EXPLANATORY STATEMENT

Issued by the authority of the Australian Communications and Media Authority (ACMA)

Telecommunications Act 1997

Telecommunications Numbering Plan Variation 2007 (No. 3)

Statutory basis

Subsection 455(1) of the Telecommunications Act 1997 (the Act) provides that the Australian Communications and Media Authority (ACMA) must, by written instrument, make a plan for the numbering of carriage services in Australia and the use of numbers in connection with the supply of such services. This is the Telecommunications Numbering Plan 1997 (the Plan). ACMA may vary the Plan under section 455 of the Act provided it:

a) has regard to the obligations imposed on carriage service providers (CSPs) by Part 4 of the Telecommunications (Consumer Protection and Service Standards) Act 1999 (the TCPSS Act) and recognised international standards in accordance with subsection 455 (10) of the Plan;

b) ensures that any person likely to be affected by the variation, where that variation is likely to have a direct, or substantially indirect, effect on business, or restrict competition, has been provided with adequate opportunity to comment as required by section 17 of the Legislative Instruments Act 2003 (the LI Act);

c) formally consults the Australian Competition and Consumer Commission (ACCC) before varying the Plan in accordance with section 461 of the Act; and

d) releases the draft variation for 30 days public consultation if it is of the opinion that the variation will affect a number issued to a customer or if it is otherwise considered in the public interest to consult, as provided by section 460(3) of the Act.

Purpose of variation

The purpose of this variation is to amend the Plan to specify a new number range (0550) and service type (Location Independent Communications Services (LICS)) to accommodate fully nomadic services such as Voice over IP (VoIP). The Plan will also be amended to include guidelines that CSPs must have regard to if they wish to supply carriage services using IP telephony. These guidelines, and the new service type and number range, will provide CSPs with the means to offer location-independent services on geographic or LICS numbers in a manner which is compliant with the Plan.

Background

The widespread distribution of broadband services in Australia, and globally, has initiated telecommunications services that rely on Internet Protocol (IP) for the digital transmission of voice telephony (i.e. VoIP services). Unlike traditional telephone services which are fixed to one location, and mobile services which are associated with an individual, VoIP services are effectively a hybrid of both these services, and can be fixed and/or location-independent (nomadic).
Consultation in relation to regulatory aspects of VoIP numbering was initiated by the Australian Communications Authority (ACA) in October 2004. The ACA released a discussion paper entitled ‘Regulatory Issues Associated with Provision of Voice Services using Internet protocol in Australia’. The paper outlined the key issues associated with the introduction of VoIP services and offered telecommunications industry participants and end-users the opportunity to consider and comment on the implications of VoIP telephony and the various numbering options. In addition, the ACA and then ACMA have maintained an ongoing dialogue with industry representatives on the Numbering Advisory Committee (NAC) about options for providing a new number range for VoIP services.

In May 2005, DCITA reported to the Minister for Communications regarding policy and regulation for VoIP services. The ACCC and the ACA were consulted as part of this process. In November 2005, the Minister endorsed the recommendations in the report. The key recommendations relating to numbering issues were:

- that a new number range should be made available for use by VoIP service providers. This range should accommodate services that depart from the expectations of a traditional telephone service;
- that geographic numbers should continue to be made available to telecommunications carriers and other providers of services that are a close substitute for a traditional telephone service;
- in seeking number allocations, and choosing the appropriate range, prospective VoIP service providers should have regard for ACMA guidelines concerning the nature and characteristics of services for which the numbers will be used.

Based on the consultation undertaken and the recommendations in the DCITA’s report, in November 2005 ACMA drafted a variation to the Plan to specify a new number range (0550) and service type (LICS) to accommodate fully nomadic services such as VoIP.

**Public consultation**

Section 460 of the Act specifies that public consultation must be undertaken where ACMA is of the opinion that a variation to the Plan will affect a number issued to a customer or if it is otherwise considered in the public interest to consult. Due to the considerable interest expressed by Numbering Advisory Committee (NAC) members,1 Emergency Service Organisations (ESOs) and Law Enforcement Agencies (LEAs) about this matter, ACMA determined that it was in the public interest to consult. Consequently, ACMA released the draft variation for public consultation in January 2006 for a 30 day period. Targeted consultation with NAC members was also conducted in accordance with the requirements of section 17 of the LI Act.

