



Telecom New Zealand Limited

**Submission:
Draft Report on
Numbering Management in New Zealand**

**provided to
Commerce Commission**

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Section 1: Executive Summary

Introduction

- 1 Telecom appreciates the opportunity to comment on the Commission's Draft Report on Numbering Management in New Zealand (Draft Report).

Summary

- 2 As the Commission is aware, the industry has been considering the governance arrangements for number administration for some time. A joint working party between the parties to the Number Administration Deed (NAD) and the Telecommunications Carriers' Forum (TCF) has been established to build on the earlier work already undertaken on the NAD.
- 3 The Commission's Draft Report provides a useful summary of information on international numbering practice, and advances our understanding. It is therefore a welcome input into the formulation of proposals for further reform of numbering management in New Zealand.
- 4 The Draft Report does however contain some inaccuracies in its evaluation of current practice in New Zealand. It is also in need of clarification at a number of points. Once these defects are remedied the Draft Report will usefully assist further reform.
- 5 We believe that the industry has a valuable role in future numbering administration and in formulating reform, and to this end we support the TCF's proposal to work with the Commission and the Ministry of Economic Development (MED) on the shape this will take.

Structure of this submission

- 6 This submission consists of four sections:
 - o This section 1 is the Executive Summary;
 - o Section 2 provides our comments on the Commission's Draft Report;
 - o Section 3 comments on some of the industry's achievements in numbering management in the last few years;
 - o Section 4 notes our support for the TCF's proposal for a joint approach going forward.

Section 2: Comments on Draft Report

Draft Report welcomed

- 7 As the Commission is aware, the industry (through both NAD and TCF) has been keen to develop an understanding of international best practice in numbering management to guide its future direction.
- 8 Telecom, as a party to the NAD, member of the TCF, and operator of telecommunications services, therefore welcomes the Commission's Draft Report as substantially meeting the industry's need. The Draft Report provides a source of helpful information to the industry as it seeks to continue to administer numbering "for the long-term benefit of end-users of telecommunications services in New Zealand"¹.

Report a helpful guide to international practice

- 9 The Draft Report most helpfully gathers together information on numbering practice internationally.
- 10 It is not clear however how *best* practice is to be derived from this information. Some principles are discussed on page 9, and the Draft Report states that "where the Commission observes a high degree of international convergence in regulatory practice which accords with these principles, the Commission will take the view that it represents international best practice" (page 10). However, the justification for these particular principles is lacking. Further, these principles are not explicitly and systematically referenced elsewhere in the paper, nor is there discussion about how trade-offs between these principles might be made when they are in conflict (as may occur for example between the principle of supporting competition and the issue of number scarcity).

Analysis of NZ performance superficial and incorrect

- 11 Our assessment is that the Draft Report, while helpfully canvassing overseas practice, has been quite superficial in its analysis of New Zealand's performance. Generally speaking New Zealand's positive achievement of much of what the Draft Report describes is not noted. The summary table on pp. 4-5 does not do justice to the situation.²
- 12 In the following paragraphs we address several examples where the Commission's evaluation is superficial and incorrect.

Critical national resource

¹ General Principle 1, clause 2.2, Number Administration Deed, version 6.1, 1 July 2008. [http://www.nad.org.nz/uploads/file/NAD%20v6_1%20July%202008\(1\).pdf](http://www.nad.org.nz/uploads/file/NAD%20v6_1%20July%202008(1).pdf)

² The table also seems to be wrongly titled: a more meaningful title in the context would be "Key Elements on which New Zealand does not meet international best practice", or something of that nature.

- 13 The table on page 4 of the Draft Report “Key Elements for Efficient Number Management” states that the fundamental principle that “numbering is recognised as a critical national resource which influences the way numbering frameworks are developed” is “not recognised in the NAD.” This is not correct.
- 14 Numbering’s national importance is evidenced in the NAD in several ways. General Principle 1 states that “the administration of numbering under the NAD must be carried out for the long-term benefit of end-users of telecommunications services in New Zealand”. General Principle 2 records the parties’ recognition of the important roles played by numbering administration, and General Principle 3 records their recognition of the importance of numbering information to end-users. General Principle 4 notes that numbering administration involves public costs and benefits.
- 15 As evidence for the Commission view that this fundamental principle is not recognised the Draft Report refers to Numbering Principle 6 which records that “number allocation does not affect number ownership or other intellectual property rights...”. The Commission asserts that it is recognition of the importance of numbering as a key national resource that has led to most countries surveyed placing the responsibility for managing numbers with an independent regulator. The Commission has not evaluated whether national importance can be supported by mechanisms other than regulation.

