OPTUS

Submission to the Australian Communications and Media Authority

Numbering Plan

Confidential Version

July 2024

INTRODUCTION

1. Optus welcomes the opportunity to provide input into the Australian Communications and Media Authority (ACMA) review of the Numbering Plan 2015.

2. There has been a longstanding construct on the allowable use of numbers, which limit their use to services being provided by the service provider that issues them a number. This construct should serve to protect Australians from Scam Calls and Scam SMs. However, the clear experience of Australian consumers shows that numbers are being used in ways inconsistent with the Numbering Plan. This inconsistent use has developed over many years due to a lack of oversight and enforcement of the Numbering Plan. The most effective way to minimise illegal spoofing of numbers is to enforce the existing Numbering Plan.

3. There have been calls by several small, and often international, providers to allow the current incorrect use of numbers. Optus rejects such calls. Providers who make such calls appear unaware of the processes in place to allow the competitive exchange and use of numbers. Australia has a competitive telecommunications environment where customers are free to change providers as they see fit, taking their phone numbers with them through mobile number portability (MNP) and local number portability (LNP).

4. Optus submits that the incorrect use of numbers does not provide any competitive benefit above that provided by the current porting arrangements. On the other hand, incorrect use of numbers leads to material detriment to Australians, including scams and fraud; risks to personal safety and adverse impacts on emergency services as well as on law enforcement agencies.

5. The current incorrect use of numbers has resulted in the current calling line identification (CLI) spoofing endemic experienced by many Australians. Scam Calls and Scam SMs have been a destructive force towards Australian consumers, particularly where the number has been spoofed to impersonate a trusted entity such as a bank or government agency. Optus is seeing hundreds of thousands of calls incorrectly using Australian numbers every day. This must be stopped to protect Australians.

6. The lack of enforcement of the Numbering Plan has resulted in the need for carriers to introduce new mechanism to protect customers against the misuse of trusted numbers. Optus has been an industry leader in countering this threat to protect consumers, including the establishment of the Do Not Originate (DNO) List in 2019, with the cooperation of other participating Carriers/Carriage Service Providers (C/CSPs), with the Australian Taxation Office (ATO), an Optus customer as the first protected entity. Many banks have since joined, including Commonwealth Bank (CBA), Australia and New Zealand Banking Group (ANZ), National Australia Bank (NAB), HSBC Bank Australia. Many other entities are also participating in the scheme.

7. This type of protection afforded by the DNO list should be available to everyone automatically. The current state of number management and enforcement of existing obligations has contributed to the rampant abuse of numbers by scammers, resulting in significant financial losses to consumers and businesses in Australia.

8. Optus submits changes to the Numbering Plan are not needed; rather an improved and enhanced focus on enforcement is required.

SPECIFIC COMMENTS

9.   In this section, Optus provides comments on the questions listed in the consultation paper.

Do you support a principles-based Numbering Plan where associated operational procedures and requirements are developed and managed by industry through codes and guidelines? Why or why not?

10.   Optus supports a principles-based Numbering Plan, with further requirements delegated to industry codes and guidelines. The Numbering Plan should contain a clear outline of the purpose of each number type.

What steps or changes to the current Numbering Plan, or existing or new industry codes, would support the evolution towards a more simplified or principles-based document? Please provide details, including likely timeframes.

11.   Optus submits that the development of a principles-based approach to numbers should utilise the CA Rights of Use (ROU) Code as a starting point. Further, the Numbering Plan should make it crystal clear that no other C/CSP can use numbers of another C/CSP for supplying carriage services unless the C/CSP allocatee of the number by the ACMA has provided prior authorisation, or the numbers have been transferred or ported-out to the other C/CSP.

12.   Optus reiterates that this is how the numbering system is supposed to work under the current CA ROU Code.

Of the number types listed in Table 2, are there any you consider are redundant or becoming less relevant in the industry? What number types that have minimal allocations are being used?

13.   Number types that have do not have any current allocations should be considered redundant.

Should digital mobile numbers be listed as a discrete number type? Why or why not?

