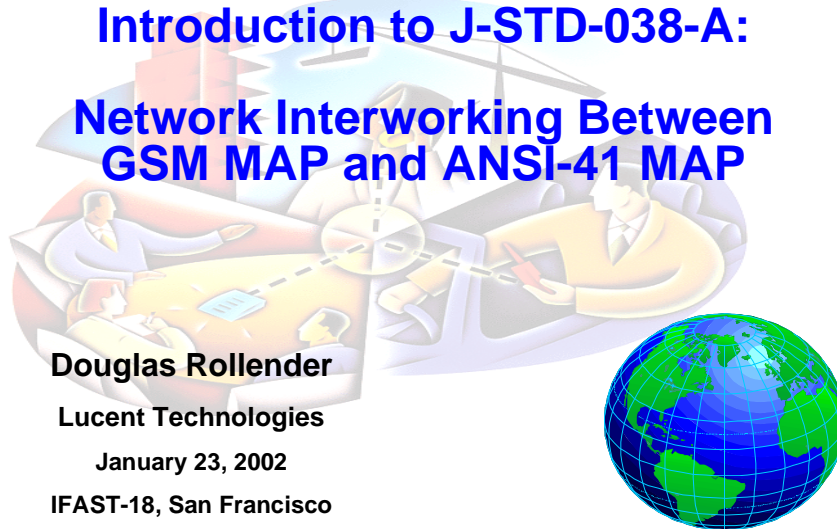




Introduction to J-STD-038-A: Network Interworking Between GSM MAP and ANSI-41 MAP



Douglas Rollender

Lucent Technologies

January 23, 2002

IFAST-18, San Francisco

DHR 11/17/2001

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

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Service Descriptions

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- Authentication
- Call Forwarding (CFU, CFB, CFNRy, CFNBc; 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 ?

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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 ?
- ? In brown = to be addressed for J-STD-038-B for CDMA-GSM roaming
- ANSI-136 Native Mode
- GSM Foreign Mode
- GPRS in GSM Foreign Mode
- CDMA Native Mode ?

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Assumptions

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

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References

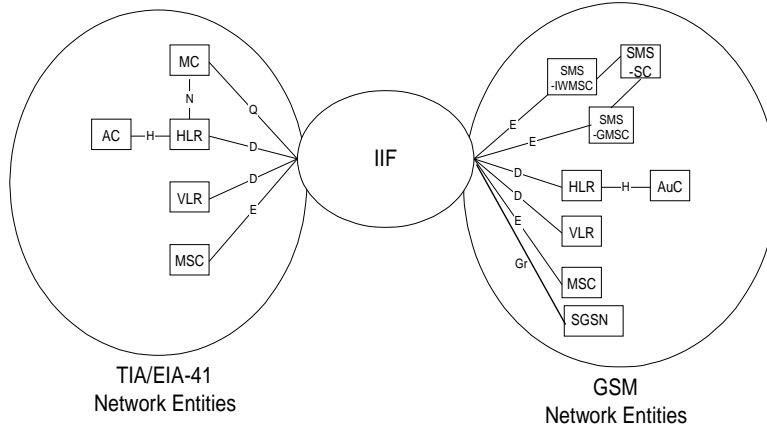
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- TIA/EIA-553, Analog
- TIA IS-129, PCS1900/Analog I/I
- TIA/EIA-136, TDMA
- TIA/EIA-95-B and TIA/EIA-2000, CDMA ?
- TIA/EIA-41-D
- TIA/EIA-751, Modifications for IMSI
- TIA/EIA-807, Internationalization Enhancements
- TIA/EIA-808, R-UIM ?
- TIA IS-737-A,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

