TELSTRA GROUP LIMITED

ACMA consultation - Proposed changes to Australia's Telecommunications numbering plan and other instruments

Public version

Date: 12 February 2025

[CIC begins / ends] = information not to be released without a confidentiality undertaking

Introduction and Executive Summary

Telstra welcomes the opportunity to respond to the Australian Communications and Media Authority's (ACMA) consultation and proposed changes to the Numbering Plan and other instruments (the consultation paper).

Telstra supports a number of the proposed changes outlined in the draft Number Plan, including:

- Removal of redundant numbers;

- Introduction of a discrete number type for mobile services, although we have concerns with the proposed drafting;

- Introduction of a new special services number type for Internet of Things (IoT) services, with some proposals to address some concerns;

- Introduction of a new special services number type for public safety services; and

- Introduction of additional geographic numbers.

Telstra is also supportive of the ACMA's proposal to remake the Portability Service Suppliers Determination in its current form and to allow the Pre-selection Determination (PD) to sunset as of 1 April 2025.

We are, however, disappointed that a number of key concerns we raised in our July 2024 submission relating to number usage and scam practices have not been addressed in the new draft Numbering Plan. Specifically, we raised concerns with:

- Carriage service providers (CSP) originating calls using a number held by another CSP (termed the multiple service practice (MSP) by the ACMA);

- CSPs using mobile numbers to originate non-mobile network traffic; and

- The practice of using Australian numbers for traffic originating from abroad.

We are also making recommendations on the potential changes the ACMA has listed to be considered post-remaking of the Number Plan, and the issues that should be prioritised and consulted on immediately. These issues continue to present key challenges for our industry related to number usage and scam practices. Telstra believes the following issues should be prioritised and consultation commenced immediately:

- Multiple use of numbers;

- Number range for nomadic services;

- Allocation application processes; and

- CSP registration.

01 Key concerns raised relating to number usage and scam practices not addressed in the new draft Numbering Plan

The ACMA has not addressed the concerns raised in our July submission and has not made direct amendments to the proposed draft Numbering Plan to address issues related to number usage and countering scam calls and messages, including supporting CSPs to disrupt scam traffic.

Specifically, we consider the draft Numbering Plan fails to address the following issues:

- CSPs originating calls using a number held by another CSP (Multiple service practice (MSP);

- CSPs using mobile numbers to originate non-mobile network traffic; and

- The practice of using Australian numbers for traffic originating from abroad.

We note the ACMA intends to explore mechanisms under their scam reduction work program to permit the MSP, supported by specific regulatory controls that seek to balance consumer choice and competition against scam reduction objectives, while minimising any related costs and regulatory impact of changes. However, we are concerned that any alternative mechanisms will be be both less efficient and effective.

Multiple use of numbers

Telstra is disappointed with the ACMA's preliminary position not to prohibit MSP, which has an ongoing negative impact on our customers and community more broadly, for what is little macro benefit. We strongly recommend that the ACMA reconsider this position, including CSPs using mobile numbers to originate non-mobile network traffic and the practice of using Australian numbers for traffic originating to generate traffic from abroad.

We estimate that at least C.I.C begins ██ C.I.C ends A large proportion of this scam traffic could be easily stopped by each CSP simply blocking all calls from numbers held by them and which originate from other CSPs.

While not to be interpreted as Telstra's acceptance of the ACMA's preliminary position on MSP, if the ACMA chooses to allow MSP, it must prioritise and accelerate the work program to identify necessary changes in legislation, other instruments, and arrangements to regulate the practice.

This includes how CSPs using numbers issued to customers by another CSP update the Integrated Public Number Database (IPND), meet lawful interception and data retention requirements, not undermine number portability arrangements and establish suitable agreements for how the annual number charge is equitably applied when a number is used for an MSP service. A further vital consideration is the national security and law enforcement impacts of MSP, as the CSP which holds the number will not have visibility of the traffic generated by the other CSP using that number. This could lead to gaps in telecommunications information provided to national security and law enforcement agencies when they seek information about the user of a number.

A regulated MSP must include measures to prevent illegitimate spoofing whilst at the same time applying a mechanism to facilitate legitimate use of numbers where an end customer has consciously chosen to use a regulated MSP service.

CSPs using mobile numbers to originate non-mobile network traffic

Telstra is also disappointed the ACMA has not explicitly restricted the use of mobile numbers to mobile services in the draft Numbering Plan.

Our primary concern with the use of mobile numbers by CSPs to originate non-mobile network traffic is that this practice complicates efforts to combat scam traffic, as it makes it more difficult to distinguish between legitimate and fraudulent traffic.

