



## **TELSTRA CORPORATION LIMITED**

**Submission to the Australian Communications and Media Authority**

**Draft allocation instruments for 3.6 GHz band (3575–3700 MHz)  
metropolitan and regional lots auction**

### **Public Version**

**15 June, 2018**

## Contents

<b>Executive Summary</b>	<b>3</b>
<b>1 Draft marketing plan</b>	<b>5</b>
<b>1.1. Lot configuration</b>	<b>5</b>
Technical lot configuration	5
Perth lots categories	6
Geographic regions	7
<b>1.2. Spectrum licences</b>	<b>8</b>
Licence commencement and duration	8
Early access	8
<b>2 Draft allocation determination</b>	<b>10</b>
<b>2.1. Auction format and stages</b>	<b>10</b>
<b>2.2. Minimum spectrum requirement (MSR)</b>	<b>10</b>
<b>2.3. Auction rules</b>	<b>10</b>
Information policy	10
Activity rule	12
Extensions	12
<b>2.4. Assignment round</b>	<b>12</b>
Assignment round scheduling	12
Assignment stage pricing rule	13
<b>2.5. Application and registration process</b>	<b>14</b>
<b>2.6. Lot ratings, reserve prices and competition limits</b>	<b>14</b>
<b>2.7. Associates process</b>	<b>15</b>
<b>2.8. Bank guarantee</b>	<b>15</b>
<b>2.9. Provisions on confidentiality (Determination section 14)</b>	<b>16</b>
<b>2.10. Payment terms</b>	<b>17</b>
<b>2.11. Spectrum licence tax</b>	<b>17</b>
<b>Appendix A</b>	<b>18</b>
<b>Draft Marketing Plan drafting issues</b>	<b>18</b>
<b>Appendix B</b>	<b>19</b>
<b>Draft Determination drafting issues</b>	<b>19</b>

---

## Executive Summary

We welcome the opportunity to respond to the ACMA's consultation on the draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction (the Consultation).

The auction of the 3.6 GHz band is critical for the launch and ongoing delivery of 5G services for the benefit of Australian consumers and businesses so it is important that the allocation instruments enable the spectrum to be auctioned in a timely and efficient manner. To this end, we are pleased to see the indicative timeline (table 2)<sup>1</sup> for the auction commencement date in late October 2018. It is important that this timeline is maintained to avoid delaying the benefits of 5G to Australians.

We support most of the proposed arrangements in the allocation instruments, but do have some specific concerns and questions as explained in the remainder of this submission.

### Lot configuration

As explained in our separate response to the ACMA's Technical Framework Paper (TFP), we have a strong preference for the technical lot configuration that is identified as sub-option 1a. In the event the ACMA does not proceed with this option, our second preference would be Option 2 in the TFP. Our view is that sub-option 1b in the TFP is not suitable and option 3 in the TFP is even more unsuitable.

In the event that Option 2 in the TFP is adopted, we disagree with the ACMA's proposal that it will not guarantee a contiguous assignment for winners of lots in both the 3.6 GHz Perth Higher and the 3.6 GHz Perth Mid lot categories. If more than one bidder secures spectrum in both Perth Mid and Perth Higher, we believe the assignment options and outcomes should be restricted so that exactly one of these bidders is guaranteed contiguity across the categories.

We recommend the ACMA time limits the excision of three of the proposed Earth Station Protection Zones (Roma, Moree and Quirindi), to provide a maximum of seven years excision. Sites not selected by the end of the seven year reallocation period for regional areas should have the excision terminated, so these areas can be accessed by those licensees that acquired the relevant regional lots in the auction.

### Spectrum Licences

Regardless of which option for licence commencement is chosen, we consider that, as a matter of principle, the timing of payments for spectrum licences acquired at auction should be aligned with or closely related to the date when access to the spectrum is first available for licensee use.

### Draft Allocation Determination

We support the ESMRA auction methodology, and generally support the proposed rules as set out in the Draft Allocation Determination. Key issues that we believe should be considered further by the ACMA include:

- Information about exact excess demand (anonymised) should be provided to all auction participants at end of all rounds in support of overall transparency and efficient outcomes being realised.
- To provide bidders with control over their eligibility and to avoid unrequested reductions in eligibility, the activity rule should be modified so that the eligibility for the next round is determined as the higher of the lot ratings associated with either the requested demand or the processed demand.

---

<sup>1</sup> "Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper", table 2, page 8

- 
- The final instruments should include guidance on how regions with identical outcomes will be combined in the assignment stage.
  - Although we support the ACMA's proposal to use the nearest Vickrey core pricing algorithm for the assignment stage, we disagree that the Nearest Vickrey Core Pricing algorithm should be weighted by the square of the distance from the Vickrey Price. An unweighted implementation would be fairer to all bidders and reduce the risk of distorted bid incentives.

## 1 Draft marketing plan

We recognise that due to uncertainty over the technical specifications of the spectrum to be allocated at auction, the draft allocation instruments — including the draft marketing plan — primarily reflect only one of the lot configuration options being consulted on (i.e. Option 2). Lot configuration is, however, one of the issues for comment, and it is our observation that preferences here are central to positions on other issues for comment, such as licence commencement and the auction rules. For this reason our response to the draft marketing plan begins by addressing issue for comment number 3, lot configuration.

We note that each of the two 3.6 GHz consultation papers<sup>2</sup> describe interrelated options with numbering that may cause confusion unless carefully distinguished. For this reason in each case where we refer to an option number we reference the consultation paper by name:

- the Allocation Instruments Paper or "AIP"; or
- the Technical Framework Paper or "TFP".

