

ACCC MTAS Inquiry  
Australian Competition and Consumer Commission  
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Attention: Ms Tara Morice and Ms Alison Sheehan

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31 May 2019

Dear Ms Morice and Ms Sheehan

**ACCC Draft Report on the Domestic Mobile Terminating Access Service Inquiry  
Submission by Pivotel**

**1. Introduction**

- 1.1 This is a submission by Pivotel in response to the ACCC's Draft Report on the Domestic Mobile Terminating Access Service (**MTAS**) Inquiry (**Inquiry**) dated 2 May 2019 (**Draft Report**). The submission addresses in particular the reasons for which the continuing declaration of SMS termination services for A2P SMS is in the long term interests of end-users.
- 1.2 This submission adopts and expands on our earlier submission in response to the ACCC's Discussion Paper in relation to the Inquiry.

**2. Pivotel is a carriage service provider and a mobile network operator**

- 2.1 The Pivotel group comprises Pivotel Group Pty Limited and its wholly owned subsidiaries Pivotel Satellite Pty Limited and Pivotel Communications Pty Limited (together, **Pivotel**).
- 2.2 Pivotel operates a mobile and satellite telecommunications network pursuant to a carrier licence issued by the Australian Communications and Media Authority in accordance with the *Telecommunications Act 1997* (Cth) (**Telco Act**). It has points of interconnect in the Australian major capital cities and points of interconnect internationally in Auckland, Los Angeles and New York.
- 2.3 The Draft Report describes Pivotel as 'MNO-like'. This is incorrect. Pivotel is a carriage service provider (as defined in the Telco Act) and a mobile network operator (**MNO**).

- 2.4 Neither the Competition and Consumer Act 2010 (Cth) (**CCA**), nor Telco Act uses the term 'mobile network operator' or 'MNO', although it is a term used throughout the Draft Report and other documents relating to the Inquiry.
- 2.5 The ACCC states in the Draft Report (at 3.1) that "the MTAS is a wholesale service *provided by* a mobile network operator (**MNO**) *to fixed line operators and other MNOs* to connect or 'terminate' a call on its mobile network". (Emphasis added.)
- 2.6 The clear implication is that the term MNO refers to parties which may seek or provide access to MTAS.
- (a) An access provider is a carrier or carriage service provider that supplies a declared service (CCA s 152AR(2)).
  - (b) An access seeker is (relevantly) a carriage service provider which seeks access to a declared service (CCA s 152AG, Telco Act s 86).
- 2.7 On this basis, Pivotel is a MNO because it is a carriage service provider capable of providing and accessing the declared MTAS. The MTAS service description defines MTAS as an access service for "*the carriage of voice calls and short message service (SMS) messages from a point of interconnection, or potential point of interconnection, to a B-Party directly connected to the access provider's digital mobile network.*"<sup>1</sup>
- (a) As to being a carriage service provider, Schedule 1 to this submission provides further detail about Pivotel's digital mobile network and a complete explanation of the basis upon which it is a carriage service provider.
  - (b) As to its capacity to provide and access services of the kind declared, Pivotel provides and accesses mobile voice and SMS termination services of the kind described in the MTAS service description. It provides and accesses these services pursuant to service agreements with each other MNO, or in reliance on the standard access obligations in s 152AR of the CCA and the service terms specified in the FAD.
- 2.8 In Australia, there are four telecommunications carriers which own or operate network units which are used to provide carriage services to and from mobile devices. They are:
- (a) Telstra;
  - (b) Optus Mobile;
  - (c) Vodafone Hutchison Australia; and
  - (d) Pivotel.

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<sup>1</sup> "Digital mobile network" is a telecommunications network that is used to provide digital mobile telephony services – MTAS Service Description, 2014 MTAS Decision. A "telecommunications network" is "a system, or series of systems, that carries, or is capable of carrying, communications by means of guided and/or unguided electromagnetic energy – Telco Act s 7. Schedule 1 describes Pivotel's operations, including its provision of a digital mobile network.

- 2.9 These are the entities which are carriage service providers and which may supply or acquire MTAS. As such, these are the entities which fall within the scope of the term MNO, as used by the ACCC in the Draft Report.
- 2.10 Relevantly, Pivotel originates and terminates voice and SMS traffic (both A2P and P2P) on its mobile network via relationships with the other, larger MNOs, Telstra, Optus, and Vodafone (**Major MNOs**). Pivotel acquires SMS termination from the Major MNOs and is predominantly an off-net supplier of wholesale A2P SMS termination, however to a much smaller extent due to the relevant size of its customer base, it also provides on-net A2P SMS termination. It competes directly with the Major MNOs which typically supply on-net SMS termination for their own network.
- 2.11 Following the inclusion of SMS termination in the MTAS and introduction of the Final Access Determination (**FAD**) in 2016, Pivotel was able to access SMS termination on a level playing field with the Major MNOs, and there was no lawful basis for the Major MNOs to refuse to terminate A2P SMS for Pivotel. This enabled Pivotel to enter the market for the supply of A2P SMS termination services, thereby introducing competition to an otherwise entirely uncompetitive market. We elaborate on this in part 7 of this submission.

### 3. **ACCC's position on A2P SMS in the Draft Report**

- 3.1 The purpose of declaration is to promote the long term interests of end users of carriage services or of services provided by means of carriage services (**LTIE**). This involves considering the extent to which the following objectives are achieved.
- (i) The objective of promoting competition in markets for listed services.
  - (ii) The objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users.
  - (iii) The objective of encouraging the economically efficient use of, and economically efficient investment in, telecommunications infrastructure.
- 3.2 In relation to A2P SMS, the main focus of the Draft Report is on the first of these considerations. The Draft Report states that the 'key question' in considering A2P SMS is "*whether declaration is necessary to prevent MNOs from exercising their market power and to promote competition in the downstream market for A2P SMS services*".
- 3.3 The ACCC has concluded in the Draft Report that declaration is not necessary to prevent MNOs from exercising market power, or to promote competition in the downstream A2P SMS markets. The Draft Report indicates that the ACCC's conclusion is based on the following matters (at pages 37- 41).
- (a) As to the state of competition in the wholesale market for SMS termination.
    - (i) Competition in the wholesale SMS termination market may not be feasible because MNOs have a monopoly over SMS termination services on their own networks and there are not any substitutes per se.

- (b) As to the state of competition in downstream markets.
  - (i) The reduction in wholesale rates for A2P SMS termination since declaration and the FAD has not flowed through to retail prices.
  - (ii) Pivotel has not taken a significant market share of wholesale A2P SMS termination since it entered the market, and aggregators and large A2P SMS service providers predominantly acquire on-net services from each MNO rather than off-net.
- (c) As to its conclusion that declaration of A2P SMS termination will not promote competition.
  - (i) MNOs are likely to be constrained from refusing SMS termination or setting unreasonably high SMS termination charges due to competition from OTT services in the retail market for messaging.
  - (ii) The current arrangements in which aggregators and A2P SMS service providers negotiate with each MNO to deliver SMS are likely to remain in place. These agreements are not dependent on MTAS, so not continuing declaration of SMS MTAS will have no impact on these arrangements.
  - (iii) Any effect declaration had in reducing the price of off-net A2P SMS would likely continue if declaration is removed. And further it is likely that each MNO will continue to provide SMS termination access agreements to Pivotel and aggregators and that is likely to remain the case even in the absence of declaration.
- (d) As to whether declaration achieves any-to-any connectivity.
  - (i) Declaration is not necessary to achieve any-to-any connectivity for A2P SMS because A2P SMS is still largely sent on-net, with only a relatively small proportion of SMS being sent off-net.