Several submissions were received from CSPs, the public, ESOs, LEAs and NAC members. These submissions were taken into account by ACMA when specifying a new number range (0550) and service type (LICS) to accommodate fully nomadic services such as VoIP.

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1 NAC membership is drawn from the telecommunications industry, business and consumer groups, customer equipment suppliers and government agencies.
Section 461 of the Act separately requires ACMA to formally consult the ACCC before varying the Plan. ACMA formally consulted the ACCC on 29 March 2007. The ACCC indicated that a new number range and pricing regime can have an adverse effect on competition. However, due to legislative constraints and the Minister’s recommendations, ACMA decided that a new number range remains the most effective short-term approach to location-independent numbering.

The Office of Best Practice Regulation (OBPR) has noted that the variation is minor and machinery in nature and a Regulation Impact Statement (RIS) is not required (OBPR Reference: 8958). OBPR was provided with a Business Cost Calculator report, which confirmed that the compliance costs for business were negligible for this variation.

Details of Variation

Section 1 provides that the variation may be cited as the *Telecommunications Numbering Plan Variation 2007 (No. 3)*.

Section 2 provides that the Variation takes effect on the date after it is registered.

Section 3 specifies that the *Telecommunications Numbering Plan 1997* is amended as set out in Schedule 1.

Schedule 1 Variations

Item 1 inserts a new paragraph 2.2(1)(l) into the Plan for “location independent communications service numbers”. This recognises the numbers as being for use in connection with the supply of carriage services to the public in Australia.

Item 2 inserts two notes into the Plan after subsection 3.4(1). The first of these, advises CSPs that they must have regard to the Guidelines contained in Part 5 of Schedule 7 to the Plan when making an application for geographic numbers for the provision of local services using IP telephony.

The second note pertains to a CSP’s obligation under Part 4 of Schedule 2 of the Act to provide to Telstra with such information as Telstra reasonably requires to maintain an integrated public number database (IPND). This obligation is mandatory for all CSPs offering a carriage service to an end user on a public number.

Item 3 sets out two changes to Schedule 4, Part 1 of the Plan. The first change replaces the number range of 05 for Universal personal telecommunications services with a subset of that range so that such services can be provided on the 0500 prefix. This opens up other numbers in the 05 range to be specified for use in connection with other types of carriage services. As a consequence, “except 059” has been omitted as the 059 part of the range (which is specified for ENUM trial numbers) does not fall within the 0500 range. The second change inserts the prefix 0550 and describes the carriage services to which the prefix relates as Location Independent Communications services. Numbers of this service type are 10-digits in length, accommodate incoming international calls and are not shared.
Item 4 sets out a change to Schedule 7, Part 2, of the Plan. Schedule 7 sets out what must be included in an application for an allocation of numbers. Part 2 specifies additional requirements for applications for geographic numbers. Item 4 inserts sections 2.7 and 2.8. Paragraph 2.7(a) sets out that CSPs wishing to apply for geographic numbers for local services utilising IP telephony must have regard to the Guidelines set out in Part 5 of Schedule 7 to the Plan and paragraph 2.7(b) requires a CSP to include sufficient information to satisfy the requirements listed in the table contained in the guidelines. Section 2.8 clarifies that the requirement listed in paragraph 2.7(a) will be considered satisfied if the CSP states in writing that he or she has:

1. taken into account the Guidelines set out in Part 5 of Schedule 7 of the Plan; and
2. understands his or her obligations with respect to the use of geographic numbers pursuant to Chapter 3 of the Plan.

Item 5 sets out a change to Schedule 7, Part 3, of the Plan. Part 3 specifies additional requirements for applications for special services numbers. New section 3.7 sets out that CSPs wishing to apply for location independent communications service numbers for location independent services must have regard to the Guidelines set out in Part 5 of Schedule 7 to the Plan.

Item 6 inserts a new Part 5 into Schedule 7 containing guidelines pertaining to the applications for the allocation of numbers relating to a location independent communications service. The Guidelines set out matters to which a CSP must have regard when providing a statement required by subsection 6.7 (2) of the Plan.

