# Telecommunications Regulatory Affairs Advisory Committee 

Re-allocation of Number Blocks within " 8 x " Level for Mobile Services

## Purpose

This paper proposes to re-allocate number blocks " $8(4-7,9) \mathrm{x}$ " within " 8 x " level for mobile services with a view to meeting the continuing demand for mobile numbers in the coming four years.

## Background

2. The Office of the Communications Authority (OFCA) established the Telecommunications Numbering Working Group (TNWG) under the TRAAC in January 2013. The TNWG was tasked to conduct studies on various telecommunications numbering related issues. Among various services, the annual growth of the number of mobile service subscribers remained strong at about $8.7 \%$ over the past five years (up to May 2013). There was a need for the TNWG to explore the number levels/blocks which might be (re-)allocated to mobile services after exhaustion of " 9 ", " 6 " and " 5 " numbers.
3. Since its establishment in January 2013, the TNWG convened four meetings and discussed various proposals in relation to possible utilisation / re-allocation of different number blocks, including " 57 x ", " 8 x ", " 7 x " and " 4 x ", for mobile services.
4. With the support of TNWG members, the proposal of re-allocating number block " 57 x " (having a million numbers) for mobile services was tabled at the last TRAAC meeting held in April 2013 vide TRAAC Paper No. 3/2013. ${ }^{1}$ Members of the TRAAC were in support

[^0]of the proposal. In the light of the current consumption rate, it is estimated that " 57 x " numbers could support mobile subscriber growth for another nine to 12 months, until around May 2014.
5. In order to meet the demand for mobile numbers beyond May 2014, the TNWG recommended that some of number blocks within " 8 x " level be re-allocated for mobile services.

## Utilisation of Number Blocks within " $8 x$ " Level

"80x" Numbers

6. According to the "Numbering Plan for Telecommunications Services in Hong Kong" (the Numbering Plan) ${ }^{2}$ and the "Code of Practice Relating to the Use of Numbers and Codes in the Hong Kong Numbering Plan" (the Numbering CoP) ${ }^{3}$, number block " 80 x " is allocated for freephone services (where " 800 " is used as the access code and " 801 " to " 809 " are reserved for expansion of the services). There are 10 million individual numbers in the number range of " 80 x " 4 and the existing utilisation is only about $0.27 \%$ (primarily using " 8009 x "). Given a low utilisation of freephone numbers to date, there may be scope for re-allocating some of these idle number blocks (e.g. " $800(0-8) \mathrm{x}$ " and " $80(1-9) \mathrm{x} ")$ for other telecommunications services (including fixed and mobile services) in the future. The TNWG would keep in view the situation and propose the way forward at a later time.

## "8(1-3)x" Numbers

7. Number blocks " $81 \mathrm{x} "$, " $82 \mathrm{x} "$, and " 83 X " are currently allocated for personal numbers. As a result of the low demand for these numbers over the years, and with the support by members of the former
[^1]Telecommunications Numbering Advisory Committee (NAC), the former Telecommunications Authority had ceased to allocate personal numbers in this range to fixed operators since 1 January 2009. In fact, OFCA from time to time received applications for returning idle personal numbers from fixed operators. This indicates that the demand for personal numbers has been diminishing. If this trend continues, the TNWG would consider whether some of the number blocks within " $8(1-3) \mathrm{x}$ " need to be re-allocated for other telecommunications services including fixed and mobile services.