3.4 We respectfully disagree with each of these conclusions.

3.5 The ACCC also stated in the Draft Report that if it thought declaration would promote competition, then it would also need to investigate whether continuing declaration would lead to an increase in spam SMS (page 42). This submission also addresses in part 10 why spam SMS should not be an impediment to the continuation of declaration.

3.6 Below we outline the reasons for which we request that the ACCC revise its conclusion and determine that declaration of A2P SMS termination is in the LTIE and therefore should remain declared.

#### 4. Summary of Pivotel's response to the Draft Report

- 4.1 Pivotel submits that the ACCC should revise its position in the Draft Report and maintain the declaration of SMS termination services in respect of A2P SMS.
- 4.2 This submission will outline why the ACCC's conclusions about the state of the wholesale market for A2P SMS termination and the consequences of ceasing termination are not supported when considering the totality of the information available. Further, the conclusions in the Draft Report are inconsistent with the ACCC's conclusions in the Final Decision on the Domestic Mobile Terminating Access Service Declaration Inquiry in June 2014 (**2014 MTAS Decision**).
- 4.3 In summary, the declaration is necessary to prevent MNOs from exercising market power, and to promote competition in the downstream A2P SMS markets for the following reasons.
- (a) Competition in the market for the wholesale supply of A2P SMS termination
- (i) OTT services do not provide a strong substitute for A2P SMS, and therefore do not provide any material competitive constraint on the MNOs' monopolies over termination services on their networks.
  - (ii) The declaration of SMS termination services has introduced competition to the otherwise uncompetitive market for the wholesale supply of A2P SMS termination. This is evidenced by Pivotel's successful entry to the market as an off-net supplier, its capture of market share, and the overall growth in A2P SMS since declaration and the introduction of the FAD.
  - (iii) Ceasing declaration risks eliminating competition, both on-net and off-net, and this will have flow-on effects in downstream markets. In contrast, continuing declaration carries no negative risk to the LTIE.
- (b) Competition in downstream markets
- (i) The benefits of increased competition in the A2P SMS traffic market since declaration have flowed to downstream suppliers and end-users. This is evidenced by retail pricing reductions since the introduction of the FAD and the growth in A2P SMS volumes.
- (c) Any-to-any connectivity
- (i) The differential bargaining power between a small MNO like Pivotel versus a Major MNO means that absent declaration a Major MNO may deny access to SMS termination unless unreasonable access terms are agreed.
- (d) Infrastructure use and investment
- (i) The identified consideration on this point is whether the declaration of A2P SMS results in an increase in spam.

- (ii) Spam is already regulated via the *Spam Act 2003* (Cth), and Pivotel has effectively mitigated spam risk since the introduction of spam filtering technology.

## 5. Market structure of the A2P SMS market in Australia

5.1 An overview of the market structure for A2P SMS services in Australia may assist in framing Pivotel's submissions below.

5.2 Broadly speaking there are three layers in the market, which may be described as follows.

- (a) Retail end users: These are the businesses or enterprises wishing to communicate with a database of contacts via SMS for which they have actual or implied consent. End users have details of the mobile phone numbers to which they wish to direct their message and the message content that they wish to send. They need to procure services by which those SMS messages will be delivered to the recipients. Large end users may also have their own internal platform for preparing and initiating delivery of the SMS.
- (b) A2P SMS providers and aggregators, and combined A2P SMS providers/aggregators: This middle level of the supply chain represents businesses which act as intermediaries between end users and the MNOs which have the relevant mobile telecommunications infrastructure to provide SMS termination services by which A2P SMS are delivered to the intended recipients. There are two elements to an intermediary's service offering:
  - (i) A2P SMS Provision: an A2P SMS provider operates a platform into which the A2P SMS content and delivery contact database are input, which then initiates the sending of the SMS, transmitting the SMS details either directly or indirectly to the relevant MNO for delivery to recipients, and providing monitoring and reporting back to the end user.
  - (ii) Aggregation: an aggregator is not a MNO and cannot itself terminate A2P SMS. However, aggregators acquire wholesale SMS termination from a MNO, either via an on-net or off-net supply, and re-sell that termination to their customer being either a smaller aggregator, an A2P SMS provider, or an enterprise end user with an internal messaging platform.
- (c) Intermediaries may be pure A2P SMS providers, or pure aggregators, or provide a combination of both A2P SMS provision and aggregation. In our Confidential Annexure A – Part 7 to this submission, we provide named examples of each of these types of intermediaries operating in the Australian A2P market, based on Pivotel's direct experience through its existing partner relationships.
- (d) Aggregators have an international focus in that they aggregate SMS termination from many MNOs globally. There are no 'national' aggregators that focus solely on aggregating SMS termination in the Australian domestic A2P SMS market of which Pivotel is aware.
- (e) There may be chains of intermediaries within this middle level of the supply chain. For example, an aggregator might supply A2P SMS termination to a smaller A2P SMS provider, which may then supply that A2P SMS termination, together with their

messaging platform capability, to a smaller end user. This longer supply chain would typically arise if a MNO did not wish to provide on-net or off-net supply directly to a smaller A2P SMS provider.

As discussed above, some intermediaries combine both aggregation and A2P SMS provision elements. Whilst aggregators lack the messaging platform capabilities, and therefore can only service enterprise end users with an internal messaging capability, pure A2P SMS providers and combined A2P SMS providers/aggregators compete to supply the same retail end user directly.

- (f) MNOs supplying A2P SMS termination: This is the market that the ACCC describes as the 'wholesale market for A2P SMS termination'. Only a MNO has the mobile telecommunications infrastructure which will enable it to deliver an A2P SMS to the end-user's recipient contact. In circumstances where SMS termination is a declared service, then this can happen in either of two ways.
- (i) On-net supply: The MNO agrees to deliver SMS to mobile devices on its own network. This doesn't rely on the MNO having an arrangement in place with another MNO for SMS termination.
  - (ii) Off-net supply: The MNO supplies SMS termination in reliance on the declared MTAS. The result of MTAS declaration is that another MNO may not refuse to supply SMS termination to the off-net supplier, and the pricing is fixed at an accessible price via the FAD. An off-net supply is equivalent to an on-net supply because:
    - (A) in both cases the supply is provided by an MNO, which comes with network visibility, troubleshooting capacity and other service levels typical of an MNO. Each MNO must supply SMS termination to each other on a non-discriminatory basis, in that their supply of SMS termination service to another MNO must be equivalent to the service levels and quality that it supplies that service to itself; and
    - (B) critically, each offers guaranteed access to A2P SMS termination, not reliant on the successful negotiation of upstream access to SMS termination services. In the case of on-net supply, this is the case because the MNO is terminating SMS on its own network. In the case of off-net supply, this is the case because the MNO has regulated access to SMS termination on the other MNOs' networks by means of the standard access obligations and the terms of the FAD.

5.3 While SMS termination remains a declared service, off-net supplies remain a direct and substitutable alternative to an on-net supply from an MNO.

5.4 A MNO offering off-net supply of SMS termination is not equivalent to an aggregator. A MNO only provides SMS termination to its own subscriber base through on-net SMS termination, or off-net SMS termination to the subscriber base of another MNO in the Australian domestic market. An aggregator is one step down the supply chain because its ability to supply SMS termination downstream is reliant on it negotiating access to SMS termination from the MNOs.

