



GHA (Global Hexadecimal Administrator) Assignment Guidelines and Procedures for Mobile Equipment Identifier (MEID) and Short Form Expanded UIM Identifier (SF_EUIMID)

**Prepared by
Telecommunications Industry Association (TIA)
Engineering Committee TR-45**

Version: 13.0

July 2017

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Revision History

Revision	Description of Changes	Date
Version 1.0	Republished S.R0089-0 to SC.R4002-0 v1.0 Initial 3GPP2 Publication	February 2004
Version 2.0	The first draft TIA MEID GHA Administrative Guidelines (not published). Transposed from and based on 3GPP2 SC.R4002-0 version 2.0 published in October 2004. Also based on TIA ESN Manufacturer's Code Assignment Guidelines and Procedures version 1.9 published in June 2005.	September 2005
Version 3.0	Includes changes from SC.R4002-0 version 3.0.	March 2006
Version 4.0	Includes changes from 3GPP2 SC.R4002 version 4.0 to address EUIM-ID SF	September 2007
Version 5.0	Includes changes from 3GPP2 SC.R4002-0 version 5.0 updates to clarify MFR Code segment assignments	March 2008
Version 6.0	Includes changes from 3GPP2 SC.R4002-0 version 6.0 updates to clarify multimode assignments & SF UIMID	July 2010
Version 7.0	Includes changes from SC.R4002-0 version 7.0 updates of multimode assignment form and editorials	April 2011
Version 8.0	Includes changes from SC.R4002-0 version 8.0 updates including MEID form updates, Annex re: MEID db and editorials	May 2012
Version 9.0	Includes changes from SC.R4002-0 version 9.0 including Form "A" LTE band updates, contact Title boxes, new TIA address location and editorials	June 2013
Version 10.0	Includes changes from SC.R4002-0 version 10.0 including Form "A" multimode sections with equipment types & editorial updates.	February 2014
Version 11.0	Updates include Form "A" multimode sections with single model and new bands. Also MEID db, editorial updates and TIA logo.	October 2015
Version 12.0	Updates include editorial & Form "A" multimode sections with extensive Carrier Aggregation operating bands added.	January 2017
Version 13.0	Updates include 256 blocks of 65,536 codes for segmentation, also editor updates including Form "A" multimode page updates.	July 2017

Note: TIA MEID GHA Administrative Guidelines "GHA (Global Hexadecimal Administrator) Assignment Guidelines and Procedures for Mobile Equipment Identifier (MEID) and Short Form Expanded UIM Identifier (SF_EUIMID)" are recommended by TR-45 for TIA use, based on and following 3GPP2 SC approval of SC.R4002-0 most recent version.

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Foreword

This foreword is not part of this specification.

This document contains the guidelines and procedures for the assignment and use of Mobile Equipment Identifiers (MEIDs) for Mobile Stations (MSs), and Short Form Expanded UIM Identifiers (SF_EUIMID) for R-UIMs or CSIMs.

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1 1.0 PREFACE

2
3 Correspondence relating to the administration herein should be directed to the MEID Global Hexadecimal
4 Administrator.

5
6 MEID Global Hexadecimal Administrator
7 c/o Telecommunications Industry Association
8 1320 N. Courthouse Rd. Suite 200
9 Arlington, VA 22201 USA

10
11

Phone: +1 703-907-7791
12 Fax: +1 703-907-7728
13 meidadmin@tiaonline.org
14

15 2.0 SCOPE

16 The Mobile Equipment Identifier (MEID) [1] is used as a means to facilitate mobile equipment identification and to
17 track mobiles. Short Form Expanded UIM Identifier (SF_EUIMID) [6], [7], with similar format to MEID, may be
18 stored on a Removable UIM (R-UIM) or CSIM and used to identify it for certain functions. The Global Equipment
19 Identifier (GEID) coordinated range encourages global roaming and harmonization between 3G technologies as a
20 universal mobile equipment identifier.

21
22 The fields in the MEID or SF_EUIMID are coded with hexadecimal coding {note: SF_EUIMID shall use RR=A0-
23 FF (regardless if it is a CDMA only or GSM+CDMA card)}. The addressing space is quite large and exhaustion
24 issues are not expected. In further text, unless specifically noted otherwise, the term MEID will be used to mean
25 either MEID in the narrow sense (i.e. identifier stored on the mobile equipment hardware), or SF_EUIMID (i.e.
26 identifier stored on the Removable User Identity Module (R-UIM) or CSIM.

27
28 GEID (i.e., IMEI and MEID) provides the manufacturer identity of the ME, and information such as type allocation
29 (for multi-mode MEID assignments) and serial number. By means of manufacturer's data base lookup, MEID may
30 help service providers identify the ME to the levels of model, manufactured factory and lot numbers. The
31 information can be used for corrective or preventive actions to improve the service quality. The MEID allows a list
32 of MEs that have been stolen or denied service to be maintained e.g., Central Equipment Identity Register (CEIR).

33
34 The MEID has a number structure and allocation system that is globally recognized and applied in multiple access
35 technologies.

36
37 Regulatory requirements associated with MEID are a subject of relevant laws and regulations, and relevant technical
38 specifications in the country where equipment is placed on the market.

39 These guidelines are in the context of international cellular telecommunications industry standards. It is
40 recommended that systems compliant with the industry standards follow these guidelines to facilitate international
41 roaming and to minimize fraud.

42 The MEID is entered into the MS by the manufacturer of the MS. The MEID is composed mainly of two basic
43 components, the manufacturer's code and the serial number. These guidelines specify the procedure for acquisition,
44 transfer, return and regulation of the MEID Manufacturer's (MFR) Codes.

45 These guidelines pertain to all digit segments of the MEID format. The GHA manages all digit segments of the
46 MEID, but directly administers only the MEID MFR Code segment. The manufacturer to which the MEID MFR
47 Code or subdivided segmented block is assigned directly administers the assigned Serial Number segment. Detailed
48 Mobile Equipment Identifier (MEID) assignment information is provided by the Global Hexadecimal Administrator
49 (GHA).
50

1 These guidelines apply globally; however, they do not supersede the regulations, procedures or requirements of any
 2 appropriate legal or regulatory authority.

3 A compliant MS must have an MEID in accordance with these guidelines.

4 Equipment identifiers other than MEID and SF_EUIMID (e.g., ESN, UIM-ID [3],[4]) are not addressed here.

5
 6 If a multi-mode MS supports one or more 3GPP2 defined radio interfaces (e.g., analog, CDMA) and utilizes a single
 7 mobile equipment identifier, that identifier conforms to the MEID guidelines. If a multi-mode MS supports both
 8 3GPP2 and 3GPP defined radio interfaces (e.g., CDMA, GSM), the mobile equipment identifier conforms to the
 9 IMEI guidelines [3.2] and/or these guidelines.
 10

11 **3.0 INFORMATIVE REFERENCES**

12 3.1

13
 14 [1] 3GPP2 S.R0048-A 3G Mobile Equipment Identifier (MEID)
 15
 16 [2] GSMA TS.06 IMEI Allocation and Approval Guidelines (also references TS.30)
 17
 18 [3] 3GPP2 SC.R4004-0 UIM ID Manufacturer's Code Assignment Guidelines and Procedures
 19
 20 [4] TIA ESN Manufacturer's Code Assignment Guidelines and Procedures
 21
 22 [5] 3GPP2 SC.R4001-0 Global Equipment Numbering Administrative Procedures
 23
 24 [6] 3GPP2 SC.R4003-0 Expanded R-UIM Numbering Procedures
 25
 26 [7] 3GPP2 S.R0111-0 Expanded R-UIM ID Stage 1
 27
 28 [8] 3GPP2 X.S0008-A MAP Support for the Mobile Equipment Identity (MEID)
 29
 30

31 **4.0 ASSUMPTIONS AND CONSTRAINTS**
 32

33 These guidelines and procedures are based on the following assumptions and constraints:

34 4.1 The guidelines are designed to provide the greatest latitude to MS, R-UIM and CSIM manufacturers while
 35 permitting the effective and efficient management of a finite resource.
 36

37 4.2 The coordinating function of the GEID administration is performed by the Global MEID Administrators.
 38 (See Ref. [5]).

39 4.2.1 The function of the IMEI Global Decimal Administration (GDA) is performed by an appointed
 40 IMEI Administrator.

41 4.2.2 The function of the MEID Global Hexadecimal Administration (GHA) is performed by the 3GPP2
 42 appointed MEID Administrator.

43 4.3 The guidelines as set forth in this document remain in effect until there is change as a result of 3GPP2
 44 standards development or regulatory policy (where applicable) direction to change them.

