Introduction to J-STD-038-A:
Network Interworking Between GSM MAP and ANSI-41 MAP

Douglas Rollender
Lucent Technologies
January 23, 2002
IFAST-18, San Francisco

Introduction to J-STD-038-A

• Service Descriptions
• Definition of Terms
• References & Assumptions
• Reference Model
• IIF Interfaces
• Message Flow Illustrations
• Implementation Alternatives
• Lucent IIF Gateway
Service Descriptions

- Authentication
- Call Forwarding (CFU, CFB, CFNR, CFNB; CFU, CFB, CFNA, CFD)
- Optimal Routing for Late Call Forwarding
- Call Waiting
- Three-Way Calling & Multi-Party
- Calling Number/Line ID
- Call Barring & Operator Determined Barring
- Short Message Teleservice Support (ANSI-136)
- Message Waiting Notification
- GPRS in GSM Foreign Mode
- Voice Mail in GSM Foreign Mode with Optimal Routing?

IIF = Interoperability and Interworking Function provides signaling control between GSM and ANSI-41 Networks

Mobile States:

- GSM Native Mode
- ANSI-136 Foreign Mode
- CDMA Foreign Mode?
- ANSI-136 Native Mode
- GSM Foreign Mode
- GPRS in GSM Foreign Mode
- CDMA Native Mode?

? In brown = to be addressed for J-STD-038-B for CDMA-GSM roaming
Assumptions

- R-UIM, Multi-Mode MS (?)
- ESN, R-UIM-ID
- MS Types A, B, C
- GHOST, WEMT: OTA Programming, SMS, WAP

References

- TIA/EIA-553, Analog
- TIA IS-129, PCS1900/Analog I/I
- TIA/EIA-136, TDMA
- TIA/EIA-95-B and TIA/EIA-2000, CDMA ?
- TIA/EIA-41-D
- TIA/EIA-751, Modifications for IMSI
- TIA/EIA-807, Internationalization Enhancements
- TIA/EIA-808, R-UIM ?
- TIA IS-737-A, ANS-41 Data Services Support for Digital Terminals (TDMA & CDMA) ?
Registration on an ANSI-41 Network (ANSI-41 Foreign Mode) with IS-808 R-UIM

Originating/Gateway MSC - Serving MSC Interface
Mobile Terminating ANSI-136 SMS Mapped to GSM SMS

HLR-SGSN Interface

TIA/EIA-41 Network Entities

ANSI-41 Subscriber roaming to GPRS network
GPRS Attach

IIF Implementation Alternatives: In or Between One or Both Nets.
... for more information
about Lucent’s IIF Gateway
compliant with J-STD-038-A for Global Roaming,
contact your Lucent Account Representative or
Srii Brahmandam, IIF Gateway Product Manager, at 614-860-2807 and
sbrahmandam@lucent.com