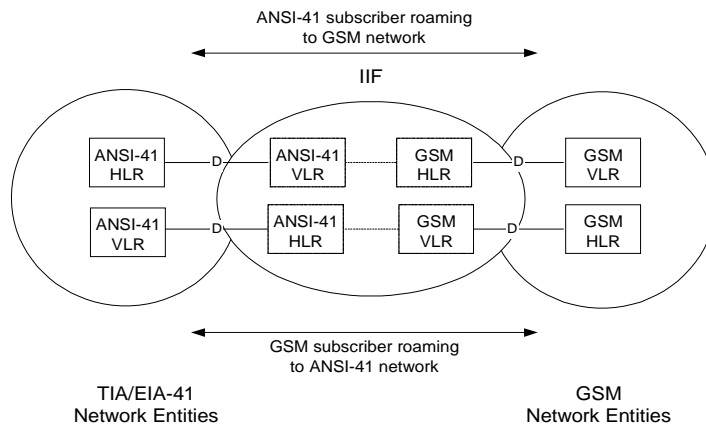
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Reference Model



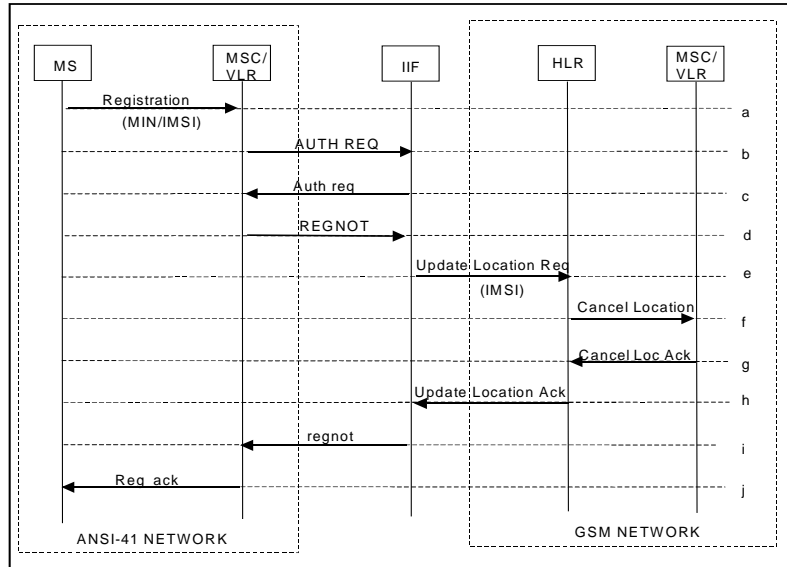
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HLR-VLR Interface



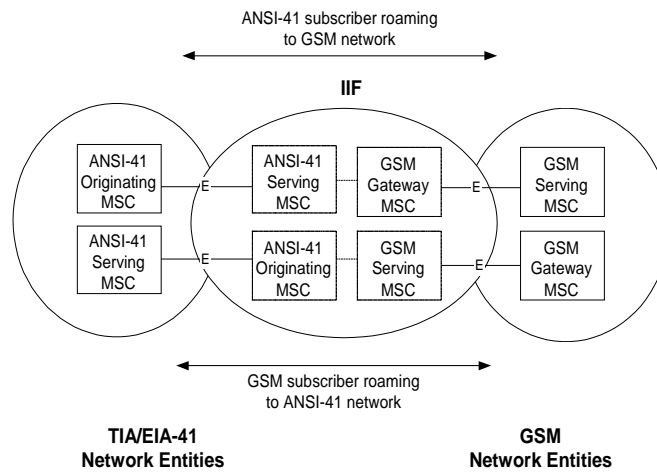
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Registration on an ANSI-41 Network (ANSI-41 Foreign Mode) with IS-808 R-UIM



