

Review of the Numbering Plan and other instruments

Discussion paper

JUNE 2024

Canberra

Level 3
40 Cameron Avenue
Belconnen ACT

PO Box 78
Belconnen ACT 2616

T +61 2 6219 5555
F +61 2 6219 5353

Melbourne

Level 32
Melbourne Central Tower
360 Elizabeth Street
Melbourne VIC

PO Box 13112
Law Courts
Melbourne VIC 8010

T +61 3 9963 6800
F +61 3 9963 6899

Sydney

Level 5
The Bay Centre
65 Pirrama Road
Pyrmont NSW

PO Box Q500
Queen Victoria Building
NSW 1230

T +61 2 9334 7700 or 1800 226 667
F +61 2 9334 7799

Copyright notice

<https://creativecommons.org/licenses/by/4.0/>

Except for the Commonwealth Coat of Arms, logos, emblems, images, other third-party material or devices protected by a trademark, this content is made available under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

All other rights are reserved.

The Australian Communications and Media Authority has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material.

We request attribution as © Commonwealth of Australia (Australian Communications and Media Authority) 2024.

Contents

Executive summary	1
1. Background	3
2. Legislative framework	4
2.1 Telecommunications Numbering Plan 2015	4
2.2 Telecommunications (Provision of Pre-selection) Determination 2015	5
2.3 Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015	6
2.4 Objects of the <i>Telecommunications Act 1997</i> and regulatory policy	6
3. Telecommunications Numbering Plan 2015	8
3.1 Principles-based	8
3.2 Types of numbers for use	8
3.3 Specification of numbers	11
3.4 Allocation of numbers	14
3.5 Special rules about smartnumbers	16
3.6 Number portability	17
3.7 Use of numbers by multiple carriage service providers	17
4. Telecommunications (Provision of Pre-selection) Determination 2015	25
4.1 Purpose of Pre-selection	25
4.2. Requirements of the Determination	26
5. Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015	27
5.1 Purpose of the Determination	27
Invitation to comment	28
Making a submission	28
‘Reply-to-comment’ period after the consultation closes	28

Contents (Continued)

Appendix A: Consolidated list of issues for comment	29
Appendix B: Prefixes for Standard Zone Unit (SZU)/charging district	33

Executive summary

Telephone numbers are a public resource and are used by the telecommunications industry to enable communications to be carried across telecommunications networks. To enable international communications, the use of numbers is harmonised by a standard made by the International Telecommunications Union (ITU) which says telephone numbers can be up to 15 digits in length including the country code. The ITU otherwise plays a small role in the day-to-day administration of numbers which, in Australia, is the ultimate responsibility of the Australian Government. Under the [Telecommunications Act 1997](#) (the Telco Act) the government has assigned responsibility for managing the supply of telephone numbers, which includes specifying the numbers for use in Australia in connection with carriage services, to the Australian Communications and Media Authority (ACMA).

As well as industry and consumer use, numbering plays an important role in supporting and facilitating various communications policy objectives under the Telco Act and Part XIC of the *Competition and Consumer Act 2010*, *Telecommunications (Consumer Protection and Service Standards) Act 1999*, *Telecommunications (Interception and Access) Act 1979* and a wide range of licence conditions, determinations, industry standards and codes. These include policy objectives related to consumer protection, competition, security and safety, and revenue collection.

Telephone numbers play an important part in the social and economic life of Australians. They are vital for the efficient and effective operations of the telecommunications industry and a competitive telco market and are increasingly integral to connectivity, identity verification and a range of transactions fundamental to our way of life.

Since the [Telecommunications Numbering Plan 2015](#) (the Numbering Plan) was made nearly a decade ago, there have been significant changes in the services provided by carriage service providers (CSPs), and those used and demanded by their customers. For example, since 2015, the proportion of Australians who only have a mobile for voice calls at home has more than doubled from 29% to 63%.¹ In contrast, in the six months to June 2023, only 18% of Australians reported using a fixed line for home calls compared with approximately 70% in 2015, while the number of Australians using messaging and calling apps rose from 24% to 84% over the same period.²

In 2024, consumers expect greater connectivity, coverage, and more sophisticated devices. New services such as satellite networks that support 2-way messaging direct-to-mobiles are increasingly available and in demand. Enterprise and government customers are seeking communication services for greater operational efficiency and to provide and support services such as cyber security, increased use of Internet of Things (IoT), machine-to-machine communication (M2M) and cloud services.³

These changes put pressure on the regulatory arrangements defining the type, specification for use, and allocation of telephone numbers. We have seen a decline in the demand for some services, for example, for premium rate, paging and calling card services which has seen a corresponding fall in the allocation and use of those number types by industry. Meanwhile the growth of other technologies has enabled a

¹ Australian Communications and Media Authority (ACMA), [How Australians make voice calls at home](#), ACMA website, 2022, accessed 31 May 2024.

² ACMA, [Communications and media in Australia: How we communicate](#), ACMA website, 2023, accessed 31 May 2024; ACMA, [Communications report 2014–15](#), ACMA website, 2015, accessed 31 May 2024.

³ ACMA, [Communications supply chain market study: Services, applications and retail](#), ACMA website, 2023, accessed 31 May 2024.

range of new services and ways to connect over communications networks, including using non-numeric identifiers such as alpha tags that are not included in current numbering arrangements. The ongoing high volume of scam calls and short messages (SMS) delivered over telecommunications networks continues to be a problem, with scammers also leveraging off new technologies, and exploiting and misusing numbers causing harm to consumers.

Telephone numbers play a key role in the supply and carriage of telecommunications services. It is important that the Numbering Plan continues to evolve to support the services offered by CSPs and demanded by consumers in the contemporary telecommunications market and that numbering arrangements continue to support the policy objectives underpinning telecommunications and regulation in Australia.

The current review of the Numbering Plan provides the ACMA with the opportunity to remake an instrument that will promote effective and efficient numbering arrangements for this innovative and changing environment.

As part of this review, this discussion paper also seeks comments on the Telecommunications (Provision of Pre-selection) Determination 2015 and Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015, particularly whether these instruments continue to form a necessary and useful part of the legislative framework.

We invite feedback on the topics presented in this discussion paper, noting that these are not an exhaustive or limited list and encourage responses to be detailed, including with suggestions about how any changes might be implemented.

Submissions to this discussion paper will inform our proposals to remake these instruments and we expect to consult on drafts of these instruments in late 2024.

1. Background

The ACMA contributes to maximising the economic and social benefits of communications infrastructure, content, and services for Australia. We do this by:

- > maintaining, enforcing and improving regulation to drive industry performance and protect consumers
- > managing public resources to enable industry to deliver existing and new services.

The ACMA plays an important role in ensuring Australians have access to the communications services they need and use.

The telecommunications landscape is steadily evolving. Technological innovations continue to increase demand for services that challenge the existing rules and arrangements set out in the Numbering Plan.

To assist us to identify what issues industry consider most important to address, in January this year we undertook a scoping exercise and invited 49 stakeholders to provide their views on what should be included for discussion as part of the review. Twelve responses were received.

These stakeholders raised a range of issues, the most recurrent being that the Numbering Plan should:

- > be principles-based, with operational rules and procedures included in associated industry codes
- > promote simplicity and consistency in its structure and definition of number types for example, by removing redundant numbers, and aligning number types with use
- > reflect changes to incorporate technological innovations that have an increasing prevalence in the industry such as Voice over Internet Protocol (VoIP) and IoT
- > clarify rules around the multiple use of numbers practice and other numbering rules considered to affect scam mitigation efforts, such as Australian numbers being used to initiate traffic outside Australia and mobile numbers being used to make calls over non-mobile networks.

Several other changes were also suggested, such as introducing short codes, mandating annual audits for carriage services providers of numbers held, and enforcing use of Eligible Party Identification (EPID) codes in the Numbering Plan.

These issues and suggestions have formed the basis of this discussion paper along with our additional suggested changes to rules for smartnumbers and introducing new number ranges where supply is approaching exhaustion.