45 4.4 The guidelines do not describe the method by which MEIDs are transmitted across and processed by
 46 networks. Network interworking arrangements are contained in other standards, documents, or business
 47 agreements.
 48

- 1 4.5 The applicant/assignee of an MEID MFR Code(s) should provide evidence of credentials, if requested, to
2 produce MSs.
- 3
- 4 4.6 The GHA may appoint other regional entities as a regional reporting body with MEID assignment
5 authorization.
- 6
- 7 4.7 Without authorization of 3GPP2, the Administrator shall take no action impacting legacy equipment
8 identifiers. Administration and Implementation of MEID shall have no negative impact on the application
9 and use of legacy equipment and identifiers (e.g., ESN, UIM ID).
- 10
- 11
- 12

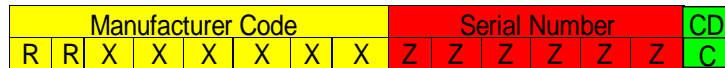
13 **5.0 MEID FORMAT AND FUNCTION**

- 14 5.1 The 56-bit MEID identifier structure is compatible between 3GPP IMEI and 3GPP2.
- 15 5.2 Each MS is assigned a unique MEID. When used as SF_EUIMID, it is uniquely assigned to an R-UIM or
16 CSIM.
- 17 5.3 The MEID identifies the manufacturer of the MS. When SF_EUIMID is assigned to an R-UIM or CSIM, it
18 identifies an R-UIM or CSIM manufacturer.
- 19
- 20 5.4 MEID Structure and Format

21 The MEID digit range is hexadecimal and syntactically consistent with the IMEI structure. However, the
22 MEID structure does not utilize all of the fields in the exact semantic manner as in IMEI. The MEID
23 numbering space is allocated in a manner that does not impact the decimally encoded IMEI. The MEID
24 structure is also consistent with the ESN allocation scheme which uses 24-bit Serial Numbers.

25 *The MEID structure (Note: format used for protocol and Hex to Decimal conversion):*

26



27

28 In the case of MEIDs for terminals conforming exclusively to 3GPP2 technology, all of these fields are defined as
29 hexadecimal values with the following valid range:

- 30 RR - valid range A0 ... FF – globally administered by GHA (i.e., MEID Administrator)
- 31 XXXXXX - valid range 000000... FFFFFFFF
- 32 ZZZZZZ - valid range 000000... FFFFFFFF
- 33 C - valid range 0... F – not transmitted over the air

34 In the case of MEIDs for terminals designed to comply with both 3GPP and 3GPP2 air interface specifications (i.e.,
35 multimode terminals), all of these fields are defined as decimal values. The following valid decimal ranges are
36 globally assigned by the GHA¹ for multimode terminals (Note: other multimode ranges are globally administered by
37 the GDA from allocation space within other individual GDA RR decimal ranges. These GDA ranges are an IMEI as
38 opposed to an MEID):

- 39
- 40 RR - valid range ‘99’, ‘98’, ‘97’..... – globally administered by GHA (i.e., MEID Administrator)
- 41 XXXXXX - valid range 000000... 999999
- 42 ZZZZZZ - valid range 000000... 999999

¹ GHA presently assigning RR 99 range.

1 C - valid range 0 ... 9 – not transmitted over the air

2

3 5.4.1 Numbering Capacity

4 The MEID numbering capacity can be computed as follows:

5 *There are 96 codes when RR is restricted to the A0 .. FF range. Note that additional 60 codes*
6 *could be made available in the ranges of 0A .. 0F, 1A .. 1F, 2A .. 2F, ... , 9A .. 9F, subject to*
7 *industry agreement. [3.5]*

8 There are 16,777,216 codes in the XXXXXX field.

9 There are 16,777,216 Serial Numbers in ZZZZZZ field.

10 *The total numbering capacity exceeds 281×10^{12} (281 trillion) per RR code.*

11 The MEID is the hardware identifier migrated from the ESN, and SF_EUIMID is a card identifier migrated from the
12 UIMID that was derived from the ESN.

13 The current ESN numbering space consists of:

14 256 Manufacturer Codes (8-bit).

15 16,777,216 Serial Numbers per Manufacturer Code.

16
17 The MEID provides for a raw numbering space that is 65,535 times the size of the existing ESN numbering space
18 per RR code. The total numbering space using 96 RR codes represents a space that is 6,291,456 times as large as the
19 current ESN numbering space.

20

21 5.5 The MEID does not specify the frequency band, air-interface technology or supported service associated
22 with the MS.

23

24

25

26 6.0 GEID SPECIFIC GDA and GHA ASSIGNMENT GUIDELINES
27 COORDINATION

28

29 Except as provided for Sections 2.8, 6.3, 6.4, 6.5 of the Global Numbering document Ref [5], the working
30 procedures and/or terms of reference of the GDA and GHA take precedence over the Global Numbering
31 Administration Procedures (see Ref. [5] Section 3.3).

32

33

34

35 7.0 ASSIGNMENT PRINCIPLES

36

37 7.1 MEID MFR Codes shall be assigned to permit the effective and efficient use of a finite resource in order to
38 maximize the existing allocated resource inventory and to defer, as long as practical, the need to request
39 additional or replacement for MEID MFR Code resources.

40 7.2 Upon application, the MEID administrator shall assign one or more MEID MFR Code(s) to each legitimate
41 MS manufacturer, R-UIM or CSIM manufacturer. An MEID MFR Code shall not be simultaneously
42 assigned to more than one MEID manufacturer.

43

44 The MEID Administrator presently assigns MEIDs in;

45

46 - FULL MFR Code Deployable singlemode hexadecimal blocks of 16,777,216. The MFR ID Code portion
= six (6) hex digits.

47

1
2 - Segmented MFR Code Deployable singlemode hexadecimal blocks of 1,048,576². The MFR ID Code
3 portion = seven (7) hex digits.

4 *In this case, the Manufacturer Code field uses a digit from the Serial Number field:*

Manufacturer Code							Serial Number					CD		
R	R	X	X	X	X	X	X	X	Z	Z	Z	Z	Z	C

5
6
7 - Segmented MFR Code Deployable singlemode hexadecimal blocks of 65,536³. The MFR ID Code portion
8 = eight (8) hex digits.

9 *In this case, the Manufacturer Code field uses two digits from the Serial Number field:*

Manufacturer Code										Serial Number				CD
R	R	X	X	X	X	X	X	X	X	Z	Z	Z	Z	C

10
11
12 - Multimode Deployable blocks of 1,000,000. The MFR ID Code / IMEI TAC portion = six (6) decimal
13 digits.

14 - MEID MFR Code hexadecimal blocks of 2048 units for singlemode testing purposes.

15 - MEID MFR Code / IMEI TAC in decimal blocks of 2000 units for multimode testing purposes.

16 Note: MEID MFR Code block contains 16,777,216 MEIDs. This block can be either assigned by the
17 GHA as a whole, or it can be subdivided and assigned as 16 blocks of 1,048,576 (1,000,000 if multimode
18 Decimal range) MEIDs each, 32 blocks of 524,288, 64 blocks of 262,144 or 256 blocks of 65,536.

19 A segmented MEID MFR Code may be assigned by the MEID Administrator, at his or her discretion, when
20 it is judged that a segmented code may be an efficient use of the MEID MFR Code resource. This is the
21 preferred method to help mitigate future exhaust concerns.

22
23 To responsibly address future numbering resource exhaust and also accommodate smaller manufacturer
24 needs, Segmented Code deployable block assignment is the preferred method to assign MEID resources.
25 Detailed Mobile Equipment Identifier (MEID) assignment information is provided by the Global
26 Hexadecimal Administrator (GHA).

27 7.3 Reassignment; An unused MEID MFR Code that is recovered or returned from a previous assignee may be
28 reassigned by the GHA to another manufacturer without limitation according to the principles in section 13.

29 7.4 An MEID Serial Number is assigned by the manufacturer to each MS, R-UIM or CSIM which it
30 manufactures. An MEID is unique to a single MS, R-UIM or CSIM. The manufacturer exercises due
31 diligence in the design and manufacture of the MS, R-UIM or CSIM to ensure tamper resistance of the
32 factory set MEID outside of place of manufacture and authorized service centers.

33 7.5 MEID MFR Codes are a global public resource. The assignment of any MEID MFR Code does not imply
34 ownership of the resource by either the entity to which it is assigned or by the entity performing the
35 administrative function.

36 7.6 Should a manufacturer transfer production of a type of MS, R-UIM or CSIM to a different manufacturer,
37 then the use of the assigned MEID MFR Code is transferable to the new manufacturer using the Form D.

² GHA is presently assigning RR A1 range subdivided as 16 blocks of 1,048,576

³ GHA is presently assigning RR A2 range subdivided as 256 blocks of 65,536

- 1 7.7 The MEID administrator:
- 2 • Assigns MEID MFR Codes in a fair, timely and impartial manner to any applicant that meets the
 - 3 criteria for assignment.
 - 4 • Addresses each application in the order they are received and assign MEID MFR Codes from the
 - 5 available pool of unassigned codes based on applicant information provided and historical data.
 - 6 When all of the codes have been assigned, codes that had been assigned but never used and
 - 7 subsequently recovered by the MEID Administrator are assigned.
 - 8 • Makes all assignments based on the procedures in these guidelines.
 - 9 • Shall treat sensitive information received from applicants as proprietary and confidential, and not
 - 10 share with non-administrator personnel.
 - 11 • Is the only global administrator authorized to assign hexadecimal (base 16) ranges i.e. MEID.