Public consultation

- 16 The Draft Report notes that “recommendations on issues under review are not subject to a public consultation process”. This statement is correct, insofar as the letter of NAD is concerned.
- 17 As noted above, Telecom supports an open, consultative approach.
- 18 However, reference to the letter of the NAD is insufficient to make a proper evaluation of the case. Awareness of the impact of number changes on the public leads to the General Principles mentioned above. This same awareness, we are confident, would lead the Management Committee to embark, voluntarily, on a programme of public consultation on any matter which has the potential to affect the public.

Activation timeframe

- 19 The Draft Report records the view that “the NAD rules do not contain any obligation to activate allocated numbers within a certain timeframe, failing which the numbers will be withdrawn and re-assigned to other operators.”
- 20 This is incorrect. The Number Allocation Rules provide a set reservation period for each Service Category (usually 6 months) and provide a mechanism for relinquishment and allocation to other operators if they remain inactive (clauses 1.2.8 to 1.2.14). We note in particular clauses 1.2.13 and 1.2.14.

Numbering usage rules and conservation and relief efforts

- 21 Because the Commission has chosen to focus only on those areas where it perceives New Zealand's regime to be lacking, there is no recognition of the provisions and activity of the industry in conserving what is a "scarce national resource"³.
- 22 The current NAD/Rules provide restrictions or conditions on transfer, and require activation (see above). Additional allocations in a service category may only be made when there is proven demand.
- 23 Industry parties have been active in returning blocks for which they have historical allocations (pre-dating the establishment of the NAD) but no further use. For example, Telecom has been actively reviewing its code block use and revising the allocation status accordingly. In particular, Telecom has recently relinquished its pre-NAD allocation of the 025 non-geographic code block, as signalled last year as part of the closure of its D-AMPS mobile network.

Recovery of numbers

- 24 The Commission states on page 50 of its Draft Report that the recovery mechanism under the NAD for parties who were allocated numbers prior to the formation of the NAD and no longer exist, and who ceased to be a party to the NAD are no longer in operation is unclear.
- 25 Contrary to the statement on page 50, the NAD clearly provides for the recovery of numbers allocated to now defunct parties to the NAD (clause 3.13), and indeed this has been successfully done in recent times.

Clarification needed at some points

- 26 There are other issues on which some clarification from the Commission would enhance the quality of the Draft Report. These are addressed in the following paragraphs.

Comparator countries

- 27 The Draft Report includes information on some countries in relation to some of the discussed attributes but not others. There is no statement as why certain countries appear in some tables but not in others: could the information not be obtained, or does the regime of the omitted countries not address that attribute, or was there some other reason?

Information sources

- 28 In many cases there is no source cited for the information provided. This would be helpful, so that issues can be explored in more depth.

Emergency services

- 29 Telecom agrees that provision of access to emergency services, and clarity of customer information about access to emergency services, are important attributes of the telecommunications environment.

³ Draft Report page 31.

However, the linkage to numbering in the Draft Report is very unclear.

- 30 The matters listed in relation to New Zealand practice on the key element of “access to emergency services should be available from a wide range of communications services” in the table on page 4 bear no relationship to numbering. Similarly, the aspects of New Zealand’s practice in emergency services access on pages 46-47 do not seem to relate to numbering management.
- 31 The substantive discussion of access to emergency services on pages 34-36 does not draw out the numbering implications of the matters raised.
- 32 The Draft Report would be enhanced if the relationship between the emergency service requirements and best practice numbering management could be spelled out.

VoIP services

- 33 The Draft Report observes, in relation to accommodating technology advancements, that “no clear rules exist in regard to the allocation of numbers for VoIP service providers. Allocations are currently made on a case to case basis without any clear guidelines.”
- 34 Allocations are in fact made on the basis of the existing service categories in the Number Allocation Rules – the focus is on the service delivered, not on the technology used to deliver it. A service with a geographic structure will be allocated a geographic code block; a service with a non-geographic structure a non-geographic code block.
- 35 The Draft Report references a “voice service regime” and an “information service regime” and the different treatment of VoIP-delivered services under each. The regulatory community in New Zealand has yet to define the necessary attributes of a service that falls within the “voice service regime”, so it is too early for the industry to determine whether it might be appropriate to provide for new Service Categories.
- 36 If the Commission believes there is a clear “voice service regime” as distinct from an “information service regime” it would be of great assistance to the industry if the Commission were to identify what that regime should cover.