## "8(4-7)x" and "89x" Numbers

8. Number blocks "8(4-7)x" and " 89 x " have been kept in reserve for possible use for number migration in the future. ${ }^{5}$ In respect of " 85 x ", " $86 x$ " and " $89 x$ ", they are reserved together with " $32 x$ ", " $33 x$ " and " 38 x " for possible 9 -digit number migration, known as the " $3 \& 8$ " option. Under the " $3 \& 8$ " option, leading digits " 3 " and " 8 " would be added to fixed and mobile numbers respectively to form a 9 -digit number. In respect of " 87 x ", it has been reserved for possible 9-digit migration for paging numbers using leading digit " 8 " (the " 87 " paging migration option).
9. The TNWG has been reviewing various options for future number migration with no definitive recommendation for the time being. With a view to better utilising number resources in the existing 8 -digit numbering plan before migration to the 9 -digit or 10 -digit numbering plan, the TNWG recommended that number blocks " $8(4-7,9) \mathrm{x}$ " (having about five million numbers) be re-allocated for mobile services. It is expected that these additional numbers for mobile services will be able to cope with the demand up to around April 2017.
10. Following the re-allocation of "8(4-7,9)x" numbers for mobile services, there will be less options left behind for 9 -digit number migration as both of the " $3 \& 8$ " option and " 87 " paging migration option

[^2]have to be dropped. The remaining options for 9-digit number migration would be utilising leading digit of either " 7 " or " 4 ". In this respect, the TNWG will continue its discussion on the matter.

## " $88 x$ " Numbers

11. Number block " $88 x$ " (together with " $33 x$ ") has been reserved for the possible 10 -digit number migration, known as the " $33 \& 88$ " option. Under this " $33 \& 88$ " option, leading digits " 33 " and " 88 " would be added to fixed and mobile numbers respectively to form a 10-digit number. To keep this option available for further consideration as the way forward of future number migration, it is recommended to continue to keep " 88 x " numbers in reserve.

## Consequential Amendments to "38(4-7,9)x" Numbers

12. Following the proposed use of "8(4-7,9)x" for mobile services, number blocks " $38(4-7,9) \mathrm{x}$ " (having half a million numbers) which has been reserved for the possible 9 -digital number migration under the " $3 \& 8$ " or " $3 \& 7$ " options can be released and made available for number allocation for fixed services. As for " $32 \mathrm{x} ", " 33 \mathrm{x}$ " and " $38(0-3,8) \mathrm{x}$ ", they would continue to be kept in reserve for possible 9-digit number migration (based on the " $3 \& 7$ " option in which leading digit " 3 " would be added to fixed numbers to form a 9 -digit number) or 10-digit number migration (based on the " $33 \& 88$ " option).

## Recommendation

13. To summarise, it is recommended that -
(a) The status quo be maintained for the existing allocation of number blocks " 80 x " and " $8(1-3) \mathrm{x}$ ";
(b) Number blocks " $84 x "$, " $85 x "$, " $86 x "$, " $87 x$ ", and " $89 \mathrm{X} "$ be re-allocated for mobile services;
(c) Number block " 88 x " would continue to be kept in reserve for the possible 10-digit number migration; and
(d) As a consequential amendment, number block " $38(4-7,9) \mathrm{x}$ " be taken out of reserve and be made available for number allocation for fixed services.
14. Subject to the support of Members, OFCA will submit the recommendation to the Director-General of Communications (DG Com). The Numbering Plan and the Numbering CoP as well as other relevant documents will be updated to reflect the new arrangement after the approval of DG Com.

## Advice Sought

15. Members' views and comments are sought on the recommendation given in paragraph 13 above.

## Office of the Communications Authority <br> August 2013


[^0]:    ${ }^{1}$ TRAAC Paper No. 3/2013 is available at http://www.ofca.gov.hk/filemanager/ofca/en/content 757/traac03_2013.pdf.

[^1]:    ${ }^{2}$ The Numbering Plan is available at http://www.ofca.gov.hk/filemanager/ofca/tc/content_311/no_plan.pdf.
    ${ }^{3}$ The Numbering CoP is available at http://www.ofca.gov.hk/filemanager/ofca/common/Industry/telecom/cop20100929e.pdf.
    ${ }^{4}$ Freephone numbers are of 9 digits.

[^2]:    ${ }^{5}$ The former NAC has identified several number migration options, namely the " $3 \& 8$ " option, the " $3 \& 7$ " option, the " 7 " option and the " $33 \& 88$ " option. Details can be found in NAC paper 1/2007 available at http://tel_archives.ofca.gov.hk/en/ad-comm/nac/paper/nac2007p1.pdf.