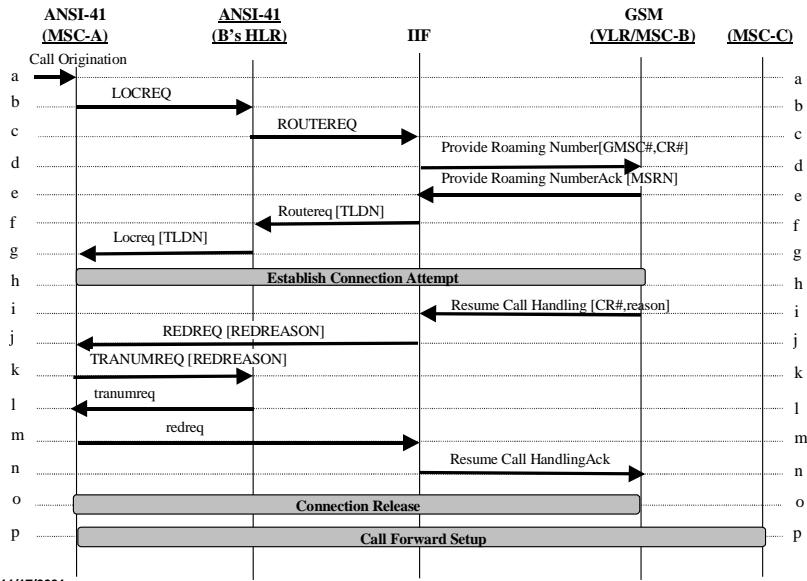
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Originating/Gateway MSC - Serving MSC Interface



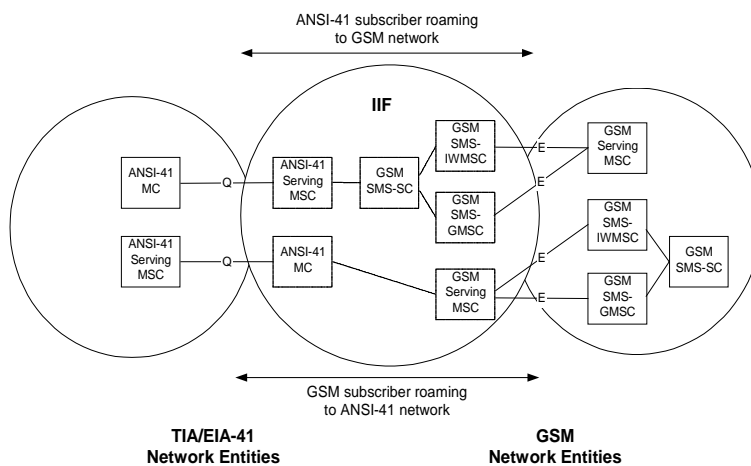
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Optimal Routing with Late Call Forwarding (GSM Foreign Mode)



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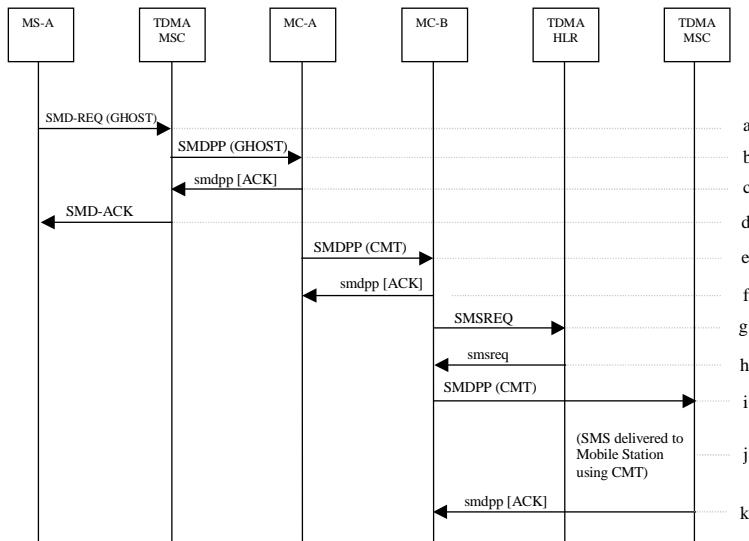
MC/SMS-SC - Serving MSC Interface



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Mobile Terminating ANSI-136 SMS Mapped to GSM SMS