2. Legislative framework

Under Part 4 of Chapter 3 of the *Legislation Act 2003*, most legislative instruments ‘sunset’ (that is, they are automatically repealed) on 1 April or 1 October that first occurs 10 years after they are registered. This is an automatic process applying to most legislative instruments regardless of their content.

This discussion paper focuses on gathering information about the instruments in Table 1 that are due to sunset in the near future. Submissions will be used to develop proposals for the future of these instruments. We plan to consult on drafts of these instruments in late 2024.

Table 1: Instruments and sunset dates

Name of instrument	Enabling legislation	Sunset date
Telecommunications Numbering Plan 2015	<i>Telecommunications Act 1997</i> – s 455(1)	1 April 2025
Telecommunications (Provision of Pre-selection) Determination 2015	<i>Telecommunications Act 1997</i> – s 349(1)	1 April 2025
Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015	<i>Telecommunications Act 1997</i> – s 110(3)	1 April 2025

Three other numbering instruments are due to sunset in 2025:

- > the Telecommunications (Annual Charge) Determination 2014
- > the Telecommunications (Collection of Numbering Charges) Determination 2014
- > the Telecommunications (Numbering Charges) (Allocation Charge) Determination 2015.

We also plan to consult on these later in 2024.

2.1 Telecommunications Numbering Plan 2015

Under the Telco Act, the ACMA must, in the absence of a numbering scheme manager⁴, make a plan for the numbering of carriage services in Australia and the use of numbers in connection with the supply of such services. Different numbers may be specified for use in connection with the supply of different types of carriage services.

The plan may set out rules about:

- > the allocation of numbers to CSPs
- > the transfer of allocated numbers between CSPs
- > the surrender or withdrawal of allocated numbers
- > the portability of allocated numbers (including rules about the maintenance of, and access to, databases that facilitate portability)

⁴ In December 2019, the Telecommunications Act was amended, enabling the minister to appoint a numbering scheme manager to manage the numbering of carriage services in Australia, and the use of numbers in connection with the supply of such services. If there is no numbering scheme manager, the ACMA is responsible for these tasks and must make a numbering plan.

- > the use of allocated numbers in connection with the supply of carriage services to the public in Australia (including rules about the issue of allocated numbers by CSPs to customers for use in connection with the supply of carriage services).

The ACMA's predecessor agency made the first plan in 1997, and it was remade in March 2015 as the [Telecommunications Numbering Plan 2015](#). The ACMA has subsequently progressed 2 amendments to the Numbering Plan to further benefit the industry and consumers.

The first of these variations was made in 2016. The substantial amendments in this variation:

- > clarified CSP obligations for porting notifications
- > provided for automation and post-payment of freephone or local rate numbers in set circumstances
- > clarified the criteria that the ACMA must consider for surrender of numbers in a non-standard size.

The second variation was made in 2022. Under this variation, the amendments:

- > supported scam disruption initiatives
- > enabled efficient allocation of numbers
- > removed outdated provisions
- > provided additional geographic numbers to meet expected demand.

The Numbering System

The ACMA manages the allocation, transfer and surrender of numbers largely via the [Numbering System](#), which enables CSPs, individuals and businesses to purchase and manage different types of numbers, including mobile numbers, geographic numbers and smartnumbers.

The operation of the Numbering System largely reflects the rules in the Numbering Plan.

2.2 Telecommunications (Provision of Pre-selection) Determination 2015

The [Telecommunications \(Provision of Pre-selection\) Determination 2015](#) (the Pre-selection Determination) applies to carriers or CSPs that supply an eligible standard telephone service. The Determination requires that these carriers and CSPs permit an end-user to pre-select another CSP for pre-selectable services.

It allows consumers to obtain line rental and local call services from one service provider but use another for:

- > national long-distance calls
- > international calls
- > fixed-to-mobile calls.

Pre-selection was introduced in the 1990s to encourage competition among fixed-line voice and integrated service delivery network (ISDN) services. There are no pre-selection requirements in place for NBN retail suppliers, wireless or mobile service providers.

The ACMA last reviewed the Pre-selection Determination in 2020 in compliance with subsection 349(15B) of the Telco Act. At the time there was limited support to either revoke or vary the instrument, so the instrument was retained in its current form.

The ACMA last reviewed the Pre-selection Determination in 2020 in compliance with subsection 349(15B) of the Telco Act. At the time, there was limited support to either revoke or vary the instrument, so the instrument was retained in its current form.

2.3 Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015

Subsection 110(3) of the Telco Act provides that the ACMA may, by written instrument, determine that persons carrying on, or proposing to carry on, one or more specified kinds of telecommunications activity constitute a section of the telecommunications industry. In accordance with paragraph 109(c) of the Telco Act, for the purposes of Part 6 of the Act, a telecommunications activity includes supplying goods or services for use in connection with the supply of a listed carriage service.

Using the power in subsection 110(3) the ACMA made the [Telecommunications \(Section of the Telecommunications Industry – Portability Service Suppliers\) Determination 2015](#), which identifies that parties who carry on, or propose to carry on the supply of portability services, constitute a section of the telecommunications industry, identified as Portability Service Suppliers.

This instrument ensures that:

- > Portability Service Suppliers can participate with CSPs in developing number portability codes
- > the application of those codes to Portability Service Suppliers can be enforced by the ACMA.

2.4 Objects of the *Telecommunications Act 1997* and regulatory policy

In undertaking these sunset reviews, the ACMA will consider the main objects of the Telco Act including whether the instruments and any proposed changes support a regulatory framework that promotes the:

- > long-term interests of end-users of carriage services or of services provided by carriage services
- > efficiency and international competitiveness of the Australian telecommunications industry
- > availability of accessible and affordable carriage services that enhance the welfare of Australians.

The ACMA will also consider other objects of the Telco Act, including to:

- > promote the supply of diverse and innovative carriage services
- > promote the development of an Australian telecommunications industry that is efficient, competitive, and responsive to the needs of the Australian community
- > promote the effective participation by all sectors of the Australian telecommunications industry in markets (whether in Australia or elsewhere)
- > provide appropriate community safeguards in relation to telecommunications activities and to regulate adequately participants in sections of the Australian telecommunications industry.

The ACMA notes the regulatory policy intent in the Telco Act that telecommunications be regulated in a manner that: promotes the greatest practicable use of industry self-regulation; and does not impose undue financial and administrative burdens on participants in the Australian telecommunications industry but does not compromise the effectiveness of regulation in achieving the objects of the Telco Act.

3. Telecommunications Numbering Plan 2015

Issues raised in this section were informed through an early scoping consultation with key stakeholders in January and February 2024. However, the issues listed within this section are not exhaustive. We welcome further comments on the current Numbering Plan and suggested changes and clarifications you think are important to support the effective and efficient numbering of carriage services in Australia and the use of numbers for the supply of those services in the contemporary telecommunications environment. It is important to note that this paper outlines a range of issues for discussion, but the ACMA is not necessarily endorsing any or all outlined positions at this stage.

Some issues raised by stakeholders, particularly around use of numbers by multiple CSPs (multiple-service practice), contain numerous legislative and technical aspects that must be considered, and which may not necessarily be addressed solely through changes in the Numbering Plan.

3.1 Principles-based

We recognise the value of a Numbering Plan that is simplified, streamlined and easy to understand across the industry and for consumers. Eliminating unnecessary and administrative wording and redundant provisions, and updating it to reflect contemporary needs will assist industry to have a clearer understanding of its obligations and meet the needs of consumers.

The current iteration of the Numbering Plan delivered significant improvements to the previous Numbering Plan's structure and content, which was difficult to understand due to its length and complexity.

Several industry stakeholders have reiterated the desire that the Numbering Plan continue to move towards being a principles-based document. In this case, the Numbering Plan would specify the numbers for use in connection with the supply of carriage services to the public and the principles for number allocation, transfer, and surrender functions; while detailed operational procedures and requirements would be set out in industry codes and guidelines. It has been suggested that this approach would promote flexibility as codes and other documents could be adapted faster than the Numbering Plan to meet changing customer and operational requirements and avoid duplication and inconsistencies across numbering rules and regulations.