### 1.1. Lot configuration

#### **ISSUE FOR COMMENT 3—Draft spectrum marketing plan (3.6 GHz band)**

The ACMA seeks stakeholder views on the draft spectrum marketing plan (3.6 GHz band), especially geographic lot configurations and multiple lot categories in Perth.

#### **Technical lot configuration**

Within the two consultation papers a total of four lot configuration options for the 3.6 GHz auction are presented. As a precursor to commenting on the configuration options set out in the AIP it will be helpful to first, as a starting point, note our views on the options contained in the TFP.

Having closely reviewed the options in the TFP, we have a strong preference for sub-option 1a in the TFP. In the event this option is not viable, our second preference would be Option 2 in the TFP<sup>3</sup>. Our view is that sub-option 1b in the TFP is not suitable and Option 3 in the TFP is even more unsuitable.

Sub-option 1a is preferred for technical reasons (as outlined in our submission in response to the TFP) but is also the most straightforward approach in terms of licencing, auction design and auction participation. In comparison, TFP Option 2 for example with its need for a 2 lot structure (3 in Perth) as set out in AIP Option 2 would introduce additional complexities in the auction design and auction participation processes. These complexities would arise in areas such as lot ratings, eligibility provisions and the information policy.

The key issue of concern with TFP sub-option 1b is its prolonged period of time for transition to a common synchronisation arrangement (i.e. up to five years). Five years is over one third of the total licence period, and as the 3.6 GHz band is central to the launch of 5G services in Australia this approach would risk denying consumers and other end users timely access to the benefits which 5G services will enable and put us behind other countries offering optimal Downlink/Uplink ratios.

<sup>2</sup> The "3.4 GHz and 3.6 GHz band spectrum licence technical framework" and the "Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper"

<sup>3</sup> We are assuming TFP and AIP Option 2 effectively result in the same lot configuration i.e. two separate lot categories:  
Lower band single lot: 1 x 15 MHz (3575–3590 MHz) — subject to interference.  
Upper band generic lots: 22 x 5 MHz (3590–3700 MHz)—not subject to interference, with

As TFP Option 3 does not properly accommodate 5G technology in the existing 3.4 GHz band, and has no resolution for differential synchronisations across existing 3.4 GHz and future 3.6 GHz licences we do not consider this to be a viable option.

For further detail, please refer to our response to the TFP.

A logical consequence of our support for sub-option 1a in the TFP is that we prefer generic lot sizes of 5 MHz to be used in every region across the entirety of the 3575-3700 MHz spectrum being auctioned, even if this requires spectrum licence commencement to be delayed until conclusion of the metro re-allocation period in March 2020 (subject to early access apparatus licences being available until then).

### Perth lots categories

In regards to the Perth lots configuration, we agree with the ACMA's proposed view to use Perth lot Option 3 as outlined in Table 5 of the AIP consultation paper (i.e. two lot categories for Perth – Perth Lower: 16 x 5 MHz lots (3575–3655 MHz) and Perth Higher: 9 x 5 MHz lots (3655-3700 MHz)). We also note that should the ACMA adopt TFP Option 2 (please refer to our separate submission in response to the TFP) there will be three product categories in Perth. The “Perth Lower” category defined in Perth lot Option 3 here will be further divided under TFP Option 2 into a single low end emission restricted block of 15 MHz and a “Perth Mid” category with 13x5 MHz encumbered lots. The “Perth Upper” category remains unchanged with 9x5 MHz unencumbered lots. Our comments will cover both sets of proposals.

The AIP consultation paper states that only a minority of industry stakeholders preferred Perth lot Option 1 while no stakeholders supported Perth lot Option 24. The proposed auction format – an Enhanced Simultaneous Multi-Round Ascending (ESMRA) of generic lots followed by an assignment round – is only appropriate, and indeed likely to produce an efficient outcome, if the lots within each category are of a similar value. This is clearly not the case in Perth, as the encumbered lots are of considerably less value than the unencumbered ones. If all lots are placed in the same category (as proposed in Perth lot Option 1 - 25 x 5 MHz generic lots) bidders face considerable uncertainty over the value of the spectrum they will be assigned. This means that bidders cannot bid with confidence in the primary stage which may lead to an inefficient allocation. This is particularly true if bidders have different attitudes towards risk. The most risk averse bidders may fail to win any lots, even if they are, potentially, the highest value user. Hence the auction may produce inefficient outcomes. This issue does not occur in Perth lot Option 3, as parties are able to bid separately in the primary stage on encumbered and unencumbered spectrum, based on the values they assign to each category.

If the interference issue between the 3.4 GHz and 3.6 GHz bands cannot be resolved by coordinated network synchronisation, and TFP Option 2 is adopted, then we agree with the ACMA's proposed modification to Perth lot Option 3 (i.e. to have three categories of Perth lower 1 x 15 MHz lot (3575-3590 MHz), Perth Middle – 13 x 5 MHz lots (3590-3655 MHz), and Perth Higher – 9 x 5 MHz lots (3655-3700 MHz)).

We recognise the difficulties that having multiple product categories causes to the design and conduct of the auction, as it effectively begins to blend the “ESMRA” and “SMRA” auction formats. We also note that this complicates the implementation of the Minimum Spectrum Requirement and allocation limits. If the ACMA adopts a more complex lot structure, it should provide clarity on how it intends to implement these features as soon as possible.