12

13 7.8 Information that is requested of applicants in support of an MEID MFR Code application shall be uniform

14 and should be kept to a minimum. In the case of multimode IMEI/MEID equipment, the information to be

15 divulged differs and is more detailed than for non-multimode terminals (see Ref. [2]).

16 7.9 Assigned MEID MFR Codes should start to be deployed as soon as possible, but no later than twelve

17 months after assignment. If the assignee can demonstrate that an assigned MEID MFR Code has not started

18 to be consumed solely due to delays beyond its control, the time period can be extended for up to 90 days.

19 At the discretion of the administrator, three additional 90-day extensions may be granted.

20 7.10 An entity which is denied an MEID MFR Code assignment or extension under these guidelines has the right

21 to appeal that decision.

22 7.11 Entities applying for assignment of MEID MFR Code(s) (see Ref. [5] Section 3.3), or entities to which

23 MEID MFR Code(s) have been assigned shall comply with these guidelines.

24 7.12 There may be an administrative fee associated with an application for an MEID MFR Code(s).

25

26 8.0 CRITERIA FOR MEID ASSIGNMENT

27 The assignment criteria in this section should be considered by a potential MEID MFR Code applicant before

28 submitting an MEID MFR Code application and is used by the MEID administrator in reviewing and processing an

29 MEID MFR Code application:

30 8.1 Applicants for an MEID Manufacturer Code must satisfy the Administrator that they intend to place

31 equipment on the market. (e.g., FCC Identifier and Grant Date).

32 8.2 An MEID MFR Code is only assigned by the administrator upon receipt and approval of a completed *Form*

33 *A – MEID Manufacturer’s Code Application*.

34 8.3 Form A should indicate the anticipated number of MFR Codes initially required. This information is held

35 confidential by the MEID Administrator.

36

37 9.0 RESPONSIBILITIES OF MEID MANUFACTURER’S CODE APPLICANTS &

38 ASSIGNEES

39 Entities requesting MEID MFR Code assignments shall comply with the following:

- 1 9.1 MEID MFR Code applicants and assignees must meet all conditions specified in these guidelines. Copies
2 of the guidelines may be obtained from the MEID Administrator or overseeing industry body.
- 3 9.2 Applicants must apply in writing to the MEID Administrator by completing *Form A - MEID MFR Codes*
4 *Application*. Copies of all required forms are included in these guidelines.
- 5 9.3 The MEID shall be set by the manufacturer. The manufacturer shall make every reasonable effort for the
6 MEID to be not alterable, not capable of duplication nor removable outside of a manufacturer authorized
7 service center, and any attempt to remove, tamper with, or change the MEID host component or operating
8 system as originally programmed by the manufacturer shall render the MS inoperative. Where a dedicated
9 MEID device is utilized, it must be permanently attached to the device that reads the MEID and the path to
10 the device must be secured. The device shall not be removable and its pins shall not be accessible. The
11 MEID is incorporated in an MS module, which is contained within the MS equipment. The MEID shall not
12 be changed after the ME's final production process. It shall resist tampering, i.e. manipulation and change,
13 by any means (e.g. physical, electrical and software). The manufacturer who is also responsible for
14 ascertaining that each MEID is unique and keeping detailed records of produced and delivered MS, R-UIM
15 or CSIM should carry out implementation of each individual module.
- 16 9.4 MEID MFR Code assignees shall:
- 17 9.4.1 Assign a different MEID to each MS, R-UIM or CSIM, within the range allocated to the
18 manufacturer. Note: R-UIM or CSIM vendors may subdivide their assigned MC (also known as
19 "Issuer Code" see [6]) or their MC segment among network operators, but all SF_E-UIM_IDs
20 associated with it must be used as E-UIM_IDs (i.e. none can be used as MEIDs for MEs). When
21 submitting *Form A – Mobile Equipment Identifier (MEID) Application*, one or the other must be
22 identified in the General description of the MS, R-UIM or CSIM MEID Use Declaration line
23 item.
- 24 9.4.2 Assign and efficiently manage the Serial Number associated with the assigned MEID MFR
25 Codes. Maintain up-to-date and accurate assignment records that match MEIDs of their
26 produced MSs, R-UIMs or CSIM. These records may be required for audit purposes. Receipt
27 of Form G is also used as an audit tool. Unused ranges of MEID Code(s) assignments may be
28 candidates for reclamation and reassignment.
- 29 9.4.3 Inform the MEID administrator of changes in the information associated with an MEID MFR
30 Code assignment by using *Form D – Request for Change in MEID Assignment Information*.
31 Changes may occur because of the transfer of an MEID MFR Code(s), through merger or
32 acquisition, to a different MS manufacturer. The initial assignee of the MEID MFR Codes
33 involved in a transfer occurring through merger, acquisition or other means must immediately
34 inform the MEID Administrator when such a change becomes effective. Timely submission of
35 change information enables the MEID Administrator to maintain accurate MEID MFR Code
36 assignment records.
- 37 9.4.4 Participate in review of the MEID process, when requested.
- 38 9.4.5 Deploy any MEID MFR Code, assigned either directly by the administrator or obtained through
39 merger or acquisition, within the time period specified. Inform the MEID Administrator of
40 MEID MFR Code deployment by submitting *Form C – MEID Use Declaration*.
- 41 9.4.6 Apply to the MEID Administrator for an extension if the deployment requirement cannot be met
42 and the MEID MFR Code is still required.
- 43 9.4.7 Return to the Administrator, using *Form F – MEID Assignment Return*:
- 44 • Any MEID MFR Code no longer needed for the production of MSs. An assignee that does
45 not completely use MEID MFR(s) assignments should return the unused MEID MFR(s) to
46 the MEID Administrator as soon as possible,

- 1 • Any MEID MFR Code not deployed within the time period specified, including extensions,
2 or
- 3 • Any MEID MFR Code not used in conformance with these assignment guidelines.

4

5 9.4.8 Return to the MEID Administrator, on an annual basis on the anniversary date of the issuance of
6 the MEID MFR Code, a duly completed and signed *Form G*.

7

8 **10.0 RESPONSIBILITIES OF THE MEID ADMINISTRATOR**

9

10 The role of the MEID Administrator is to manage the entire MEID resource and to directly administer the MEID
11 MFR Code segment of the MEID. In this context, the MEID Administrator shall:

12 10.1 Provide to the industry general and specific information on the structure, proper use and management of
13 MEIDs for MSs, R-UIMs or CSIMs meeting regulatory requirements.

14 10.2 Provide copies of these guidelines and forms to MEID MFR Code applicants and assignees, and assist them
15 in completing the required forms.

16 10.3 Review and process MEID MFR Code applications as follows:

17 10.3.1 Review the application to determine if all requested information is provided and credible. If not,
18 return the application to the applicant requesting that any deficiency be corrected.

19 10.3.2 Inform applicants of the status of their requests using *Form B – MEID Manufacturer’s Code*
20 *Application Disposition*. There are two possible dispositions: 1) granted or 2) additional
21 information required. Notify the applicant in writing of the disposition within thirty days from
22 receipt of Form A. The response includes:

- 23 • If granted, the specific MEID MFR Code(s) assigned,
- 24 • If additional information is required, the specific information required.

25 10.3.3 Keep confidential all information relative to anticipated volume of MSs, R-UIMs or CSIMs
26 and/or market launch details provided by applicant.

27

28 10.4 Use the following MEID MFR Code assignment procedures:

29 10.4.1 The Administrator should assign MEID MFR Codes in numerical sequence.

30 10.4.2 There may be considerations or limitations on the part of the manufacturer that require a specific
31 assignment or preclude them being able to use the next consecutive MEID MFR Code
32 assignment. These exceptions are set forth below and in the addenda (if any) to this document.