Questions

1. 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?
2. 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.

3.2 Types of numbers for use

The Numbering Plan sets out numbers that are for use in connection with the supply of carriage services to the public in Australia. Therefore, number types in the plan need to reflect and support services offered by CSPs and demanded by consumers in the

contemporary telecommunications market. Stakeholders in early scoping have noted the review provides an opportunity to define number types and ranges in a more consistent structure, align number types with current use and remove number types no longer in demand. Some specific suggestions raised by stakeholders are discussed below and we welcome further suggestions.

Removal of unused number types from the Numbering Plan

Some stakeholders noted that there are number types listed in the Numbering Plan that are redundant or have minimal use, such as premium rate numbers, and should be removed. This would free these numbers for other uses or new number types. A list of all number types and the percentage of the numbers available in the Numbering System is shown in Table 2. We note there are some number types with no current allocations.

Table 2: Numbers for use and availability of those numbers in the Numbering System as of May 2024

Number type	Allocated	Spare	Percentage available
Geographic*	122,312,400	45,587,600	27.2%
Freephone	178,253	820,650	82.1%
Local rate	240,436	771,812	76.2%
Premium rate	100,117	2,203,883	95.7%
Premium rate and paging	0	1,000,000	100%
Restricted access and premium	0	1,000,000	100%
Satellite telephone	90,000	4,910,000	98.2%
Paging	0	700,090	100%
Data network access	24,000	476,015	95.2%
Digital mobile*	83,180,000	16,820,000	16.8%
Community service	1	912	99.9%
Operator service	134	17,524	99.2%
Internal network service	4,002	8,698,004	99.9%
Testing service	90,202	7,800,000	98.9%
Calling card	0	100	100%
International service	3	123	97.6%
Incoming only international	1,010,101,030,003	103,532,407	0.01%
Interconnection and routing	31	59	65.6%
Virtual private network	6	94	94%

*Numbers that have been designated in the Numbering Plan but not been released for allocation in the system have not been counted towards the spare numbers.

Questions

3. 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?
4. Could existing number types be repurposed for another use? If so, which number types and for what purposes (for example, which services)?
5. Are there any specific costs or impacts of removing number types and associated provisions from the Numbering Plan? If so, please provide details.

Digital mobile numbers

In the Numbering Plan, numbers for digital mobile services are categorised as special service numbers (see sections 16, 31, 32 and Schedule 5 of the Numbering Plan).

When the current Numbering Plan was remade in 2015, it was decided that digital mobile numbers should remain as a subset of special service numbers because there were no specific rules that were solely applicable to these numbers and that might warrant digital mobile numbers being a discrete number type.

However, several stakeholders in our scoping consultation have suggested that listing digital mobile numbers as a discrete number type should again be considered. Some stakeholders have noted that mobile numbers are one of the most dominant types of numbers used by consumers. There have also been many developments in how mobile numbers are used that may warrant a discrete number type and specific rules.

Some stakeholders in the scoping consultation have also called for clarification of rules for using mobile numbers (see section 3.3 below).

Questions

6. Should digital mobile numbers be listed as a discrete number type? Why or why not?
7. Are there specific rules that should apply to this number type? If so, please provide details and reasons.

Internet of Things and machine-to-machine services

IoT refers to the multiple wireless and wired interconnections between personal, consumer and industrial devices. Popular uses for IoT include devices that enable home automation or health monitoring. Many IoT devices are located in cities that may use smart meters, sensors, and lights. IoT includes M2M services, which refers to the connection and sharing of information between devices.

The use of IoT promotes innovation, productivity and efficiencies across several industries and demand for IoT technology is expected to grow. Consequently, many stakeholders have suggested that the Numbering Plan should define numbering for IoT and M2M services.

Some IoT devices operate on mobile networks, such as Narrowband IoT and LTE Cat-M1 (a category of cellular long-term evolution technology for machines), and therefore use a 10-digit number. However, it has been suggested that using public mobile numbers is unnecessary and changes to the Numbering Plan could reduce the demand and use of 10-digit public numbers and instead allow the use of:

- > private numbers
- > public numbers longer than 10 digits.

Questions

8. What is the expected demand for mobile numbers for IoT purposes over the next decade?
9. Do you support the introduction of different numbers for IoT and M2M communication? Why or why not?
10. Which of the 2 options do you support and why? If neither or another, please explain.
11. Is there an existing number range that would be suitable for this use, or should a new number range be introduced?
12. 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?

Short codes

In our scoping consultation it was suggested that the ACMA introduce short codes as numbers for use in the Numbering Plan.

A short code is a number of between 3 and 6 digits that facilitates direct customer communication via a short message service (SMS). Short codes can enable a high volume of SMSs, which is commonly used for promotion and marketing, account alert notifications, one-time passwords, appointment reminders or campaigns. Short codes can be in 2 forms: shared and dedicated. A shared short code can be used by multiple businesses, which means one user does not have to bear the cost of the entire code. Dedicated short codes are associated with just one brand, promoting a sense of familiarity, and reducing the chance of misuse. In the UK, the number reservation and allocation system for short codes is managed by the Shortcode Management Group.

In Australia, mobile numbers and alphanumeric sender IDs are more commonly used for these forms of communications. Six-digit premium rate numbers beginning with 19 are listed in Schedule 4 of the Numbering Plan.

Questions

13. Should short codes be introduced for use in the Numbering Plan? Why or why not?
14. Are there any risks or benefits in introducing short codes, for example, on scam mitigation efforts?

3.3 Specification of numbers

The Numbering Plan specifies types of numbers that may only be used in connection with the supply of particular services.

Technological innovations have introduced services that are challenging the specifications regarding use of numbers in the Numbering Plan. For example, section 19 states that a geographic number may only be used in connection with the supply of a local carriage service that terminates calls to a location in the standard zone unit, or for which the call is charged as if the call was terminated in the standard zone unit. However, VoIP enables such numbers to be used regardless of the call recipient's geographic location.

Use of digital mobile numbers

The current Numbering Plan specifies 10-digit 04 and 05 numbers (the latter has not yet been released by the ACMA) for use associated with a digital mobile service

(defined in the Numbering Plan as a public mobile telecommunications service supplied by a network using digital modulation techniques).

Technology and over-stamping allow calls using mobile numbers to originate and be supplied not only on traditional mobile networks via mobile service providers and equipment, but also using, for example, voice over wi-fi and over fixed-line networks. Mobile numbers are also used to support satellite services, application-based messaging and IoT and M2M services (see above).

During our scoping consultation some stakeholders suggested that the ACMA should clarify the use of mobile numbers; in particular, that mobile numbers should only be used by mobile service providers to originate calls over mobile networks. One stakeholder noted that the majority of scam calls using mobile numbers come from fixed-line networks, and such a change would result in a reduction of these forms of scams. Some also suggested that the Numbering Plan should be updated to specify mobile numbers should only be allocated to mobile network operators. Some industry stakeholders also noted that when calls using mobile numbers originate with non-mobile infrastructure, location and routing data cannot be transmitted, which could affect services requiring closest point-of-contact, and emergency services.

Other stakeholders suggested that the Numbering Plan should be updated to include definitions that better support and reflect current technology and expanding services and uses of mobile numbers.

Questions

15. Do you agree or disagree that mobile numbers should only be used to originate calls from mobile networks? Why or why not?
16. 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.
17. Is the definition of digital mobile services in the Numbering Plan still fit for purpose? If it should it be updated, how?

VoIP, application-based messaging and cloud-based services

Most stakeholders in the scoping consultation acknowledged the need for the Numbering Plan to be updated to recognise current technologies. Stakeholders noted new developments in IP routing and that interconnection and routing to Australian numbers is now VoIP and Session Initiated Protocol (SIP) based.