14.   Digital Mobile Numbers should be listed as a discrete number type so as to reinforce the rules in the Numbering Plan that apply to restrict their use only by the C/CSP to whom they have been allocated by the ACMA. Optus observes that the Numbering Plan has been routinely ignored for many years by various C/CSPs who are using the original allocatee C/CSP's Digital Mobile Numbers without their authorisation or formal transfer or port-out, without any compliance action by the ACMA.

Are there specific rules that should apply to this number type? If so, please provide details and reasons.

15.   There must still be a requirement for Digital Mobile Numbers to be used only for use with a Public Mobile Telecommunications Service (PMTS) in accordance with the definition of the terms "Digital Mobile Number" and "Digital Mobile Service" in Section 15 of the Numbering Plan. It is also crucial that Mobile Number Portability (MNP) must be supported by all operators who issue these Digital Mobile Numbers to end-users.

16.   Digital Mobile Numbers must only be used for supply of a PMTS, as required under the current regulations. The term "PMTS" is defined in Section 32 of the Telecommunications Act and requires that the service to be supplied by use of a

Telecommunications Network that has Intercell Hand-over functions. The term "Intercell Hand-over" is defined in Section 33 of the Telecommunications Act and requires that the facilities of the Telecommunications Network include at least 2 base stations each of which transmits and receives signals to and from Customer Equipment (CE). However Digital Mobile Numbers appear to have been repeatedly allocated to CSPs that do not operate a Telecommunications Network which has Inter-Cell Hand-over functions, including:

(a)   Sinch Australia Pty Ltd

(b)   Symbio Networks Pty Ltd

(c)   Compatel Limited

(d)   Netsip Pty Ltd

(e)   Lycamobile Pty Ltd

(f)   Travelsim Australia Pty Ltd

(g)   My Number Pty Ltd

(h)   Messagebird Pty Ltd

(i)   Lmgps Ltd

17.   Optus submits that the rules around allocation of numbers should be strengthened to support the rules of use with those numbers.

Internet of Things and machine-to-machine services

18.   Optus agrees that using public mobile numbers is unnecessary for the provision of IoT and M2M services and changes to the Numbering Plan could reduce the demand and use of 10-digit public mobile numbers and instead allow the use of private numbers and public numbers longer than 10 digits in E.164 format.

What is the expected demand for mobile numbers for IoT purposes over the next decade?

19.   Other organisations have produced or commissioned research on the projected use of IoT and M2M, although we note that there appears to be a general consensus that demand will increase for mobile numbers over this time period if mobile numbers remain the only option for use with IoT and M2M services.

Do you support the introduction of different numbers for IoT and M2M communication? Why or why not?

20.   A separate public number range for these services would reduce the demand for Digital Mobile Numbers which are considered to be a finite Australian resource.

Which of the 2 options do you support and why? If neither or another, please explain.

21.   Optus supports the use of a specific public number range for IoT/M2M services and which should conform with the ITU-T Recommendation E.164 format i.e. longer than 10 digits. This would minimise any issues with existing systems. The Numbering Plan also needs to ensure that these numbers have defined portability arrangements to support the movement of IoT & M2M services.

22.   Private numbering schemes are also available as an option for future study.

If numbers were to be introduced to support IoT and M2M communication, how would the operation of these numbers differ from existing numbers and what specific rules would be required?

23.   Numbers that are used for IoT/M2M services must only be provisioned for IoT or M2M services and not for traditional mobile services accessed by non-IoT/M2M Customer Equipment (CE) like mobile phones, dongles, data modems etc. IoT/M2M numbers must have portability arrangements to ensure customers are not locked into a single supplier. The IoT/M2M numbers should not be subject to any Numbering Charges (similar to Local Numbers which are exempt from any Numbering Charges). This will enable greater take up of innovative IoT/M2M services and applications in Australia.

Should short codes be introduced for use in the Numbering Plan? Why or why not?

24.   Short Codes are primarily used in Australia for community service purposes, such as reporting Scam SMS, checking if a person's phone has a dependency on the 3G network, or for a person performing administration tasks on their phone plan.