CSPs misuse mobile numbers for services that are not mobile services but need to support functionalities like application-based messaging, SMS and MMS. This misuse arises because there is no dedicated number type available for these services. The lack of progress from the ACMA in introducing a new number type and number range for geographically unspecific or nomadic services is concerning given the significant impact of scams on the Australian public.

Telstra's view is the ACMA should prioritise and accelerate the introduction of a geographically unspecific / nomadic number range as part of the numbering work program following the remaking of the Number Plan.

This should not be interpreted as acceptance of the ACMA's decision not explicitly restricted the use of mobile numbers to mobile services in the draft Numbering Plan.

Restrict the use of Australian numbers by offshore service providers

As outlined in our July submission, the use of Australian numbers from locations outside of Australia should be restricted to known, legitimate use cases. A blanket acceptance of Australian numbers from offshore sources should not be permitted.

We estimate that at least C.I.C begins ███████████████████████████████

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Telstra recommends that the ACMA update the Numbering Plan to restrict the use of Australian numbers by offshore service providers. Regulations pertaining specifically to number usage should be incorporated that stipulate that the use of Australian numbers from offshore sources is not permitted, unless there is an agreement, and suitable arrangements have been made with the holder of the number.

02 Draft Telecommunications Numbering Plan 2025

2.1. Removal of redundant number types

Telstra is not aware of any reasons to retain any of the number types proposed to be removed from the draft Numbering Plan and supports the ACMA's proposal to remove them.

A direct benefit of this proposed change is it allows the ACMA, as part of the remaking the Numbering Plan, to repurpose the redundant premium rate number type for Internet of Things (IoT) services. It is expected that IoT services and the use of IoT numbers will significantly grow in the foreseeable future and will help drive Australia's connected digital future.

There are no particular costs that Telstra is aware of associated with removing the redundant number types proposed by the ACMA.

2.2. Introduction of a discrete number type for mobile services

Telstra's previous support for the introduction of mobile numbers as a separate number type was based on the current Numbering Plan's definitions for a digital mobile service and digital mobile number, and the permitted use of special service numbers as described in Section 32. Section 32 clearly states that a digital mobile number may only be used for digital mobile services.

However, section 19(1)(b) of the draft Numbering Plan effectively allows mobile numbers to be used for any service not mentioned in Chapter 2. This broad approach could lead to unintended consequences. Our previous support for the introduction of mobile numbers as a separate number type did not anticipate the ACMA would take such an approach.

We propose either reverting to the previous arrangements detailed in the current Numbering Plan or removing section 19(1)(b) altogether.

2.3. Introduction of a new special services number type for Internet of Things (IoT) services

IoT services are expected to grow significantly in the foreseeable future, driving Australia's connected digital future. IoT services can improve efficiency, enable data-driven decision-making, and optimise resource use across various sectors, including healthcare, agriculture, transportation, and manufacturing.

It is important that the definition of IoT services in the draft Numbering Plan, as well as the application and rules for using IoT numbers, accurately reflect current IoT practices while allowing for future adaptation. This should be done in a way that avoids unintended consequences.

Telstra supports the inclusion of the new number types for IoT. However, we have some concerns with the proposed changes, which we have outlined below.

New Definitions

The proposed definitions for "Internet of things data-only service" and "Internet of things service" should make clear that they include services previously known as Machine-to-Machine (M2M) and Telemetry services to avoid confusion. This could be achieved by adding a note under each definition.

The draft Numbering Plan in Schedule 5 - Special Services Numbers, specifies that incoming international access is not available for 0900, 0910, and 0920 numbers. This access should be made available for any number ranges that allow voice services.

Use of mobile numbers for IoT service

It is unclear from the draft Numbering Plan if the intention is that mobile numbers are prohibited from being used for new IoT services once the new Numbering Plan comes into effect. Telstra believes that the use of mobile numbers (the 04 range and the 05 range when released) should continue to be permitted for new IoT data-only services and IoT services following the remaking of the Numbering Plan. This should be in addition to the continued use of any mobile number that was in use immediately before the remaking of the Numbering Plan.

As part of its consultation on various numbering charging instruments, the ACMA is proposing that 09 numbers set aside for IoT services be classified as a low-charge number type for the purpose of the annual numbering charge (ANC). This would result in these numbers being charged 1% of the full ANC charge.[1] Additionally, 19 numbers set aside for IoT data-only services are not within the scope of the ANC. Both of these ANC treatments should act as a strong incentive for CSPs to use dedicated IoT numbers for IoT services and IoT data-only services.

Telstra seeks clarity from the ACMA on whether the responsibility to determine if a service is being used in an IoT application resides with the carriage service provider. Telstra offers a range of IoT carriage services to business and enterprise customers for their IoT applications. However, unless a customer specifies the carriage service requested will be used for an IoT application, the CSP may issue a mobile number rather than a special services number specified for IoT services in the Numbering Plan.