That is, an aggregator is a customer of either one MNO offering an off-net supply, or each MNO offering an on-net supply. As described above, aggregators operate in an international market for A2P SMS, aggregating SMS termination to many MNOs globally. Unlike MNOs which have a national focus (either on-net or off-net supply), aggregators have an international focus, and Australian A2P SMS termination is just a proportion of their overall international business. Sinch is an example of this.

5.5 Figure 1 below depicts the various permutations of the A2P SMS supply chain as described above.

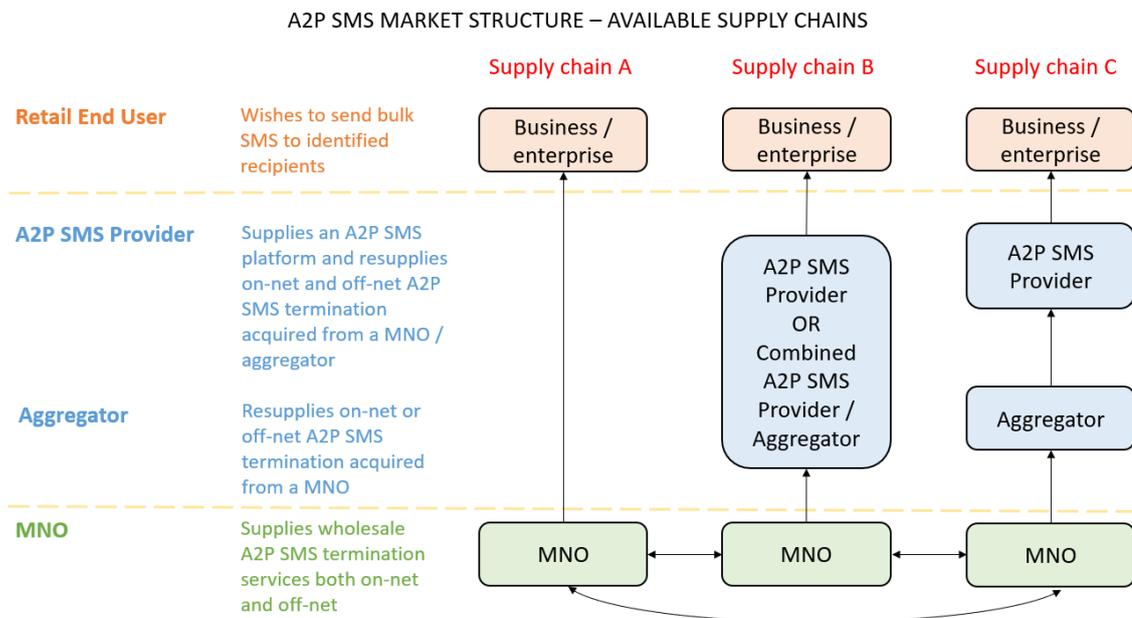


Figure 1: A2P SMS market structure and variations on the supply chain

## 6. Competition in the wholesale A2P SMS market

### 6.1 OTT services are not an effective substitute for A2P SMS

6.2 The Draft Report concludes that OTT services are an effective substitute for P2P SMS. It then extrapolates that the same would apply for A2P SMS. This conclusion is not supported by market data for A2P SMS, or the ACMA report on which the ACCC's P2P conclusion is apparently based.

6.3 From a practical perspective, OTT is not an effective substitute for A2P SMS, for the following reasons.

- (a) Retail customers seek the delivery of A2P SMS to a specified set of customers. SMS offers a far greater degree of certainty as to the ability to reach those customers, and provides a single, ubiquitous delivery method. It reaches customers regardless of their handset type, availability of data services, and regardless of which, if any, OTT services they have chosen to acquire in addition to their mobile services. The widespread use by OTT providers of A2P SMS for secure information and one-time passwords (OTPs) demonstrates that A2P SMS is not substitutable by OTT providers.

- (b) In contrast, OTT services such as WhatsApp, Facebook etc. may each only reach a subset of the intended recipients, being those who use the relevant OTT service. This is a fundamental limitation on the viability of OTT services for bulk or commercial message applications. The OTT providers have not developed nor released production interfaces that would allow a retail or wholesale messaging provider to effectively and efficiently send commercial messages using their OTT applications.
- (c) Further, read and response rates are higher with SMS, which is a key success metric for end-customers running an A2P SMS campaign.
- (d) The *Ovum Mobile Messaging – Traffic and Revenue Forecast Report 2017 - 22 (Ovum Report)*, on which the ACCC relies in the Draft Report at page 29-30, also states as follows in relation to the substitutability of OTT services.

***The ubiquity of SMS must be used in the short term: SMS continues to be the only messaging service that is ubiquitous across markets, users, and devices. Even chat apps that have amassed over a billion users rely on SMS to deliver one-time passwords (OTPs) and other secure private information. Therefore, even though SMS is under pressure to grow both P2P and A2P revenues, it still fulfils a vital function in the security and enterprise messaging industry.***

6.4 Pivotal has obtained further data from Ovum relating to the substitutability of OTT services and A2P SMS services<sup>2</sup> (**2019 Ovum Report**). A copy of the 2019 Ovum Report is included as Confidential Annexure B to this submission. It supports the contentions above, proposing as follows.

- (a) On average, fewer than 20% of Australians interact with service providers across a range of industries using a chat app.
- (b) OTT messaging apps are taking longer than expected to penetrate the A2P communications market, on account of:
  - (i) market fragmentation between the apps (e.g. Facebook, WhatsApp, iMessage), and businesses preferring a channel that allows them to communicate with *all* users;
  - (ii) immaturity of the business offerings of the chat apps, including pricing; and
  - (iii) uncertainty among businesses about how to adopt chat apps.
- (c) Ovum does not predict that OTT messaging apps will substitute A2P SMS in Australia in a meaningful way until at least 2024 for the following reasons.
  - (i) The substitution of A2P OTT for A2P SMS is not happening as quickly as expected;

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<sup>2</sup> The report includes data and analysis drawn from Ovum's Digital Consumer Insights 2019: Communications, Commerce and Media survey (yet to be published), and Ovum's Mobile Messaging Traffic and Revenue Forecast: 2017-22.

- (ii) OTT messaging apps remain one of the least used communications channels for customer interactions; and
- (iii) On average, over 70% of Australians currently do not use a chat app to interact with their service providers.

6.5 Further, the data relating to the relationship between OTT services and P2P SMS does not logically extend to A2P SMS. The Draft Report relies on the Australian Communications and Media Authority's *Communications Report 2017-2018* in concluding that OTT services operate as a substitute for P2P SMS. It does not provide a basis for a conclusion as to A2P SMS for the following reasons.

- (a) The section of the report on which the ACCC relies is 'Consumer engagement with communications and media' (emphasis added). It relates specifically to personal use of messaging, rather than commercial messaging. That is, the survey data only considers individuals sending messages and not commercial entities sending messages. As such it cannot inform any conclusion as to whether there is substitutability between OTT services and A2P SMS.
- (b) Pivotal also respectfully submits that the ACCC's conclusion as to OTT service usage in relation to P2P SMS based on the ACMA report is not well-founded. Figure 4 on page 29 of the Draft Report is based on data presented in section 2.4 of the ACMA report, which reports that 68% of Australian internet users (not Australians generally) have used a communications app in the previous 6 months. That data does not make any comparison against SMS usage, or indicate any preference between OTT or SMS services as a means of messaging. Further the survey question targeted 'any' OTT usage. It does not record prevalent usage, preferred usage, or even regular usage. As such it does not provide a reasonable basis for making any conclusion about the extent to which OTT services are substitutable, or taking market share away from, SMS services.
- (c) Other data presented in the ACMA report which is not reported in the ACCC's Draft Report states that 70% of Australian adults who sent messages in the six months to May 2018 preferred to use their mobile plan rather than an OTT service. This data implies a far lesser degree of uptake (and therefore substitutability) of OTT services than is suggested in the Draft Report in relation to P2P SMS.