25.   The Numbering Plan should define the number ranges to be used for Short Code SMS. Individual number allocation and management of community service short codes could be managed by Communications Alliance. Currently, some numbers are "shared", although are on-net only, such as 3498, used by Optus and Telstra to check if a phone will be impacted by 3G network shutdowns.

26.   Any public use of short codes other than by MNOs must be through the numbers being allocated to MNOs, which are then issued to an end user who gains Rights of Use (ROU) to that number, with a right to use the number on the network that issued them the number. This could also be handled in a manner similar to the issuing of smart numbers (13/1300).

27.   The consultation paper states that the use of short codes can enable a high volume of SMs. However Optus submits that they will have no impact on the volume of SMs that can be sent.

Are there any risks or benefits in introducing short codes, for example, on scam mitigation efforts?

28.   The concept of a shared public short code is in opposition to the concept of ROU and could be an enabler of Scam SMs. Modern smartphones group messages into threads that are from the same Sender ID (numeric or alphanumeric). This would see messages from multiple senders entering the same message thread, with the receiver being unable to differentiate the senders.

29.   CA C661:2022 Reducing Scam Calls and Scam SMs Industry Code also states in clause 5.2.1, that:

Originating C/CSPs must prevent carriage of SMs where the A-Party does not hold Rights of Use to the Number.

30.   And further, in clause 5.2.2, that:

If a SM uses an Alphanumeric Sender ID, Originating C/CSPs must only originate SMs on their Telecommunications Network using an Alphanumeric Sender ID where:

a) it does not present as a Number;

31.   A shared shortcode would also confuse issues of who a reply message would be routed to, if it was other than the scenario presented in the response to the previous question.

Do you agree or disagree that mobile numbers should only be used to originate calls from mobile networks? Why or why not?

32.   Please see response to the related Question 7. Digital Mobile Numbers must only be used to originate calls from mobile networks i.e. Telecommunications Networks which have Inter-Cell Hand-over functions. The illegitimate use of Digital Mobile Numbers has seen a decrease in the level of trust that people have in these numbers and has also been a significant factor for Scam Calls & Scam SMs. The industry has a defined and developed Mobile Number Portability process for moving Digital Mobile Numbers between CSPs and for broadcasting the current CSP of a Digital Mobile Number. If any CSP can originate calls or originate messages from any Digital Mobile Number without porting that number then this would undermine the entire porting process and create loopholes that any CSP could exploit.

Are there specific rules or updates that should apply to mobile numbers, including to support changes in technology and in the use of mobile numbers? If so, please provide details and reasons.

33.   Please see response to the related Question 7. Digital Mobile Numbers have been routinely misused in recent years with no compliance enforcement action by the ACMA - however this is not a valid argument to justify allowing continued misuse in future. If any CSP wants to use a Digital Mobile Number, then the Digital Mobile Number should firstly be ported to that CSP under the terms specified in the CA MNP Code. The ACMA must not undermine the existing portability process by permitting or encouraging CSPs to use Digital Mobile Numbers to establish calls and messages without firstly porting them.

Is the definition of digital mobile services in the Numbering Plan still fit for purpose? If it should it be updated, how?

34.   Please see Optus' response to the related Question 7. The definition of Digital Mobile Services is still fit for purpose, although there has been a lack of compliance enforcement action by the ACMA, which may see a need for the definition to be updated to make it abundantly clear as to the permitted use of Digital Mobile Services.

What specific changes or updates to the Numbering Plan, including definitions, should be made to accommodate these services?

35.   VoIP services are not specifically attached to a geographic area. It would make sense for ranges to be available that are not geographically restricted. Local Zones are no longer relevant to consumers, and these should also be redesigned into larger zoning, such as States/Territories being the smallest unit.

What types of numbering rules should be included in the Numbering Plan for these types of services?