We agree with the proposed rules, should TFP Option 2 be adopted, that the winner of the lower 15 MHz block be guaranteed contiguity with any lots that bidder wins in the Perth Mid category. However, we

---

<sup>4</sup> Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper, p18

disagree with the ACMA's proposal that it will not guarantee a contiguous assignment for winners of lots in both the 3.6 GHz Perth Higher and the 3.6 GHz Perth Mid categories and that this should be dealt with during the Assignment Stage. We understand that the current position reflects the possibility that there may be more than one winner of lots in each category (in which case it is not possible for all winners to secure contiguous spectrum), but we consider there are specific cases in which contiguity could be guaranteed. For example, the ACMA could introduce a simple rule to guarantee that if there is only one bidder who wins spectrum in both Perth Mid and Perth Higher categories, then in the interests of efficient spectrum allocation, that bidder should be guaranteed a contiguous allocation and not need to bid in the Assignment Stage.

In the event that more than one bidder secures spectrum in both Perth Mid and Perth Higher, then we believe the assignment options and outcomes should be restricted so that exactly one of these bidders is guaranteed contiguity across the categories, (noting that it is not possible for more than one bidder to end up with contiguous spectrum across the categories).

This outcome could be facilitated by the addition of a simple constraint to the assignment stage solver which requires that if there is one or more winners of spectrum in both Perth Mid and Perth Higher, one of them will receive a contiguous assignment. We suggest this be based upon which bidder, among the bidders in this situation, submits the highest combined Assignment Stage bids in Perth Mid and Perth Higher. This would be an elegant solution that would ensure competition between these winners determines who gets a contiguous assignment, and would be consistent with the ACMA's general approach of prioritising contiguous assignments over fragmented spectrum outcomes.

## Geographic regions

We support the ACMA's proposed geographic configuration which consists of six inner metropolitan lots based on current 3.4 GHz holdings, no outer metro areas, plus eight regional lots (the ACMA's modified version of Option 1 in its geographic lot options discussed in its recent draft spectrum reallocation declaration recommendation consultation<sup>5</sup>). The ACMA's rationale for deciding on this configuration is based on sound principles and has a number of advantages as outlined in the consultation paper by the ACMA (p22) such as the possibility of pursuing future defragmentation of the 3.4-3.7 GHz band, the avoidance of complicating boundary issues and the creation of dead zones if the "outer metropolitan lots" proposal had been adopted.

## Earth Protection Zones (ESPZs)

In the proposed configuration, the ACMA has marked four areas to be excised (Moree, NSW; Quirindi, NSW; Roma, QLD; and Uralla, NSW) as future Earth Station Protection Zones (ESPZs). As stated in our previous submission<sup>6</sup>, we recommend that the ACMA time limits the excision of three of the proposed sites (Roma, Moree and Quirindi), to provide a maximum of seven years excision (to coincide with the end of the regional reallocation period). This will allow adequate time for detailed site investigation studies be completed, and one or more sites to be selected. Sites not selected by the end of the seven year reallocation period for regional areas should have the excision terminated, so these areas can be accessed by those licensees that acquired the relevant regional lots in the auction and become part of their spectrum licence.

This should be done, if possible, via a licence condition in the regional licences issued as part of the initial price-based allocation, avoiding the need for a further price-based allocation. The effective

<sup>5</sup> Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper, p22

<sup>6</sup> Telstra's submission on 3.6 GHz draft Reallocation Recommendation, November 2017, p7:

<https://www.acma.gov.au/-/media/Spectrum-Licensing-Policy/Issue-for-comment/IFC-28-2017/Telstra-submission-pdf.pdf>

increase in licence area and population covered by those licences, should any excision removals be triggered, are relatively minor compared to the extent of the proposed regional geographic area. Hence the removal of any excised areas should not be considered a “windfall” for those licensees, but a prudent and efficient mechanism to maximise spectrum utility, the likelihood of which can be priced in by the auction bidders.

Please see Appendix A for a list of drafting issues in the Marketing Plan.

## 1.2. Spectrum licences

### Licence commencement and duration

#### ISSUE FOR COMMENT 1—Licence commencement

The ACMA seeks stakeholder views on whether spectrum licences for the 3.6 GHz band should commence as soon as possible after the auction, or at the end of the two-year reallocation period in metropolitan areas.

We note that under the TFP sub-option 1a, the ACMA proposes that all the spectrum licences will be issued at the end of the two-year reallocation period in metropolitan areas (our understanding is that it is the ACMA’s intention in this auction to issue all spectrum licences in all regions simultaneously, not just those for metropolitan areas). Under this option, an “early access” regime for apparatus licences would be made available to successful bidders to enable them to begin using the spectrum they secured at auction ahead of the relevant spectrum licence being issued.

Under TFP sub-option 1b and Option 2, the ACMA proposes that the spectrum licences be issued and commence as soon as practicable after completion of the auction, hence payment would be required immediately after auction completion.

Regardless of which option for licence commencement is chosen, we consider that, as a matter of principle, the timing of payments for spectrum licences acquired at auction should be aligned with or closely related to the date when access to the spectrum is first available for licensee use<sup>7</sup>. That means, in case the option for licence commencement at the end of the two-year metropolitan reallocation is adopted, we believe that payment should be deferred until as close as possible to actual commencement of the licence i.e. if the licences commence end-March 2020, the notice for payment should only be issued in early 2020.

We support the proposal that all spectrum licences for the 3.6 GHz band metropolitan and regional lots expire on 13 December 2030 so that they are aligned with the expiry date of the 3.4 GHz spectrum licences.

### Early access

#### ISSUE FOR COMMENT 2—Amendment to the Tax Determination

The ACMA seeks stakeholder views on the proposed amendment to the Tax Determination to set an annual licence tax rate of **\$0.0039/MHz/pop**.

