



**– CDG Executive Briefing –**  
**Migration to MEID and EUIMID**

Executive Summary

*ESNs and UIMIDs are likely to be exhausted by early 2008. All CDMA carriers are strongly urged to ensure their networks are upgraded and capable of handling MEID-based devices, and to activate only MEID devices, as soon as possible and before June 2008 in any case. Carriers using Removable UIMs should similarly transition from UIMID to Expanded UIMID (EUIMID) in this timeframe.*

Additional Information

Until recently all CDMA2000<sup>®</sup> devices used an ESN (Electronic Serial Number) as a hardware identifier. Those equipped with removable UIMs (User Identity Modules) had a UIMID on the card which was used as a substitute for the ESN in most network operations. ESNs and UIMIDs are allocated from the same group of 32-bit numbers. It was recognized several years ago that the supply of unique 32-bit codes would soon be exhausted.

3GPP2 and its partners modified standards for CDMA2000 phones and network interfaces to support a new hardware identifier named MEID (Mobile Equipment Identifier). Somewhat later they approved new standards for EUIMID based either on MEID or the existing ICCID identifier. The quantity of these identifiers is much larger than for the ESN or UIMID; as a result, there should be a supply of codes for many years into the future.

Unfortunately, the progress of migration to MEID and EUIMID has been slower than expected. At the current rate, it is likely that ESNs and UIMIDs will be completely depleted during 2008, possibly before all networks are capable of fully supporting MEID and EUIMID devices.

In response to this, the ESN and UIMID administrator (the TIA) started a major conservation and reclamation program. ESN codes are now allocated in smaller groups (1/4 million rather than 17 million) and codes previously allocated for analog or TDMA are being quickly reassigned as ESNs or UIMIDs. This has extended the life of the number resource by roughly 18-24 months – from 2006 until 2008. Despite these measures, the demand for these codes is still much greater than the supply.

To stimulate the universal migration to MEID and EUIMID, the CDG has launched a global education campaign for operators and vendors. Workshops will be held in several locations and written materials will be provided on the CDG web site. The purpose of this campaign is to provide detailed information to managers and engineers, to help them plan their migration, and to assist with any specific problems. Workshops are currently being planned for India, China, Japan, and Southeast Asia.

We urge all operators to support the following goals, no later than **June, 2008**:

1. Upgrade networks to support MEID (or EUIMID). Note that this is required to support roaming from operators who already use MEID-equipped phones; failures have been reported in which roaming MEID-equipped CDMA terminals did not function in networks that did not support them properly.
2. Be prepared to support MEID-equipped terminals and EUIMID-equipped R-UIMs.

For further information, send email to [meid@cdg.org](mailto:meid@cdg.org)

#### Definitions

ESN: Electronic Serial Number

EUIMID: Expanded User Identification Module Identifier

MEID: Mobile Equipment Identifier

RUIM: Removable User Identity Module

TIA: Telecommunications Industry Association

UIMID: User Identification Module Identifier