The Guidelines discuss the legislative basis under the Act and the Plan for the specification of numbers for carriage services in Australia. Numbers must be specified for particular service types. Numbers must be allocated to CSPs for service types as specified in the Plan. Numbers allocated to CSPs must be issued to customers for the supply of carriage services that are consistent with the service type for which they have been specified. CSPs must take reasonable steps to ensure that numbers are used in a manner that complies with the provisions of the Plan.

The Guidelines state that geographic numbers, which are specified in Schedule 2 to the Plan, may only be used according to the rules set out in section 3.4 of the Plan. The Guidelines also provides a summary of these rules, including that geographic numbers must only be used:

(a) in connection with a local service (subsection 3.4(1)); and
(b) for calls where the call terminates in the standard zone unit (SZU) to which the number was allocated to a CSP (subsection 3.4(4)).

The Guidelines notes that the requirement under subsection 3.4(4) can also be satisfied if the CSP can establish a location to which call charges can be applied ‘as if’ the geographic number terminated within the SZU to which it was originally allocated. The ‘charged as if’ requirement provides for a limited degree of mobility in the use of geographic numbers using call diversion techniques. The Guidelines clarify that this ‘charged as if’ provision provides some flexibility in the use of geographic numbers.

The Guidelines provide that when requesting an allocation of geographic numbers, CSPs must be able to establish a permanent location to which calls to the number must terminate.
The Guidelines note that the underlying rationale for these requirements in the use of geographic numbers is to provide CSPs with the ability to meet their obligation to provide the untimed local call option to customers in accordance with section 105 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999* on eligible local calls. The Guidelines also states that CSPs applying for geographic numbers must have regard to the criteria described in the table (outlined below).

The Guidelines explain that a new special services number range 0550 has been specified for use by LICS providers to accommodate partial or fully nomadic services. This range has been specified in Part 1 of Schedule 4 of the Numbering Plan. The range is for the allocation of numbers for services that will not be charged by reference to a fixed location, because they are nomadic. The service will be considered nomadic if it is itinerant in nature or otherwise departs significantly from other service types specified in the Numbering Plan, particularly local services.

The Guidelines further explain that geographic numbers will only be allocated to CSPs for a service utilising IP telephony if it is a close substitute for a local service. A service will be considered a close substitute if the CSP can demonstrate a sufficient link to the SZU to which the numbers will be allocated, so that calls to the numbers can be charged as if they terminate in that SZU. The CSP must demonstrate that calls from the service can be charged in a manner that meets their obligation to provide an untimed local call option to customers for eligible local calls. The Guidelines also states that CSPs must not issue a geographic number to a customer to provide a VoIP service if this requirement cannot be established. The example used in the Guidelines is that a CSP who provides a IP telephony service to a Melbourne-based customer must not issue a number allocated to an SZU in Brisbane.

The Guidelines also contain information for CSPs on the selection of appropriate numbers for the service type they intend to offer. The Guidelines notes that when applying for numbers to be issued to customers for use with IP telephony, CSPs should select a number range that is consistent with the comparable service type described in the table (outlined below). The Guidelines also make the point that PC-PC based services, independent of the PSTN (or cellular) networks, are not included because they are not ‘carriage services to the public’ within the meaning of section 456 of the Act.

The Guidelines conclude with a table which list three discrete types of location-independent communications service and the key attributes of each service.

The first type of LICS service contained in the table is a ‘stand alone voice service on the premises.’ This service type may be offered on geographic numbers. It is defined by reference to the following criteria: that it is always on; is location-dependent (static); provides accurate location based information (to the IPND); the service is pre-configured; the quality of service (QoS) is equivalent to that of a PSTN service; and calls can be terminated in the SZU to which the geographic numbers were allocated. The table lists a voice service with an independent handset as an example of this type of LICS service.

