

Commpete's submission to the Australian Communications and Media Authority public consultation on the review of the Numbering Plan and associated instruments

July 8, 2024

An Introduction to Commpete

Commpete is an alliance representing some of Australia's non-dominant telecommunications service providers. Our members build, operate and provide, 4G, 5G and fixed wireless networks, retail and wholesale fibre connectivity and mobile voice and data services within a range of customer segments across Australia.

Our members' operations span a variety of business models, with some acquiring access services from a range of wholesale suppliers and maintaining fixed line carrier interconnection arrangements in place with the major carriers, and some building their own mobile and fixed network infrastructure.

For over 20 years, Commpete and its members have advocated for telecommunications regulatory policy and legislative reforms that have increased competition and encouraged both challenger and incumbent telecommunication service providers to deliver more to their customers.

Commpete welcomes the review of the Numbering Plan

Commpete welcomes the ACMA's review of the Numbering Plan. The Numbering Plan has not kept pace with innovation within the global telecommunications industry.

This review presents an opportunity to revise the Numbering Plan in a way that will cater for the use cases, for end users, for service providers today and for the next decade. A forward-looking approach is encouraged.

Commpete considers that the following principles should inform the ACMA's review of the Numbering Plan and that in considering proposed variations to the Numbering Plan, the ACMA should evaluate by the extent to which a proposed variation would serve each of these principles:

- Numbering use and allocation rules set out in the Numbering Plan should serve the interests of end users
- Allocation and use of numbers should be managed fairly, in transparent and predictable ways and in ways that stimulate and do not inhibit competition
- Australia's Numbering Plan needs to work within the context of global technology trends and global trends in demand for use of numbers

In the remainder of this submission, Commpete responds to just some of the ACMA's questions raised in the Discussion Paper.

The modern context of a numbering plan – supporting the evolution of the Numbering Plan

The Numbering Plan needs to be better equipped for the next decade, Commpete submits that to achieve simplification and evolution, the review could be informed by revisiting and addressing some of the historical assumptions about the role of numbers. Some of these are inherent in the current Numbering Plan, but that are no longer valid, or are no longer as significant as they were previously. For example:

Historical Assumption	Contemporary Considerations
Numbers are designed to be recalled by those who place calls and need to be customer friendly	<ul style="list-style-type: none"> - Reliance on human number recall is no longer as significant as it once was. Devices manage number recall for humans - Reliance on numbering directories has declined - Customers should be able to choose and easily switch between service providers - Individuals now use their mobile service numbers as a form of digital identification, which means the concept of the individual's rights of use in a number has gained increased significance
Numbers are a way for users to predict the cost of a call	<ul style="list-style-type: none"> - This remains important for free call or zero rate numbers - This is no longer significant for local/regional calling - In many cases IP calling and OTT calling, data calling and wifi calling mean that numbering is disassociated from the charging method for a call
Numbers may indicate the geographic location of the caller	<ul style="list-style-type: none"> - Country and region codes remain important for caller ID - At the same time, VOIP, Communications as a service and data calling are changing called party perceptions of calling line ID to indicate a caller's location - There is no longer a 1:1:1:1 relationship between a carrier: number: user: location/connected premises/device
Numbers can signify the originating network and the network technology	<ul style="list-style-type: none"> - Diversity of service providers and interconnection technology mean this is no longer the case - International trends (in the USA in particular) show even further fragmentation, use cases where a single number is used across multiple different providers for different services (e.g. calling with one provider and messaging with another)

Currently the Numbering Plan sets up the allocation of numbers to services framework, and already much of the operational detail is found across at least 10 current industry Codes. These industry Codes are drafted largely from the perspective of network operators rather than with the full range of emerging communications service providers and end-user use cases in mind. To be clear, Commpete is predominantly supportive of the current code making process. However, we observe that for issues where there are significant competing interests within the industry and for the end user, the existing Code making approach does not always deliver clear and timely outcomes, or sufficient flexibility to accommodate innovative developments in the sector.

This is borne out by the fact that many of the Code obligations are also still based on an outdated presumption that there is a 1:1:1:1 relationship between a carrier, number, user, and location/connected device.

