in a timely manner.
- 3.11 Optus also requests the ACMA clarify how the proposed annual transmitter tax to PMTS Class B apparatus licences issued in the 2GHz band will apply in practice.
- 3.12 The ACMA has proposed that the tax amount that will apply to the 2110-2170 MHz segment of the 2GHz band would be \$0.06 for each paired MHz of spectrum multiplied by the ‘population of the area to which the service relates’.
- 3.13 However, it is not clear to Optus what the ‘population of the area to which the service relates’ means in practice. For example, does it mean that applicants will have to predict the specific geographic coverage of each site, estimate the population covered by that site, and provide that estimate to ACMA? Alternatively would the ACMA be responsible for undertaking this calculation?
- 3.14 If the ACMA does undertake the calculation, it is also not clear what avenues would be open to applicants who disagreed with the assessment.
- 3.15 Optus also questions:
- whether the proposed approach is equitable when a single site uses both spectrum and apparatus licences. For example, a regional 3G site may use two 5 MHz channels - one of which is a spectrum licence and the other an apparatus licence. The annual spectrum tax for that site should be the same for each frequency.
 - how this calculation could be completed when a number of sites may be built in a given area over time? That is, the ‘area’ covered by one site will decrease as new neighbouring sites are introduced, theoretically reducing the tax liable for that site. This would imply an ongoing requirement to continuously re-calculate the population covered by every site, and re-calculate the tax accordingly.
- 3.16 Optus’ recommends the ACMA consider a simpler spectrum tax regime to minimise administration costs and ensure tax equity between different licence types at the same location.
- 3.17 For example, a fixed tax rate per 5 MHz per site, with different rates possible depending on a broad geographical classification, eg one rate for ‘regional’ sites and a lower rate for ‘remote’ sites. The geographic boundaries should

be aligned to the existing boundaries used for the relevant comparable spectrum licence, if and where they exist (e.g. 1800MHz band spectrum licence boundaries for 1800MHz apparatus licences, and the 2GHz spectrum licence boundaries for 2GHz apparatus licences).

Other competition issues

- 3.18 Optus supports the ACMA's objective of attempting to ensure that no one player dominates the acquisition of new 2GHz regional and remote allocations.
- 3.19 However Optus considers that the current proposal that no more than two 5GHz channels be assigned to a single licensee in the same geographic area is somewhat restrictive, and could prevent operators from obtaining sufficient spectrum to create a viable contiguous block.
- 3.20 Optus considers that the ACMA's proposal should be modified to create a spectrum cap of 20MHz per user in the same geographic location, inclusive of current holdings and new acquisitions.
- 3.21 Optus also proposes that the proposed licensing arrangements exclude applicants who already hold spectrum in the 2GHz band in the relevant geographical area, but are not currently using that spectrum to deliver commercial services to the public. The objective of this proposal is to prevent spectrum hoarding or 'land banking' by applicants who are not using existing spectrum entitlements in a particular area.
- 3.22 In this context 'use' means providing commercial public mobile telephony services, using currently held spectrum, within the spectrum licence area of consideration - as defined by ACMA in the 2001 3G spectrum licence auction. Merely registering putative sites in the ACMA licence register, but not radiating RF energy and providing commercial services, should not constitute 'use'.
- 3.23 With regard to 3.21 above, Optus' proposed change should not in any way restrict the ability of any licensee to subsequently participate in the secondary trading market and acquire, dispose of or lease or otherwise deal with in their spectrum holdings, provided that the transaction is not between related corporate entities in an attempt to circumvent the initial restrictions on the acquisition of apparatus licences or contravene ACCC competition rules.
- 3.24 Optus considers that his proposed reforms would allow efficient allocation within the proposed allocation whilst retaining reasonable competitive limits on the extent of acquisition.

4. Technical parameters

- 4.1 The Discussion Paper states at page 16:
- 'Amend the 900 MHz and 1800 MHz PMTS Class B apparatus licences specified in line items 16 and 17 to specify the base transmit segments of the frequency bands. That is... the 1800 MHz band will be amended to reflect the base transmit frequency range 1710-1820 MHz, respectively'.

- 4.2 It is Optus' view that this frequency range is incorrect and that PMTS services in Australia in the 1800 MHz band operate on a base transmit frequency range 1805 - 1880 MHz, and a mobile transmit frequency range 1710-1785 MHz.
- 4.3 Optus recommends that this statement be amended to: 'the 1800 MHz band will be amended to reflect the base transmit frequency range 1805 - 1880 MHz, respectively'.

5. Regulatory framework

Removal of Unused Licensing Options

- 5.1 Optus supports the AMCA's proposal to rationalise the number of licensing options under the PTS licence type, by removing the PMTS Class A and PACTS licensing options.

Streamlining regulatory processes

- 5.2 Optus supports the ACMA's proposal to:
- remove references to specific frequency bands of operation for PTS licences in the *Radiocommunications (Interpretation) Determination 2000* and instead specify frequency bands in individual licences; and
 - adopt a technology-neutral and technology-flexible spectrum regulatory regime.
- 5.3 Optus believes that as the wireless telecommunications industry grows and transforms, and new technologies are introduced, ACMA's ability to respond to industry needs and issue PMTS Class B apparatus licences in new frequency bands more quickly is essential for future economic growth and Australia's ability to remain at the technological forefront.
- 5.4 However, Optus does not consider that there is a duplication and does not consider that a change needs to be made to the requirement to hold a carrier licence in the PTS licensing arrangements and the requirement to hold a carrier licence under Section 42 of the *Telecommunications Act 1997*.
- 5.5 It is Optus' view that these two 'legislative instruments' regulate separate things, that is, one is an eligibility requirement and the other is about who is authorised to 'run' a piece of network equipment.

Authorisation of repeaters

- 5.6 Optus supports the ACMA's proposal to specifically allow for repeaters by varying the definition of PTS licences in the 'Interpretation Determination'.
- 5.7 It is Optus' view that including specific licence conditions in the PTS LCD authorising repeater transmissions using both transmit and base receive frequencies will remove uncertainty for operators and allow them to provide coverage solutions for their customers in the most cost-effective manner.