One stakeholder pointed out that the Numbering Plan was developed in a time when local access services required geographic and local routing of calls. Given that calls and messages can now be originated and terminated on IP networks, it was suggested the ACMA should consider these new developments and the resulting impact on who can hold and use numbers.

Some stakeholders suggested expanding the definition of 'Local Service' to clarify the inclusion of VoIP services and other virtual voice services as a local service under the Numbering Plan.

In addition to VoIP, some stakeholders suggested that a remade Numbering Plan should recognise Unified Communications as a Service (UCaaS), and Communications Platform as a Service (CPaaS) due to growing demand for these services by business customers. These services use both local and mobile numbers and changes to the plan could involve amendments to the definitions of local and mobile numbers.

Another stakeholder noted that the current Numbering Plan assumes SMS and MMS will use mobile numbers however, that is no longer the case with application-based messaging forms such as application-to-person (A2P) SMS and MMS which may use Alphanumeric Sender IDs. Reflecting these changes, the stakeholder noted the need for updated and new definitions for A2P SMS and A2P MMS and consideration of rules on the use and display of mobile numbers in applications.

We understand that some of the new services and technologies discussed above are part of the innovative services being offered to consumers as part of the contested multiple-service practice discussed in section 3.7 below.

Questions

18. What specific changes or updates to the Numbering Plan, including definitions, should be made to accommodate these services?
19. What types of numbering rules should be included in the Numbering Plan for these types of services?
20. Should the definition of 'Local Service' be changed? If so, how?

Standard Zone Units

Standard Zone Units (SZUs) have traditionally been used by CSPs to determine whether a call from a local service number is a local call charged on an untimed basis or a long-distance call charged on a timed basis based on the distance between calling and called parties. A stakeholder has suggested that, given the developments in IP routing (discussed above) and predominance of flat rate telephony plans, the requirement to issue numbers in set standard zone units should be removed and replaced with simpler arrangements that rezone and allocate numbers in areas of broad geographic significance in each state or territory. This would remove the administrative burden on CSPs to calculate call rates and bill callers for local rate and national calls. (Access to untimed calls is an obligation in Part 4 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999*).

Questions

21. Are standard zone units still required? Why or why not?
22. If it is possible, do you support the potential move to broader geographic zones and accompanying number ranges?
23. What costs or burdens could result from such a change?

Traffic origination from outside Australia

Several stakeholders in the scoping consultation suggested that the Numbering Plan should be amended to prohibit the use of Australian numbers to originate traffic from outside of Australia, citing that there are no rules that limit Australian numbers coming into the country as a local call. They advised that many scam calls, particularly finance scams, originate overseas using local numbers.

Other CSPs have noted that this is a common practice for legitimate businesses that operate in Australia but maintain offshore operations such as call centres. They often present Australian numbers to enable customers to identify the business and return the call. We recognise that prohibiting the use of Australian numbers offshore may directly affect these businesses and other arrangements such as international roaming.

Questions

24. Should there be rules about the use of Australian numbers to originate calls from locations outside Australia? Why or why not?
25. 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.
26. What would be the effect of such rules on businesses and consumers?

3.4 Allocation of numbers

Availability of numbers

Numbering is a key resource that allows CSPs to supply services to customers and it promotes competition. It is therefore important to provide enough numbers to meet potential demand.

The ACMA needs to ensure there is sufficient supply for future allocations of local service numbers. Prefixes have been identified for areas where, based on historical allocation data, current ranges may be exhausted in the next 10 years, and no replacement range has yet been designated. A list of proposed prefixes, the areas in which they would be designated, and the prefixes they will supplement are in Appendix B. Numbers will not be released for allocation to CSPs until the existing ranges are approaching exhaustion.

Questions

27. Are there any comments on the list of proposed numbers in Appendix B?
28. Should the ACMA withdraw unused numbers under section 94 of the Numbering Plan before releasing additional prefixes or numbers?
29. Are there any number conservation strategies the ACMA should consider in a remade Numbering Plan?

Rules for allocation

One stakeholder suggested that an updated Numbering Plan needs strong rules to ensure the Numbering System provider only allocates numbers to carriers and CSPs that will use them and can support all the requirements of the Numbering Plan. This includes carriers and carriage service providers (C/CSPs) declaring they are a registered C/CSP when they apply and that they can support number portability requirements.

Other regulators have requirements similar these. For example, when allocating numbers to providers, the UK regulator [Ofcom seeks information](#) from the applicant that explains their proposed activities and how their network will operate, including:

- > how the applicant will interconnect with other networks
- > whether the services the applicant intends to offer are appropriate to the number ranges applied for and in accordance with the rules in the National Telephone Numbering Plan
- > that the applicant has included contact details for a named individual. This information check is repeated each time numbers are applied for.

Ofcom also recently introduced [good practice guidelines](#) to help prevent misuse of sub-allocated and assigned numbers. The guidelines set out steps it expects providers to take for these numbers including: 'know your customer' checks, checks on intended use of numbers, and checks when additional numbers are requested.

In 2023, the ACMA registered the [Industry Code C566:2023 Number Management – Use of Numbers by Customers](#). This code requires CSPs to maintain records of the numbers a CSP assigns or churns outside the Numbering System, including the:

- > number assigned or churned
- > date of the assignment or churn
- > name and contact details of the CSP.

As part of our most recent review of the Numbering Plan in 2022, we proposed CSPs should be registered under section 122 of the Numbering Plan before they can be assigned numbers. This change would be consistent with current obligations that require CSPs to be registered in the Numbering System before numbers can be allocated to them by the ACMA. We considered this would provide better transparency of CSPs that hold Australian numbers, a key tool in preventing the misuse of numbers by scammers. While there was some support from stakeholders for this change, most industry participants did not support the proposal, noting it did not provide visibility on which numbers were held.

One stakeholder in the scoping consultation suggested the updated Numbering Plan should include a requirement for an annual audit of allocated, issued, and ported numbers by the ACMA and CSPs, to accurately record the current CSP against each number including matching against data in the Integrated Public Number Database (IPND).

Questions

30. Should there be stronger, or more prescriptive, rules for allocating numbers to C/CSPs in the Numbering Plan? Why or why not?
31. Should the ACMA seek additional information from CSPs during the application process for numbers? Would this strengthen the integrity of the numbering ecosystem?
32. 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?
33. 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?
34. Do you support the ACMA revisiting its proposal for CSPs to be registered in the Numbering System before they can be assigned numbers?
35. Do you support provisions requiring annual audits in the Numbering Plan? Why or why not?
36. What specific costs or burdens could arise due to these proposals? Please provide specific details.

Pooled numbers

Pooled numbers are numbers that are shared across multiple end-users, generally for business purposes. They are used by companies such as SMS aggregators that provide services to allow their customers to send booking confirmations and appointment reminders by SMS. Instead of each customer having their own number to send SMS, the provider has a pool of numbers, and messages can be sent from any number within this pool. The provider's software allows for any return message to be delivered directly to the sender of the message. Any subsequent messages are likely to be sent from a different number.

There are currently no specific rules in the Numbering Plan for using numbers in this way. The providers of these services often obtain numbers from multiple CSPs. The numbers used will depend on which network is being used to send the messages.

Question

37. 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?

Eligible Party Identification codes

EPID codes are issued to CSPs by Communications Alliance. They can be used to identify CSPs for processes such as local number portability and NBN transfer.

A stakeholder suggested that an updated Numbering Plan should include reference to EPIDs as the industry recognised provider ID for associating all types of numbers with CSPs and require CSPs to record the EPID in all types of number movement as a way of determining which CSPs are offering services on numbers.

As EPIDs are allocated and monitored by a body external to the ACMA, this may not be able to be enforced within the ACMA's regulatory framework.

Questions

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

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

3.5 Special rules about smartnumbers

Cancellation of enhanced rights of use for numbers used for scam and fraud purposes

The 2022 variation of the Numbering Plan gave the ACMA the power to withdraw numbers from CSPs if there was evidence that a number was used in scam activity.

