3GPP2 SC.R4001-0

Version 2.0

December 2010

3RD GENERATION
PARTNERSHIP
PROJECT 2
"3GPP2"

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GLOBAL WIRELESS EQUIPMENT NUMBERING ADMINISTRATION PROCEDURES

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1   Revision History
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Revision	Description of Changes	Date
Version 0.1	Initial draft output of London meeting	12 February 2003
Version 1.0	Initial Publication version	February 2004
Version 2.0	Publication version including multi-mode & editorial updates	December 2010

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1   FOREWORD

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3   This foreword is not part of this specification.
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6   This specification was prepared by the Third Generation Partnership Project 2 (3GPP2).
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1   INTRODUCTION

3   1.1   SCOPE

4   This document defines administrative guidelines and procedures ("Administration
5   Procedures" in further text) governing coordination of two bodies responsible for high
6   level management and allocation of Equipment Numbering Identifiers (IMEI and MEID),
7   the Global Decimal Administrator (GDA), and Global Hexadecimal Administrator (GHA).

8   Administration Procedures were developed by the consensus of representatives of
9   entities within the wireless sector of telecommunications industry. Administration
10 Procedures become effective upon recognition and or endorsement by GSMA, EICTA,
11 ARIB, TTC, TIA, CMSA (CWTS), CMCA, TTA, etc.

12 The detailed management of identifiers within a block allocated to either GDA or GHA,
13 is not within the scope of these Administration Procedures.

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15 1.2   INFORMATIVE REFERENCES

16 The documents that are referenced herein are for the sole purpose of identifying related
17 normative reference sources and were used in the formulation of this document. There
18 are no direct or indirect claims regarding the property rights, legal, or regulatory status
19 of those documents listed. Unrelated references in these documents are not considered
20 binding on any party.

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22 *[1]   DG.06   IMEI Allocation and Approval Guidelines, (Note: GSMA publication.*
23 *   SC.R4001-0 is included as a reference in DG.06)*

24 *[2]   SC.R 4002-0   Mobile Equipment Identifier (MEID) Assignment Guidelines and*
25 *   Procedures.*
26

27 *[3]   Mobile Equipment Numbering JEM Report and Conclusions, April*
28 *   2002*

29 *[4]   NAPRD03   PTCRB Overview of PTCRB Mobile/User type Certification (Note:*
30 *   see IMEI control sections 3.3 & 4.0)*

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1 **2   ASSUMPTIONS**

2   2.1   There shall be a Global Decimal Administrator (GDA) and a Global Hexadecimal
3   Administrator (GHA), or collectively, Global Administrators (GA). GDA and GHA
4   are impartial administrators with clearly defined scope and charter. GDA and
5   GHA shall coordinate the overall allocation of the equipment identifiers. The GA
6   allocate numbers to administrators or directly to manufacturers, or both.

7   2.2   The allocation of identifiers that are administered by the GDA and GHA (division
8   of identifier space between GDA and GHA) is by mutual recognition and/or
9   endorsement by GSMA (including CTIA PTCRB for 850 and 1900 IMEI bands),
10   EICTA, ARIB, TIA, CWTS, CMCA, etc, as stipulated in this document.

11 2.3   GDA is the global administrator with the primary responsibility for management
12   and allocation of identifiers for wireless equipment designed to comply with
13   specifications developed by 3GPP. The GSMA currently performs this role and the
14   JEM Group recommends that this should continue.

15 2.4   GHA is the global administrator with the primary responsibility for management
16   and allocation of identifiers for wireless equipment designed to comply with
17   specifications developed by 3GPP2. Based on the experience of TIA in ESN
18   allocation, the TIA is to act as GHA with recognition and/or endorsement by
19   3GPP2. The JEM Group also endorses this proposal.

20 2.5   GDA and/or administrators delegated by GDA shall allocate equipment identifiers
21   to manufacturers for equipment designed to comply to 3GPP specifications, and
22   not compliant with 3GPP2 specifications.

23 2.6   GHA and/or administrators delegated by GHA shall allocate equipment identifiers
24   to manufacturers for equipment designed to comply with 3GPP2 specifications,
25   and not compliant with 3GPP specifications.