6.6 These points displace the proposition that OTT services operate as a substitute for A2P SMS.

## 7. **Off-net supplies are necessary for competition in the wholesale A2P SMS market**

### 7.1 The wholesale SMS termination market was uncompetitive prior to declaration

7.2 Prior to the inclusion of SMS termination in MTAS and the introduction of the FAD in 2016, Pivotal had to negotiate for SMS termination with each Major MNO and each Major MNO could choose to deny Pivotal access to SMS termination on its network. Although each party obtained termination on the other's network, the Major MNOs had far greater bargaining power than Pivotal on account of their much greater traffic volume. If Pivotal could not originate SMS to a Major MNO, that would have a serious impact on the commercial viability of its business. Whereas if a Major MNO could not originate SMS to Pivotal's network, it would have had a far

lesser impact on their business given the relatively small number of Pivotal customers. That is, few customers of the Major MNO would seek to send SMS to a Pivotal customer, and so it would not represent any material shortcoming in the Major MNO's service offering.

- 7.3 For Pivotal, its small market position meant that it was generally only able to obtain SMS termination on less favourable terms, both in relation to price and service quality. Further, the Major MNOs had the ability to deny termination, either altogether or in relation to particular kinds of SMS such as 'commercial SMS' or A2P SMS. In its negotiations with the Major MNOs, Pivotal was invariably required to adopt the SMS termination rate dictated by the respective Major MNO on a bilateral basis, and these termination rates varied materially. Either the termination rate was very high, or a lower termination rate was coupled with the prohibition of sending 'commercial SMS' or A2P SMS. A higher termination rate heavily favoured the Major MNO, where Pivotal's relatively small number of customers resulted in the total SMS termination fees payable by the Major MNO being very low regardless of the rate. Pivotal refers to page 4 of the confidential annexure to its previous submission on the Discussion Paper for the Inquiry which provides an example of the commercial terms for SMS termination to which it was subject prior to the inclusion of SMS termination in MTAS and the introduction of the FAD.
- 7.4 In relation to A2P SMS, prior to declaration these market conditions meant that Pivotal was unable to supply off-net A2P SMS termination. The Major MNOs maintained a monopoly over their own networks, and were able to set pricing and non-pricing terms (such as an exclusion of 'commercial SMS' from the Major MNO's SMS termination service) without any competitive constraint.
- 7.5 Recognising these conditions, the ACCC states as follows in the 2014 MTAS Decision (at page 45-46).
- (a) *"...competition in the wholesale market for A2P SMS is limited due to significant on-net/off-net pricing differentials caused by high SMS termination rates";*
  - (b) *"MNOs do not have to actively compete for the provision of wholesale A2P SMS services and do not have incentives to reduce the price of on-net services";*
  - (c) *and in relation to the downstream markets, "the ACCC considers that limited competition in the upstream wholesale market may limit the minimum prices that can be offered by SMS aggregators and A2P SMS service providers. Prices charged by A2P SMS service providers or SMS aggregators, to end-users and/or resellers range from around 4 cents to 20 cents..."*
- 7.6 The ACCC ultimately concluded as follows (at page 52).
- (a) *"the declaration of A2P SMS termination services, coupled with regulated pricing, will significantly reduce the cost to the MNOs of providing off-net services by reducing SMS termination rates. This will enable and encourage MNOs to offer lower prices for wholesale off-net SMS services.*

*The ability and potential for the MNOs to offer cheaper off-net prices means that it is likely to become commercially viable for SMS aggregators to buy both on-net and off-net*

*services from a single MNO. This will likely increase competition between MNOs for A2P SMS services, and lead to reductions in both off-net and on-net prices.*

*Reductions in the wholesale A2P SMS prices charged by MNOs will reduce the costs to SMS aggregators and A2P SMS service providers in the downstream markets.”*

7.7 The wholesale market for A2P SMS termination has become competitive since declaration

7.8 In the Draft Report the ACCC concluded that competition in the wholesale A2P SMS termination market may not be feasible because MNOs maintained a monopoly over SMS termination services on their own networks and there are no substitutes. The inconsistency between this statement and the position in the 2014 MTAS Report, which recognises the potential for competition between on-net and off-net supplies, is not explained.

7.9 Pivotal suggests that the more supportable conclusion is that declaration has introduced competition to the market for wholesale SMS termination, as was contemplated in the 2014 MTAS Decision, for the following reasons.

- (a) Pivotal has entered the wholesale market for A2P SMS termination since declaration, offering off-net supply. This is a direct substitute for on-net supply via each MNO. That is, an aggregator or service provider (in the middle tier of the supply chain depicted in Figure 1) can choose between an on-net or off-net supply. Either the on-net or off-net supply offers direct access to the mobile telecommunications infrastructure by which A2P SMS can be delivered which is not reliant on upstream negotiations for access to SMS termination.
- (b) Pivotal is continuing to gain market share of the wholesale A2P SMS termination market. See Confidential Annexure A – Part 3 for further information on Pivotal’s market share since entering the market. The ACCC Draft Report at page 37 indicates uncertainty as to Pivotal’s market share. The data presented in Confidential Annexure A is based on Pivotal’s own records of its own A2P SMS traffic, and the overall A2P traffic volumes obtained from Ovum. The ACCC itself has relied on Ovum’s traffic volumes in the Draft Report. Accordingly, Pivotal submits that the market share data that it presents in Confidential Annexure A is reliable and robust.
- (c) The Draft Report also refers to Optus’ estimation of Pivotal’s market share at page 37. We have been in contact with Optus and it has informed us that it has not supplied any interconnection data to the ACCC. As such, we are uncertain of the basis upon which the ACCC has considered any estimate of Pivotal’s market share based on Optus’ data. Regardless, Pivotal maintains the submission that the data in Confidential Annexure A – Part 3 is robust and is the relevant data on which the ACCC should rely. If the ACCC has any remaining uncertainty as to the market size and the share represented by off-net traffic, we urge it to seek further data from Pivotal and the other MNOs. Pivotal’s submission is that off-net traffic represents a material and increasing share of the wholesale A2P SMS termination market, which is a clear indicator of the competitive constraint that it applies to both off-net and on-net supplies.
- (d) Pivotal’s entry into the market and gain of market share since declaration and the FAD has resulted in reduced wholesale pricing for both off-net and on-net services, which is a

further indicator of its competitive impact on the wholesale A2P SMS termination market. See Confidential Annexure A – Part 1 for further information on Pivotel's pricing since entering the market.

- (e) The total A2P SMS market has grown since declaration, further indicating a competitive wholesale market. The Draft Report draws the conclusion that the use of SMS has stagnated since the previous declaration inquiry. But this does not distinguish between the P2P and A2P markets. The data on which the Draft Report relies to support this conclusion in the Ovum Report in fact suggests that A2P SMS volumes have grown since 2015. Figure 2 below represents Ovum's depiction of A2P SMS volumes in Australia between 2015 and 2018.

