FCC Callback Ruling

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FCC Ruling

On April 17, 2002 the US FCC adopted an order ruling that "123-456-7890" should be used as the "telephone number" for non-initialized phones, including "911-only" phones.

This ruling ignores the distinction between the two classes of phone numbers: directory numbers (sent to PSAP) and MSID (MIN or IMSI sent to wireless system by mobile).

The ruling has impacts on IFAST, GSM and Emergency Services systems.

The ruling ignores the assignment of the "911" pseudo-area code.

IFAST Impact

- *1234-xxxxxx* is a valid IRM (International Roaming MIN).

- This IRM is (luckily) not currently assigned.

- If MSC's are programmed with "123-456" in their roamer agreement table, the entire block will be unavailable as an IRM.

- It is unlikely that the remainder of this block can be used, as no carrier is likely to want a block of numbers contaminated in this way.

- IFAST must consider whether to assign the entire block to this usage and whether to waive the annual IRM maintenance fee.

- One alternative is for the FCC to use the entire block (e.g. assign random number to last 6 digits) rather than wasting 1,000,000 numbers.

- Another alternative is to use MIN's programmed with the reserved '911' pseudo-area code.

Emergency Services Impact

- This solution identifies that a mobile is non-initialized and cannot be called back.

- It does not provide the pseudo-uniqueness of the J-STD-036 solution (911 + last 7 digits of ESN or IMEI).

- Pseudo-uniqueness could also be provided by using the last 6 digits of the ESN along with the IRM prefix (e.g. 1234+ESN-portion).

GSM Impact

- No solution for '911-only' GSM phones with a UIM. This would require a recognizable IMSI or IMSI block.

- Similar problem occurs if CDMA/TDMA phones start using IMSI. Even if they have a MIN programmed, they will not transmit it if asked for IMSI.

- No proposal for GSM phones without a UIM. MSC's could recognize the lack of UIM and use a default MDN as callback number to the PSAP.

Standards Impact

- Joint ATIS/TIA standard J-STD-036 has been published for some time with a solution to the callback problem.

- This solution is to recognize the lack of a callback number and substitute "911" plus last 7 digits of ESN or IMEI.

- This does not rely on a programmed MIN value, although it is compatible with a recognizable value.

- The J-STD-036 solution does not waste an IRM, does not require phone provisioning, works with GSM *and* provides pseudo-unique-ness.

- The FCC proposal may require the republication of this industry standard.

Recommendation

ESIF should communicate these problems to the FCC, and ask them to put their order on ice (we have lots of that up here) until the various affected segments of the wireless industry can up with a consensus alternative proposal.

ESIF should take a lead role in the development of this alternative proposal.