The arrangements for smartnumbers require additional consideration. When someone purchases a smartnumber, they get the enhanced rights of use (EROU) to that number and approach a CSP to supply a service to that number. The ACMA can withdraw the number from the CSP on the grounds of scam activity, however, the smartnumber holder retains the EROU and can reconnect a service to the number with another CSP almost immediately.

The current Numbering Plan only allows the ACMA to cancel EROU if the EROU-holder is convicted of making a false statement (within the meaning of subsection 136(1) of the Criminal Code) in their application.

We propose to explore whether the grounds for cancellation of EROU be extended to include scam activity on the number. EROU holders would be notified of any proposed cancellation and be given the opportunity to respond before a decision is made.

We are also considering whether it is appropriate to place a restriction on smartnumbers that have been withdrawn on the grounds of scam activity to prevent them being obtained by another applicant within the following 12 months.

Question

40. Do you support these initiatives? Why or why not?

3.6 Number portability

The ACMA can only include number portability provisions in the Numbering Plan at the direction of the Australian Competition and Consumer Commission (ACCC). The ACCC has previously given the ACMA a number of directions regarding number portability in the Numbering Plan and these remain in force.

Question

41. Are the number portability provisions in the Numbering Plan still fit for purpose? Why or why not?
42. Are there any additional number portability provisions the ACCC should consider including in the Numbering Plan? Please explain.

3.7 Use of numbers by multiple carriage service providers

Telecommunications arrangements have traditionally operated on an understanding that only the CSP that holds a number it has issued to a customer will provide carriage services for that number. If a customer wishes to obtain carriage services on that number from another CSP, they have the option to port the number to that CSP.

Multiple-service practice

In discussions in late 2021 and early 2022 during the development of the Reducing Scam Calls and Scam SMS Industry Code (the Scams Code), it surfaced that some CSPs are challenging this traditional model by supplying outbound carriage services using numbers held by other CSPs.

This occurs when a customer of the first CSP is the rights of use holder for a number and requests a new outbound service on that number from a second CSP. The second CSP then over-stamps the calling line identification (CLI) for outgoing calls/messages with the number held by the first CSP. Put another way, numbers held and issued to a customer by one CSP are used to originate traffic on the networks of other CSPs, at the request of the rights of use holder.

Box 1: Examples of services provided using the multiple-service practice

- > A large business based in Australia is customer of a CSP that has issued it numbers. The business has call centres located offshore that contact customers in Australia. These calls are made via cloud-based platforms managed by specialist CSPs, not via the first CSP's network. The numbers issued by the first CSP are used (over-stamped) for these calls, as the numbers are part of the business' brand and are recognised and trusted by the customers.
- > A bank has ported some of its numbers to another CSP but wants outgoing calls to display the bank's primary number, which has not been ported to the other CSP.
- > A business wants to ensure that numbers for its experts/specialists located in Australia are displayed on outgoing calls, so that customers who call back will connect to the right area.
- > Any bulk messaging services requiring an inbound reply path. This includes, but is not limited to:
 - > marketing messages using a 'STOP' reply to facilitate their opt-out obligations
 - > small and medium businesses (such as hairdressers, real estate agents, trades etc.) using their mobile phone numbers to send automated/bulk messages to customers/clients using an A2P (application to person) messaging platform

- > 2-way messaging services for call centres
- > appointment and booking confirmations
- > fraud detection alerts seeking verification
- > alarm and alert monitoring with reply acknowledgements
- > health/wellbeing check ups
- > consumer based services, such as bulk messaging to parents of a school or local sporting teams

Under the Scams Code, all originating carriers and CSPs have an obligation to prevent carriage of calls or SMSs where the domestic caller or customer does not hold rights of use.

Over-stamping, which is central to the multiple-service practice, can be considered as technically and functionally the same as CLI spoofing. CLI spoofing is commonly used by scammers impersonating legitimate businesses.

Box 2: Example of CLI spoofing

A scammer 'spoofs' a bank's telephone number when it calls or texts an intended victim, so that it looks like the communication is from the bank. The scammer pretends to be from the bank, and on smart phones, texts will look like a legitimate text from the bank (for example, they will appear in the same message streams/lists as actual messages from the bank). This is designed to trick the call recipient into providing information that will allow the scammer to access the call recipient's bank account and steal their money.

Industry views of the multiple-service practice

Since becoming aware of the multiple-service practice, we have met with a number of CSPs that use or oppose using numbers in this way. Stakeholders also provided views on this practice as part of the scoping consultation. We have found industry views of the practice are polarised. Current regulations (see below) do not explicitly prohibit or allow this practice, as they were developed before this use emerged. Industry representative groups, as well as individual carriers and CSPs, have sought regulatory clarity and intervention on this issue.

For carriers/CSPs that have expressed strong opposition to the multiple-service practice ('opposing' CSPs), their objections have centred on how it affects public safeguards and commercial and regulatory arrangements. They claim it significantly undermines scam mitigation initiatives and other critical safeguards, such as data in the IPND. Some also claim that they lose revenue because of the multiple-service practice, while bearing all the compliance and regulatory burdens associated with the numbers used for the practice.

We understand that the general, shared position of CSPs that oppose the practice is that CSPs should only originate calls and SMSs on their own network for numbers issued to customers by that CSP (with limited exceptions, such as international roaming).

They are also concerned that if the multiple-service practice is allowed, it may further open the door to misuse by bad actors. This is because the multiple-service practice uses over-stamping, which is functionally the same as CLI spoofing.

Some opposing CSPs have suggested that CSPs that engage in the practice could provide the services to the customer using different numbers that they hold. While the communication would come from a different number than the customers' usual

number, the SMs could include the relevant contact details of the customer and information to identify the sender. These opposing CSPs claim this would ensure that all CSPs meet their regulatory obligations, and public safeguards would not be compromised, however, we consider this approach would likely be exploited by brand impersonation scammers and undermine scam mitigation efforts.

In contrast, CSPs that support the multiple-service practice ('supporting CSPs') claim that it should be allowed to continue as there is customer demand, it is already widespread and long standing, and there are no significant negative consequences. Their argument for the practice primarily centres on meeting customer demand and promoting innovation and competition.

Their position is that the multiple-service practice is ubiquitous (nationally and internationally) and has now been available for around a decade. They claim that services provided via the multiple-service practice (see Box 1 above) are popular with large business and enterprise customers but are also used by small businesses and consumers and that the multiple-service practice enables customers to:

- > choose a service that suits their needs at reasonable cost
- > establish a reply path back through their own numbers, which are essential to their 'brand' and are recognised and trusted by customers
- > provide redundancy options, if their primary CSP experiences an outage.

Supporting CSPs suggest that the public safeguard concerns raised by the opposing CSPs have not eventuated and it is not realistic to prohibit this practice, given its prevalence and demand from customers.

There are different views among the supporting CSPs about implementing measures to manage/regulate the multiple-service practice. Some supporting CSPs oppose any measures and argue they would add undue costs and stifle innovation and competition. Others indicate support for the introduction of some measures, such as managing arrangements through bi-lateral agreements (including multi-homing and routing the traffic from the number being used for over-stamping to/through the issuing CSP) or introducing network numbers and presentation CLIs attached to each call or SMs, which would enhance transparency.

Regulatory context of the practice

The numbering of carriage services in Australia and the use of numbers are regulated under the Telco Act, the Numbering Plan and industry codes.

Pursuing and implementing substantive changes that address the concerns raised about the practice would be an iterative and gradual process. There are numerous legislative and technical aspects that must be considered, as well as changes that may be required under other acts, instruments or industry codes including those that may sit outside the ACMA's direct remit. The key concerns about the prevalence of scam activities are unlikely to be resolved solely by the revised Numbering Plan.

The Numbering Plan and industry codes

Part 22 of the Telco Act provides for the regulation of numbering of carriage services. The ACMA is required to make and administer a plan for the numbering of carriage services in Australia and the use of numbers in connection with the supply of such services, that is, the Numbering Plan.