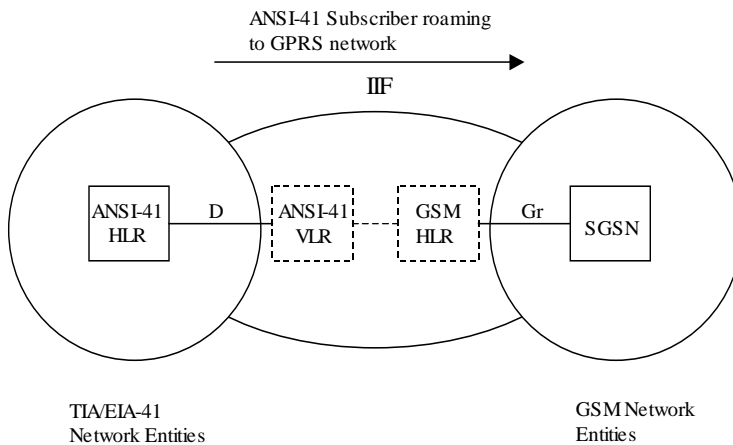
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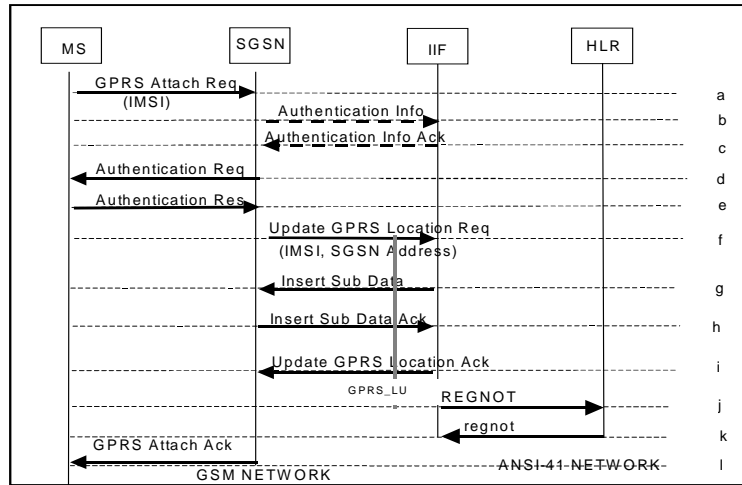
HLR-SGSN Interface

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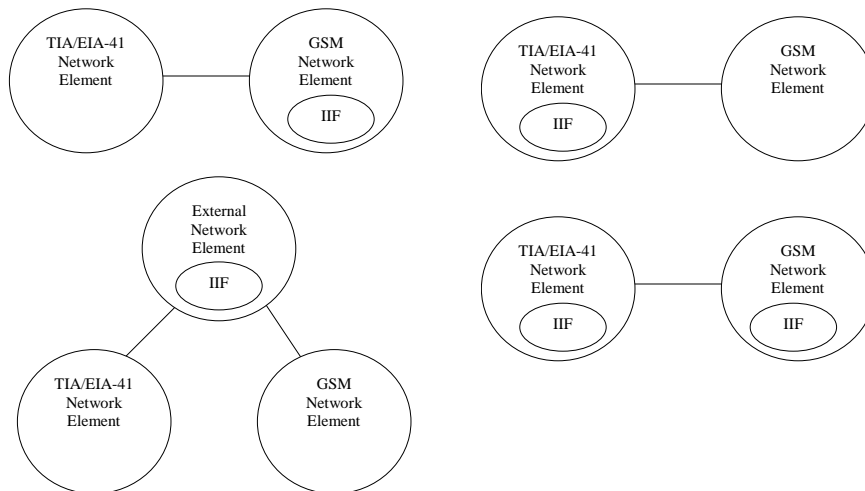
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GPRS Attach



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IIF Implementation Alternatives: In or Between One or Both Nets.



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... for more information

about Lucent's IIF Gateway

compliant with J-STD-038-A for Global Roaming,

**contact your Lucent Account Representative or
Srini Brahmandam, IIF Gateway Product Manager, at 614-860-2807 and
sbrahmandam@lucent.com**