36.   The ACMA had previously explored the concept of "Location Independent Communications Services" i.e. LICS for VoIP services with it's own dedicated number range. However, this was unsuccessful due to no takeup of the LICS number range. In view of this experience, we do not recommend creating any new numbering rules for these services which are supplied today with Local Numbers (e.g. NBN based VoIP services) & Digital Mobile Numbers (e.g. VoLTE services).

Should the definition of 'Local Service' be changed? If so, how?

37.   Yes. The concept of a service needing to be identifiable by location, is obsolete. It is also undesirable from a privacy standpoint.

Are standard zone units still required? Why or why not?

38.   Consumer phone plans typically refer to "national" calls. The concept of a local call is outdated, as Telstra has closed and sold off many local exchanges and VOIP has drastically reduced the points of interconnect between carriers. Less and less consumers every year purchase or hold a landline with a local number and the prefixes of phone numbers have become less and less meaningful. Almost every carrier offers a voice bundle of inclusive calls and the concept of a cheaper Local call has become meaningless to the few remaining consumers who still purchase a local number. Under the existing plan the ACMA already issues blocks of local numbers with broad geographic significance, It would make sense to get rid of SZUs and reclassify all existing local number ranges that are currently associated with a SZU to become numbers of broad geographic significance that are state based only.

39.   The requirement in the TCPSS Act for all CSPs to offer and support untimed local calls needs to be removed. Optus believes that there would be minimal impact to Consumers as charges for Local Calls have become irrelevant to Consumers as most CSPs now charge similar rates for local and national calls.

If it is possible, do you support the potential move to broader geographic zones and accompanying number ranges?

40.   Yes, Optus supports getting rid of SZUs. The smallest unit should be at a state level, to align with area codes.

What costs or burdens could result from such a change?

41.   While there would be an initial cost burden to make changes in systems, this would be offset by the removal of ongoing compliance costs relating to the maintenance of systems that are no longer logical to be maintained. Systems to calculate local call charging are expensive to maintain. Optus believes that there would be minimal impact to Consumers as Local Calls have become irrelevant to Consumers and most CSPs now charge similar rates for local or national calls.

Should there be rules about the use of Australian numbers to originate calls from locations outside Australia? Why or why not?

42.   Australian numbers should not be used to originate calls from outside Australia where those calls would enter an Australian network through their international switches with the exception of Digital Mobile Numbers used for international outbound mobile roaming. Where such calls are legitimate, such as an Australian company, or a company that provides services to people in Australia, they should use a service that has a direct SIP trunk to their C/CSP in Australia. There are already some rules about such call cases in the CA C661:2022 Reducing Scam Calls and Scam SMs Code.

Noting stakeholders have cited scam calls originating offshore using Australian numbers as the reason for this suggestion, should any such rules be in the Numbering Plan or another instrument? Please explain your answer.

43. Australian numbers have been used by scammers who are primarily based offshore. An Australian number is essentially a credential that is more trusted within Australia than an overseas number, particularly where a scammer is impersonating an Australian entity, such as a bank.

44. International Mobile Roaming is the only logical exception to any proposal to prohibit the use of Australian numbers outside of Australia, other than where an organisation has a direct SIP connection into its Australian provider.

What would be the effect of such rules on businesses and consumers?

45. Australian consumers would be better protected against scams, as all CSPs would have no valid reason for accepting any Australian local numbers from any overseas sources, other than where they have a direct business relationship with that organisation, and are bringing in their phone traffic through a direct SIP connection.

Should there be stronger, or more prescriptive, rules for allocating numbers to C/CSPs in the Numbering Plan? Why or why not?

46. Optus submits that the primary issue with the current management of numbers relates to effective compliance of existing rules rather than the rules themselves. The Numbering Plan has compliance issues rather than issues of not being prescriptive enough. It is clear that numbers are being misused, such as Digital Mobile Numbers being used for services other than a PMTS.

47. Numbers are also being allocated to CSPs who have no right to be issued Digital Mobile Numbers.

Should the ACMA seek additional information from CSPs during the application process for numbers? Would this strengthen the integrity of the numbering ecosystem?

48. The ACMA should collect sufficient information during the application to ensure that the numbers will be used in a manner compliant with the Plan. No entity, other than a mobile network operator should be issued Digital Mobile Numbers.