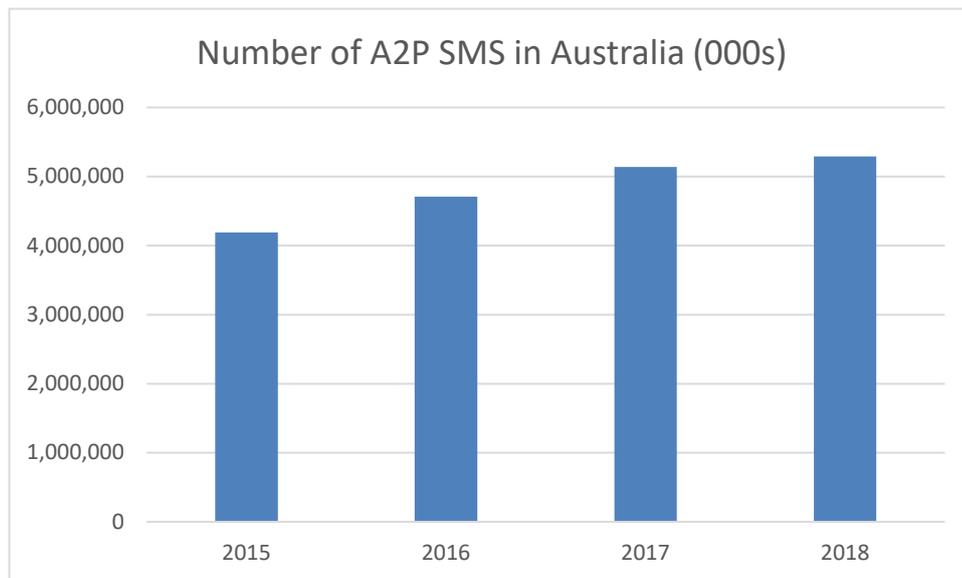


Figure 2: Data extracted from: Ovum, *Mobile Messaging Traffic and Revenue Forecast: 2017-22* (February 2018).

- (f) Data in the 2019 Ovum Report indicates that A2P SMS revenue is forecast to reduce over coming years, yet A2P SMS volumes will remain stable. This implies that the price per SMS is likely to continue to fall, evidencing a competitive market, which is in the LTIE.

- (g) Figure 3 below depicts the A2P SMS volumes and revenue data in coming years as forecast in the 2019 Ovum Report.

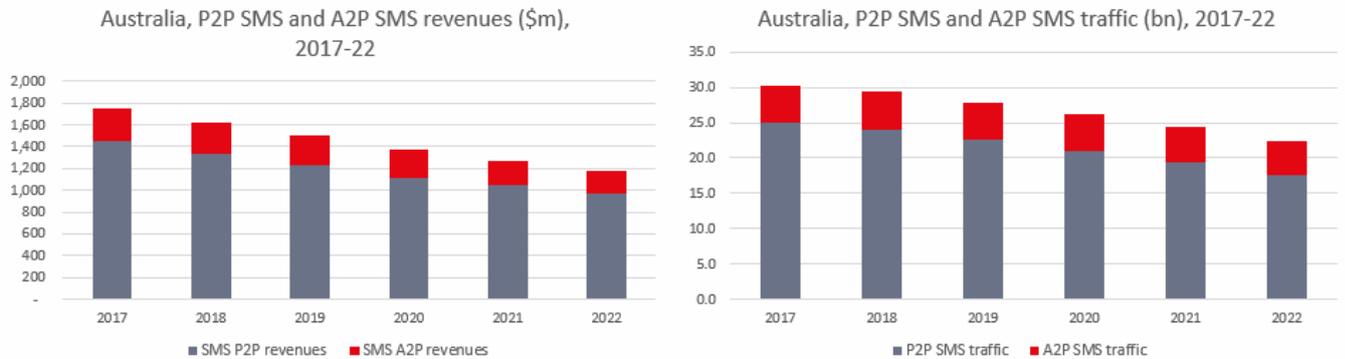


Figure 3: Data extracted from: 2019 Ovum Report (May 2019).

- (h) Ovum has informed Pivotal that the forecasts in the Ovum Report and 2019 Ovum Report are based on an assumption of continuing declaration of SMS termination services, and the continuing competition between on-net and off-net suppliers.
- 7.10 Prior to the FAD, there was no commercially competitive off-net supply of A2P SMS termination available in the market, as the interconnect rates charged between MNOs for SMS termination were very high. That means that Pivotal's market share reflects traffic that would otherwise have been forced to rely on monopolistic on-net supplies, either via a direct connection or an aggregator.
- 7.11 The fact that Pivotal has entered the market from a standing start following the FAD, and taken its whole market share from the Major MNOs' on-net supplies, indicates that it is a vigorous competitor and that its existence in the market is applying competitive constraint to otherwise monopolistic on-net suppliers. This is the precise outcome that the ACCC predicted when it decided to declare A2P SMS termination in the 2014 MTAS Decision (see page 52, quoted at paragraph 7.6 above). That is, it predicted that:
- (a) declaration would facilitate competition between on-net and off-net supplies of wholesale A2P SMS termination services; and
  - (b) that this would result in price reductions for both on-net and off-net supplies.
- 7.12 Pivotal further submits that the competitive market for A2P SMS termination services is still young, having only truly been established following the FAD in 2016. Three years is a very short period over which to observe market conditions in a newly competitive market. Pivotal submits that this offers a further reason for which to continue the declaration of SMS termination services; i.e. to allow the A2P SMS termination market to mature prior to making such a significant decision as to cease declaration.
- 7.13 There is authority for the proposition that consideration of the 'long term' interests of end users involves considering the period over which the full effects of the declaration may be felt, and that this requires some years, being sufficient time for all players (existing and potential

competitors at all stages of the supply chain) to adjust to the outcome, make investment decisions and implement growth strategies<sup>3</sup>.

- 7.14 Pivotal submits that the current declaration has not been in place for sufficient time to fully realise the long term benefits to end users flowing from declaration. In particular, Pivotal submits that the downstream pricing benefits flowing from a competitive market for the supply of A2P SMS termination services are not yet fully realised. As Pivotal continues its investments and grows its market share, consistent with the trend shown in its growth data in Confidential Annexure A – Parts 2 & 3, end-users are likely to further experience the benefits from the availability of a reliable and sustainable off-net service offering, either directly or via the competitive constraint that it applies to on-net service suppliers.
- 7.15 The continuing availability of off-net supplies is of critical relevance to the wholesale A2P SMS termination market. The supply of on-net SMS termination is not subject to MTAS. However, it is relevantly affected by MTAS. Off-net supplies are a direct substitute for an on-net supply, and are subject to MTAS. Off-net supplies benefit from the pricing regulation in the FAD. As a result, this places competitive pressure for on-net suppliers not to substantially exceed the regulated pricing for off-net supplies.
- 7.16 On this basis, off-net services introduce competition to the market for the wholesale supply of SMS termination services generally. The same pro-competitive effect will occur in the retail A2P SMS market where MNOs supply services directly to large enterprises, as is stated in the Draft Report at page 38.
- 7.17 The wholesale market for A2P SMS termination will become uncompetitive if declaration ceases
- 7.18 As predicted by the ACCC in the 2014 MTAS Decision, declaration has resulted in competition between on-net and off-net supplies for wholesale A2P SMS termination. If declaration ceases, off-net suppliers will no longer be able to compete by offering wholesale A2P SMS termination services at the same level of the supply chain as on-net suppliers. On-net suppliers will have no meaningful competitive constraint and will continue to maintain a monopoly over SMS termination on their own networks. With the removal of competition arising from off-net supplies, and the absence of competition from OTT services, there will be no commercial incentive for the on-net suppliers to maintain currently low pricing.
- 7.19 Further, there will be little commercial incentive for Major MNOs to continue supplying SMS termination services to a smaller MNO like Pivotal for A2P SMS, either at a competitive price or at all. Pivotal proposes that there would instead be an incentive for Major MNOs to increase SMS termination rates for A2P SMS, or deny termination for them altogether, thereby allowing the Major MNOs to regain their respective shares of the wholesale market that they had lost to Pivotal. Market conditions would return to a state similar to that pre-declaration, as were observed in the 2014 MTAS Decision and as are outlined in paragraphs 7.2 to 7.6 above.
- 7.20 For these reasons, a cessation of declaration risks seeing Pivotal cease to compete in the supply of wholesale A2P SMS termination via its off-net supply, and risks the negative downstream effects of Pivotal exiting the market. As stated in paragraph 2.8 above, there are four MNOs in Australia; the three Major MNOs and Pivotal. The ACCC has recently claimed

