



MEID Overview

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TIA Committee TR-45 ESN/UIM/MEID Ad Hoc
Group (EUMAG)

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Information Resource - TIA Website:

<http://www.tiaonline.org/standards/resources/esn> and

<http://www.tiaonline.org/standards/resources/meid>





Background – (MEID) Mobile Equipment Identifier

- Electronic Serial Numbers (ESNs) are typically used today for mission-critical applications including Billing, Fraud Detection, Inventory and Activation.
- ESN Manufacturer Code (MC) exhaust for planning purposes is conservatively estimated (at this time) to occur as soon as 3Q2006. 14 bit MC assignments are slowing 8 bit assignment rates.
- TIA is developing Mobile Equipment Identifier (MEID) Standards in cooperation with 3GPP2 as the alternative to ESN for new terminals.



Background – (MEID) Mobile Equipment Identifier - Continued

- ESN is a 32 bit number. MEID is a 56 bit number.
- There will be compatibility with 3G terminals for multi-technology devices (GSM, CDMA, W-CDMA, TIA-136-E) through continued global cooperation with Administrators and industry bodies.
- TIA has provided MEID test block assignments “for test MEID devices only” in Q4’04. Expects the industry will have MEID devices in the marketplace as early as 2006.



Actions Being Taken by TIA for MEID Migration

- Completed and updated MEID Administrative Procedures with 3GPP2 SC.R4002-0 (formerly S.R0089) and GDA/GHA Assignment Guidelines SC.R4001-0 (formerly S.R0088).
 - The TIA will act as the Global Hexadecimal Administrator (GHA) to assign MEID code prefixes, and already acts as the ESN administrator.
- Conservation guidelines developed by TR-45 EUMAG have been implemented by the ESN Administrator
- A second portion [TIA-MEID v1.8.4] in this MEID presentation suite was adopted and contains the technical detail.



Actions Being Taken by TIA for MEID Migration - Continued

- Milestones & Timelines are documented, including applicable standards listed with development or publication identified.
- Migration efforts from ESN-to-MEID were identified and sent in a first industry outreach letter dated December 18, 2003.
 - Resent original letter as a follow-up, January 7, 2004.
- An outreach effort to the industry, such as clearinghouse & mediation communities, was started in February 2004 and continues.
- Letter to CTIA sent March 9, 2004 as an update regarding issues related to the migration from ESNs to the MEIDs.



Actions Being Taken by TIA for MEID Migration - Continued

- ESN to MEID FAQ list developed, updated and available.
- Information for decimal MEID representation of hexadecimal MEID is referenced in 3GPP2 S.R0048-A and is shown in an annex to X.S0008-0 v2.0 / TIA-928-2 [E] .
- ESN reissue/reclamation letters sent to Manufacturers (ID Codes 129-254) December, 2003. Expect to begin reclaiming identified ESN codes as appropriate in early 2005.
- Support in standards is rapidly being developed.



Actions Required by Carriers for MEID Migration

- Software for back-office billing & roaming applications may need to be updated & tested well in advance of MEID-capable handsets being deployed.
- Preliminary Recommendations & Guidance for Service Providers in assessing readiness for MEIDs;
 - Be aware that 32-bit ESN will transition to MEID and what a 56-bit MEID is. Are you able to identify the decimal 128 (H80) manufacturer code number as a MEID (Pseudo ESN) if seen in processing?

Actions Required by Carriers for MEID Migration - Continued

- Investigate all internal use of ESN application (Fraud, Revenue Assurance, IT, Repair & Customer Service, Network, Roaming, Marketing e.g., mobile manufacturers, publications, service contracts, etc.). Then track/resolve any required use of MEID applications where appropriate.
- Make sure your Infrastructure vendors implement MEID supporting system updates when available.
- Make sure your Rating, Billing & Clearinghouse vendor is MEID aware and track/resolve any issues related to the migration.
- Test MEID and Pseudo ESN processing when & where able to.

Summary

- ESN assignment and MEID assignment process will be done in parallel to ensure a smooth migration from ESNs to MEIDs. Once ESNs exhaust, only MEIDs will be assigned.
- TIA TR-45, through its EUMAG is charged with addressing the migration issues and ***urges carriers to carefully review their "back office" systems and determine how the migration to MEIDs will affect their systems.***
- Continued participation by the service provider, clearinghouse and manufacturer community is critical.
- The TIA TR-45 EUMAG is interested in any significant issues that are discovered in these system reviews.