Simplicity across the Numbering Plans and industry Codes could be achieved by removing duplication of obligations and consolidating numbering rules where possible. Also, by critically determining whether a specific issue is best solved through a Numbering Plan-based amendment or instead through conduct/type rules or agreed industry procedures. For example, allocating specific number ranges for specific technologies has merits where there is a need to route traffic in a particular way, or where there are merits in customers and/or networks being able to recognise that a specific number type is associated with traffic or a specific and predictable type. However, allocation for the most trusted number ranges, such as 04 numbers, should not be limited to established carriers or prohibited for innovative users.

An example is the use of short codes in the USA for application to person SMS may make it harder for scammers to impersonate businesses because commercial SMS are not easily confused with SMS from ordinary mobile numbers.

Flexibility should be promoted by engaging in more frequent reviews into emerging technology and global communications services trends that impact the numbering approach.

Calls over non-mobile networks and the definition of “digital mobile services” in the Numbering Plan

There are a significant number of legitimate use cases already adopted by Australian businesses (and multinational businesses operating in Australia) that rely on the origination of calls, SMS or MMS over digital mobile numbers via service providers that are not traditional national mobile network operators. The use of digital mobile numbers has been necessary to meet demand for services that can terminate to mobile phones or other devices registered to mobile networks in Australia (albeit that the number and the interconnection service are distinct as we explain further below).

For example:

- **Cloud based communications services:** cloud-based services using mobile numbering facilitate a range of new and innovative use-cases, from allowing end-users

to have separate numbers for different functions, to allowing businesses to provide integrated cloud-based communications solutions that enhance productivity, convenience and security. Cloud-based services using mobile numbering therefore have the potential to drive increased services-based competition in respect of business to consumer voice, SMS and chat services, generate increased benefits for consumers and maximise the economically efficient use of telecommunications infrastructure. The Numbering Plan definitions should be updated to reflect current usage models and technologies.

In the same way, there are already a number of use cases adopted which see predominantly IP originated traffic using geographic, freephone and sometimes Smart numbers.

The Numbering Plan should continue to accommodate all of these cases in order to maintain an efficient and competitive communications marketplace in Australia.

Commpete is concerned about how the Numbering Plan definition of “Digital Mobile Service”¹ and the Telecommunications Act definition of “Public Mobile Telecommunications Service”² are being interpreted by some mobile network operators (**MNOs**).³ Whether to deny challenger service providers the ability to deliver legitimate calls and SMS onto MNO networks or to suggest that such use is not consistent with the Numbering Plan. In fact, these definitions do not require that the entire end-to-end service is provided over a PMTS and extend to services that originate over other networks but terminate on mobile networks. This is precisely how the Scam Code is able to be applied to A2P providers.

Commpete’s view is that restricting non-mobile operators from accessing any digital mobile service numbers would restrict service-based competition and hinder any-to-any connectivity. The issues raised by those stakeholders who are opposed to non-MNOs accessing digital mobile numbers through sub-allocation can be better addressed through targeted and specific industry Codes, or if necessary, service provider rules, instead of denying certain service providers access to these numbering resources at all.

¹ Section 5 of the *Numbering Plan 2015 (Cth)* defines a “digital mobile service” as “a public mobile telecommunications service supplied by a network using digital modulation techniques.”

² Section 32 of the *Telecommunications Act 1997 (Cth)* defines a “public mobile telecommunications service” as (subject to exemptions for private mobile radiocommunications services like trunked land mobile radio services (under s32(2)), one-way only, store and forward communications services like simple pager services (under s32(3)) and micro-cell or on premises PABX services where the network is for users all located at the same distinct place (under s32(4)) a service which an end-user can use while moving continuously between places and for which the customer equipment is not in physical contact with the network over which the service is supplied and the network for which uses intercell hand-over functions.

³ We refer to page 12 of the Discussion Paper, at which the ACMA refers to stakeholder suggestions in scoping discussions that such an interpretation is warranted to reduce scam, to reduce issues with not being able to deduce a caller’s location from routing information and to restrict number allocation to a known class of MNOs.

Traffic origination from outside of Australia

Accepting there are clearly legitimate use cases for Australian numbers to be used to originate calls outside of Australia, Commpete recommends against establishing rules restricting this practice within the Numbering Plan.