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<sup>3</sup> *Seven Network Limited (No 4)* [2004] ACompT 11 at [120] – [121].

that the mobile services market will be more effectively competitive with four competitors rather than three, in the context of the proposed TPG/Vodafone merger. In his address to the 2019 Competition Law Conference on 25 May 2019, ACCC Chair Mr Rod Sims stated:

*Australia already has a very concentrated mobile services market, with the three network operators, Telstra, Optus and Vodafone.*

*TPG has a proven track record of disrupting the telecommunications sector and establishing itself as a successful competitor in fixed broadband services. This has had large benefits for customers.*

*Removing TPG as an independent player, with its customer base, backhaul infrastructure and spectrum, would, in our view, have a very negative impact on Australian consumers in this increasingly important market. As was much discussed at the ICN meeting, around the world markets with four mobile players result in better outcomes for consumers.*

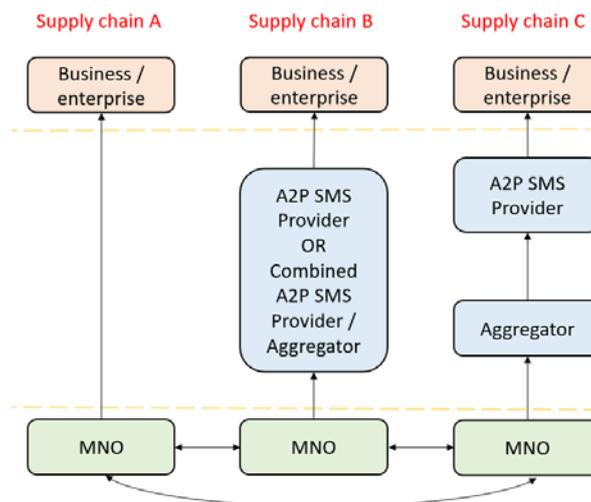
*We see this currently playing out overseas in markets as diverse as Canada and France. Indeed, recently the Canadian Competition Bureau has said that mobile wireless pricing is much lower in regions where there are four players; prices are high and stable where there are three players.*

7.21 These statements overlooked Pivotal's position as a MNO. There are in fact four mobile network operators already. Ceasing the declaration of A2P SMS however risks removing Pivotal as an effective fourth competitor in the market for wholesale A2P SMS termination, and more broadly in its plans to expand its LTE cellular network rollout. In contrast, maintaining the declaration will enable Pivotal to continue to grow as an increasingly vigorous competitor in the wholesale A2P SMS termination market, and further support its expansion plans in mobile services as described in Confidential Annexure A – Part 6.

## **8. The positive competitive impact of declaration on downstream A2P SMS services**

8.1 Two indicators by which the ACCC may observe the positive impact of declaration on downstream A2P SMS services are reduced pricing and increased service quality. These improvements in the downstream market have created market conditions in which the overall A2P SMS volumes can grow, as is evidenced in the Ovum Report data shown in Figure 2 above.

8.2 We understand from our customers that the Major MNOs may refuse on-net supplies to aggregators and A2P SMS providers, both large and small for various reasons. Declaration of A2P SMS termination has allowed Pivotel's entry to the market for wholesale A2P SMS termination services. Therefore, as a result of declaration those aggregators and A2P SMS providers have had the benefit of choice between off-net supply and an aggregator who has gained direct access to a MNO. That is, where an aggregator or A2P SMS provider cannot access on-net supply itself, it can still choose between supply chain B and supply chain C, as shown in Figure 1 and replicated again below. (Pivotel does not have the capacity to support small end users directly as it does not offer a SMS messaging platform, and unlike some large end users, small end users do not have an internal SMS messaging platform).



Extract from Figure 1 depicting possible supply chains in A2P SMS market

- 8.3 The availability of off-net supply allows the smaller A2P SMS provider to benefit from the pricing competition between MNOs at a wholesale level. Without off-net supply, the smaller A2P SMS provider's only choice would be supply chain C, and it would remain subject to the upstream pricing set by the Major MNOs even if it could not deal with them directly.
- 8.4 Further, from a service quality perspective, an aggregator is not a true substitute for an off-net supply from an MNO. The aggregator does not operate a mobile telecommunications network and does not itself terminate A2P SMS. Rather, supply via an aggregator represents the insertion of an additional link in the supply chain, whereby the MNO supplies the aggregator, and the aggregator supplies the downstream A2P SMS service provider or end customer. This is illustrated in supply chains B and C, where supply chain C depicts the insertion of the additional layer in the supply chain when a smaller A2P SMS provider acquires SMS termination via an aggregator, rather than from a MNO.
- 8.5 An off-net supply by an MNO offers a better service quality than an aggregator. The MNO controls spam filtering and the message management process. It has access to network operation centres, providing visibility of network performance. This gives the MNO the ability to identify and resolve any network issues. An aggregator cannot do this.

- 8.6 An aggregator may deprioritise a smaller A2P SMS provider’s traffic in order to attract the end-customer to deal with the aggregator directly (as in, via supply chain B rather than supply chain C), rather than competing to offer better price or service quality. This is not in the LTIE.
- 8.7 Further, off-net services offer a shorter supply chain, which logically is likely to produce lower pricing for the end user.
- 8.8 The commencement of the FAD and Pivotel’s resulting entry to the wholesale A2P SMS termination market has resulted in lower pricing for the wholesale service. Pivotel has also adopted pricing strategies intended to drive retail uptake and growth in A2P SMS volumes. See Confidential Annexure A – Part 4 for more detail. Pivotel submits that the overall market growth may, at least in part, be attributed to those strategies.
- 8.9 Pivotel has also identified the following retail price reductions since introduction of the FAD based on publicly available website information and historical website information available via the Wayback Machine Internet archive.

<b>Retailer</b>	<b>Previous pricing</b>	<b>Current pricing</b>
SMS broadcast	From 4.5c (in 2013) <sup>4</sup>	From 3.7c <sup>5</sup>
Burst SMS	From 6.9c (in 2014) <sup>6</sup>	From 4.9c <sup>7</sup>
SMS Tech	From 6.9c (in 2017) <sup>8</sup>	From 5.2c <sup>9</sup>
SMS Solutions Australia	From 6c (2015) <sup>10</sup>	From 4c <sup>11</sup>

- 8.10 Pivotel has also identified a published rate for bulk SMS of 2.967c per message for 500,000 to 999,000 messages by Clickatell<sup>12</sup> which is substantially below the market rates of 4c – 20c for SMS termination the ACCC reported in the 2014 MTAS Decision.
- 8.11 The above paragraphs illustrate the benefit of choice and the potential for improvements in both downstream pricing and service quality when off-net A2P SMS termination services are available. The availability of these services is a direct consequence of declaration of A2P SMS termination, as is the overall growth in the A2P SMS market size.
- 8.12 On the other hand, ceasing declaration will logically have negative downstream effects as follows.