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[1] Proposed changes to the Telecommunications numbering charge instruments | ACMA

For example, a consumer customer may purchase an IoT device from eBay and then procure a prepaid or postpaid SIM to use in that device. This may only become visible to Telstra when the SIM is inserted into the IoT device and used, and a 04 number has already been provisioned.

Telstra will use IMEI and TAC details of the device to identify it. However, there are many devices where the device TAC does not identify it as an IoT device, making identification of the how the service is being used impossible. In such cases, we cannot accurately determine what the mobile service is being used for unless the customer informs us.

On this basis, Telstra is strongly of the view that the draft Number Plan should not arbitrarily constrain how mobile numbers are used over mobile networks.

Application and holding of numbers

Due to the scale of IoT, Telstra has experienced instances where we have a shortage of numbers available for this purpose in our number management inventory system. In the future, CSPs will likely need to hold large volumes of public IoT numbers to avoid this scenario. Therefore, they should be permitted to request allocation of at least one million public IoT numbers at a time, and it would not be unusual for a CSP to be hold large volumes of IoT numbers, which in some cases would equate to only several months of future customer demand. A larger allocation limit would be beneficial, improving customer experience and reducing the volume of requests to the ACMA.

The public and private ranges proposed by the ACMA in the draft Number Plan, provide for 30 million numbers each, totalling 60 million. It is expected that this will suffice for the next 5-10 years. However, provision should be made to increase these ranges in the future to cater to the demand of a hyper-connected, IoT-enabled world.

Potential cost and transition period required

The ACMA has asked if there are any specific cost burdens related to the introduction of a new special services number type for IoT services, and if so, to please specify.

Telstra anticipates significant costs related to uplifting our number management system, customer relationship management systems, provisioning systems, networks, and various databases to cater for the new 19 and 09 number ranges.

More time is required to coordinate analysis of the impact of this proposal to ascertain both the costs involved and the time needed to complete any uplift required.

We anticipate the costs to be in the order of C.I.C begins ███████████ C.I.C ends and the time required to transition using 19 and 09 numbers, including systems development, testing and deployment, to be up to 18 months.

This includes elements that are yet to be considered, such as the support and development activities needed to support carrier interconnection for public 09 numbers, considerations regarding any interplay with emergency call handling for these numbers and legal intercept, data retention and Integrated Public Number Database (IPND) and possible Telecommunications Act considerations.

It is also unknown, at this stage, if there will be a need to communicate any changes to customers and allow them time to assess the impact, if any, on their operations. This will add to the cost to transition to cater for the new 19 and 09 number ranges.

Telstra is pleased that the ACMA has acknowledged the merit in exploring a reduced annual numbering charge (ANC) to proposed IoT numbers and will consider this as part of the "imminent consultation" on the numbering charges instruments.

Portability

IoT number portability is neither a benefit nor an inhibitor for customers. When a customer decides to change their IoT service provider, the SIM in the IoT device requires replacement with a new SIM supplied by the gaining service provider. Doing this in one step, i.e., removing the old CSP SIM and replacing it with the gaining CSP SIM with a new number, is easier for the customer than a two-step process of coordinating the port of a number in conjunction with a replacement SIM.

The one-step process provides certainty of continuous service, whereas the two-step process of porting a number in conjunction with the SIM replacement creates a greater risk of IoT service disruption, as the timing of the number port needs to be coordinated with the SIM replacement in the IoT device.

As this is done at scale (IoT services will be numbered in the thousands to millions), the process would be complex and costly.

Additionally, the IoT number is used in a backend system and is not made available to the end user, so there is no attachment to having the same number if they were changing provider.

The implementation of automated IoT number portability will be costly with no benefit to either the customer or the gaining CSP.

2.4. Introduction of a new special services number type for public safety service

Telstra welcomes and supports the introduction of a new special services number type for public safety services, designating specific number ranges for this purpose. Introducing a number type and ranges for these services will reduce the risk of these numbers being unintentionally used for other purposes.

Telstra also requests that the ACMA designates the mobile number range set aside to support the national emergency warning system (NEWS) as public safety numbers for use with a public safety service.

NEWS is designed to provide timely and accurate emergency alerts to the public, helping to ensure safety during natural disasters, acts of terrorism, and other emergencies. It includes various alert mechanisms such as the Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), and NOAA Weather Radio. Alerts can also be sent to mobile devices, ensuring wide reach and accessibility.

The mobile number 0444 444 444 is used to send alerts to mobile devices, with a block of ten thousand mobile numbers (0444 44x xxx) set aside to prevent inadvertent repurposing of the emergency alert number.

Telstra recommends that 0444 44x xxx be set aside as public safety numbers.