We support the ACMA’s proposal (should an “Early Access” licence arrangement be made available) to amend Part 7A of the Tax Determination in July 2018 to incorporate base rates of tax for a PMTS Class

<sup>7</sup> We have previously set out the detailed basis for our position in section 2.4 and Annex 1 of our submission to the ACMA, “Draft allocation instruments for the allocation of spectrum in the 700 MHz and 2.5 GHz bands”, 14 May 2012.

---

B licence, authorising the operation of a transmitter in the frequency range 3575–3700 MHz, and set an annual licence tax rate of \$0.0039/MHz/pop.

## 2 Draft allocation determination

### Issue for comment 4—The draft 3.6 GHz band allocation determination

The ACMA seeks stakeholder views on the draft allocation determination and the auction rules for the 3.6 GHz band auction.

#### 2.1. Auction format and stages

We support the ESMRA auction methodology, which is to be conducted in three stages.

We note that the consultation paper states that lots unallocated in the primary stage due to insufficient demand will not be offered for sale in the secondary stage<sup>8</sup>. We support this proposal but note that this policy does not seem to be reflected in the draft Determination. Appendix B lists all issues of this nature in the draft Determination that we would like to bring to the ACMA's attention.

We suggest that the ACMA should consult with bidders on the detailed auction parameters such as duration of rounds, the interval between rounds and the number of rounds per day, closer to the auction date.

#### 2.2. Minimum spectrum requirement (MSR)

We support the MSR cap of 10 MHz (2 lots) as proposed by the ACMA as this is currently the minimum 5G New Radio bandwidth specified in this spectrum band by 3GPP. Given the large number of lots available in each region, we believe that bidders should be able to manage their exposure risk at levels above 10 MHz. A larger MSR is also undesirable, as it could result in a large number of unsold lots, placing too much emphasis on the secondary stage, where competition may be artificially limited by the outcome of the primary stage.

#### 2.3. Auction rules

##### Information policy

In order to discourage strategic demand reduction, the ACMA is proposing that it will only reveal exact excess demand information at the end of each round if excess demand is greater than four lots. We disagree with this assessment and continue to be of the view that exact excess demand (anonymised) should be provided to all auction participants in support of overall transparency and efficient outcomes being realised.

Precise aggregate demand information is particularly important for bidders in this auction for the following reasons:

- **To address common-value uncertainty.** It is a well-established fact that “when there is a common value component to valuation and when bidders’ signals are affiliated, an open ascending bid format may induce participants to bid more aggressively (on average) than in a sealed bid format, as participants can infer greater information about their opponents’ signals at

---

<sup>8</sup> Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper, p28

---

the time they place their final bids”<sup>9</sup>. Providing precise aggregate demand information allows bidders to get a better understanding of the intensity of competition at a particular point in the auction. This provides them with better information to adjust their estimate of any common-value component more accurately and with confidence. The proposed range (4 blocks) does not provide bidders with sufficiently clear information to make such demand adjustments with confidence, thus nullifying some of the advantages of using an open, multi-round format (as opposed to a sealed bid).

- **To promote a level-playing field for all bidders.** Reporting excess demand only up to 4 blocks creates information asymmetry between bidders as some bidders can infer more than others from this information in combination with their bids and the allocation limits that are adopted. In general, bidders who change their demand from one round to another receive more information than others. When auction rules create information asymmetries between bidders, this is something that bidders will likely try to exploit in the auction, and undesirable distortions may result. Such issues fall away if aggregate demand information is provided in full.
- **To close off incentives for strategic bidding.** The informational asymmetry created by the proposed rules introduces incentives for bidders to ‘test’ actual aggregate demand by switching or reducing their demand. This may lead to price distortions and potentially an inefficient allocation. In the worst case, an inefficient outcome may result because a bidder who was bidding strategically to test demand inadvertently makes a move that closes the auction and/or leaves their demand stranded in the wrong category.

The ACMA’s current proposal will create uncertainty for bidders at crucial stages of the auction (i.e. in the closing stages), and is also likely to complicate decisions on any potential category switching in Perth (assuming this is the only region with a multi-category lot structure). If TFP Option 2 lot configuration were to be adopted, the challenges arising for bidders from the proposed information policy would be even greater as there would be multiple categories in all regions (as opposed to Perth alone) with different lot ratings. The issue here is that any moves between lot categories would carry the risk of inadvertent reductions in eligibility if the exact level of excess demand is not known.

Collectively the issues outlined above could be counter-productive to the price discovery process, and create disadvantages which outweigh the ACMA’s stated concerns about strategic demand reduction (the risk of which we consider low, given both the competitiveness of the domestic mobile sector and the limited quantity of spectrum available at the auction). This is why bidders should be provided exact excess demand information throughout the entire auction. At a minimum we request that exact excess demand should be revealed in Perth if the two-category lot structure is adopted under TFP Option 2 (with there consequently being up to 3 categories in Perth under the AIP Perth lot options as proposed to be modified by the ACMA).

Finally, we request that ACMA publish exact information about excess supply (i.e. negative excess demand). This approach may encourage switching into categories with spare capacity and reduce the likelihood of unsold lots. If a bidder knows with certainty that there is excess supply for a particular product, it may consider switching to that product. Without knowing the level of excess supply, it would be very difficult for bidders to judge the likelihood of winning lots in that category and they may be reluctant to switch for fear of not being able to switch back in case prices rise and/or they lose eligibility.

---

<sup>9</sup> Ausubel, Lawrence M. (2004), “An Efficient Ascending Bid Auction for Multiple Objects”, American Economic Review, 94(5), pp. 1452–1475.