26 2.7   Administrators shall adopt and abide by these Administration Procedures.

27 2.8   A terminal designed to comply with both 3GPP and 3GPP2 specifications shall
28   contain a single and unique equipment identifier accepted in all modes of
29   operation. This equipment identifier may be allocated by either GDA or GHA.

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1 **3 GDA AND GHA PROCEDURES**

2 3.1 The working procedures and/or terms of reference of both the GDA and GHA
3   shall be consistent with these Administration Procedures, and shall contain
4   specific references to it.

5 3.2 The working procedures and/or terms of reference of both the GDA and GHA
6   shall be consistent with, and not conflict with, each other.

7 3.3 Except as provided for in Sections 6.3, 6.4, and 6.5 herein, the working
8   procedures and/or terms of reference of both the GDA and GHA take precedence
9   over these Administration Procedures.

10 **4 GENERAL CLAUSES**

11 4.1 The Administration Procedures apply globally, however, they do not override the
12 regulations, procedures, or requirements of any appropriate legal authority or
13 regulatory authority.

14 4.2 The Administration Procedures remain in effect until changed by either industry
15   consensus or regulatory policy direction, which may invalidate them. GDA is
16   notified by GHA when any change to [2] is made. GHA is notified by GDA when
17   any change to [1] is made.

18 4.3 Equipment identifiers must be allocated for use as defined in appropriate sections
19   of relevant documents including [1], [2].

20 4.4 In the event that an issue cannot be resolved within a global administrator, then,
21   as required, the GDA, GHA, and/or industry organisations may facilitate
22   meetings (electronically or face to face) to discuss common problems or objectives
23   with the intention and authority to resolve these issues.

24 **5 NOTATION**

25 The following notational conventions are used in this document:

26 Unless otherwise noted, hexadecimal notation is used to designate values of equipment
27 identifier digits, e.g., 'A' signifies decimal 10, or binary 1010.

28 The ordered sequence of IMEI/MEID digits will be designated as [D0 … D13].

29 A range of values will be designated as $\{V_{MIN} … V_{MAX}\}$.

30 **6 ALLOCATION GUIDELINES**

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32 The following constitutes common administrative guidelines for the allocation of
33 Equipment Identifiers:

1   6.1   3GPP, 3GPP2, and their constituent SDOs and Market Representation Partners
2   should reference these guidelines where appropriate.

3   6.2   Coordination should exist between industry groups through the GDA and GHA to
4   ensure that there is no conflict or overlap between the numbering ranges
5   allocated to any group. The vehicle for such coordination on a global scale
6   between GHA and GDA shall be these Administration Procedures. The vehicle for
7   such coordination within the realms of GDA and GHA are within their domain,
8   and is not subject of these Administration Procedures.

9   6.3   GHA shall be responsible for allocation of numbering space in the range: D0 = {'A'
10   .. 'F'}; D1, … , D13 = {'0' .. 'F'}. Requests for number allocation for terminals
11   designed to comply with 3GPP2 specifications shall be fulfilled from this range by
12   GHA or an Administrator reporting to GHA. The total size of numbering space for
13   this block exceeds 27.0×10^{15}.

14   6.4   GDA shall be responsible for allocation of numbering space in the decimal range:
15   D0, … , D13 = {'0' .. '9'}, excluding the numbering space reserved for multimode
16   terminals allocated to GHA, as described in clause 6.5. Requests for number
17   allocation for terminals designed to comply with 3GPP specifications shall be
18   fulfilled from this range by GDA or an Administrator reporting to GDA. The total
19   size of numbering space for this block (assumes initial allocation to GHA per item
20   6.5 below) is 99.0×10^{12}. Part of this space has been allocated (see [1].) The GDA
21   shall maintain an inventory of the numbering space.