<sup>4</sup> <https://web.archive.org/web/20131229151334/https://www.smsbroadcast.com.au/> accessed 24 May 2019.

<sup>5</sup> <https://www.smsbroadcast.com.au/pricing> accessed 24 May 2019.

<sup>6</sup> <https://web.archive.org/web/20140712012918/http://burstsms.com.au/pricing> accessed 24 May 2019.

<sup>7</sup> <https://www.burstsms.com.au/pricing> accessed 24 May 2019.

<sup>8</sup> <https://web.archive.org/web/20170219024230/http://www.smstech.com.au/sms-pricing/> accessed 24 May 2019.

<sup>9</sup> <https://smstech.com.au/pricing/> accessed 24 May 2019.

<sup>10</sup> [https://web.archive.org/web/20150831065326/https://www.smssolutionsaustralia.com.au/#pricing\\_id](https://web.archive.org/web/20150831065326/https://www.smssolutionsaustralia.com.au/#pricing_id) accessed 24 May 2019.

<sup>11</sup> [https://www.smssolutionsaustralia.com.au/#pricing\\_id](https://www.smssolutionsaustralia.com.au/#pricing_id) accessed 24 May 2019.

<sup>12</sup> <https://www.clickatell.com/promotions/australia-sms/> accessed 30 May 2019.

- (a) Off-net suppliers will need to either increase their pricing or cease offering SMS termination altogether, depending on the unregulated SMS termination terms offered by the Major MNOs.
- (b) In either case, customers of off-net suppliers will need to review the means by which they acquire SMS termination. Supply chain B may no longer be available to them. An input pricing increase is likely regardless of whether they acquire on-net or off-net services. Where off-net services are likely to increase their prices or leave the market as described in (a), there would be no commercial incentive for the on-net suppliers to maintain low prices matching the off-net suppliers and certainly no incentive to see further price reductions without the competitive pressure from off-net supply. Pivotel's data in Confidential Annexure A – Part 2 shows its A2P SMS volume increasing over time, along with its share of the A2P SMS market. This reflects a competitive market in which end users are likely to experience benefits in the form of reduced pricing and improved service resulting from competition between suppliers. Pivotel submits that continuing declaration of A2P SMS termination will allow the benefits of a competitive market to continue in future.
- (c) Where off-net supplier input pricing is likely to increase, so may their customer pricing in order to maintain business viability. This will flow through to the end-users of A2P SMS services. A pricing increase is not in the LTIE.

## **9. Declaration facilitates any-to-any connectivity**

- 9.1 Pivotel submits that continuing declaration is necessary to facilitate any-to-any connectivity for the primary reason that absent declaration, a MNO may deny SMS termination services.
- 9.2 This is likely to be an issue in the case of a small MNO like Pivotel when it seeks terminating access from a Major MNO, on account of its lesser degree of marketing power. We refer the ACCC to our submissions above at paragraphs 7.2 to 7.6 in this regard.
- 9.3 It may also be an issue for any potential new MNO entering the market. The potential denial of terminating access to the Major MNOs' networks would represent an insurmountable barrier to entry.
- 9.4 The ACCC recognised the issue of denial of access in the 2014 MTAS Decision (at page 54). The Draft Report does not address this conclusion or explain its own conclusion in light of the 2014 MTAS Decision.

## **10. Declaration and infrastructure investment**

- 10.1 The Draft Report observes a potential issue in relation to infrastructure, based on a submission that A2P SMS declaration may increase spam levels. The Draft Report does not reach a conclusion on this point.
- 10.2 Pivotel submits that the declaration of A2P SMS does not result in increased SMS spam for the following reasons.

- (a) The *Spam Act 2003* (Cth) offers an existing regulatory and enforcement regime which addresses SMS spam.
- (b) Pivotel has effectively managed and minimised spam SMS traffic on its network following the introduction of the latest generation of spam SMS filter technology. It has also applied a dedicated resource to analyse and categorise any SMS messages flagged as possible spam messages for investigation. Pivotel's spam prevention measures are industry best practice. As well as blocking spam SMS, they act as a deterrent against future spam SMS, as it becomes known that Pivotel has these measures in place and therefore is not a good target for spam SMS. Confidential Annexure A – Part 5 provides details as to the substantial positive effect of these measures on spam SMS rates on Pivotel's network.
- (c) Further, there is no demonstrated causal connection between the fact of declaration and any change in spam levels. To Pivotel's knowledge, all MNOs including the Major MNOs have implemented spam filtering technology and all MNOs are highly motivated to keep that spam filtering technology updated and effective, given customer dissatisfaction with spam SMS. Given the proposition that other than the off-net services offered by Pivotel, most A2P SMS are delivered by the Major MNOs on-net, and on-net does not require MTAS, this displaces any proposition that continuing the declaration would result in an increase in spam SMS volumes. For these reasons, we submit that continuing the declaration is not correlated with spam volumes.

## 11. The Relationship between A2P and P2P SMS declaration

- 11.1 Pivotel submits that the necessity for declaration of A2P SMS is such that it should prevail over any consideration of P2P SMS, resulting in the continuing declaration of all SMS termination services.
- 11.2 The Ovum Report suggests that A2P SMS is a smaller percentage of the overall SMS market in Australia at this point than P2P SMS.<sup>13</sup> However, it also suggests that since declaration P2P SMS volume has decreased and A2P SMS volume has increased. That means that A2P's proportion of total SMS is growing. Further, a comparison of the forecast A2P and P2P SMS volumes in the 2019 Ovum Report (see Figure 3 above) suggests that this proportion is likely to continue increasing in coming years. This implies that A2P SMS deserves the prevailing consideration.
- 11.3 Further, as indicated at paragraph 5.6 above, the substitutability between P2P SMS services and OTT services may not be as strong as the ACCC indicates in its Draft Report, based on the ACMA report. This may in itself indicate that P2P SMS may also benefit from a further period of declaration of SMS termination. At worst, the P2P SMS market would not suffer any detriment from a further period of declaration. The conclusion in the Draft Report is that the P2P market will not change materially with or without declaration.
- 11.4 In Pivotel's submission, where:

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<sup>13</sup> Ovum, *Mobile Messaging Traffic and Revenue Forecast: 2017-22* (February 2018), Worksheet 'By Geography Country: Australia'.

- (a) the LTIE are clearly served by continuing declaration in the relevant A2P SMS markets; and
- (b) the LTIE are either served, or do not suffer, by continuing declaration in the relevant P2P SMS markets,

then the declaration of SMS termination services as whole should continue.