Again, it is important that the Numbering Plan does not have the effect of stifling legitimate use cases by imposing broad restrictions at the numbering level. The nuances of permitting the permitted use cases while also addressing the very important goal of disrupting offshore scammers from targeting victims in Australia are, in our view, better addressed outside of a number allocation management regime. Anti-scam measures should sit outside of the Numbering Plan altogether. Commpete acknowledges that Government and regulators have been proactively working in targeted ways at national and regional levels to combat scams effectively.

Sub-Allocation

Commpete's views on sub-allocation of numbers are similar. In our view, it is not the practice of sub-allocation that is problematic, in fact, sub-allocation allows numbering resources to be used where there is demand, promotes customer choice of service providers, service provider diversity and ease of switching.

Allocation rules and CSP registration

With the recent broad support of a Registry of Carriage Service Providers (**CSPs**) by industry, the present rules for allocating numbers are sufficient, and the C566:2023 Number Management – Use of Numbers by Customers Code strikes the right balance to ensure that a customer's rights of continuity of use of numbers is protected.

As we referred to above, the trend, particularly in relation to mobile numbers, is that individuals are using these numbers as a form of digital identification. Any change to the approach to rules about sub-allocation of numbers should be considered through the primary lens of how that change would or could impact the rights of an individual user to retain a mobile number that may be associated with and integral to that individual's ability to verify their identity to gain access to a range of other essential services.

Commpete supports the ACMA's proposal⁴ that primary CSPs should be registered prior to being assigned numbers. Commpete members remain acutely conscious, however, of the duplication of registration requirements that exist for carriage service providers today and queries whether any of these existing registries could be leveraged to the same benefit, rather than creating another registration obligation.⁵

⁴ In Question 34 of the Discussion Paper.

⁵ CSPs are required to register with the TIO, CommsAlliance, the IPND scheme, the ACMA under the Scam Code, if they provide consumer services, they are required to register with Communications Compliance,

In practice, a CSP who sub-allocates numbers to another CSP obtains additional information when contracting with the sub-allocatee. Any proposal to impose additional information gathering requirements should occur only after an assessment of whether existing, industry-wide, Know Your Customer practices are sufficient, and whether the additional burden is in fact the most effective means to address the issue that is being solved for, through a thorough cost benefit analysis.

Alternatively, if effective central registry was in place for CSPs to verify who holds the rights of use of a number, then that could avoid the need for a register of CSPs who are authorised to provide service to the rights of use holder. Commpete supports exploring solutions from the perspective of ensuring that legitimate rights of use holders are protected from bad actors and are able to use any network or carriage service provider of their choosing.

Enhanced Rights of Use – cancellation

Commpete considers that the proposals in the Discussion Paper around cancellation of EROU⁶ do not appear to be an effective or long-term method of reducing scams, particularly if an attractive number can be returned to the EROU holder who can continue to derive commercial gain if restrictions are placed solely on the CSP and not the party who has sought to misuse the smart number.

Multiple services to a number

Commpete views the issue of multiple use of numbers as being very closely intertwined with the issues discussed above in relation to CSPs who are not MNOs having access to digital mobile numbers, flexibility for sub-allocation and maintaining the customer's choice and flexibility to use numbers with service providers of their choosing.

The practice of multiple use of numbers is distinct from spoofing cases or illegitimate overstepping cases.

Legitimate multiple use of numbers involves a verified ROU holder using numbers to support their organisational needs using new communication technologies that work differently from traditional PSTN, but are often analogous to how a PABX or private numbering systems worked in the past. For example:

1. **Business Communication:** Companies can display a consistent, recognisable number for customer service or sales calls, ensuring customers can easily identify and return calls to the business. This can be particularly valuable when an organisation has a

under the Telecommunications (Carriage Service Provider - Security Information) Determination 2022 they are required to register as interest holders in respect of telecommunications assets and as Relevant Electronic Service Providers under the Online Safety Act are required to register contacts with the eSafety Commissioner.