The Numbering Plan is supported by a range of industry codes and guidelines and contractual arrangements between CSPs. Together, these set out a framework whereby a CSP is considered to hold a number if the number has first been specified by the ACMA and then:

- > allocated to the CSP by the ACMA via the Numbering System
- > transferred to the CSP from another CSP via the Numbering System
- > ported to the CSP from another CSP
- > sub-allocated to the CSP via contractual arrangements with another CSP.

The holder of a number may issue the number to the customer to supply a carriage service to the customer. Customers have rights of use associated with a number, which in practical effect, means they can port a number to another provider. Numbers are conditioned for use on a particular network and regulatory obligations predominantly fall on CSPs who hold the numbers.

The regulatory arrangements do not contemplate CSPs providing services on numbers held by other CSPs, so the multiple-service practice is not explicitly prohibited or condoned.

The Integrated Public Number Database (IPND)

The Telco Act also provides for the IPND, which is a repository of all public numbers in Australia. The IPND is maintained by Telstra Limited (Telstra) under a carrier licence condition and Schedule 2 to the Telco Act (the service provider rule). There are strict controls on who can access the IPND and how the data can be used. The ACMA has specified access authorisation, compliance monitoring and enforcement roles in relation to the IPND. The database is used for a range of critical purposes including the emergency call service, the emergency alert system and law enforcement.

The service provider rule requires that if a CSP supplies a carriage service to an end-user (customer) and the end-user has a public number, the CSP must give Telstra such information as it reasonably requires to fulfill its licence condition to provide the IPND. Telstra's licence condition specifies the information that the IPND must include for each public number, including the customer's phone number, name, service and directory addresses, the type of service, whether the service is listed or unlisted, and details about the CSP who provides the service.

Although the service provider rule does not preclude the possibility of multiple CSPs providing services to a number, Telstra's licence condition more clearly assumes a one-to-one relationship between CSPs and numbers. This is reflected in the IPND Data Users and Data Providers Technical Requirements for IPND, which set out the information required by the IPND Manager; the C555:2020 Integrated Public Number Database (IPND) industry code; and the technical design of the database which was established to have one record per number.

Number charging and cost recovery

The numbering charges framework is set out under the Telco Act, the *Australian Communications and Media Authority Act 2005*, the *Telecommunications (Numbering Charges) Act 1997* (Numbering Charges Act) and other legislative instruments made by the ACMA under those acts. The ACMA's powers to set allocation fees and collect the annual numbering charge (ANC) are set out in the Numbering Charges Act. The ANC applies to the 'holder of number' as defined by the Numbering Charges Act, which is a narrower definition than the broader industry definition set out above.

The multiple-service practice challenges this framework because, unlike sub-allocations/assignments, holding CSPs are generally not aware of other CSPs using their numbers and supporting CSPs effectively avoid charges.

Reducing scams

The Scams Code places enforceable obligations on CSPs to identify, trace, and block scam calls and scam SMSs. A key objective specified in Section 4.2 of the code is to improve CLI accuracy. For calls that originate domestically, originating carriers and CSPs must prevent carriage of calls where the A-Party (consumer) does not hold rights of use for the number, with the intention of this rule being to minimise CLI spoofing. This rule does not prevent the multiple-service practice, however, as legitimate end-users should hold the rights of use for the numbers.

Initial assessment

After considering information provided by CSPs to date, our observations are that the multiple-service practice:

- > is longstanding, widespread and popular with consumers (rights of use holders)
- > if prohibited, may result in increased costs to consumers and reduced competition, as the types of services offered through the multiple-service practice may increase in cost or no longer be available
- > provides some challenges to scam reduction efforts
- > may undermine some public safeguards
- > results in inequitable sharing of costs and regulatory burdens associated with the numbers used
- > if managed/regulated, would likely result in further costs to industry, which could impact provision of services and result in increased costs for consumers.

Specific evidence and data about the cost and impact of adverse outcomes arising from the multiple-service practice have not yet been provided. Similarly, no examples, evidence or data has been provided about the benefits to either allowing or prohibiting the practice. However, based on consultation we consider that the practice may raise some potential risks to the work of critical users of the IPND.

Questions

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

44. Can you provide some evidence/data of the benefits or harms of this practice? Please provide details and indicate if this information is provided in confidence.

In representing their respective positions, both opposing and supporting CSPs have stressed the impact on consumers. The opposing CSPs have focused on consumer safeguards and impact on scam mitigation efforts in particular, while supporting CSPs have focused on consumer choice and demand for this practice by businesses.

We consider a way forward should consider these positions and the following objects of the Telco Act:

To provide a regulatory framework that promotes:

- > the availability of accessible and affordable carriage services that enhance the welfare of Australians
- > the supply of diverse and innovative carriage services and content services
- > the development of an Australian telecommunications industry that is efficient, competitive, and responsive to the needs of the Australian community.

To provide appropriate community safeguards in relation to telecommunications activities and to adequately regulate participants in sections of the Australian telecommunications industry.

Potential solutions

Based on the information we have obtained, we have identified 3 broad options:

- > no change/Status quo
- > introduce rules to manage the multiple-service practice
- > prohibit the multiple-service practice.

No change/Status quo

If the multiple-service practice has been used for over 10 years, as some stakeholders suggest, and is prevalent throughout the telco industry, it could be argued that the case for regulatory intervention might not be strong, noting it was only raised as an issue by CSPs in late 2021 and primarily in relation to scams. Up to that point we had not received specific reports or evidence of harms related to CSPs using this practice to supply additional services to legitimate rights of use holders.

An argument for this approach is it does not disrupt the market and what might be longstanding arrangements for consumers and business. It appears to support competition and choice for consumers. The asserted downside are complexities in addressing scams, and the risk that scam prevention activities might accidentally capture legitimate traffic. Those CSPs who advocate for the multiple-service practice to be prohibited may be reluctant to make agreements with other CSPs that would allow the practice to continue. Some opposing CSPs are already using/trialling measures to prevent CLI spoofing by scammers at the network level. As the multiple-service practice utilises over-stamping, this may result in indiscriminate blocking of calls and SMS originating on the networks of CSPs that do not hold the number but have been initiated at the request of a customer who hold rights of use for the number.

Introduce rules to manage the multiple-service practice

Rules or arrangements could be put in place that allow the multiple-service practice to continue but place obligations on CSPs that use or are affected by the practice. This approach would address some of the key concerns identified. For example, rules or arrangements could require one or more of the following outcomes:

- > CSP B (the CSP that provides a service to a number it does not hold) must advise CSP A (the holder of the number) of the numbers it uses (to provide visibility and address some of the public safeguard concerns). This could be done bilaterally, or potentially via an industry register.
- > CSP A must have processes in place (for example, placing number used by other CSPs on an allowlist) so that the relevant numbers are not blocked or impeded by any of its scam reduction activities or related processes (to make sure the multiple-service practice can continue without impeding scam mitigation activities).
- > CSP B must pay a fee to CSP A for use of its numbers (potentially a percentage of the amount cost recovered from CSP As by government and to address any regulatory cost, and commercial concerns, without impeding the provision of multiple services on numbers). This could be done via bilateral arrangements between CSPs, or in connection with an industry register. It may involve recovering ANC pro-rata where applicable, or potentially other costs for any measures put in place to manage the practice.
- > CSP B must have robust processes in place (such as 2-factor authentication) so that it can be satisfied it is dealing with the rights of use holder before providing services to customers (to protect against scams and fraud). These measures would build on and complement other current verification rules introduced to mitigate the risk of scams.

We consider one or more of the above outcomes could be implemented in the short to medium term, potentially via a combination of changes to industry codes, and new (or changes to existing) regulations.

Prohibit the multiple-service practice

Rules could be considered to effectively prohibit the multiple-service practice. This would expressly require all CSPs to introduce measures that only allow traffic to originate from the network of the CSP holding the number.