---

## Activity rule

The ACMA is proposing to determine eligibility for the next round based on the sum of the lot ratings of the lots included in the posted demand of a bidder. The posted demand is the demand of a bidder post-processing, i.e. after all requested reductions and increases have been applied either in full or partially (or not at all). This could lead to situations in which a bidder inadvertently loses eligibility if a bidder attempts to switch between products. For Perth or if TFP Option 2 is adopted (with separate 15MHz and 5MHz lots in each region), switching becomes more risky for bidders towards the end of the auction when excess demand will be lower but at the same time, the ACMA would likely want to increase the activity requirement to ensure that bidders reveal their demand in full.

We note that in addition to the potential for 'accidental' reduction in eligibility as a result of a 'decrease' bid being only partially applied, there is also the potential for the wrong 'increase' bid to be applied if a bidder makes multiple 'decrease' and 'increase' bids in the same round. Again, this is more likely to be a problem if TFP Option 2 is adopted (with separate 15MHz and 5MHz lots in each region). For example if a bidder intended to switch between the 15MHz and 5MHz lots in multiple regions in the same round it is possible for the bidder to acquire additional 5MHz lots in the 'wrong' region as there is no explicit linkage between 'decrease' and 'increase' bids (i.e. no 'switch' bids).

To provide bidders with control over their eligibility and to avoid unrequested reductions in eligibility, we urge the ACMA to adopt a slightly modified activity rule in which the eligibility for the next round is determined as the higher of the lot ratings associated with either the requested demand or the processed demand. As this rule would provide bidders with perfect control over their eligibility, the ACMA can start the auction with a high activity requirement of between 90% and 100% which would force bidders to reveal their full demand from the start of the auction. This would increase the usefulness of the aggregate demand and price information at the beginning of the auction and has thus the potential to increase the efficiency of the auction.

We understand the ACMA is already aware of the 'accidental' reduction in eligibility issue (as it was also raised during the industry "tune-up" on 10 April 2018) and will consult further on the activity rule level and other auction parameters with registered bidders after the close of applications.

## Extensions

We note that there are no provisions in the Draft Determination for extensions to round times if a bidder has failed to submit a bid before the scheduled finish of the round. In the absence of this safeguard, bidders will have to rely on the auction manager's discretion (under section 45(2)) to accept bids late. Therefore, if a situation arises (such as technical difficulty or bidder error) that requires an extension of time, we ask that the ACMA deal sensibly with such requests from bidders.

## 2.4. Assignment round

### Assignment round scheduling

We welcome the ACMA's proposal to consider combining regions with identical outcomes in the assignment stage. A contiguous assignment of spectrum across a metro area and its adjacent region will be helpful for operators as it will minimise the need for coordination in border areas. We note that the ACMA intends to retain discretion over the order in which products are to be assigned in the assignment stage.

These decisions could well be of considerable importance to bidders, so we believe the ACMA should establish up-front in the final instruments some guidelines about how it intends to approach this

question. Further, during the auction, prior to the commencement of the Assignment stage, the ACMA should distribute its regional aggregation proposal to all bidders so that bidders can comment on the ACMA's proposal and have the ACMA take those comments into account before finalising its decision. We therefore ask that Schedule 3 of the Determination be amended to include text similar to that in Schedule 1 subclause 9(2), requiring the ACMA to notify bidders of its proposals in these matters, ask each bidder for their comments within a specified time (being not less than one working day), and take into account any comments received within that time.

We believe that the ACMA should establish the following principles for aggregating regions ahead of the assignment round:

1. The ACMA should consider metro areas first and identify which ones, if any, have identical bid outcomes with its adjoining regional area (each metro area has only one adjoining regional area).
2. The ACMA should anchor this approach with the region or regions that has the most valuable combination of products first, and continue in order of decreasing value.
3. The ACMA should not aggregate dis-contiguous geographic regions, even if they have identical bid outcomes, unless all the intervening adjoining geographical areas also have identical bid outcomes (e.g. Central Queensland should not be aggregated with Regional SA unless Regional NSW and Regional South Qld/North NSW also have identical bid outcomes)

We appreciate that it may be difficult for the ACMA to understand the circumstances in which bidders may or may not want regions to be combined in the assignment stage. Therefore, and as mentioned above, we believe that it is critical that the ACMA consults all winning bidders prior to the assignment stage to understand their preferences.

In regards to the order in which assignment rounds should be held once the ACMA has decided which products to include in which round – we believe that it would be most appropriate for the ACMA to hold the assignment round for the most valuable combination of products first, and to continue in order of decreasing value, in other words, follow the same sequencing it used to determine which regions should be aggregated.

Finally, the ACMA should provide each bidder with their assignment options well in advance of the first assignment round. Currently in the draft Determination, the auction manager will provides bidders with the list of their frequency range options “at the start of an assignment round”<sup>10</sup>. This is too late – the ACMA must provide each bidder with their assignment options well in advance of the first assignment round, so that bidders have sufficient time to evaluate those options and decide how to bid in the various assignment rounds. There should be at least one and possibly two full working days between bidders receiving their assignment options and the commencement of the assignment round.

### Assignment stage pricing rule

We support the ACMA's proposal to use the nearest Vickrey core pricing algorithm for the assignment stage. However, we disagree that the Nearest Vickrey Core Pricing algorithm should be weighted<sup>11</sup> by the square of the distance from the Vickrey Price. The proposed weighting penalises the winners of larger amounts of spectrum in the sense that they will have to bear a relatively higher proportion of any necessary excess of total assignment prices over total Vickrey prices. The proposed weighting may have the superficial advantage of looking fairer (the bidder with the more valuable package bears a

<sup>10</sup> Draft Determination Schedule 3 Part 3 sub-clause 4(6).

