

INVENTION DISCLOSURE

1. **Invention Title.**

Signaling telephony CPE devices of standard and high definition call types.

2. **Invention Summary.**

Expand the Telecordia GR-30 FSK message types to include signaling indicate standard and high definitions call types for new and active calls.

3. **Invention Description.**

a. **Describe the invention in detail.**

Expand the Telecordia GR-30 to include new message types and parameters to allow signaling to Customer Premise Equipment (CPE) to indicate the type of call, standard definition (SD) or high definition (HD), that is being established or in progress. The GR-30 defines how Caller ID, Caller Name, and Call Waiting are communicated to CPE devices that are on-hook (Type 1) and off-hook (Type 2). The addition of the message type "0x0C" for the SDMF formatted FSK messaging and "0x83" for the MDMF formatted FSK messaging well signal to the CPE the type definition of the call. The parameter for each message type will be "0x00" to indicate a standard definition call and "0xFF" to indicate a high definition call. The signaling can be used be the CPE to indicate to the user the definition type of the call in progress. For a Type 1 CPEs the signaling may be included with the Caller ID information transmitted between the first and second ring if the definition of the call is known. For Type 2 CPEs the CPE Alerting Signal (CAS) will be used to signal the CPE of the call definition type. By default the CPE will assume the call is a standard call. The method of signaling will follow that as specified in the GR-30 specification allowing current GR-30 implementations to be used. If during an active call the definition type of the call changes, the CAS method will be used to signal the CPE.

b. **Why was the invention developed? What problem(s) does the invention solve? How is it better?**

Currently there is no method in place to indicate or signal to the CPE if a new or currently active call is a standard definition or high definition call. The industry is attempting to determine how to signal the user handset (CPE) over the standard analog twisted pair phone line of the type of call that is active. By adding the new message types to the GR-30, the FSK Signaling can be used to signal the handset allowing the handset to display the definition type if the current active call as negotiated. The indication to the user will aid the user in determining the type of call active and why two calls may sound different based on a standard and high definition call. This should assist in reducing confusion on the user's part in the deferent in call quality.

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

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Being able to signal when an HD call is active will allow marketing of the HDV feature by both service providers and handset CE vendors. This will add to marketing value in feature presentation. The consumers will be able to determine why there is a difference in call quality when HD is available but not used in all cases depending on the call far-end functionality and features. This method of adding the additional message types and parameters reduce having to add additional functionality to handsets that could result in false indications of the definition of the call type. By adding these additional messages will allow the implementation to go beyond just PacketCable devices to other switch devices.

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

There are no existing systems or methods in place to allow signaling to the handset the type definition of the current active call.