⁶ Question 40 of the Discussion Paper.

dispersed workforce who need to communicate when working from home or on the road. For example, a maintenance business that has a central landline and sends out multiple workers to complete jobs at multiple sites. All workers can call customers showing the business number and protecting their own.

2. **Telehealth Services:** Healthcare providers can display the clinic's main number when doctors or nurses make calls from different lines, ensuring patients recognise the call as coming from their healthcare provider.
3. **Unified Communication Systems:** Large organisations that operate over multiple sites or departments can show a central contact number for outbound calls, providing a streamlined and professional appearance. An example of this would be a hospital, shopping centre, school or university where each department can dial out using the same number (the service replaces the role of a traditional PABX).
4. **Critical services:** Crisis hotlines can ensure their operators display a recognisable number to ensure that recipients understand the importance of the call and can respond appropriately.
5. **Charity and non-profits:** Workers who log in to a platform for work to manage customer support and accounts from a remote site need to make calls from personal devices can display their office number, protecting their personal contact information while maintaining professional communication.
6. **Notifications / reminders (over messaging services):** Digital services for reminders for appointments, for queues at restaurants and other bookings. The customer can register their number for their appointment or booking and the system can call and remind them or tell them their table is ready. The number used is the same as the existing standard number of the business.

Commpete views the provision of numbers, (and the associated inbound termination service) and the provision of outbound termination services as distinct services provided to and purchased by customers of CSPs.

In our view, numbers are purchased and can be used by businesses and consumers primarily as a standalone product, enabling a reply-path to the communications they are sending, but also often for branding purposes on outbound communications, so that consumers can become accustomed to interacting with them via a consistent set of phone numbers.

Depending on the specific service, the customer then also relies on the ability to originate communications that will be identified with that number, and mostly also to receive inbound communications sent to that number. Note there is no substitutability for the inbound connectivity service provided to a number by the host CSP; communications sent to a number can only ever come to and via the network hosting it (and any CSPs that have subsequently resold it to an end-user).

Included as part of these services is the ability for end-users to define the CLI or sender ID their communications will present to their respective recipients, subject to rules imposed by the Scam Code.

The ability for end-users to utilise multiple CSPs provides them with a number of benefits, including but are not limited to:

- Service redundancy
- Throughput/performance enhancement
- Greater commercial leverage through more competitive supply
- Utilisation of features, products and/or technology unique to specific CSPs

Restricting the use of numbers to only the CSP hosting that number will inextricably combine both inbound and outbound services, forcing end-users to navigate compromises to their services that will likely lead to increased costs and reduced functionality. Outbound traffic can currently be directed to whichever CSP provides the best service required by the end-user at any particular time or for any particular reason.

If this was restricted, it would require an end user to port each number to a CSP and to ensure a bundle of ancillary call features or services (calling, SMS, MMS etc) was all purchased from the same CSP therefore blocking some service providers from the market. In effect, end-users will be 'locked in' to a CSP's bundle of services.

Commpete would therefore strongly advise against prohibiting multiple use. Prohibiting multiple use of numbers would be out of step with global trends and would be an overly blunt regulatory approach.

It is also not clear how hard blocks across entire ranges of numbers being used as CLIs and sender IDs could enhance a network's ability to identify scam traffic.

Commpete's views on options to address multiple use numbers in the Discussion Paper

Commpete has concerns about a number of the proposed arrangements in the discussion paper.

One of the options proposed would involve that CSP B providing CSP A with full details of the numbers it uses. If this option is pursued, it should not require divulging commercial information with other industry players in order to provide a service if done bilaterally. A central ROU verification registry (preferably a technology solution rather than a manual bilateral process solution) would be a preferable approach. The carrier which holds the number will continue to provide chargeable primary services to the customer.

In the same vein Commpete expresses significant concerns regarding the proposed use of safe-lists, where CSPs are required to register overstamped numbers for their customers. This

approach also forces sharing of commercially valuable information with competitors, without controls in place to ensure there is transparency in the management of safe-listing processes. Furthermore, it is burdensome for CSPs and customers, as legitimate calls can get disrupted for days without resolution.

Commpete thanks the ACMA for this opportunity to provide its comments on the issues discussed in the Paper.

If you would like to discuss matters raised in this submission, please do not hesitate to contact us.