This means numbers held and issued to a customer by one CSP (CSP A) could not be used to originate traffic on the networks of other CSPs (CSP B), if requested by the rights of use holder (the customer). If a customer wants additional outbound services (such as those listed in Box 1) using numbers issued by CSP A they could either:

- > obtain those services directly from CSP A or
- > port their number/s to CSP B and obtain services from CSP B.

If either CSP does not offer the full suite of services required by the customer, or the services are not competitively priced, the customer may have to obtain services from 2 different CSPs using different numbers supplied by each CSP.

As it appears that the multiple-service practice has been used for many years and is prevalent throughout the telco industry, a key risk is that we would be prohibiting an established practice used to deliver innovative carriage services valued by business customers who want to display a single number their customers are familiar with for outbound communications. This could be disruptive for businesses and CSPs currently using this practice.

Questions

45. Which of the 3 potential options do you consider to be most viable in the circumstances and why? Please provide details.
46. What are the potential benefits and costs to industry and end-users of each option?
47. 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?
48. Are there other solutions or measures that could be implemented to address the concerns raised to date?
49. Is legitimate use of the multiple-service practice a problem? Please explain and provide specific details.

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?
 - b) What specific services do you provide to customers using these numbers? What is the total volume of calls and / or SMS sent?
 - c) What is the total revenue received from services provided to customers using this practice?
 - d) Do you also offer similar services to customers using numbers you hold and have directly issued to customers?

- 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?
- 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?

51. 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?
- b) 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?
- c) Do you provide similar services to those your customers are seeking to obtain from other CSPs? If so, are you aware of why your customers aren't obtaining these services from you?
- d) What effect does this practice have on your business? What specific costs (if any) do you incur as a result of your numbers being used for this practice? Have there been any harms or detriments to your business or your customers because of this practice? Please provide specific details.

4. Telecommunications (Provision of Pre-selection) Determination 2015

4.1 Purpose of Pre-selection

Pre-selection enables customers with a fixed-line eligible standard telephone service (as defined under section 349(10) of the Telco Act) to choose one provider for their line rental and local calls and another for long-distance, mobile, international, and some operator-assisted calls (pre-selectable services).

Pre-selection was introduced in the early 1990s to encourage competition between telecommunications providers on fixed-line networks by enabling consumers to access competing services for some voice services.

The obligation to provide pre-selection applies to carriers or CSPs that supply an eligible standard telephone service to fixed line and some existing fibre-based services. Pre-selection is not required to be provided on services supplied on mobile networks or the NBN.

Pre-selectable services are provided to end-users by C/CSPs in 2 main ways:

- > Directly – where a customer obtains line rental and local calls from one carrier and specifically selects another provider for long distance, international and / or fixed-to-mobile calls either on a call-by-call basis or as an ongoing arrangement usually by using a code. This type of pre-selection is predominately used by residential customers.
- > Through wholesale arrangements – for example, a CSP may buy a local carriage service from a carrier and use pre-selection to bundle it up with its own long distance and fixed-to-mobile services to provide a seamless end-to-end service to its customer. These wholesale arrangements support delivery of services to both residential and business customers.

Our 2020 review of the Pre-selection Determination found that demand for, and use of pre-selection has fallen significantly with the growth of bundled service offerings, more flexible contracts, increased use of mobile services and the decline of fixed-line services. Pre-selection use fell 68 % between 2017 and 2020, with the greatest decrease attributable to residential consumers. The review also expected that the demand from end-users for pre-selection would continue to fall as the NBN roll-out reached completion⁵ and with continued steady increase in the number of mobile services in use, including as a substitute for fixed line services.

We note that pre-selection is part of the ACCC's regulatory framework for the fixed originating access service (FAOS). In March 2024 the ACCC released its final inquiry report on the FAOS and decided to extend the declaration of the service for a further 5 years. In the absence of a determination under section 350A of the Telco Act, the ACMA has discretion on remaking the Determination.

⁵ In December 2020, the Minister for Communications, Cyber Safety and the Arts [declared](#) that the NBN should be treated as built and fully operational.

4.2. Requirements of the Determination

The Determination requires pre-selectable services to be provided for calls made using an eligible standard telephone service (as defined under subsection 349(10) of the Telco Act) to any of the following:

- > a geographic number or local number, that is not a local call
- > an access code specified for use with an international direct dial service
- > a special services number specified for use with an operator service that is a selectable shared number
- > an access code that is specified for use with an international ring-back price service
- > a special services number specified for use with a digital mobile service.

The obligation to provide pre-selection applies to carriers or CSPs that supply a standard telephone service.

Questions

52. Is the Pre-selection Determination still fit for purpose? Please provide reasons.
53. Is the Pre-selection Determination still required to support the competitive delivery of long distance, international and fixed-to-mobile calls? What is the demand for pre-selection? Please provide details.
54. Should the ACMA remake the Determination? If so, are there any changes that should be made to the Determination?
55. What would be the likely effect of allowing the Determination to sunset on end-users, and/or to any other arrangements, including on the operation of the FAOS?
56. Are there any other factors the ACMA should consider when reviewing the Determination?

5. Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2015

Chapter 10 of the Numbering Plan mandates the portability of certain telecommunications service numbers.

Participants in the telecommunications industry, through Communications Alliance, have developed industry codes (which the ACMA registers) including the Local Number Portability Industry Code (C540:2023) and the Mobile Number Portability Industry Code (C570:2009) that detail how industry participants interact to port geographic numbers and mobile service numbers respectively.

5.1 Purpose of the Determination

The current Determination identifies and names Portability Services Suppliers as a section of the telecommunications industry. Without this Determination, Portability Services Suppliers could not formally participate in the drafting and consultation for the number portability codes or be subject to potential compliance action.

Portability Service Suppliers play a significant role in number portability. These services are essential for smaller CSPs that rely on other parties for information to route calls or other support in porting geographic numbers. The Determination defines 'portability services' as:

Portability Services are supporting services provided to carriers or CSPs in relation to the provision and operation of Number Portability. These services include:

- > port administration services
- > ported number register database maintenance or provision, and
- > the provision of network information services, or intelligent network database services, for call routing.

In remaking the current Determination, we would continue to identify that the parties providing portability services are participants in the telecommunications industry.

Questions

57. Is the Determination still fit for purpose? Please provide reasons.
58. Should the ACMA remake the Determination?
59. Are there any other factors the ACMA should consider when reviewing the Determination?

Invitation to comment

Making a submission

The ACMA invites submissions on the issues raised in this discussion paper as well as any other matters related to the effective and efficient operation of these instruments.

- > [Online submissions](#) can be made by uploading a document. Submissions in PDF, Microsoft Word or Rich Text Format are preferred.
- > Submissions by post can be sent to:

The Manager
Numbering Policy and Regulation Section
Australian Communications and Media Authority
PO Box 13112 Law Courts
Melbourne Victoria 8010

Submissions and consultation enquiries can be emailed to:
numberingplanreview@acma.gov.au.

The closing date for submissions is **COB, Monday 1 July 2024**.

Publication of submissions

The ACMA publishes submissions on our website, including personal information (such as names and contact details), except for information that you have claimed (and we have accepted) is confidential.

Confidential information will not be published or otherwise released unless required or authorised by law.

‘Reply-to-comment’ period after the consultation closes

We will publish submissions as soon as possible after the consultation closes on 1 July 2024.

We will then open a reply-to-comment period for 3 weeks. This allows stakeholders to offer feedback and further views in response to the submissions made to the consultation.

We will provide more information when initial submissions are published.

Privacy

View information about our policy on the [publication of submissions](#), including collection of personal information during consultation and how we handle that information.

Information on the *Privacy Act 1988*, how to access or correct personal information, how to make a privacy complaint and how we will deal with the complaint, is available in our [privacy policy](#).

Appendix A: Consolidated list of issues for comment

Telecommunications Numbering Plan 2015

Principles-based

1. 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?
2. 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.