<sup>11</sup> The formula as currently set out in Part 4 of Schedule 3 of the Determination, weights  $(1/w_j)$  the square of the distance from the Vickrey price for each bidder by one over the reserve price of the lots assigned to the bidder.

large share of any coalitional cost), however it creates distorted bid incentives which could lead to an inefficient allocation. As bidders with larger winning packages will expect to make a larger contribution, they face stronger incentives to shade their bids than bidders with smaller winning packages. If they do lower their bids, this could either lead to an inefficient allocation or a disproportionate rise in the prices for bidders with smaller winning packages. In contrast, the unweighted Nearest Vickery rule spreads these bid shading incentives evenly across all bidders which ultimately reduces its impact. Therefore, we request that the ACMA use the unweighted formula as was for example used by Ofcom in the UK 2.3 and 3.4GHz auction (2018)<sup>12</sup>.

We agree with the ACMA's position that external verification of the assignment stage results is not required for this auction. While we expect that the full bidding files will be released to all bidders at some point after completion of the auction, we restate our request that all Assignment stage bids stay confidential and are removed from any bid files released by ACMA to bidders. We oppose the ACMA revealing the Assignment stage bids to any bidders after the auction as this information can be used for competitive intelligence and therefore needs to remain confidential.

## 2.5. Application and registration process

We have no objections to proposal to set the application fee for the auction at \$10,000 and to have a single stage application and registration process.

However, there is a discrepancy between the Consultation paper and the draft Determination which we would like to bring to the ACMA's attention. In the Consultation paper<sup>13</sup> it states that interested parties need to submit a completed application form, setting out which geographic regions they intend to bid on and the maximum number of lots they intend to bid on for each region and that this information is used to calculate the required eligibility payment. It goes on further to say that registered bidders will only be permitted to bid on their nominated regions and up to their nominated maximum number of lots. By contrast the draft Determination requires applicants to specify their "start demands" (in essence their initial bid), which are then used to calculate their initial eligibility points and required eligibility payment, and there is no prohibition on a bidder bidding for more lots in a region than their "start demand", or bidding on lots in a region where their "start demand" was zero (provided the bidder remains within its eligibility). In light of the proposed auction design, and in particular the apparent intention that bidders be able to switch demand between products as prices evolve, we assume that the latter is correct. However, in order to avoid any doubt, we request the ACMA to clarify this point.

## 2.6. Lot ratings, reserve prices and competition limits

We note that the ACMA has not yet decided on the lot ratings (number of eligibility points) or what the "eligibility requirement percentage" should be initially. The severity of the issue of inadvertent loss of eligibility (discussed in section 2.3) depends to a large extent on the lot ratings used in the auction. We would expect large differences between lot ratings for low- and high-value regions which would exacerbate risks associated with switching demand and uncertainty created by restrictions on information about demand. Given the complexity of the auction rules and the interplay between lot ratings and the rest of the auction design, we urge the ACMA to provide an indication of its current thinking on lot ratings as soon as possible, so as to allow stakeholders to comment and for bidders to start developing their bid strategy as well as refining their valuations.

<sup>12</sup> see the formula in paragraph 5(2) of Schedules 5 and 6 of the Wireless Telegraphy (Licence Award) Regulations 2018 [http://www.legislation.gov.uk/uksi/2018/86/pdfs/ukxi\\_20180086\\_en.pdf](http://www.legislation.gov.uk/uksi/2018/86/pdfs/ukxi_20180086_en.pdf).

<sup>13</sup> Draft allocation instruments for 3.6 GHz band (3575-3700 MHz) metropolitan and regional lots auction Consultation paper, p32

---

Further, we understand that it is the ACMA's intention that any allocation limits are applied on a region-by-region basis. However, the draft Determination states that allocation limits will apply per product and not in total across all spectrum in a geographic area (see for example section 35(2)(i) and Schedule 1 subclause 15(d)). We assume that this is an error and will be corrected in the final drafting; otherwise it will be possible for bidders to circumvent the allocation limits by bidding for lots in multiple products within a region.

We also note that if, as expected, the allocation limits are to be applied by region, the bid-processing in a two-category lot structure would be complicated, as processing is based on product categories not regions. Regardless, this will be an issue for Perth.

We urge the ACMA to explain as soon as possible how it will integrate allocation limits into bid processing.

## 2.7. Associates process

The draft Determination Part 2 sections 11-13 sets out the 'Associates' process which is used to determine bidder compliance with the allocation limits. We are awaiting the text of the Ministerial Direction on allocation limits which will also define the term "associate", however we reiterate our position that either this definition should be amended to disregard non-material affiliations or the ACMA should be given express discretion in this regard. Whatever is done to improve the situation in the Ministerial Direction should be flowed down into the ACMA's Determination.

## 2.8. Bank guarantee

The draft Determination section 33(7) only allows for a bank or insurer's guarantee to constitute the required deed of financial security at the auction bidding phase. Telstra considers that the additional cost of a bank or insurer's guarantee at the auction bidding phase is excessive and unnecessary for major companies with a strong credit rating. Our view is that a long term credit rating of at least "BBB-" from Moody's or Standard & Poors should be sufficient to enable an auction applicant to be relieved of the obligation to provide a bank or insurer's guarantee. Telstra's current credit rating is superior to that of over at least a dozen Australian authorised deposit-taking institutions that would qualify to execute the deed of financial security, creating the odd situation that the ACMA is requiring Telstra's commitment to be guaranteed by a party that is less credit-worthy than Telstra itself. Telstra believes that a corporate guarantee is adequate for companies in this category and requests that such a guarantee be added to the list of options for executing a deed of financial security.