Should CSPs be required to seek additional information from other CSPs before being able to sub-allocate/assign numbers to them? Why or why not?

49. The C566:2023 Number Management – Use of Numbers by Customers Industry Code states that "A CSP that Assigns, or Churns an Allocated Number(s) to another CSP outside of the Numbering System, must maintain a record, for as long as that Number is Assigned or Churned…".

50. It is the responsibility of each CSP to comply with the requirements of the Numbering Plan. It is not necessary for sub-allocations to result in recording the use by those other CSPs.

Should the ACMA consider enhancing its registers in the Numbering System to improve visibility of all current CSPs and the numbers they hold? Why or why not?

51. Optus supports further work on this proposal. This would improve transparency and better protect the ROU of the Numbers allocated by ACMA to CSPs.

Do you support the ACMA revisiting its proposal for CSPs to be registered in the Numbering System before they can be assigned numbers?

52.   Optus supports CSP registration as a broad concept. CSP registration in the Numbering System would assist ensuring that allocation of numbers are consistent with the obligations in the Plan. It would assist compliance activities by the ACMA.

Do you support provisions requiring annual audits in the Numbering Plan? Why or why not?

53.   Optus supports the ACMA examining this issue further. There is merit in ensuring that numbers allocated to CSPs are done in a manner consistent with the Plan. Annual audits could form part of the ongoing compliance work by the ACMA.

What specific costs or burdens could arise due to these proposals? Please provide specific details.

54.   Optus does not anticipate that these proposals would impose material compliance costs.

Should any rules be introduced in the Numbering Plan for 'pooled' numbers? If so, why, and what should the rules be? If not, why not?

55.   This practice is already prohibited under the CA C661:2022 Reducing Scam Calls and Scam SMs Industry Code, specifically clause 5.2.1, which states that "Originating C/CSPs must prevent carriage of SMs where the A-Party does not hold Rights of Use to the Number."

56.   Any C/CSPs that are doing this should be subject to compliance action.

What are your views about using the Numbering Plan to enforce the use of EPIDs?

57.   There are currently many CSP identifiers in use, including:

      (a)   TIO created their own Provider ID

      (b)   IPND Team created their own CSP ID

      (c)   ACMA has some carrier IDs

58.   Optus agrees that EPID is a superior scheme, as it capable of being used for Mobile Number Portability (MNP), Local Number Portability (LNP), and NBN services. This system is also managed by Communications Alliance in accordance with an Industry Guideline.

59.   It is not clear how the Numbering Plan would incorporate a CSP identifier, and such matters are better addressed at Industry Code or Industry Guideline level.

What are the specific costs or burdens that may result from this suggestion?

60.   If EPID is to be adopted as a general CSP identifier across multiple systems and instruments, then those systems would require work to accommodate this, and the relevant industry codes and other documents would require updating.

Do you support these initiatives? Why or why not?

61.   The telecommunications industry has efficiently handled cases of geographic and mobile numbers being used for scam activities, such as through obligations in the Reducing Scam Calls and Scam SMs Industry Code. However, we agree that ACMA should have the ability to cancel EROU of a smartnumber in cases where it is being used for scam activity, and to quarantine the number for a period of 12 months.

Are the number portability provisions in the Numbering Plan still fit for purpose? Why or why not?

62.   An updated Numbering Plan must not undermine number portability. If a Rights of Use Holder wishes to use their number with a different provider, they must be able to port that number away from their current CSP.

Are there any additional number portability provisions the ACCC should consider including in the Numbering Plan? Please explain.

63.   Optus submits that the ACMA should not issue numbers to any CSP who doesn't support number portability, and who cannot provide that capability within 6 months of commencing service. If a CSP is unable or unwilling to support number portability, that CSP should be required to surrender any numbers issued to them back to ACMA.

64.   Compliance activity on this could form part of the annual audit process suggested above.

65.   Optus submits that it is anti-competitive for any CSP to continue to not support number portability, and the ACMA should undertake enforcement action against any CSP not supporting portability.