33 10.4.3 The following MEID MFR Code(s) are not available for MFR Code assignment due to previous
34 assignment and reservation (also see Section 18) e.g., test mobiles, expansion space:

35 Code A0000000 (Not available)

36 Code FFFFFFFF (Not available)

37 10.4.4 MEID MFR Code applicants eligible for multiple MEID MFR Codes (i.e., applicants with high
38 run rates as determined by the MEID Administrator using historical data and unbiased judgment)
39 may request that such codes be assigned in the next available block of numerically sequential
40 codes (excepting those codes reserved or unavailable for assignment, pursuant to Section 9.4.2
41 or any subsequent addenda to these guidelines). In such cases, a separate Form A should be

- 1 submitted for each MEID MFR Code required, along with a cover letter requesting their
 2 assignment in a sequential block.
- 3 10.5 Maintain accurate and current MEID MFR Code assignment records. Update the records as required to
 4 respond to requests for changes in assignment information reported by MEID MFR Code assignees.
 5 Respond to these requests within thirty days using *Form E – Confirmation of Change of MEID Assignment*
 6 *Information*.
- 7 10.6 Publish, monthly, via the agreed medium, a list of assigned MEID MFR Codes. The list includes the MEID
 8 MFR Code number, the manufacturer to which the code is currently assigned, and the entity contact and
 9 number.
- 10 10.7 Track the number of MEIDs assigned and report this data regularly to the applicable Standards
 11 Development Organizations.
- 12 10.8 Investigate any MEID MFR Code that has not started to be deployed within the required time frame, and
 13 issue extensions if appropriate. Notify the appropriate Engineering Committee if an assignee fails to start to
 14 deploy an assigned MEID MFR Code within two extensions.
- 15 10.9 Reclaim assigned MEID MFR Code(s), as needed.
- 16 10.10 Direct the MEID conservation program and conduct periodic reviews, as required, of MEID MFR Code
 17 assignee records.
- 18 10.11 Inform the wireless telecommunications industry, via the agreed method, of any revisions to these
 19 guidelines.
- 20 10.12 The term of the MEID Administrator shall be for one (1) year from the date of appointment by the
 21 overseeing industry body. One (1) extension of the appointment is automatic. The appointment may be
 22 reviewed by the overseeing industry body at any time.

23

24 11.0 MEID MANUFACTURER’S CODE RETURN AND RECLAMATION
 25 PROCEDURES
 26

- 27 11.1 Assignee responsibilities:
- 28 Assignees shall return MEID MFR Code(s) that are no longer required, not deployed, or not used in
 29 conformance with these assignment guidelines. In addition, assignees shall return the Code(s) and an
 30 indication of the range of Serial Numbers that have been used if the manufacturer has not manufactured an
 31 MEID MS, SF_MEID R-UIM or SF_MEID CSIM for at least one year.
- 32 Assignees shall cooperate with the MEID Administrator in carrying out its reclamation and review
 33 responsibilities.
- 34 11.2 Administrator responsibilities:
- 35 The MEID Administrator shall contact any MEID MFR Code assignee identified as not having returned to
 36 the Administrator, for reassignment, any MEID MFR Code(s) no longer required, not deployed, or not used
 37 in conformance with these assignment guidelines.
- 38 The Administrator shall first seek clarification from the assignee regarding any alleged non-use or misuse.
 39 If the assignee provides an explanation satisfactory to the administrator, and in conformance with these
 40 assignment guidelines, the MEID MFR Code will remain assigned. If no satisfactory explanation is
 41 provided, the Administrator will request a letter from the assignee returning the assigned code(s) for
 42 reassignment. If a direct contact can not be made with the assignee to effect the above process, a registered
 43 letter will be sent to the assignee address of record requesting that they contact the Administrator within

1 thirty days regarding the alleged code non-use or misuse. If the letter is returned as non-delivered, the
 2 Administrator will advise the overseeing industry body i.e., the body that Administrator reports to (e.g. the
 3 ESN and MEID Administrator reports to TIA).

4 The MEID Administrator will consult with the overseeing industry body for guidance on any instance which
 5 is not resolved through the procedures in the paragraph above. The overseeing industry body will
 6 coordinate with appropriate industry fora in seeking a suggested resolution.

7 If the overseeing industry body cannot suggest a resolution, or if the MEID MFR Code assignee will not
 8 comply with the resolution suggested by the overseeing industry body, the MEID Administrator may refer
 9 the case to the appropriate regulatory body (pertinent to the jurisdiction where the assignee is located).

10 11.3 The overseeing industry body responsibilities:

- 11 • Accept all referrals of alleged non-use or misuse of MEID MFR Codes from the MEID Administrator
- 12 or any other entity (also see section 15.0 regarding dispute resolutions),
- 13 • Investigate the referral,
- 14 • Review referrals in the context of these assignment guidelines,
- 15 • Attempt to identify a suggested resolution of the referral, and
- 16 • Inform the MEID Administrator of the suggested resolution, if identified, or that the overseeing
- 17 industry body was unable to identify a suggested resolution,
- 18 • If a suggested resolution is not in conformance with the existing guidelines, the overseeing industry
- 19 body may initiate the guidelines revision process [Section 14].
- 20 • Material changes or exceptions to these procedures should occur with industry consensus reflected in
- 21 the change process, and in accord with Global Administration Procedure evolution.

22

23 12.0 MEID RESOURCE CONSERVATION AND ASSIGNMENT REVIEWS

24 12.1 Assignment and management of MEID resources are undertaken with the following conservation
 25 objectives:

- 26 • To efficiently and effectively administer/manage a limited resource through code conservation, and
- 27 • To eliminate or delay the potential for MEID exhaustion.

28 The process to achieve these objectives should not impede the introduction of competitive wireless services
 29 which use MEIDs.

30 12.2 To promote the efficient and effective use of numbering resources, reviews of MEID MFR Code
 31 assignments may be performed to ensure consistent compliance with these guidelines.

32 12.3 The MEID Administrator tracks and monitors MEID MFR Code assignments and assignment procedures to
 33 ensure that all segments of the MEIDs are being used in an efficient and effective manner. Ongoing
 34 administrator procedures that foster conservation shall include, but not be limited to, the following:

- 35 • An active reclamation program to reclaim unused or misused MEID MFR Code,
- 36 • Strict conformance with these guidelines by those assigning MEID MFR Codes and MEID Serial
- 37 Numbers,

- 1 • Appropriate and timely modifications to these guidelines to enhance text that may have allowed
- 2 inefficient use of MEID MFR Codes,
- 3 • Periodic specific and random reviews of assignments and assignment procedures.
- 4 • GSMA have re-examined the issue of TAC/MFR ID exhaustion in preparation for the “one model one
- 5 TAC/MFR ID”. The new forecast indicates that there are multiple 100s of years of capacity available.
- 6 GSMA confirmed that TAC exhaustion is not an issue and does not need to influence TAC/MFR ID
- 7 allocation activity.
- 8

9 12.4 The MEID Administrator may initiate a review of an MEID MFR Code assignee’s assignment records. The
 10 review may be precipitated by a complaint from outside the Administrator's organization or by the
 11 Administrator. The review shall be initiated if a request for an MEID MFR Code assignment is received
 12 from a manufacturer that already has an MEID MFR Code assignment. The purpose of a review is to verify
 13 the MEID MFR Code assignee's compliance with the provisions set forth in these guidelines. The review is
 14 performed by the MEID Administrator or by a neutral third party acceptable to the reviewed party and the
 15 Administrator.

16 12.4.1 These reviews are conducted at the MEID MFR Code assignee's premises or at a mutually
 17 agreed to location and at a mutually agreed to time.

18 12.4.2 The MEID Administrator shall not copy or remove the information from the premises nor
 19 disclose the information to non-MEID Administrator personnel.

20 12.4.3 The MEID Administrator reviews the following information to ensure conformance with these
 21 guidelines and the proper use of the MEID resource:

- 22 • Verification that not more than one MEID MFR Code is assigned unless near serial number
- 23 exhaustion has been reached under all but one of the assigned MEID MFR Codes, or, if a
- 24 new MEID MFR Code assignment has been requested, verification that near serial number
- 25 exhaustion has been reached under all assigned MEID MFR Codes. However, a
- 26 manufacturer can request the assignment of multiple MEIDs if that manufacturer can
- 27 certify that they reasonably expect to exhaust all their assigned MEIDs within six months
- 28 of issuance.
- 29 • Verification of assignment for each working MEID MFR Code, (e.g. declaration from
- 30 manufacturer)
- 31 • Date of assignment of each working MEID MFR Code,
- 32 • Implementation date of each working MEID MFR Code,
- 33 • Indication of MEID Serial Number assignment to MSs, R-UIMs or CSIMs, and
- 34 • Status and status date of each MEID MFR Code unavailable for assignment; *i.e.*, MEID
- 35 MFR Codes reserved, aging, pending and/or, suspended.

36 12.5 Review results should be used to identify and recommend to the overseeing industry body specific
 37 corrective actions that may be necessary. Examples of specific corrective actions, which may be proposed,
 38 are as follows:

- 39 • Modifications to these assignment guidelines to reflect the specific circumstance revealed by the
- 40 review,
- 41 • Additional training for MEID MFR Code assignees concerning the assignment guidelines,
- 42 • Return of assigned MEID MFR Code,

- 1 • Requirements for supporting documentation of future MEID MFR Code requests in non-compliant
- 2 situations, or
- 3 • Modifications to the process in which records are maintained or MEID MFR Codes are assigned.
- 4 12.6 Review results with respect to MEID MFR Code assignee information and/or recommended MEID MFR
- 5 Code assignee process modifications shall be treated on a proprietary and confidential basis.
- 6 12.7 Failure to participate or cooperate in a review shall result in the activation of MEID MFR Code reclamation
- 7 procedures.