The cost of obtaining a bank guarantee is significant. In the 2013 Digital Dividend spectrum auction, the relevant amount to be secured by Telstra exceeded [C-i-C], and the cost paid to the guaranteeing bank was approximately [C-i-C] (with the security being in place for 18 months).

Telstra understands from prior correspondence on this issue with the ACMA that it may be concerned about the treatment of a corporate guarantee in the event that a successful bidder wishes to reassign their obligation to acquire the spectrum licences to another party prior to licence issue. Telstra considers that this concern can be readily addressed by including a requirement in the marketing plan that any security provided by the successful bidder to the ACMA must be matched by the recipient party (whether by corporate guarantee, bank guarantee or deposit) and approved by the ACMA prior to the assignment of the obligation being permitted.

The ACMA should appropriately adjust its credit risk assessment for bidders that are established businesses with good credit histories, consistent with standard commercial practise in the modern economy. The current approach of the ACMA is wasteful in imposing cost and bureaucratic requirements on bidders that are not consistent with commercial practice. These bank or insurer guarantee expenses, which are sizeable, then become part of the bidders' costs in providing services to customers, so that the ACMA is indirectly imposing an unnecessary cost on Australian consumers. Moreover, this constitutes an ACMA-imposed windfall benefit to the guaranteeing bank or insurer.

As is convention in most other parts of the economy, if a company consistently pays its debts in good time and establishes a track record of trustworthiness, it should be rewarded by better credit terms. The ACMA has visibility of Telstra's history of timely payment of licence and other fees to it – often very large amounts running into many millions of dollars – and should make use of this data to reward Telstra (and all other similarly placed bidders) by removing the undue cost of obtaining a bank or insurer guarantee.

## 2.9. Provisions on confidentiality

Our view based on experience in previous ACMA spectrum auctions is that the confidentiality provisions may be interpreted to potentially act in an unduly restrictive manner to prevent an applicant or bidder from publically disclosing that it has applied to participate, or is participating, in the auction. This concern arises out of uncertainty about the very broad terms of sections 14(j) and (k) of the draft Determination. While it may be argued that an applicant or bidder is entitled to disclose its participation in the auction in accordance with section 15(2)(g) of the draft Determination, as a consequence of continuous disclosure obligations under the *Corporations Act (Cth) 2001* and the relevant ASX Listing Rules<sup>14</sup>, we are concerned about the lack of clarity in this regard.

We note that an implied restriction on applicants and bidders from disclosing their participation in the auction is at odds with the apparent liberty of non-applicants to disclose freely that they are not participating in the auction, despite such a disclosure arguably being of similar relevance to the market and the public. This asymmetry arises from the leveraging of the auction application process by the ACMA to impose broad confidentiality obligations on applicants alone. If there was a legitimate concern about such disclosure (of either participation or non-participation in the auction) then the prohibition should be in plenary legislation i.e. in section 60 of the *Radiocommunications Act (Cth) 1992*. Telstra receives multiple requests from journalists, analysts and other interested parties before and during auctions as to whether it is participating in the auction. Given the uncertainty about the scope of section 14 of the Determination in respect of a mere disclosure of participation in the auction, we suggest that it would be equitable and sensible for the Determination to expressly allow such disclosure.

We therefore propose the following additional provision in section 15 of the Determination (additions shown by underlined red text; deletions by struck-out red text):

<sup>14</sup> ASX Listing Rules 3.1, 3.1A and 3.1B; Corporations Act s674.

- 
- (3) Subsection (1) does not prohibit an applicant or bidder, or a related person of an applicant or bidder, or contractor of an applicant or bidder, disclosing:
- (a) information about the auction if:
    - (a)(i) the information is already publicly available; and
    - (b)(ii) the information was not made available because of a breach of this section; or
  - (b) the fact that the applicant or bidder is participating, or intends to participate, in the auction.

## 2.10. Payment terms

As currently drafted in s59(1) of the draft Determination, it seems that the notice is issued immediately at the conclusion of the auction. This means that the winning price must be paid by the winning bidder to the ACMA no later than 20 working days after the date of the notice. Unless the spectrum licence is to commence as soon as possible after completion of the auction, we object to this proposal as a matter of principle. We believe, the timing of payments for spectrum licences acquired at auction should be aligned with or closely related to the date when access to the spectrum is first available<sup>15</sup>. Please refer to section 1.2 for more information.

## 2.11. Spectrum licence tax

### Issue for comment 5—Amendment to the SLT Determination

The ACMA seeks stakeholder views on the proposal to amend Table 1 of the SLT Determination to include the 3.6 GHz band with frequency range of (3575–3700 MHz), total spectrum of 125 MHz and a base amount of \$69,180.

We support this proposal and have no further comments on this issue.

---

<sup>15</sup> We have previously set out the detailed basis for our position in section 2.4 and Annex 1 of our submission to the ACMA, "Draft allocation instruments for the allocation of spectrum in the 700 MHz and 2.5 GHz bands", 14 May 2012.