## 12. **If declaration ceases, there must be a phase-out period**

- 12.1 If, contrary to Pivotel's submission, the ACCC ultimately determines that it will not continue the declaration of SMS termination, then it should provide for a reasonable phase-out period to enable any changes to supply arrangements to occur prior to cessation of the declaration and the FAD. The MTAS declaration and FAD are due to expire on 30 June 2019. Given that these submissions are open until 31 May 2019, the ACCC is likely to deliver its Final Report during June, and more likely towards the end of June. This may result in just days between a final decision and a cessation of declaration.
- 12.2 Pivotel, as the smallest MNO, is at a unique disadvantage if this occurs, for the same reasons outlined in paragraph 7.2. The ACCC allowed approximately 4-5 months phase-in period between announcing the FAD in August 2015 and its commencement in January 2016. Pivotel submits that the FAD and MTAS service description should be continued for 12 months following the ACCC's final decision on the Inquiry to allow any commercial negotiations and resulting service adjustments to take place. This approach would have no adverse impact on the LTIE. It will not only serve Pivotel, but also the interests of end-users, by best facilitating the prospect of uninterrupted service, and the potential for Pivotel to continue to supply an off-net service that can compete with and constrain the Major MNOs' on-net services.

## 13. **Conclusion**

- 13.1 Continuing declaration in respect of A2P SMS termination services is in the LTIE for the following reasons.
  - (a) It is the only way to ensure continuing competition in the wholesale supply of A2P SMS termination services.
  - (b) There is strong evidence of downstream benefits flowing since the commencement of the FAD, which will only continue if declaration continues.
  - (c) Ceasing declaration will allow Major MNOs to deny access to small or new MNOs, presenting a risk to the achievement of any-to-any connectivity.
  - (d) There is no evidence that continuing declaration of A2P SMS will result in an increase in spam levels. To the contrary, Pivotel's proportion of spam SMS has reduced following introduction of spam filtering and other practices.
  - (e) Overall, Pivotel submits that the ACCC consider the balance of risk to the LTIE.

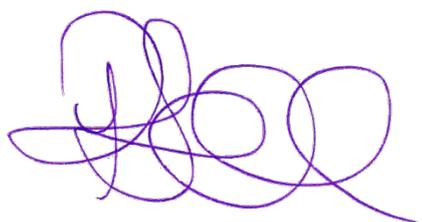
- (i) On the one hand, declaration of SMS termination services has introduced competition to an otherwise uncompetitive market. This submission provides evidence as to the reasons for which that competition will continue if declaration continues. There are strong indicators that continuing declaration will see continuing benefits in the LTIE. There is no risk of harm to the LTIE by continuing declaration for a further period.
- (ii) On the other hand, there is a clear risk that ceasing declaration will result in the market returning to an uncompetitive, monopolistic state, which is wholly contrary to the LTIE.

13.2 Accordingly, the answer to the 'key question' as to "*whether declaration is necessary to prevent MNOs from exercising their market power and to promote competition in the downstream market for A2P SMS services*" must be yes. We strongly urge the ACCC to maintain declaration in respect of A2P SMS termination services.

13.3 We request that the ACCC treat Confidential Annexure A and Confidential Annexure B as confidential and exclude them each from the published version of this submission. We would be happy to answer any questions or provide any further information that may assist the ACCC. For any enquiries please contact Robert Sakker by email – [robert.sakker@pivotel.com](mailto:robert.sakker@pivotel.com).

Yours sincerely

**Pivotel Group Pty Limited**



**Robert Sakker**

Executive Director

## SCHEDULE 1 – PIVOTEL’S MOBILE NETWORK OPERATIONS

### 1. Pivotel is a carriage service provider

1.1 Pursuant to section 87 of the Telco Act, Pivotel is a carriage service provider if it:

- (a) supplies a listed carriage service,
- (b) to the public,
- (c) using:
  - (i) a network unit owned by one or more carriers; or
  - (ii) a network unit in relation to which a nominated carrier declaration is in force.

1.2 ‘Carriage service’ and ‘listed carriage service’

- (a) A listed carriage service is a carriage service between two points in Australia (Telco Act s 16). A carriage service is a service for carrying communications by means of guided and/or unguided electromagnetic energy (Telco Act s 7). This is a broad definition and would include the carriage, transmission, switching or receipt of SMS (taking into account the definition of ‘carry’ in s 7 which includes transmit, switch and receive).
- (b) Pivotel supplies services which may be characterised as carriage services, and which fall within the MTAS service description. For example, it supplies messaging services which include carriage of SMS to the relevant SMS point of interconnection between Pivotel’s network and another carrier’s network.

1.3 Supply to the public

- (a) The agreements by which Pivotel supplies carriage services like these are for the carriage of communications between 2 end users which are unrelated to Pivotel. As such, its supplies are ‘supplies to the public’ pursuant to section 88 of the Telco Act.

1.4 Network units

- (a) The final element of the carriage service provider definition requires that the carriage service provider use a network unit to provide its carriage services, and that the network unit either be owned by a licensed carrier or be the subject of a nominated carrier declaration.
- (b) Pivotel’s network units are designated radiocommunications facilities, as contemplated in section 28 of the Telco Act. They are base stations used for supplying a public mobile telecommunications service, as defined in section 32 of the Telco Act.

- (c) The relevant radiocommunications facilities used to provide the carriage services are owned by Pivotel Satellite Pty Limited (Formerly Localstar Pty Limited) <sup>14</sup> and Pivotel Mobile Pty Limited<sup>15</sup>.

## 2. Pivotel's current mobile network and imminent growth

- (a) The network units by which Pivotel delivers its cellular mobile service consist of 4G (LTE) mobile base stations utilising a distributed core architecture (EPC) that is fully integrated with the rest of Pivotel's Australian network. As at May 2019 Pivotel's commercial service consisted of nine 4G base station encompassing 12 radio cells on a mine site in Western Australia and one 4G base station encompassing a single cell at a site owned by the University of New England, near Armadale, New South Wales. Pivotel has under construction fourteen additional base stations near the townships of Wickepin and Mt Barker in Western Australia. These base stations are being built by Pivotel and co-funded by the Western Australia Government under the Digital Farms Initiative and contract awarded to Pivotel in August 2018. Customers will be able to make and receive voice calls, SMS and data calls to and from anywhere while connected inside the coverage areas. Pivotel accesses licenced spectrum for use at all of these sites under a Spectrum Authorisation Agreement with Vodafone Hutchison Australia.
- (b) Pivotel's mobile satellite voice, SMS and low speed data services operate on a roaming model whereby domestic Pivotel SIM cards roam onto the mobile satellite services of our mobile satellite partners being Iridium, Inmarsat, Thuraya and Globalstar. In the case of Globalstar, Pivotel also owns and operates 3 large satellite gateways at Dubbo, Mt Isa and Meekatharra with a total of ten radio communication antennas that track the Globalstar LEO satellites and provide the satellite to ground component of the end to end user communication.
- (c) Calls and messages to and from the satellite terminal or cellular terminal of a Pivotel customer traverse the Pivotel network and Pivotel is interconnected with the major fixed and mobile network operators to facilitate call origination and termination from customers on their networks.
- (d) See Confidential Annexure A – Part 6 for further information.

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<sup>14</sup> Declaration dated 4 April 2003, relating to: "Designated radiocommunications facilities on the purchase by Localstar Pty Ltd and located at:

- Dubbo Gateway, Lot 52 Burraway Road, Brocklehurst NSW 2830
- Meekatharra Gateway, Lot 33 Murchison Downs Road, Meekatharra WA 6642
- Mt Isa Gateway, Lot 33 Lake Moondarah Road Mt Isa Qld 4825
- Globalstar Mobile Switching Centre, 2 Raw Square Stratfield Nsw 2135."

<sup>15</sup> Declaration dated 26 October 2016 in relation to network units described as 'Designated radiocommunications facilities being any radio base stations owned by Pivotel Mobile Pty Limited and used to provide public mobile telecommunications services in Australia'.