Non-geographic allocations

- 37 On page 7 of the Draft Report the following statement is made in relation to the demand for mobile numbers in particular:

... numbers need to be allocated on equal terms i.e. like for like basis to remove the potential barrier to entry for new entrants.

It would be of significant help to the industry if the Commission could explain what “like for like basis” means, and how this is implemented in the numbering regimes of other jurisdictions.

- 38 Elsewhere in the Draft Report (pages 18-20) reference is made to the need to conserve non-geographic numbers because of the high

demand for them. In addition to the factors leading to increased demand for mobile numbers listed on page 18 the Commission might add the development of mobile numbering on telemetry devices. The Commission notes (pages 19-20) that many countries have moved to reduce the size of mobile number blocks for allocation and to set a higher threshold for the utilisation rate before further allocations are made.

- 39 It is not at all clear whether and how the reduction in block size relates to a principle of like for like allocation.
- 40 The Number Register shows that in April New Zealand Communications was allocated all the spare codes in the 024X range. This size of allocation exceeds that provided by the Number Allocation Rules (which provide for a maximum allocation of a single 02XY block), and so it may be inferred that this allocation required a special resolution of the Management Committee. This raises the question as to whether some kind of two-tiered approach to making mobile allocations is appropriate, with allocations possible at the 02X level (not currently permitted under the Number Allocation Rules) for applicants committed to establishing national coverage using their own infrastructure. Finding an approach that works and appropriately balances the need to conserve numbers, allow for entry, and not cause disruption for end-users is challenging. The sorts of factors that Telecom has been considering in this context follows and illustrates the challenge:
- 40.1 The only argument we are aware of that might support a “like for like” principle is that the same size of code block allocation is needed to facilitate customer acquisition in an already highly penetrated market – customers will only be acquired through transfer from existing operators, and even in the presence of portability, it may be argued that it is necessary to be able to give such customers a new mobile code (02X prefix) while allowing them to retain the same number body.
- 40.2 The “like for like” principle on its own creates concern around scarcity of code blocks because it means that a factor other than demand determines the “consumption” of code blocks. The creation of new code blocks, once those currently available are used up, is not costless.
- 40.3 If there is no scarcity problem at all, or the probability of it arising is low, or the cost of creating new code blocks is low then there may be no need for a 2-tiered approach – every applicant could be given a block at the 02X level.
- 40.4 We are working with the assumption that at least one of the conditions in 40.3 does not hold – that if anyone can apply, then there will be insufficient 02X blocks for the expected demand and it is not low cost to create new blocks. Creating new code blocks requires such things as the rearrangement of other existing blocks, or the insertion of additional digits. These are non-trivial matters to implement, both for operators

and for their customers (as the Commission's Draft Report notes, at page 33).

- 40.5 Another way of dealing with the problem would be to limit the demand for code blocks, by setting conditions so that not just "anyone" can apply.
- 40.6 Setting conditions however could mean barriers to entry. Are there conditions that could reduce the demand for code blocks but not create barriers to entry (and not by allocating entrants only part of a code block)? Is it still possible to enter without a code block?
- 40.7 In theory at least, resellers and shallow MVNOs do not need their own code block allocation in order to enter. However, they face the same customer acquisition issues as an infrastructure player.
- 40.8 Ladder of investment arguments mean that we need to recognise and provide for players to transition from, say, resale to MVNO to full infrastructure play. We should also consider those transitioning from a regional network build to a national one.
- 40.9 If someone who has worked their way up from the bottom of the ladder is disadvantaged relative to their peers when they reach the top, this would seem to be problematic. We need to ensure that someone starting off as a reseller has a way of getting to the position of having the same means of competing as their peers when they reach the higher rungs of the ladder.
- 40.10 The problem raised in 40.9 may be able to be addressed in the following way. If those who start off as second tier players (and thus are allocated codes at the 02XY level) wish to apply for a full 02X block, once they qualify for it, they should be allowed to do so provided that they are required to migrate their customers to new block (customers could retain their number body – a previous 02AB NNNNNN would become 02C DNNNNN) and relinquish their previous 02XY block.
- 40.11 However, if we were to have a two-tier approach, then we would be effectively saying that the customer acquisition issue raised in 40.7 is not going to be resolved for players until they show some commitment to being "tier 1" style (infrastructure based) competitors. This increases the height of the first rung of the ladder of investment relative to today. A crucial evaluation therefore is whether this consequence is worse than the costs of resolving the portability issues in 40.1 (and any other as yet unstated "like for like" arguments) or than the scarcity consequences indicated in 40.2 and 40.3.
- 40.12 It may be argued that the Telecommunications Act 2001 already provides a precedent for differential treatment in that the National Roaming specified service is only available to those with serious infrastructure plans. That is true, but the consequences seem to be a bit different in the case of

