



GSM North America

The North American Interest Group of the GSM Association

March 4, 2002

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Chairman of IMSI Oversight Committee (IOC)
C/O ATIS
Washington, D.C.

RE: INTERNATIONAL MOBILE SUBSCRIBER IDENTITY (IMSI) ISSUES

This letter is written in response to your liaison regarding the issues identified by the IMSI Oversight Council (IOC) on the use of International Mobile Subscriber Identities (IMSI) in the United States.

These issues were presented and discussed at the November meeting of the GSM-NA Numbering Group. The answers provided below represent the consensus view at that meeting.

- 1) Is your membership aware of any *domestic* roaming conflicts between providers in MCC310 and providers in MCC 311?

No, we are not aware of any domestic roaming conflicts between GSM providers in MCC 310 and MCC 311 at this juncture.

- 2) Is your membership aware of any *international* roaming conflicts between providers within E.164 Country Code "1"? (e.g., between Canada and the U.S.?, or between the Caribbean and the U.S.)?

No, we are not aware of any international roaming conflicts between GSM providers within E.164 Country Code 1. However, this may not be the case for subscribers outside of Country Code 1 (U.S. and Canada).

- 3) Is ITU-T Recommendation E.214 used at GSM international gateway switches?

Yes, E.214 is used at GSM international gateways. There are no conflicts at the gateway converters, but there could be a conflict at the originating MSC outside of the Country Code 1 area. If the originating MSC translates the MCC to a CC of 1(a two stage translation), a conflict could result for a Country Code 1 subscriber roaming outside the U.S. or Canada. Within Country Code 1, E.212 is used for Global Title Translation; outside of Country Code 1, E.214 is used for Global Title Translation.

If so,

- a) Are translations done in a single stage? (MCC+MNC)

Yes, translations are done in a single stage

- b) Are GSM international gateway switches capable of handling 3-digit MNCs?

Teleglobe and France Telecom are the only two international gateway providers at this time. Teleglobe gateways are capable of a seven-digit free association on the MSID. Therefore, they are capable of handling 3-digit MNCs.

- c) Are GSM billing systems capable of supporting 3-digit MNCs?

We do not know if all GSM billing systems are capable of supporting 3-digit MNCs. We do know that some GSM billing systems are not presently capable of supporting 3-digit MNCs.

- d) Are GSM international roaming partners capable of supporting 3-digit MNCs?

We do not know if all GSM international roaming partners are capable of supporting 3-digit MNCs. We are aware of the investigation of the use of both 2-digit and 3-digit MNCs concurrently by the European community. However, until the use of 3-digit MNCs is adopted in Europe, there is no incentive for the European operators to accommodate 3-digit MNCs. Expensive upgrades to billing systems, roaming systems, and support systems would be required.

- e) How soon will GSM gateway switches be able to use a translations mechanism other than E.214 which can support the entire 15-digit IMSI? (e.g., Q.713)

There is currently no incentive to support translations on the entire 15-digits of the IMSI, so it is unlikely that GSM gateways would deploy such a mechanism.

- 4) Are there still backward compatibility issues with GSM handsets in terms of being capable of handling 3-digit MNCs? How soon will this situation be alleviated?

Yes, there are still backward compatibility issues with legacy GSM handsets. The newer handsets are capable of handling 3-digit MNCs. We do not know when this will no longer be a significant issue in GSM networks.

- 5) There is an additional handset issue about having to "Power Down" handsets when leaving your Home Serving Area. Although this is not a technical requirement in order to maintain service, it is a requirement in order to maintain access to a home network rather than to a competitor's network. How soon will this problem be alleviated?

This is still a problem for legacy handsets, but is no longer a problem for newer handsets.

We trust that this correspondence sufficiently addresses the issues you raised. Please advise if additional information or clarification regarding this liaison is required.

Kindest regards,

[signed copy on file]

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