3GPP2 SC.R4001-0
Version 3.0
March 2011

GLOBAL WIRELESS EQUIPMENT NUMBERING ADMINISTRATION PROCEDURES

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
Version 3.0	Publication version including sect 6.5 text & editorial updates	March 2011

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FOREWORD

This foreword is not part of this specification.

This specification was prepared by the Third Generation Partnership Project 2 (3GPP2).

1 INTRODUCTION

1.1 SCOPE

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

Administration Procedures were developed by the consensus of representatives of entities within the wireless sector of telecommunications industry. Administration Procedures become effective upon recognition and or endorsement by GSMA, Digital Europe, ARIB, TTC, TIA, CCSA, CMCA, TTA, etc.

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

1.2 INFORMATIVE REFERENCES

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

[1]	*TS.06*	*IMEI Allocation and Approval Guidelines, (Note: GSMA publication SC.R4001-0 is included as a reference in TS.06)*
[2]	*SC.R 4002-0*	*Mobile Equipment Identifier (MEID) Assignment Guidelines and Procedures.*
[3]		*Mobile Equipment Numbering JEM Report and Conclusions, April 2002*
[4]	*NAPRD03*	*PTCRB Overview of PTCRB Mobile/User type Certification (Note: see IMEI control sections 3.3 & 4.0)*
[5]	*TS.16*	*TAC Allocation Process for India*
[6]	*TS.17*	*TAC Allocation Process for China*

2 ASSUMPTIONS

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

2.2 The allocation of identifiers that are administered by the GDA and GHA (division of identifier space between GDA and GHA) is by mutual recognition and/or

endorsement by GSMA (including CTIA PTCRB for 850 and 1900 IMEI bands), Digital Europe, ARIB, TIA, CCSA, CMCA, etc, as stipulated in this document.

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

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

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

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

2.7 Administrators shall adopt and abide by these Administration Procedures.

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

3 GDA AND GHA PROCEDURES

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

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

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

4 GENERAL CLAUSES

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

4.2 The Administration Procedures remain in effect until changed by either industry consensus or regulatory policy direction, which may invalidate them. GDA is notified by GHA when any change to [2] is made. GHA is notified by GDA when any change to [1], [5] or [6] is made.

4.3 Equipment identifiers must be allocated for use as defined in appropriate sections of relevant documents including [1], [2], [5] and [6].

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

5 NOTATION

The following notational conventions are used in this document:

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

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

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

6 ALLOCATION GUIDELINES

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

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

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

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

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

6.5 Terminals designed to comply with both 3GPP and 3GPP2 specifications are considered multi-mode, a numbering space within the decimal range shall be delegated by the GDA to GHA for multi-mode use. GHA shall use the same IMEI TAC format as GDA for these allocations. Global Decimal Administrator (GDA) multi RAT 3GPP2/3GPP mobile assignments are allocated from within the individual IMEI Reporting Body Identifier allocation space. Global Hexadecimal Administrator (GHA) multi RAT 3GPP2/3GPP mobiles are allocated starting from the Reporting Body Identifier 99 allocation space. There shall be an initial allocation described as follows: [D0, D1] = '99', D2, …, D13 = {'0', …, '9'}. This numbering space shall be expandable in decrementing values of [D0, D1] to '98', '97', etc. Expansion of this initial space shall be the subject of written agreement between GDA and GHA. The results of the expansion agreements shall be recorded in the allocation history (see [1]). The total size of numbering space of this initial block allocation to GHA is 1.0×10^{12}.

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

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

6.8 GHA can transfer the authority of allocation of some or all of the allocated numbering space to the GDA. Conversely, GDA can transfer the authority of some or all of the allocated numbering space to the GHA. The agreement to transfer authority shall be recorded in the allocation history.

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

7 NUMBER MANAGEMENT COORDINATION BETWEEN GDA AND GHA

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

7.2 Administrators shall recognize allocations made by other administrators.

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

8 MAINTENANCE OF GUIDELINES AND PROCEDURES

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

9 MANAGEMENT OF UNALLOCATED NUMBERING SPACE

9.1 The numbering space described as follows is reserved.

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

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

10 GLOSSARY AND LIST OF ACRONYMS AND ABBREVIATIONS

3GPP	Third Generation Partnership Project
3GPP2	Third Generation Partnership Project Two
ARIB	Association of Radio Industries and Businesses
CCSA	China Communications Standards Association
CMCA	China Mobile Communications Association
ESN	Electronic Serial Number
GA	Global Administrators (Union of GDA and GHA)
GDA	Global Decimal Administrator
GHA	Global Hexadecimal Administrator
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	RAT	Radio Access Technology
7	SDO	Standards Development Organization
8	TIA	Telecommunication Industries Association
9	TAC	Type Allocation Code
10	TTA	Telecommunications Technology Association
11	TTC	Telecommunications Technology Committee
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