numbering. Provision of the roaming service to one operator does not impinge upon the potential for roaming service to be made available to a subsequent applicant; allocation of code blocks does (if we accept that there is some scarcity issue).

40.13 If we were to allow a two-tier approach, then there does need to be provision made for losing the right to the entire code block if the national roll out plan does not eventuate (or if the criteria for differentiation, whatever they are, are not met). This will require customers to change numbers, because otherwise the relinquished block will be peppered with assigned numbers and will be useless for allocation to another. This would have to be a recognised risk that a prospective infrastructure player would have to be willing to take on if they apply for an 02X level code ahead of proven demand.

41 We would therefore welcome clarification of the Commission's view and insights from international best practice in this regard.

Premium rate service codes and short codes

42 The discussion of short codes and premium rate service codes on pages 20 to 22 does not clearly relate to the management of numbers, and drifts into matters of retail service definition. Clarification of the *number management* issues that arise would be helpful.

Withdrawal of numbers

43 In relation to three topics there is mention of the possibility of numbers being withdrawn from operators – timeframe for activation, unused numbers, and enforcement. In relation to enforcement, the report notes that the sanction of withdrawal is “an important feature for effective and efficient management of the numbering scheme” (page 52).

44 In our view the possibility of withdrawing in-use numbers from an operator needs to be balanced with the consequences of withdrawal for end-users and other operators – withdrawal of numbers is effectively the closing down of the service involved. Clarification of how the Commission sees such a mechanism operating would assist the NAD as it continues its work in reviewing the enforcement provisions of the NAD.

Portability

45 The Draft Report notes that “Individual number assignment and 1-step assignment process are most appropriate for number ranges where ... the numbers are subject to portability” (page 26). It is not clear what the linkage between portability and individual/1-step assignment is that makes this assignment approach appropriate when portability is involved.

Section 3: Achievements of Industry Management of Numbering

- 46 The Commission's Draft Report contains a section on "The New Zealand Experience". The Commission's review of the history of the NAD would be more complete if reference was made to the NAD's own efforts to review and improve its operation and governance, and to resolve issues. In this section we very briefly summarise the key recent achievements of the industry in this respect, which are evidenced in successive amendments to the published NAD documents.
- 47 In June 2007 approval was obtained from all of the Parties to the NAD to adopt a new voting structure, replacing the previous requirement for consensus decisions on most items with either Super-Majority or simple majority.
- 48 In July 2007, approval was obtained from all the Parties to changes to the NAD's membership criteria to require New Zealand residency, thus making the NAD more enforceable. Changes to the NAD and Rules were also made to provide allocation information to the Commission to assist the Commission in assessing eligibility for number portability.
- 49 As the Commission is aware, in October 2007 the Management Committee agreed to form a sub-committee to review whether to merge the NAD and the TCF. (As noted below, shortly thereafter this work became the subject of a joint TCF/NAD working party).
- 50 In October 2007, the Management Committee approved a rule change on the use of short codes.
- 51 In November 2007 a joint TCF/NAD working party was established to review the governance arrangements for number administration.
- 52 In June 2008, the NAD Parties approved a change to the NAD to harmonise the quorum requirements for decisions requiring Consensus and Super-Majority.

Section 4: A Way Ahead

- 53 We are aware that the TCF is making a submission on the Draft Report in which it proposes working with the Commission and Ministry for Economic Development on any necessary re-design of the New Zealand numbering regime. This follows the work of the joint TCF/NAD working party on numbering governance arrangements.
- 54 Telecom welcomes this proposal. There is, we believe, an important ongoing role for the industry in numbering management in which the industry's expertise and nearness to end-users can usefully shape numbering developments.