

# INVENTION DISCLOSURE

1. **Invention Title.**

## Signaling method for phone handsets and base stations to report capabilities

2. **Invention Summary.**

A signaling method to allow phone handsets/base stations to report functions and capabilities to an MTA or like controller/switch.

3. **Invention Description.**

Currently there is no universal method for phone handsets/base stations to report their functionality and capabilities to an MTA or like controller/switch. While there is some propriety method for IP phones to report this information to like vendor PBXs, there is no standard that can be used universally. This describes how a universal method could be used by making use of the Telecordia GR-30-CORE FSK signaling. Telecordia GR-30-CORE defines Voiceband Data Transmissions from the SPCS to a CPE device and through this method the roles are switched allowing CPEs (handsets/base stations) to send communications back to the SPCS or MTAs using the FSK method of signaling. Since this signaling should not interfere with calls in progress the CPE should first monitor the line to ensure there a call is not in progress, on this is determine than the CPE would send the information in a style like the on-hook signaling without power ring. Due to the extended data that can be sent SDMF should not be used only the MDMF mode. Any current MDMF and SDMF codes would have to be excluded so that other CPEs would not assume that the message is from the SPCS. It is suggested the "0x84" be used for MDMF messages and labeled as CPE messages intended for SPCS. To farther expand to allow CPE to CPE communications that "0x85" for MDMF messages.

The CPE should be allowed to be reactive to queries from either SPCS or other CPEs or active to initiate communication as needed.

The MDMF parameter codes will need to be defined as usage is expanded but to initiate the list and address an existing problem the codes are as follows:

- 01h - Capable of supporting Wideband Audio
- 02h - Number of handsets supported on a base station
- 03h - New handset added to base
- 04h - Handset deleted from base
- 05h - Change in functionality/capabilities

**Briefly outline the potential commercial value and customers of the invention.**

This will allow MTAs to determine if they have handsets connected that can make use of HDV (G.722). There is cost incurred with offnet calls involving transcoding with these cost being in both resources needed to do the transcoding and the cost of transcoding licenses. By the MTA knowing that there are not handsets that support Wideband audio the MTA can then us a less costly codec. To expand this, phone vendors could use this to transfer data between handsets such as phone books or SMS messages

4. **How is this invention different from existing products, processes, systems?**

## **INVENTION DISCLOSURE**

While several PBX vendors have options for reporting phone capabilities, these are proprietary to their systems (PBX and IP phones) and not universal for use across the telephony industry (of which the cable industry is part of).