22   6.5   Terminals designed to comply with both 3GPP and 3GPP2 specifications are
23   considered multi-mode, a numbering space within the decimal range shall be
24   delegated by the GDA to GHA for multi-mode use. GHA shall use the same IMEI
25   TAC format as GDA for these allocations. There shall be an initial allocation
26   described as follows: [D0, D1] = '99', D2, …, D13 = {'0', …, '9'}. This numbering
27   space shall be expandable in decrementing values of [D0, D1] to '98', '97', etc.
28   Expansion of this initial space shall be the subject of written agreement between
29   GDA and GHA. The results of the expansion agreements shall be recorded in the
30   allocation history (see [1]). The total size of numbering space of this initial block
31   allocation to GHA is 1.0×10^{12}.

32   6.6   At the time of each new allocation of numbering space to GHA for terminals
33   designed to comply with both 3GPP2 and 3GPP specifications, the status of GDA
34   allocations shall be recorded in [1].

35   6.7   GDA has already allocated equipment numbers in the decimal numbering space,
36   as indicated in the [1]. All existing GDA allocations are in the numbering space
37   described as follows: [D0, D1] <= '54', D2, …, D13 = {'0', …, '9'}, but don't fully
38   utilise this space. Going forward, GDA shall allocate identifiers for terminals
39   designed to comply with 3GPP specifications or terminals designed to comply
40   with both 3GPP and 3GPP2 specifications, generally starting with unused
41   numbering space [D0, D1] <= '54', D2, …, D13 = {'0', …, '9'}, before allocations
42   within [D0, D1] > '54'.

43   6.8   GHA can transfer the authority of allocation of some or all of the allocated
44   numbering space to the GDA. Conversely, GDA can transfer the authority of

1   some or all of the allocated numbering space to the GHA. The agreement to
2   transfer authority shall be recorded in the allocation history.

3 6.9 The administrator(s) shall allocate mobile identifiers in a fair, timely, and
4   impartial manner to any applicant that meets the administrator's criteria for
5   allocation per [1] and [2].

6 **7 NUMBER MANAGEMENT COORDINATION BETWEEN GDA AND GHA**

7 7.1 The GA shall periodically jointly review their processes to ensure they are in line
8   with these guidelines.

9 7.2 Administrators shall recognize allocations made by other administrators.

10 7.3 The GDA and GHA shall regularly provide information to each other on all multi-
11   mode allocations made.

12 **8 MAINTENANCE OF GUIDELINES AND PROCEDURES**

13 8.1 Upon approval, this document will be maintained under change control by the
14   GA. Amendments to this document must be approved by the GA and industry
15   partners.

16 **9 MANAGEMENT OF UNALLOCATED NUMBERING SPACE**

17 9.1 The numbering space described as follows is reserved.

18         $D0 = \{'0', ..., '9'\}$; $Di = ['A', ..., 'F']$, "" is one or more of $= \{1, ..., 13\}$

19   Authority for allocation of this reserved space is not assigned. The reserved
20   numbering space shall not be allocated by either GDA or GHA until mutually
21   agreed to by both GDA and GHA and these Administration Procedures are
22   modified to allow such allocation.

23 **10 GLOSSARY AND LIST OF ACRONYMS AND ABBREVIATIONS**

24
25 3GPP   Third Generation Partnership Project
26 3GPP2   Third Generation Partnership Project Two
27 ARIB   Association of Radio Industries and Businesses
28 CMCA   China Mobile Communications Association
29 CWTS   China Wireless Telecommunications Society
30 EICTA   European Information, Communications, and Consumer Electronics
31   Technology Association
32 ESN   Electronic Serial Number
33 GA   Global Administrators (Union of GDA and GHA)
34 GDA   Global Decimal Administrator
35 GHA   Global Hexadecimal Administrator
36 GSM   Global System for Mobile Communication

1	GSMA	GSM Association
2	IMEI	International Mobile Equipment Identity
3	JEM	Joint Expert Meeting
4	MEID	Mobile Equipment Identity
5	PTCRB	PCS Type Certification Review Board
6	SDO	Standards Development Organization
7	TIA	Telecommunication Industries Association
8	TAC	Type Allocation Code
9	TTA	Telecommunications Technology Association
10	TTC	Telecommunications Technology Committee
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