8

9 **13.0 MEID EXHAUSTION CONTINGENCY**

10 13.1 When 75% of all the available MEID MFR Codes have been assigned, or assignments are exceeding 10%

11 of the resource per year, the MEID Administrator shall inform the overseeing industry body.

12 13.2 When the MEID Administrator informs the overseeing industry body that the MEID MFR Codes are

13 approaching exhaustion, the overseeing industry body:

- 14 • Conducts a review of current MEID MFR Codes assignments to ensure that efficient MEID MFR
- 15 Codes utilization is in effect, and, if not,
- 16 • Recommends additional procedures to be initiated to effect more efficient MEID MFR Codes
- 17 utilization, or if efficient utilization is in effect,
- 18 • Makes a determination of the most efficient method of expanding the MEID keeping in mind the
- 19 requisite lead time required to adequately address the network elements which utilize the MEID.

20 13.3 Using data provided by the overseeing industry body, the wireless industry shall undertake to specify the

21 desired method and time frame needed to implement the proposed changes in the MEID. There should be

22 concurrence from all disciplines in the wireless industry as to the method and time frame for

23 implementation of a replacement for MEID MFR Codes.

24 13.4 A partially used MEID MFR Code may be reassigned to another manufacturer for use with limited serial

25 numbers if a significant block of serial numbers associated to that MEID MFR Code remained unassigned.

26 When the criteria in section 13.1 have been reached the administrator may recommend methods of

27 conservation and re-use of parts of assigned blocks that will not be used.

28 An MEID MFR Code(s) recovered or returned to the administrator for reassignment may remain dormant.

29 If no MSs, R-UIMs or CSIM have been manufactured by the previous assignee, the code(s) may be

30 reissued. If, however, MSs, R-UIMs or CSIM have been produced and sold, the code(s) shall be blocked

31 from future use. As the need for MEID MFR Codes becomes critical (e.g., 90% of available codes are

32 assigned), codes which have been partially used by a previous assignee may be re-assigned with serial

33 number range limitations. That is, if the previous assignee had only produced a limited number of

34 equipment using a contiguous serial number range, the present assignee may use the code to produce

35 equipment with serial numbers that do not duplicate those of the previous assignee. It should be

36 recognized that the re-issue of an MEID MFR Code is considered an exceptional measure anticipated to be

37 invoked only during MEID resource exhaust timeframes.

38

39 **14.0 MAINTENANCE OF GUIDELINES**

40 It may be necessary to modify the guidelines periodically to meet changing and unforeseen circumstances. The

41 administrator, any entity in the wireless telecommunications sector or the appropriate wireless industry forum, may

42 identify the need for guidelines modification. When need for modification is identified by other than the forum, the

1 identifying entity submits the modification issue to the forum. The forum coordinates the modification process.
2 Questions or concerns regarding the maintenance of the guidelines may be directed to:

3 MEID Global Hexadecimal Administrator
4 c/o Telecommunications Industry Association
5 1320 N. Courthouse Rd. Suite 200
6 Arlington, VA 22201 USA
7 Phone: +1 703-907-7791
8 Fax: +1 703-907-7728
9 meidadmin@tiaonline.org

11 15.0 APPEALS PROCESS

12 Disagreements may arise between the MEID Administrator and MEID applicants or assignees in the context of the
13 administration and management of MEIDs and the application of these guidelines. In all cases, the MEID
14 Administrator and MEID applicants/assignees shall make reasonable, good faith efforts to resolve such
15 disagreements among themselves, consistent with the guidelines, prior to pursuing any appeal. Appeals may include,
16 but are not limited to, one or more of the following situations,

17 By submitting an application for MEID Codes, accepting these Guidelines, or accepting any MEID MFR Code
18 Assignments, the company agrees that these Guidelines and all disputes arising out of or relating to the application
19 for or assignment of MEID MFR codes shall be governed by the laws of the state of Virginia without giving effect to
20 applicable conflict of laws provisions. The parties further agree that they will first attempt to resolve any and all
21 disputes, differences, or questions arising out of or relating to these Guidelines, or the validity, interpretation, breach,
22 or violation or termination thereof through a meeting of the principals of the parties. Such meeting may be in person,
23 via telephone or via videoconference. If such a meeting does not resolve the dispute between the parties, the matter
24 must first be brought to a meeting of the TIA TR-45 EUMAG. If that meeting does not resolve the issue, the matter
25 must then be brought to the industry experts participating in TIA TR-45. In the event such meetings are
26 unsuccessful, then such dispute shall be finally and solely determined and settled by arbitration in Washington, D.C.
27 in accordance with the Commercial Arbitration Rules of the American Arbitration Association. In any such
28 arbitration proceedings, the arbitrators shall adopt and apply the provisions of the Federal Rules of Civil Procedure
29 relating to discovery so that each party shall allow and may obtain discovery of any matter not privileged which is
30 relevant to the subject matter involved in the arbitration to the same extent as if such arbitration were a civil action
31 pending in a United States District Court. Judgment upon any arbitration award may be entered and enforced in any
32 court of competent jurisdiction. All notices required hereunder shall be in writing.

33 Reports on any resolution resulting from the above situations, the content of which is mutually agreed upon by the
34 involved parties, and kept on file by the MEID Administrator. At a minimum, the report contains the final
35 disposition of the appeal; e.g., whether or not an MEID was assigned.

36 16.0 GLOSSARY

37 *3GPP* - Third Generation Partnership Project

38 *3GPP2* - Third Generation Partnership Project Two

39 *Assignee* - The entity to which an IMEI, MEID, UIM or ESN has been assigned for the manufacture of mobile
40 stations.

41 *Brand Owner (BO)* - Brand Owners are Private Labels that neither design nor manufacture any products. These
42 companies generally select and acquire existing products from Original Design Manufacturers (ODMs) who
43 offer their off-the-shelf portfolio to their customers. Brand Owners / Private Labels sometimes also work
44 through IDHs for their design requirements and Electronic Manufacturing Services (EMS's) for contract
45 manufacturing. These companies market the procured products under their own brand names to the
46 consumers.

- 1 *CEIR* - Central Equipment Identity Register
- 2 *CMRS* - Commercial Mobile Radio Service. A mobile service (or functional equivalent) that is (1) provided for
 3 profit, (2) an interconnected service, and (3) available to the public, or to such classes of eligible users as to
 4 be effectively available to a substantial portion of the public.
- 5 *Conservation* - Consideration given to the efficient and effective use of a finite resource in order to minimize the
 6 need to expand its availability while at the same time allowing the maximum flexibility in the introduction
 7 of new services, capabilities and features.
- 8 *CSIM* – CDMA2000® Subscriber Identity Module
- 9 *ESN* - The Electronic Serial Number
- 10 *Electronic Manufacturing Services (EMS)*- Companies that provide manufacturing services to other companies
 11 including Original Equipment Manufacturers (OEMs) and Independent Design Houses (IDH's). EMS do
 12 not sell or market any product under their own brand.
- 13 *EUIM-ID* - Expanded R-UIM Identity
- 14 *GAN* - Generic Access Network
- 15 *GDA* - Global Decimal Administrator
- 16 *GHA* - Global Hexadecimal Administrator
- 17 *GEID* - Global Equipment Identifier encompasses both the GDA and GHA assignable numbering range for
 18 coordinated global roaming and harmonization between 3G technologies as a universal mobile equipment
 19 identifier.
- 20 *GSMA* - GSM Association
- 21 *IMEI* - International Mobile Equipment Identity, which may uniquely identify a mobile station
- 22 *Independent Design House (IDH)* - Companies that have independent in-house design expertise and produce custom
 23 / reference designs for other companies including ODM's, OEM's, and EMS's but do not provide any
 24 manufacturing services to their customers neither do they sell or market any products under their own
 25 brand.
- 26
- 27 *ME* - Mobile Equipment. (See also *Mobile station*, *R-UIM* or *CSIM*)
- 28 *MEID* - Mobile Equipment Identity, which may uniquely identify a mobile station
- 29 *MS* - Mobile Station. Interface equipment used to terminate the radio path at the user side. The mobile station
 30 contains an Electronic Serial Number and other identification information, either a Mobile Identification
 31 Number (MIN) or an International Mobile Station Identification (IMSI).
- 32 *Multi-Mode IMEI/MEID MS* - Mobile Station designed to operate according to more than one air interface or
 33 Network specification. Terminals designed to comply with both 3GPP and 3GPP2 specifications. Note:
 34 IMEI /MEID Manufacturers ID Code field is similar to an IMEI TAC field.
- 35 *Original Design Manufacturer (ODM)* - Companies that design and manufacture products that are sold by other
 36 companies under their own brand names. The ODM's do not sell or market their products directly to the
 37 consumers.
- 38 *Original Equipment Manufacturer (OEM)* - Company that designs, manufacture, sell, and market products under
 39 their own brand name. Some OEM's only design their products while the manufacturing is outsourced to
 40 contract manufacturers, generally referred to EMS / ECM (Electronic Manufacturing Services / Electronic
 41 Contract Manufacturing).