Do you support the use of numbers by multiple CSPs? Why or why not?

66.   Numbers cannot and should not be allocated to multiple CSPs. Optus only provides services using numbers that Optus has issued to our customers including numbers allocated to Optus as well as numbers ported into Optus via the Industry Code defined MNP, LNP or INP processes Where one Carrier starts to use a Number that is not ported or allocated to that Carrier, this can cause numerous risks (as outlined below) and should be considered as a breach of the Numbering Plan and the ACMA Registered Number Portability Codes.

Annual number charge

67.   Optus pays an initial allocation fee in addition to the annual numbering charge on the eligible numbers allocated to Optus, and has in effect licenced them from the Government for exclusive use and monetisation opportunities with an Optus telephony service. ACMA has failed to enforce this exclusivity for many years. The current practices of CSPs who are breaching the many regulatory instruments are using Optus assets for their own monetary gain without any agreement or compensation. Any future endorsement of this approach by ACMA would amount to the seizure of assets and would require compensation.

68.   ACMA has a responsibility to enforce the use of numbers to those entities they have been licensed to, as much as they have an obligation to enforce the exclusive use of other licensed items, such as spectrum.

69.   Allocation of numbers to multiple CSPs would impact the following regulatory obligations.

(a)   **Support to Law Enforcement & National Security Agencies for legal interception, data retention & agency assistance**: This would result in substantial increase in the number of warrant requests received by Optus from Agencies for CLI (Calling Line Identifier) & customer validation as well as Optus ICP (Interception Capability Plan) updates. In addition to putting strain on Optus' limited LELU (Law Enforcement Liaison Unit) resources, this would also result in increased costs on Agencies for issuing the increased number of warrants.

(b)   **Notifications Management**: Optus will have to develop new Network & IT systems for logging and managing the notifications from other CSPs, if other CSPs were required to notify Optus that they are using Optus numbers, so as to be compliant with law enforcement requests.

(c)   **Emergency Calls:** If the subject Optus number is an MSN (Digital Mobile Number), the ECP & ESOs would expect to see enhanced location information such as Push MOLI, Pull MOLI & AML for an emergency call from that MSN. We are concerned accurate information would not be provided to these agencies if another CSP (if it happens to be a non-Mobile Carrier i.e. not an MNO) uses the Optus MSN for sending the emergency call to the ECP & ESOs.

(d)   **Significant Network Outages & Welfare Checks**: If another CSP, who is using Optus numbers, and was originating emergency calls using an Optus MSN, and experiences Significant Network Outages, we are concerned that the other CSP may not undertake the Welfare Checks & associated Police Referrals for the failed emergency calls which used an Optus MSN and the ACMA would be seeking answers from Optus as the C/CSP holding the MSN.

(e)   **Number Portability:** Some proposals have had the other CSP notifying the issuing CSP of their use of their numbers. How will LNP & MNP work if the customer decides to port out the Optus number to another C/CSP (other than the CSP misusing Optus numbers)? If the ROU Holder were to later port-out the number to yet another CSP, a new notification would need to be sent from the CSP misusing Optus numbers to the Gaining CSP. Procedures for detection and notification of such a change would be required so as to assist law enforcement and national security agencies.

(f)   **IPND:** The IPND database is the key source of truth for IPND users such as Law Enforcement Agencies, National Security Agencies, ECP & ESOs as it is updated daily with public number customer data supplied by C/CSPs. As pointed out in the submission from Home Affairs Department to Communications Alliance in the development of the CA C661:2022 Reducing Scam Calls and Scam SMs Industry Code, CLI Accuracy is a vital requirement for the Agencies. How would IPND be updated to inform the Agencies that calls are also being originated by another CSP from an Optus number for which Optus is listed as the associated CSP? Who has the responsibility to update IPND? How would this be done to show two or more CSPs associated with the same number where the current IPND DB only allows for listing one associated CSP with a number? There could be more than two CSPs that

have been engaged by the ROU Holder to make outbound calls on the same number.