Removal of unused number types from the Numbering Plan

3. 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?
4. Could existing number types be repurposed for another use? If so which number types and for what purposes (for example, which services)?
5. Are there any specific costs or impacts of removing specific number types and associated provisions from the Numbering Plan? If so, please provide details.

Digital mobile numbers

6. Should digital mobile numbers be listed as a discrete number type? Why or why not?
7. Are there specific rules that should apply to this number type? If so, please provide details and reasons.

Internet of Things / machine-to-machine

8. What is the expected demand for mobile numbers for IoT purposes over the next decade?
9. Do you support the introduction of different numbers for IoT and M2M communication? Why or why not?
10. Which of the 2 options do you support and why? If neither or another, please explain.
11. Is there an existing number range that would be suitable for this use, or should a new number range be introduced?
12. 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?

Short codes

13. Should short codes be introduced for use in the Numbering Plan? Why or why not?
14. Are there any risks or benefits in introducing short codes, for example, on scam mitigation efforts?

Calls over non-mobile networks

15. Do you agree or disagree that mobile numbers should only be used to originate calls from mobile networks? Why or why not?
16. 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.
17. Is the definition of digital mobile services in the Numbering Plan still fit for purpose? If it should be updated, how?

VoIP, application-based messaging and cloud-based services

18. What specific changes or updates to the Numbering Plan, including definitions, should be made to accommodate these services?
19. What types of numbering rules should be included in the Numbering Plan for these types of services?
20. Should the definition of Local Service be changed? If so, how?

Standard Zone Units

21. Are Standard Zone Units still required? Why or why not?
22. If it is possible, do you support the potential move to broader geographic zones and accompanying number ranges?
23. What costs or burdens could result from such a change?

Traffic origination from outside of Australia

24. Should there be rules about the use of Australian numbers to originate calls from locations outside Australia? Why or why not?
25. 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.
26. What would be the effect of such rules on businesses and consumers?

Allocation – availability of numbers

27. Are there any comments on the list of proposed numbers in Appendix B?
28. Should the ACMA withdraw unused numbers under section 94 of the Numbering Plan before releasing additional prefixes or numbers?
29. Are there any number conservation strategies the ACMA should consider in a remade Numbering Plan?

Allocation – rules

30. Should there be stronger, or more prescriptive, rules for allocating numbers to C/CSPs in the Numbering Plan? Why or why not?
31. Should the ACMA seek additional information from other CSPs during the application process for numbers? Would this strengthen the integrity of the numbering ecosystem?
32. 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?
33. 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?
34. Do you support the ACMA revisiting its proposal for CSPs to be registered in the Numbering System before they can be assigned numbers?

35. Do you support provisions requiring annual audits in the Numbering Plan? Why or why not?
36. What specific costs or burdens could arise due to these proposals? Please provide specific details.

Pooled numbers

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

EPIDS

38. What are your views about using the Numbering Plan to enforce the use of EPIDs?
39. What are the specific costs or burdens that may result from this suggestion?

Enhanced Rights of Use

40. Do you support these initiatives? Why or why not?

Number portability

41. Are the number portability provisions in the Numbering Plan still fit for purpose? Why or why not?
42. Are there any additional number portability provisions the ACCC should consider including in the Numbering Plan? Please explain.

Multiple services to a number

43. Do you support the use of numbers by multiple CSPs? Why or why not?
44. Can you provide some evidence / data of the benefits or harms of this practice? Please provide details and indicate if this information is provided in confidence.
45. Which of the 3 potential options do you consider to be most viable in the circumstances and why? Please provide details.
46. What are the potential benefits and costs to industry and end-users of each option?
47. 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?
48. Are there other solutions or measures that could be implemented to address the concerns to date?
49. Is legitimate use of the multiple-service practice a problem? Please explain and provide specific details.

Answers to questions 50 and 51 can be provided to the ACMA in-confidence.

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?
 - b) What specific services do you provide to these customers using these numbers? What is the total volume of calls and/or SMS sent?
 - c) What is the total revenue received from services provided to customers using this practice?

- d) Do you also offer similar services to customers using numbers you hold and have directly issued to customers?
 - 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?
 - f) Do you have (or have you attempted to put) any agreements in place with the CSPs who 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?
51. 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?
 - b) 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?
 - c) Do you provide similar services to those your customers are seeking to obtain from other CSPs? If so, do you know why your customer aren't obtaining these services from you?
 - d) What effect does this practice have on your business? What specific costs (if any) do you incur as a result of your numbers being used for this practice? Have there been any harms or detriments to your business or your customer because of this practice? Please provide specific details.

Provisions of Pre-selection Determination

- 52. Is the Pre-selection Determination still fit for purpose? Please provide reasons.
- 53. Is the Pre-selection Determination still required to support the competitive delivery of long distance, international and fixed-to-mobile calls? What is the demand for pre-selection? Please provide details.
- 54. Should the ACMA remake the Determination? If so, are there any changes that should be made to the Determination?
- 55. What would be the likely effect of allowing the Determination to sunset on end-users and/or to any other arrangements, including on the operation of the FAOS?
- 56. Are there any other factors the ACMA should consider when reviewing the Determination?

Portability Service Suppliers Determination

- 57. Is the Determination still fit for purpose? Please provide reasons.
- 58. Should the ACMA remake the Determination?
- 59. Are there any other factors the ACMA should consider when reviewing the Determination?

Appendix B: Prefixes for Standard Zone Unit (SZU)/charging district

Prefix	SZU/charging district	Supplements
0230	Newcastle Charging district	0240, 0241
0231	The following charging districts: Bathurst Cowra Lithgow Mudgee Orange Rylstone Young	0253, 0263
0232	Wollongong charging district and Helensburgh standard zone unit in the Campbelltown charging district	0242
0234	The following charging districts: Bourke Condobolin Coonamble Dubbo Forbes Nyngan Parkes Wellington The following standard zone units in Moree charging district: Berkley Downs, Bonnay, Boorooma, Borah Tank, Cumborah, Goodooga, Grawin, Lightning Ridge, Walgett	0258, 0268
0236	The following charging districts: Casino Coffs Harbour Grafton Kyogle Lismore Murwillumbah	0256, 0266
0270	Sydney Charging District	0279
0271	Sydney Charging District OR Avalon Beach, Dural, Sydney and Terrey Hills standard zone units	0279, 0299
0330	The following charging districts: Balranald Hopetoun Mildura Ouyen Swan Hill	0340, 0350
0331	Bairnsdale, Morwell and Sale charging districts	0341, 0351
0346	Foster and Korumburra charging districts, and the following standard zone units in Warragul charging district: Bunyip, Hill End (Victoria), Icy Creek, Neerim South, Trafalgar, Warragul	0356
0368	The following charging districts: Deloraine	0363, 0367

	Flinders Island Launceston Scottsdale St Mary's	
0751	The following charging districts: Caboolture Gatton Gympie Nambour The following standard zone units in Esk charging district: Coominya, Crossdale, Esk, Lowood, Moore, Toogoolawah	0752, 0753, 0754
0758	Beaudesert charging district	0755, 0756, 0757
0772	Cairns charging district	0770
0778	The following charging districts: Biloela Emerald Gladstone Mackay Rockhampton	0748, 0749, 0779
0820	Adelaide charging district	0870
0821	Adelaide charging district	0871
0827	Bordertown, Mount Gambier and Naracoorte charging districts	0877, 0887
0828	The following charging districts: Balaklava Burra Clare Gawler Kadina Maitland Yorketown Thistle and Wedge standard zone units in Port Lincoln charging district	0878, 0888
0829	Alice Springs and Darwin charging districts	0879, 0889
0841 or 0859	The following charging districts: Christmas Island Cocos (Keeling) Islands Derby Great Sandy Port Hedland	0851, 0891
0857	The following charging districts: Bridgetown Bunbury Busselton Lake Clifton and Waroona standard zone units in Pinjarra charging district	0867, 0897