1 *Overseeing Industry body* - The body that the MEID Administrator reports to (e.g. ESN Administrator and MEID
 2 Administrator reports to TIA).

3
 4 *Regulatory Approved Licensed two-way CMRS service provider* - Any entity that is authorized, as appropriate, by
 5 local, state, or federal regulatory authorities to provide two-way mobile stations to the public.

6 *R-UIM* - Removable User Identification Module, often called the Subscriber Identity Module (SIM) card.

7
 8 *Sensitive Information* - Information expressly identified as such by applicant or information on submitted forms
 9 other than manufacturer name and contact information.

10 *Serial Number* - The portion of the MEID or IMEI that uniquely identifies the MS within the Manufacturer code
 11 allocation space.

12
 13 *SF_EUIMID* - Short Form EUIM-ID

14
 15 *SIM/UICC* - Subscriber Identity Module/Universal Integrated Circuit Card (similar to R-UIM, CSIM card)

16
 17 *TAC* – Type Allocation Code (IMEI 3GPP terminology)

18
 19 *UIM* - User Identification Module
 20

21
 22 **17.0 MEID ADMINISTRATIVE REPORT INFORMATION**

23
 24 An MEID GHA administrative report may be available to materially- and directly-affected parties via the TIA online
 25 MEID database.

26
 27 **18.0 MEID MANUFACTURER'S CODE ASSIGNMENT**

28
 29 The MEID Manufacturers Code assignment information may be available to materially- and directly-affected parties
 30 via the TIA online MEID Manufacturers Code assignment database. Login/password credentials are required.
 31

32 The following table is an example of MEID ranges.

Manufacturer Code		Manufacturer (list manufacturer name or regional administration body and contact information when allocated)
Hexadecimal	Decimal	
	98dddddd	GHA (for 3GPP/3GPP2 multi-mode terminals) < * see note below this table >
	99dddddd	GHA (for 3GPP/3GPP2 multi-mode terminals) (Start)
A0000000		Reserved for test / prototype mobiles allocated in small quantities
A0000001		Available for allocation to regional administration bodies or mobile manufacturers (Start)
--->	--->	Available for allocation to regional administration bodies or mobile manufacturers
FFFFFFFE	4,294,967,294	Available for allocation to regional administration bodies or mobile manufacturers
FFFFFFF	4,294,967,295	Reserved

33 * Note: With the exception of ranges assigned by the GDA prior to January 2010.

34
 35 **19.0 MEID APPLICATION AND RELATED FORMS PACKAGE**

36
 37 The MEID db online application method is the primary method for MEID Application and Assignment and is found
 38 at <https://meid.tiaonline.org> . The online application process adheres to the same guidelines herein. See Annex A.
 39

40 The forms in this package are used for communication between the MEID Administrator and applicants for assignees
 41 of these resources. The online MEID application process will be the primary application method when available
 42 (capability included with the TIA MEID database development). Forms included in this package are:

1 Form A – Mobile Equipment Identifier (MEID) Application also applicable for SF_EUIMID i.e., R-UIM or CSIM
2 Applicants complete, sign, and return this form to apply for an MEID. Note: Form “A” pages 3a, 3b, 3c,
3 3d and 3e (used primarily for multi-mode assignments) may be submitted independently when
4 information is updated and the page 3e “Update Section” is completed.

5 Form B – Mobile Equipment Identifier (MEID) Application Disposition also applicable for SF_EUIMID i.e., R-
6 UIM or CSIM.

7 The MEID GHA Administrator uses this form to notify the applicant of the outcome of his/her
8 application, which may be a code assignment, denial, or a request for additional clarifying information.

9 Form C – Mobile Equipment Identifier (MEID) Use Declaration also applicable for SF_EUIMID i.e., R-UIM or
10 CSIM.

11 The recipient of an Mobile Equipment Identifier (MEID) assignment uses this form to notify the MEID
12 Administrator that the assigned code has been deployed.

13 Form D – Request for Change in Mobile Equipment Identifier (MEID) Assignment Information also applicable
14 for SF_EUIMID i.e., R-UIM or CSIM

15 Mobile Equipment Identifier (MEID) assignees use this form to notify the MEID Administrator of a
16 change in any of the assignment information; for example, a change in the name, address, or phone
17 number of the contact person in the company holding the Mobile Equipment Identifier (MEID). As a
18 more complex example, this form should also be used to record the transfer of a Mobile Equipment
19 Identifier (MEID) to a new company, as might happen as a result of a merger or acquisition.

20 Form E – Confirmation of Change in Mobile Equipment Identifier (MEID) Assignment Information also
21 applicable for SF_EUIMID i.e., R-UIM or CSIM.

22 The MEID Administrator uses this form to acknowledge a change initiated by a Mobile Equipment
23 Identifier (MEID) assignee through submission of Form D.

24 Form F – Mobile Equipment Identifier (MEID) Assignment Return also applicable for SF_EUIMID i.e., R-UIM
25 or CSIM.

26 Mobile Equipment Identifier (MEID) assignees use this form to return to the pool any Mobile
27 Equipment Identifier (MEID) which are no longer required.

28 Form G – Certification of Compliance with MEID Guidelines also applicable for SF_EUIMID i.e., R-UIM or
29 CSIM.

30 Mobile Equipment Identifier (MEID) assignees use this form to certify compliance with the MEID
31 Assignment Guidelines and Procedures.

32 Return completed forms to:

33
34 Engineering Committee TR-45 MEID Global Hexadecimal Administrator
35 c/o Telecommunications Industry Association
36 1320 N. Courthouse Rd. Suite 200
37 Arlington, VA 22201 USA
38 Phone: +1 703-907-7791
39 Fax: +1 703-907-7728
40 meidadmin@tiaonline.org
41

1 **FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION** (also applicable for SF_EUIMID
2 i.e., R-UIM or CSIM)

3
4 Entity (company name) requesting assignment:

5 General description of the MS or R-UIM/CSIM to be provided (**Check One**)

6
7
8
9

10
11
12 Regulatory Agency Reference Code (if applicable):
13
14

15
16
17 Multi-Mode MS terminals designed to comply with both 3GPP and 3GPP2 air interface specifications?

18 YES NO IMPORTANT: If “YES” must complete pages 3a, 3b, 3c, 3d and 3e of FORM “A”

19
20 Test Block?

21 YES NO

22
23 Singlemode Block size (tick one per Form A)?

24 A0 (1 block = 16,777,216) A1 (1 block = 1,048,576) A2 (1 block = 65,536)

25
26 Number of Serial Numbers being requested:
27
28

29 Do special considerations apply?

30 YES NO

31
32 If YES, please specify the special consideration(s) needed

33
34
35
36
37
38

39
40 The MEID shall be set by the manufacturer. The manufacturer shall make every reasonable effort for the
41 MEID to be not alterable, not capable of duplication nor removable outside of a manufacturer authorized
42 service center, and any attempt to remove, tamper with, or change the MEID host component or operating
43 system as originally programmed by the manufacturer shall render the MS inoperative. Where a dedicated
44 MEID device is utilized, it must be permanently attached to the device that reads the MEID and the path to
45 the device must be secured. The device shall not be removable and its pins shall not be accessible. The
46 MEID is incorporated in an MS or R-UIM or CSIM. The MEID shall not be changed after the ME’s final
47 production process. It shall resist tampering, i.e. manipulation and change, by any means (e.g. physical,
48 electrical and software). The manufacturer is also responsible for ascertaining that each MEID is unique
49 and keeping detailed records of produced and delivered MSs, R-UIMs and CSIMs.

FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION (also applicable for SF_EUIMID i.e., R-UIM or CSIM **(CONTINUED)**)

Contact: (Family name): (Given name):

Name Title: Mr. Mrs. Ms. Dr. Other: _____

Company:

Address:

.....

City: State (or Province): ZIP (or Postal Code):

Country:

Phone: Cell (Mobile): Fax:

E-mail: [Chat e.g., WeChat]:

Signature below indicates that the applicant:

- Certifies the accuracy of the information provided in this application,
- Commits to deploy any assigned MEID Manufacturer’s Code(s) within the time period specified by the assignment guidelines,
- Certifies that the **MOBILE EQUIPMENT IDENTIFIER (MEID)** Manufacturer’s Code will be used in mobile sets for CMRS,
- Certifies that any required authorization has been secured from the appropriate federal, state, or local regulatory bodies, and
- Understands and agrees that the use of any assigned MEID Manufacturer’s Code(s) in a manner other than in conformance with the assignment guidelines may result in forfeiture.