(g)   In the event that a person made a 000 call from a mobile device, the address that is presented to the ESO may not be the address that the person is calling from. This may lead to delays in an emergency response.

(h)   **Numbering Plan** – Arrangements under the Numbering Plan rules could be compromised. Would allocation of numbers to a C/CSP remain as relevant requirement in the Numbering Plan if ACMA allows a number to be concurrently used by multiple C/CSPs without being either ported-out or transferred from between C/CSPs or used by a C/CSP under a prior agreement with the holding C/CSP? Who would have the responsibility to update ACMA NUMB DB in this scenario?

(i)   **Preselection** - How would this work in a scenario of multiple CSPs.

(j)   **Unwelcome Calls Tracing** – How would Holding C/CSPs comply with the requirements to trace Unwelcome Calls for compliance with the CA C525:2017 Handling of Life Threatening and Unwelcome Communications Industry Code as the Holding C/CSP will not have access to the other C/CSP's CDRs?

(k)   **Life Threatening Calls –** How would Police know that they also need to contact C/CSPs other than the Holding C/CSP for investigations under CA C525:2017 Handling of Life Threatening and Unwelcome Communications Industry Code?

(l)   **Overseas Call Termination –** How would a Gateway C/CSP like Optus know where to send an inbound overseas call for termination to the Australian B-Party if the same Public Number is being used by multiple C/CSPs? The same issue arises for termination of domestic calls received by Optus Wholesale products like Call Termination Service, CSP-Connect and Carrier Interconnect services.

70.   If the ACMA was to allow multiple CSPs to hold a number the following legislation, regulation, and industry codes would all require significant re-writes:

Mobile Number Portability (MNP)
- CA C570:2009 MNP Industry Code
- ACCC Direction to ACA (ACMA) on MNP of October 1999
- Telecommunications Numbering Plan 2015

Local Number Portability (LNP)
- CA C540:2013 LNP Industry Code
- ACCC Direction to ACA (ACMA) on LNP of September 1997
- Telecommunications Numbering Plan 2015

IPND
- CA C555:2020 IPND Industry Code
- Telecommunications Act 1997 (Division 3A and Schedule 2 (Part 4))

Handling of Life Threatening and Unwelcome Communications Industry Code CA C525:2017 [Unwelcome Calls & SMS tracing]

Telecommunications Numbering Plan 2015 [Numbering]

Telecommunications (Annual Charge) Determination 2014 [Number Tax]

Telecommunications (Interception and Access) Act 1979 [ICP, LI, DR, Assistance to law enforcement & national security agencies]

Telecommunications Act 1997 [Assistance to law enforcement & national security agencies, Part 14 & Part 15]

Telecommunications Emergency Call Services Determination 2019 [Location information]

45. Which of the 3 potential options do you consider to be most viable in the circumstances and why? Please provide details.

71. The practice of multiple-service providers being used to provide services on the one number has been demonstrated here to not be viable under the current regulatory construct. There have been 3 options presented by the ACMA:

    (a)   no change/Status quo

    (b)   introduce rules to manage the multiple-service practice

    (c)   prohibit the multiple-service practice.

72. On the matter of the first option, this would be to continue to ignore the construct on the permitted use of numbers, and to not enforce existing requirements. It is not suitable for this state to continue.

73. The second option would require widespread rewriting of existing obligations, which would be a time consuming endeavour, and at great expense to retrofit existing systems.

74. Both option 1 and 2 would be to accept a large volume of Scam Calls and Scam SMs to continue to reach telecommunication users in Australia. This has proven to be a very expensive approach, for which individuals bear the cost of scams.

75. The third option is to recognise the existing construct, and for the ACMA to enforce existing regulations. This would have a dramatic impact on reducing the level of Scam Calls and Scam SMs that reach people in Australia. Optus strongly supports this and sees this is the only viable option.