The second type of LICS service contained in the table is a ‘service with the capacity to be nomadic on an occasional basis.’ This service type may be offered on geographic or LICS numbers. It is defined by reference to the following criteria: location is virtually fixed; it is
normally available (subject to user set up); provides location based information (to the IPND); the service may be configured by user; the quality of service (QoS) is high; customer equipment is home-based, with the capacity to roam; and there exists sufficient link between the calls and the SZU so that calls can be terminated in the SZU to which the geographic numbers were allocated. This type of LICs service will also offer the customer the option of untimed local calls for geographic numbers. The table lists a bundled voice service with an independent handset provided on a modem or home PC as an example of this type of LICS service.

The third type of LICS service referred to in the table is a ‘nomadic voice service.’ This service type may be offered on LICS numbers. It is defined by reference to the following criteria: it is location independent / personalised; it is intermittently available subject to user set up; location based information is not available; the service may be configured by user; the QoS is variable; and the service is nomadic to the extent that a permanent fixed location for call charges cannot be established. The table lists a wireless voice service on a laptop as an example of this type of LICS service.

**Item 7** sets out two changes to Schedule 8 to the Plan. Schedule 8 contains the unit sizes for allocation and surrender of special services numbers. The first change specifies a new prefix, 0500, for providing a Universal Personal Telecommunications Service. The reference to ENUM Trial numbers (‘except 059’) is removed as it is no longer required. The unit sizes in columns 1 (service type) and 3 (unit size) remain unchanged.

The second change inserts a new entry for the prefix 0550. Column 1 specifies the service type associated with 0550 as location independent communications service. Column 2 contains the new prefix 0550 and column 3 contains the unit size, for allocation of numbers commencing with 0550, is 1,000 numbers.

**Item 8** sets out a change to the Dictionary for the Plan. The change inserts additional text into the definition of ‘digital mobile service.’ The additional text is: ‘or a public mobile telecommunications service,’ which is inserted into the definition after the existing text ‘a mobile telephone service.’ The definition for ‘digital mobile service’ now reads ‘a mobile telephone service or a public mobile telecommunications service supplied by a network using digital modulation techniques.’ This insertion clarifies that a digital mobile service includes two types of public mobile telecommunications services:

(i) those that are supplied by use of a telecommunications network that has intercell hand-over functions; and
(ii) those that are not supplied by use of a network with intercell hand-over functions.

**Item 9** inserts additional text into the definition of ‘freephone service’ in the Dictionary for the Plan. The additional text is: ‘location independent communications service or a’ which is inserted into the definition after the existing text ‘other than a.’ Paragraph (b) of the definition for ‘freephone service’ now reads ‘a carriage service in which the call charge for calls made to the number for the service from a standard telephone service (other than a location independent communications service or a public mobile telecommunications service) is zero.’ The change to the definition is to exclude a location independent communications service from the requirement to offer a zero call charge for calls made to a freephone service.
Item 10 inserts additional text into the definition of ‘local rate service’ in the Dictionary for the Plan. The additional text is: ‘location independent communications service or a’ which is inserted into the definition after the existing text ‘other than a.’ Paragraph (d)(i) of the definition for ‘local rate service’ now reads a carriage service ‘for which the call charge for calls made from a standard telephone service (other than a location independent communications service or a public mobile telecommunications service) is equal to, or less than, the call charge for local calls.’ The change to the definition is to exclude a location independent communications service from the requirement to offer a local call charge for calls made to a local rate service.

Item 11 inserts a new definition into the Dictionary for ‘location independent communications service’. A location independent communications service is defined as:

(a) a carriage service that is capable of voice telephony; and
(b) is provided for receiving calls at a location that can be identified by the originating CSP as the location of the customer or the point of intersect to another CSP’s network; and
(c) is not a local, digital mobile, freephone, local rate or premium rate service.

The above definition is phrased to maintain consistency with the definitions of other service types that are contained in the Plan. Service types in the Plan are defined with reference to charging arrangements, which requires the inclusion of the terminating point of a call in the definition. As a consequence, a carriage service that is defined in part by reference to incoming calls for the purposes of charging does not preclude outgoing calls from its definition. This is the case with the above definition for location independent communications services.

This item also has a note to the effect that the requirement at paragraph (a) for a LICS service to be capable of voice telephony is a minimum requirement. Any LICS service capable of voice telephony may also be capable of other, non-voice-based functions.