## Appendix A

### Draft Marketing Plan drafting issues

Section	Issue
Part 3, Section 17	This clause indicates that the ACMA or the Government may consider a “deferred payment option”. We do not support deferred or instalment payment options for spectrum licences if that means that a spectrum licence can be issued to a licensee without that licensee having paid in full for that licence. Spectrum licences should be paid in full at a time as close as possible, and prior to, the date of issuance of that licence.
Part 3, Section 20(2)	Incumbent apparatus licensees in geographic areas subject to the 3.6 GHz reallocation are provided varying timeframes for protection from spectrum licensees. However once a spectrum licence is issued, we believe that incumbent licensees should not be permitted to make any changes to their systems (for example, change their transmit powers, antenna tilts or azimuths, or add new sectors or transmitters). This is necessary so that the new spectrum licensees can plan their networks with confidence. While arguably this is prevented by Embargo 42 (since any system change should trigger an application for a new apparatus licence, which should be rejected since the spectrum is embargoed) this should be explicitly communicated to incumbent licensees so that they are aware of the restrictions on their operations.
Part 3, Section 20(3)	This section refers to protection of the proposed earth station protection zones (ESPZs). As stated in the body of our submission, we believe that any ESPZ which is determined to be not required after the expiration of the regional reallocation period should be dissolved and that there is automatic accession of the unused ESPZ to the spectrum licensees out of which the zone has been carved at an administratively determined price. This is possible under s60 of the Radiocommunications Act.

## Appendix B

### Draft Determination drafting issues

Section	Issue
Part 2, Sections 11-13	We are awaiting the text of the Ministerial Direction on allocation limits which will also define the term “associate”, however we reiterate our position that either this definition should be amended to disregard non-material affiliations or the ACMA should be given express discretion in this regard. Whatever is done to improve the situation in the Ministerial Direction should be flowed down into the ACMA’s Determination.
Part 4, Division 4, subsection 33(4)	This clause reduces a bidders initial eligibility points if their eligibility payment is inadequate. However there does not appear to be any mechanism by which their “start demands” are similarly reduced.
Schedule 1: Part 3, subclause 3(d) and Part 4, subclause 15(d) and Schedule 2: Part 3 subclause 12(d)	The way these sections are currently drafted it appears that any allocation limit in a region is applied per “product” and not per region. Hence, a region which contains more than one “product” (e.g. Perth, or if TFP Option 2 is adopted, all regions) would apparently have the allocation limit applied separately to each product. Consequently, a bidder could ‘circumvent’ the allocation limit in that region by securing products in two categories. This drafting needs to be clarified.
Schedule 1: Part 4, subclause 11(1)	There is no need to define an “activity target” since the formula to calculate a bidder’s eligibility in each round after the first (specified in Schedule 1: subclauses 12(1)(b) and 13(2)) is independent of this concept.
Schedule 1: Part 4, subclause 13(1)	The statement that a bidder’s eligibility will be reduced if the bidder does not meet its activity target is does not seem correct. It is possible for a bidder to have activity in a round that is less than their activity target but still to have the same eligibility in the next round. For example, if a bidder’s eligibility at the beginning of a round is 10 points and the activity requirement percentage is 95%, the bidder will have an “activity requirement” of 10 points according to the formula in subclause 11(1); if however their activity in that round is only 9 points their eligibility in the next round (according to subclauses 12(1)(b) and 13(2)) will be 9/95% rounded up to the nearest integer, which is once again 10 points.
Schedule 1: Part 4, subclause 15(1)(g)	Subclause 15(1)(g) is imprecise and incorrectly drafted. For “decrease bids” presumably we are supposed to subtract the relevant eligibility points (but that isn’t what the rule says). The rule as written will double count lots in “maintain bids” (as they are also part of the “start demands”).
Schedule 2, Part 4, subclause 15 (1)(c)(ii)	Clause 15 (1)(c)(ii) reads “ <i>the tied exit bids were greater than <u>each other</u> exit bid mentioned in paragraph (b)</i> ” (our emphasis). This clause appears to have been wrongly worded. Does ACMA mean “any other” instead of “each other”?

<p>Schedule 3, Part 3, subclause (4)(4)</p>	<p>We agree with this clause that requires the auction manager to ensure that any unallocated lots will be contiguous to each other in the assignment stage. We assume that the final position of the unallocated lots will be an outcome of the bids made during the Assignment Round for lots that have been sold. However we believe that, when bidders are presented with their Assignment Round options in each region, the ACMA should clearly indicate on the chart which spectrum lot or group of lots (frequency-contiguous), if any, is unallocated spectrum, rather than leave it indistinguishable from any other block of spectrum acquired by a bidder. This may be a relevant and material factor in a bidders' consideration of their preferred position in the band and the value that they place on that position.</p> <p>Furthermore, the ACMA should make it clear whether all possible assignment permutations will be presented to bidders if there is an unallocated lot or block in a region, or whether the bid manager will exercise discretion as to whether any combinations will be omitted since the unallocated block, by definition, will not bid in the assignment round hence has no preference. The Auction Manager could, for example, decide to place the unallocated block at one end of the 3.6 GHz band and only present assignment combinations to bidders where that is the case. The ACMA needs to clarify its intended approach on this issue and consult with bidders prior to the commencement of the auction.</p>
<p>Schedule 3, Part 3, subclause (4)(6)</p>	<p>This clause says that the ACMA will provide bidders with the list of their frequency range options "at the start of an assignment round". This is too late – the ACMA must provide each bidder with their assignment options well in advance of the first assignment round, so that bidders have sufficient time to evaluate those options and decide how to bid in the various assignment rounds. There should be at least one and possibly two full working days between bidders received their assignment options and the commencement of the assignment round.</p>
	<p>In the consultation paper (page 28), under Secondary stage, it is stated "Lots unallocated in the primary stage due to insufficient demand are not offered for sale in the secondary stage." We do not believe this is reflected in the draft Determination.</p>