Telstra appreciates that this may require a redrafting of the definition for public safety service and proposes the following redraft:

> *Public safety service means a carriage service that is used by a recognised person who operates an emergency call service, as defined in section 19 of the Act, to assist them in the delivery of that service or a carriage service used in the delivery of the national emergency warning system.*

2.5. Updating the definition of local service

Telstra acknowledges that the definition of a local service needs to be reviewed and amended to accurately reflect current services. However, changes to the definition should be delayed until the ACMA and industry have had the opportunity to further explore a new number type for geographically unspecific / nomadic services.

The introduction of a number type for geographically unspecific / nomadic services would likely require

new additional definitions to be inserted in an updated Numbering Plan to support the new number type and service. It would be more appropriate to consider the definition for local service while also considering the definition for a new number type for geographically unspecific / nomadic services. Considering these definitions together is likely to ensure both sets of definitions are correctly aligned and that there will not be unintended consequences.

Telstra recommends that the ACMA revert to the previous definition for local service at this time.

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

Telstra has no concerns with proposed changes in the draft Numbering Plan in relation to cancellation of enhanced rights of use for numbers used for scam and fraud purposes.

2.7. Availability of geographic numbers

Telstra supports the inclusions of the additional number ranges in the specific areas in Schedule 1 of the draft Numbering Plan and the ACMA intention not to release these new numbers for allocation to CSPs until the existing ranges are approaching exhaustion.

03 Potential changes to be considered post remake Telecommunications Numbering Plan

In terms of the potential changes the ACMA has identified for consideration post the remaking of the Number Plan, Telstra believes the following issues should be prioritised and consultation commenced immediately. These issues continue to present significant challenges for our industry in relation to number usage and scam practices:

- Multiple use of numbers;

- Number range for nomadic services;

- Allocation application processes; and

- CSP registration.

3.1. Multiple use of numbers

Telstra's view is if the ACMA is not going to prohibit MSP, it needs to prioritise and accelerate the work program to identify changes in legislation, other instruments, and arrangements to regulate the practice.

See our comment under section *01 Key concerns raised relating to number usage and scam practices not addressed in the new draft Numbering Plan.*

3.2. Number range for nomadic services

Telstra's view is if the ACMA is not going to address the misuse of mobile numbers, it needs to prioritise and accelerate the introduction of a geographically unspecific / nomadic number range as part of the numbering work program following the remaking of the Number Plan.

See our comment under section *01 Key concerns raised relating to number usage and scam practices not addressed in the new draft Numbering Plan*.

3.3. Allocation application processes

Numbers should be allocated to a primary number holder who is responsible for the use of that number on its network. The Numbering Plan should clearly specify the criteria for allocating numbers to providers. The allocation process should include an assessment by the ACMA of the applicant, with the

decision to allocate based on the information provided by the applicant. This information should explain their proposed activities and network operations, including how the applicant will interconnect with other networks, the types of services they intend to offer, and whether these services are suitable for the number ranges they have applied for, in accordance with the rules set out in the Numbering Plan.

3.4. CSP registration

Telstra notes the Ministerial announcement on 21 January 2025, after the release of the discussion paper, that there will be a register of CSPs. Telstra looks forward to contributing to the work by ACMA on this matter.

04 Draft Telecommunications (Section of the Telecommunications Industry – Portability Service Suppliers) Determination 2025

Telstra supports the ACMA proposal to remake the Portability Service Suppliers Determination in its current form. Portability service suppliers play a significant role in number portability, often assisting smaller CSPs. Remaking this determination ensures that these providers can continue to operate and support CSPs across the various porting processes in the Australian market.

05 Proposed sunsetting of the Telecommunications (Provision of Pre-selection) Determination 2015

Telstra supports allowing the Pre-selection Determination (PD) to sunset as of 1 April 2025.

Pre-selection regulation was made to encourage competition for the types of calls that carriers other than Telstra were able to provide (long distance, fixed-to-mobile and international), at a time when there was no other competitive constraint on Telstra's pricing of those call types.

Since then, the following critical developments have occurred:
- The ACCC has declared fixed line services including services that require Telstra to offer to other carriers the ability to provide voice connection and local calling using Telstra's network.
- Most voice calling has migrated to mobile and fixed IP networks, particularly on the nbn. The PD does not apply to mobile or IP networks.
- Many voice plans now include unlimited domestic calls of all types, such that there is minimal competitive pressure on voice plan pricing.

The ACMA consultation paper highlights that the use of pre-selection declined by approximately 68% between 2017 and 2020. Additionally, it estimates a further decline in use by 80% since then.[2]

It follows that the Number Plan should be updated to reflect the PD has been allowed to sunset and the definition for a pre-selection verification service be removed along with its use and reference in section 105 Routing arrangements and Schedule 5 Special services numbers.

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[2] Proposed changes to the Numbering Plan and other instruments_consultation paper.docx, page 27.