46. What are the potential benefits and costs to industry and end-users of each option?

76. In addition to number allocation costs and annual numbering charges, Optus incurs other costs relating to the use of numbers. Examples include:

    (a)   **Network & IT systems conditioning costs**: Based upon the number's allocation from the ACMA, Optus would have incurred costs for conditioning the number in Optus' various Network & IT systems to support its use with the Optus telephony service supplied to the Optus customer. These costs will not be recovered by Optus if it does not receive the originating calls revenue from the Optus customer or any commercial compensation from other CSPs or any call termination revenue from other C/CSPs or International Carriers who

choose to send outbound calls for termination on B-Party Optus number to another CSP instead of sending such calls to Optus.

(b) **Compliance burden**: The compliance burden & costs associated with the Optus number would remain on the Holding CSP (Optus) and could potentially be increased the following key regulatory obligations without Optus receiving the originating calls revenue from the Optus customer or any commercial compensation from other CSPs.

If option 2 were preferred, what should the rules be and how would these best be achieved/implemented? Are different solutions required for voice and SMS or fixed and mobile services? What are the potential timeframes needed to implement these arrangements from an industry and consumer perspective?

77.   If option 2 (introduce rules to manage the multiple-service practice) is endorsed by the ACMA, the answers provided to question 43 outline the many regulatory instruments and legislation that would require updating at great expense. Each of those items would require their own detailed consideration on how to address the relevant issues.

Are there other solutions or measures that could be implemented to address the concerns raised to date?

78.   If a Rights of Use Holder wants to use their phone number with another provider, mobile and local number portability enables them to do so, and has been the longstanding approach for this.

Is legitimate use of the multiple-service practice a problem? Please explain and provide specific details.

79.   While there is no legitimate use of numbers across multiple service providers, where a legitimate Rights of Use Holder misuses a number with a CSP that did not issue the number, it would provide an opening for Scam Calls and Scam SMs.

80.   Mobile Network Operators and other Carriers are implementing solutions to prevent numbers arriving onto their networks from illegitimate sources. While there have been suggestions of whitelisting numbers so they can circumvent these protections, it isn't possible to whitelist them only for the ROU Holder, but rather, the numbers are made available for use by anyone. This may result in targeting of those numbers, and contributing to an increasing lack of trust in Australian numbers.

Specific questions for stakeholders that use or are affected by multi-service practice
Information and data provided by individual stakeholders in response to the questions below will be understood to be provided in-confidence to the ACMA and will not be published.

50. If you are a CSP that uses the multiple-service practice to originate calls/SMs using numbers issued to your customers by another CSP:

(a)   **How many customers and how many numbers in total do you apply this practice to? What number types are used?** Not applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

(b)   **What specific services do you provide to customers using these numbers? What is the total volume of calls and / or SMS sent?** Not

applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

(c) **What is the total revenue received from services provided to customers using this practice?** Not applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

(d) **Do you also offer similar services to customers using numbers you hold and have directly issued to customers?** Not applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

(e) **Would a customer be able to port their number to you and receive an equivalent service to that supplied by their current CSP? If not, why not?** Not applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

(f) **Do you have (or have you attempted to put) any agreements in place with the CSPs that hold the numbers of customers to whom you provide services? If not, do you notify the CSPs of your use of their numbers? If not, why not?** Not applicable to Optus. Optus only permits the origination of calls on our network using numbers issued to the customer by Optus.

If you are a CSP that holds numbers being used by other CSPs to originate calls on another network (on behalf of a customer who has rights of use of the number) using this practice:

a) How many of your customer numbers, that you estimate or are aware of, are being used by other CSPs for this practice? How did you become aware of this use?

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84. The incorrect use of numbers is a pernicious issue across industry and must be eradicated to minimise scam and fraudulent traffic. It is too easy to target Australian end-users through spoofing and incorrect use of numbers. Optus strongly supports the ACMA taking a more active compliance role with the Numbering Plan

If you are aware of another CSP using numbers you hold, have you taken any steps regarding that arrangement (for example, putting an agreement in place, contacting the customer, putting the customers' number on an 'allow' list etc)? If yes, please outline them; if no, why not?

85.   Any use of Optus numbers through other providers without prior written authorisation is not permitted by Optus.