Authorized name: Job Title:

Authorized signature:

E-mail:

Date of application:

Form “A” Page 2

Complete next pages 3a, 3b, 3c, 3d and 3e ONLY if you are requesting MEID Mfr Codes for Multi-Mode equipment designed to comply with both 3GPP and 3GPP2 air interface specifications.

1 **FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION** (also applicable for SF_EUIMID
2 i.e., R-UIM or CSIM) **(CONTINUED)**

3
4 **Complete this page ONLY if you are requesting IMEI/MEID Manufacturer’s Codes for Multi-Mode ME or
5 MS equipment designed to comply with both 3GPP and 3GPP2 air interface specifications.**

6 *WARNING – Must be filled out accurately and in full for proper global interoperability.*

7
8 **NOTE: Form “A” pages 3a, 3b, 3c, 3d and 3e may be submitted independently when information is**
9 **updated and the “Update Section” below is completed (see bottom of page 3e).**

10
11 **Should any of the requested block(s) be labeled “Reserved” for confidential identification?** YES* NO

12
13 **Number of Blocks you want to Reserve?** _____

14
15
16 **** If YES, applicants MUST promptly follow up “Reserved” block requests with updated details (e.g.,***
17 ***marketing/brand/model names, “tick box” characteristics), including the UPDATE SECTION information***
18 ***herein, to the MEID Administrator prior to these products being shipped for commercial deployment.***

19
20
21 **Brand:** _____ May be same as Manufacturer {i.e., entity requesting
22 assignment} or different.

23
24 **Model:** _____ One model per TAC/MFR ID

25
26 **Internal Model Name:** _____ (Optional) Free text for any Designation Type used by MFR

27
28 **Marketing Name(s):** _____ Include all names and variants of the model. Separate
29 Marketing Names that will be used for the sale of the device,
30 by commas.

31
32 **Are you the OEM?** YES NO Note: If NO, MUST provide the details of the manufacturer (ODM)
33 or design house (IDH) [Company Name, Address, Contact name,
34 Contact email]: _____
35

36 **Equipment Type:** (select one)

37
38 Tablet Connected Computer Dongle Modem Mobile/Feature Phone

39
40 WLAN Router e-Book Smartphone

41
42 **Operating System/Platform supported:**

43
44 Android Bada BlackBerry CyanogenMod Firefox iOS Mac OS Nucleus

45
46 RTOS S30 Sailfish Symbian ThreadX TIZEN UBUNTU Windows Phone

47
48 YunOS (Aliyan) None Not Known

49
50 Note: If the Equipment Type is “Dongle”, “WLAN Router” or “Mobile /Feature Phone”, tick the box for “Operating
51 System” as “None”. If the Equipment Type is “Modem”, tick the box for “Operating System” as “Not Known”.

52
53 **Device Certification Bodies:** _____ (Optional)

1 **FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION** (also applicable for SF_EUIMID
 2 i.e., R-UIM or CSIM **(CONTINUED)**)

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Modes, Bands Supported:

GAN

CDMA 2000®

GSM Bands

GSM 450 GSM 850 (GSM 800) GSM 900 GSM 1800 GSM 1900

WCDMA FDD Bands

WCDMA FDD Band I WCDMA FDD Band II WCDMA FDD Band III

WCDMA FDD Band IV WCDMA FDD Band V WCDMA FDD Band VI

WCDMA FDD Band VII WCDMA FDD Band VIII WCDMA FDD Band IX

WCDMA TDD Bands

WCDMA TDD Band A WCDMA TDD Band B WCDMA TDD Band C

WCDMA TDD Band D

E-UTRA LTE FDD Bands

LTE FDD Band 1 LTE FDD Band 2 LTE FDD Band 3 LTE FDD Band 4

LTE FDD Band 5 LTE FDD Band 6 LTE FDD Band 7 LTE FDD Band 8

LTE FDD Band 9 LTE FDD Band 10 LTE FDD Band 11 LTE FDD Band 12

LTE FDD Band 13 LTE FDD Band 14 LTE FDD Band 15 LTE FDD Band 16

LTE FDD Band 17 LTE FDD Band 18 LTE FDD Band 19 LTE FDD Band 20

LTE FDD Band 21 LTE FDD Band 22 LTE FDD Band 23 LTE FDD Band 24

LTE FDD Band 25 LTE FDD Band 26 LTE FDD Band 27 LTE FDD Band 28

LTE FDD Band 29 LTE FDD Band 30 LTE FDD Band 31 LTE FDD Band 32

LTE FDD Band 66

E-UTRA LTE TDD Bands

LTE TDD Band 33 LTE TDD Band 34 LTE TDD Band 35 LTE TDD Band 36

LTE TDD Band 37 LTE TDD Band 38 LTE TDD Band 39 LTE TDD Band 40

LTE TDD Band 41 LTE TDD Band 42 LTE TDD Band 43 LTE TDD Band 44

Intra-band contiguous Carrier Aggregation (CA) operating bands and configurations

CA_1C CA_2C CA_3C CA_4C CA_5C CA_7B CA_7C CA_12B

CA_13C CA_23B CA_27B CA_38C CA_39C CA_40C CA_40D

CA_41C CA_41D CA_42C CA_42D

1 **FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION** (also applicable for SF_EUIMID
2 i.e., R-UIM or CSIM **(CONTINUED)**)

3
4 **Inter-band Carrier Aggregation (CA) operating bands and configurations (Two Bands)**

- 5 CA_1A-3A CA_1A-5A CA_1A-7A CA_1A-8A CA_1A-11A CA_1A-18A
6
7 CA_1A-19A CA_1A-20A CA_1A-21A CA_1A-26A CA_1A-28A CA_1A-40A
8
9 CA_1A-41A CA_1A-41C CA_1A-42A CA_1A-42C CA_2A-4A CA_2A-2A-4A
10
11 CA_2A-4A-4A CA_2A-2A-4A-4A CA_2A-5A CA_2A-2A-5A CA_2C-5A
12
13 CA_2A-12A CA_2A-2A-12A CA_2A-12B CA_2C-12A CA_2A-13A CA_2A-2A-13A
14
15 CA_2A-17A CA_2A-28A CA_2A-29A CA_2C-29A CA_2A-30A CA_2C-30A
16
17 CA_3A-5A CA_3C-5A CA_3A-7A CA_3A-7B CA_3A-7C CA_3C-7A
18
19 CA_3A-8A CA_3A-3A-8A CA_3A-19A CA_3A-20A CA_3A-26A CA_3A-27A
20
21 CA_3A-28A CA_3A-31A CA_3A-38A CA_3A-40A CA_3A-40C CA_3A-42A
22
23 CA_3A-42C CA_4A-5A CA_4A-4A-5A CA_4A-7A CA_4A-4A-7A CA_4A-12A
24
25 CA_4A-4A-12A CA_4A-12B CA_4A-13A CA_4A-4A-13A CA_4A-17A
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27 CA_4A-27A CA_4A-28A CA_4A-29A CA_4A-30A CA_5A-5A CA_5A-7A
28
29 CA_5A-12A CA_5A-13A CA_5A-17A CA_5A-25A CA_5A-29A CA_5A-30A
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31 CA_5A-40A CA_7A-8A CA_7A-12A CA_7A-20A CA_7A-22A CA_7A-28A
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33 CA_7B-28A CA_8A-11A CA_8A-20A CA_8A-40A CA_8A-41C CA_11A-18A
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35 CA_12A-25A CA_12A-30A CA_18A-28A CA_19A-21A CA_19A-42C
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37 CA_20A-31A CA_20A-32A CA_21A-42A CA_21A-42C CA_23A-29A
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39 CA_25A-26A CA_25A-41A CA_25A-41C CA_25A-41D CA_26A-41A
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41 CA_26A-41C CA_29A-30A CA_38A-40A CA_38A-40A-40A CA_38A-40C
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43 CA_39A-41A CA_39A-41C CA_39C-41A CA_41A-42A CA_41A-42C
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FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION (also applicable for SF_EUIMID i.e., R-UIM or CSIM) **(CONTINUED)**

Inter-band Carrier Aggregation (CA) operating bands and configurations

- CA_1A-3A-5A CA_1A-3A-8A CA_1A-3A-19A CA_1A-3A-20A CA_1A-3A-26A
- CA_1A-3A-28A CA_1A-3A-42A CA_1A-5A-7A CA_1A-7A-20A CA_1A-7A-28A
- CA_1A-18A-28A CA_1A-19A-21A CA_1A-19A-42A CA_1A-21A-42A CA_2A-4A-5A
- CA_2A-4A-12A CA_2A-2A-4A-12A CA_2A-4A-4A-12A CA_2A-4A-13A CA_2A-4A-29A
- CA_2A-4A-30A CA_2A-5A-12A CA_2A-5A-13A CA_2A-5A-29A CA_2A-5A-30A
- CA_2C-5A-30A CA_2A-12A-30A CA_2C-12A-30A CA_2A-29A-30A CA_2C-29A-30A
- CA_3A-7A-8A CA_3A-7A-20A CA_3A-7A-28A CA_3A-19A-42A CA_4A-5A-12A
- CA_4A-5A-13A CA_4A-5A-30A CA_4A-7A-12A CA_4A-12A-30A CA_4A-29A-30A
- CA_7A-8A-20A CA_19A-21A-42A

Inter-band Carrier Aggregation (CA) operating bands and configurations (Four Bands)

- CA_2A-4A-5A-30A CA_2A-4A-12A-30A CA_2A-4A-29A-30A

Intra-band non-contiguous Carrier Aggregation (CA) operating bands and configurations (With Two Sub-Blocks)

- CA_2A-2A CA_3A-3A CA_4A-4A CA_7A-7A CA_23A-23A CA_25A-25A
- CA_40A-40A CA_41A-41A CA_41A-41C CA_41C-41A CA_42A-42A
- CA_42A-42C CA_42C-42A

Inter-band dual connectivity operating bands and configurations (two bands)

- DC_1A-3A DC_1A-5A DC_1A-7A DC_1A-8A DC_1A-19A DC_1A-21A
- DC_2A-4A DC_2A-13A DC_3A-5A DC_3A-7A DC_3A-8A DC_3A-19A
- DC_3A-20A DC_3A-26A DC_4A-7A DC_4A-12A DC_4A-13A DC_4A-17A
- DC_5A-7A DC_5A-12A DC_5A-17A DC_7A-20A DC_7A-28A DC_19A-21A
- DC_39A-41A

1 **FORM A – MOBILE EQUIPMENT IDENTIFIER (MEID) APPLICATION** (also applicable for SF_EUIMID
2 i.e., R-UIM or CSIM **(CONTINUED)**)

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4 **TD-SCDMA**

5
6 **Multi SIM/UICC Support** (Number of SIM supported in a device); 1 2 3 4

7
8 **Other Radio Interfaces Supported:**

9
10 3GPP2 CDMA Satellite None Other _____ (bands not listed on the Form e.g., LTE
11 FDD Band 31)

12
13 **Support NFC ?**

14
15 Yes No

16
17 **Support Bluetooth ?**

18
19 Yes No

20
21 **Support WLAN ?**

22
23 Yes No

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33 **UPDATE SECTION:**

34 Date of update:

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36 Date of original application:

37
38 Company:

39
40 Authorized name: Job Title:

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42 Authorized signature:

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44 Phone: Cell (Mobile): E-mail:

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46 MFR ID code and Block #(s) related to original application: _____

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1 **FORM B – MOBILE EQUIPMENT IDENTIFIER MANUFACTURER’S CODE APPLICATION**
2 **DISPOSITION** (also applicable for SF_EUIMID i.e., R-UIM or CSIM)
3

4 The MEID Administrator has reviewed your application filed for assignment of an MEID Manufacturer’s Code. The
5 box checked below indicates the action taken:
6

8 Your application has been granted. The MEID Manufacturer’s Code(s) and serial number code range(s)
9 assigned for your use is/are:

10

11
12 The assignment is effective as of:

13
14 The information recorded for this assignment is shown below. Please notify the MEID Administrator
15 immediately of any errors in or changes to this information.

16
17 *(Display computer generated assignment information here.)*
18

20 Your application has not been granted at this time for the following reason(s):

21

22

23
24
25 You are entitled to appeal as specified in Section 15 of the assignment guidelines.
26

28 The following additional information is needed to process your application:

29

30

35 Authorized name: Job Title:

36 Authorized signature:

38 Phone: Cell (Mobile): E-mail:

39 Date:

50 **Form “B”**

1 **FORM C – MOBILE EQUIPMENT IDENTIFIER USE DECLARATION** (also applicable for SF_EUIMID i.e.,
2 R-UIM or CSIM)

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4
5 By submitting this form, I certify that

6
7 MEID Manufacturer’s Code and Serial Number Range(s):

8
9 Assigned to:

10 Assigned range is first used effective (date of first use):
11
12

13
14
15 Authorized name: Job Title:

16 Authorized signature:

17
18
19 Phone: Cell (Mobile): E-mail:

20
21 Date of this notification:
22

23
24 Return completed application forms to:

25
26 Engineering Committee TR-45 MEID Global Hexadecimal Administrator
27 c/o Telecommunications Industry Association
28 1320 N. Courthouse Rd. Suite 200
29 Arlington, VA 22201 USA

30
31 Phone: +1 703-907-7791
32 Fax: +1 703-907-7728
33 meidadmin@tiaonline.org
34

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53 **Form “C”**
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1 **FORM D – REQUEST FOR CHANGE IN MOBILE EQUIPMENT IDENTIFIER INFORMATION** (also
2 applicable for SF_EUIMID i.e., R-UIM or CSIM)

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4
5 Effective (date):
6

7 The assignment information for MEID Manufacturer’s Code and Serial Number Range(s):
8 should be changed. The changes are described below:
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Authorized name: Job Title:

Authorized signature:

Phone: Cell (Mobile): E-mail:

Date of this notification:

Return completed application forms to the:

Engineering Committee TR-45 MEID Global Hexadecimal Administrator
c/o Telecommunications Industry Association
1320 N. Courthouse Rd. Suite 200
Arlington, VA 22201 USA

Phone: +1 703-907-7791
Fax: +1 703-907-7728
meidadmin@tiaonline.org

Form “D”

FORM E – CONFIRMATION OF CHANGE IN MOBILE EQUIPMENT IDENTIFIER ASSIGNMENT INFORMATION (also applicable for SF_EUIMID i.e., R-UIM or CSIM)

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Your request-dated _____ for change(s) to the assignment information for MEID Manufacturer’s Code and Serial Number Range(s)_____ has been processed by the administrator and the changes have been made. Please verify the revised assignment information below and report any errors or discrepancies to the administrator.

(Display computer generated assignment information here.)

Authorized name: Job Title:

Authorized signature:

Phone: Cell (Mobile): E-mail:

Date of this notification:

Report discrepancies to the:

Engineering Committee TR-45 MEID Global Hexadecimal Administrator
c/o Telecommunications Industry Association
1320 N. Courthouse Rd. Suite 200
Arlington, VA 22201 USA

Phone: +1 703-907-7791
Fax: +1 703-907-7728
meidadmin@tiaonline.org

1 **FORM F – MOBILE EQUIPMENT IDENTIFIER ASSIGNMENT RETURN** (also applicable for SF_EUIMID
2 i.e., R-UIM or CSIM)

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4
5
6 MEID Manufacturer’s Code and Serial Number Range(s):

7
8
9 Currently held by:
10 is no longer required effective (date) and may be returned to the
11 pool for assignment to another entity.

12
13 Serial Numbers used thus far are in the range of _____ to _____.

14
15
16
17 Authorized name: Job Title:

18
19 Authorized signature:

20
21 Phone: Cell (Mobile): E-mail:

22
23 Date of this notification:

24
25 Return completed forms to the:

26
27 Engineering Committee TR-45 MEID Global Hexadecimal Administrator
28 c/o Telecommunications Industry Association
29 1320 N. Courthouse Rd. Suite 200
30 Arlington, VA 22201 USA

31
32 Phone: +1 703-907-7791
33 Fax: +1 703-907-7728
34 meidadmin@tiaonline.org

1 **FORM G - CERTIFICATION OF COMPLIANCE WITH MEID GUIDELINES** (also applicable for
2 SF_EUIMID i.e., R-UIM or CSIM)

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We, _____ (Assignee), certify that MEID Code and Serial Number Range(s)
_____,
_____,
_____,
_____,

has been used in accordance with all of the terms and provisions set forth in the MEID Guidelines as published by 3GPP2 and TIA and posted on the latter's web site on the date of this certification ("MEID Guidelines"). We further specify that we have complied in specific with applicable Sections of the MEID Guidelines.

We understand that failure to comply with the MEID Guidelines may result in the forfeiture of the above MEID Code and Serial Number Range(s).

Serial Numbers used thus far are in the range of _____ to _____.

Authorized name: Job Title:

Authorized signature:

Phone: Cell (Mobile): E-mail:

Date: _____

Return completed Form G on an annual basis to:

Engineering Committee TR-45 MEID Global Hexadecimal Administrator
c/o Telecommunications Industry Association
1320 N. Courthouse Rd. Suite 200
Arlington, VA 22201 USA

Phone: +1 703-907-7791
Fax: +1 703-907-7728
meidadmin@tiaonline.org

ANNEX “A” (Informative)

MEID Application and Assignment forms - Online process

The preferred method for MEID Applications and Assignments is found at <https://meid.tiaonline.org>. The MEID db online application tool is a near realtime process and adheres to these guidelines.

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