



AM-TR-NIS-000099

Ameritech's Caller ID, Caller ID With Name and Visual Message Waiting Indicator

Reference material for CPE vendors to design and build Called ID, Caller ID with Name and Visual Message Waiting Indicator CPE

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Canceled Documents: N/A

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1. INTRODUCTION

1.1. *General*

This document describes the technical network interface specification for Ameritech's Called ID, Caller ID with Name and Visual Message Waiting Indicator, hereafter Called TR-30 Interface using selected Ameritech central office switches.

1.2. *Reasons For Reissue*

In February of 1990, Ameritech issued a technical notice of Ameritech's Intent to offer the Caller ID service. In July of 1992, Ameritech issued a technical notice of Ameritech's intent to offer the Caller ID with Name service. The Caller ID interface has used the Single Data Message Format (SDMF). With the addition of the remainder of the TR-30 Interface, Ameritech began offering the Caller ID with Name and now completes the TR-30 interface with the Visual Message Waiting Indicator. The Caller ID, Caller ID with Name and Visual Message Waiting Indicator use the Multiple Data Message Format (MDMF).

2. CALLER ID, CALLER ID WITH NAME AND VISUAL MESSAGE WAITING INDICATOR

2.1. *Purpose*

Ameritech's Caller ID, Caller ID with Name and Visual Message Waiting Indicator are the AOC's planned offerings of calling telephone number, calling name and a visual indication of message(s) waiting service. Caller ID, Caller ID with Name and Visual Message Waiting Indicator differ from other offerings in that they provide incoming telephone call information (calling telephone number and calling name) and a visual indication of voice message(s) waiting, over the local loop to a customer's Customer Premise Equipment (CPE).

2.2. *Capabilities*

The TR-30 Interface is specified in Bellcore's TR-NWT-000030, Issue 2, October 1992, "Voiceband Data Transmission Interface Generic Requirements".

The customer's equipment can receive the following incoming telephone call information and/or a visual indication of voice message(s) waiting, over the local loop:

- Date and Time of the incoming Call
- 10 Digit Calling Telephone Number, or Out of Area Indicator, or Anonymous Indicator when appropriate
- The name associated with the Calling Telephone Number

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- An “Activate” or “Deactivate” signal for a CPE provided lamp

3. TR-30 INTERFACE

3.1. *Physical Network Interface*

The physical Network Interface (NI) is the point of connection between the facilities of the AOC central office based equipment and the CPE provided by the customer. Interconnection to the CPE is via standard outside plant cable, tip and ring connections. Bellcore also has available “Data Set 212A Interface Specification”, Bell Communications Research, Inc., PUB41214. CPE vendors may find the information in the PUB41214 useful.

Figure 1 shows typical interconnections need to implement the TR-30 Interface.

3.2. *Message Protocols*

For Caller ID and Caller ID with Name, between the first and the second power ring over the local loop, the output message containing the information associated with the calling telephone number is transmitted to the CPE. Messages are transmitted with the following information:

- Date and Time of the Incoming Call
- 10 Digit Calling Telephone Number, or Out of Area Indicator, or Anonymous Indicator when appropriate
- The name associated with the Calling Telephone Number

For Visual Message Waiting Indicator, the output message containing the status associated with the customer’s Network Voice Message Provider Mail Box is transmitted to the on-hook CPE. Messages are transmitted with the following information:

- Activate, or
- Deactivate

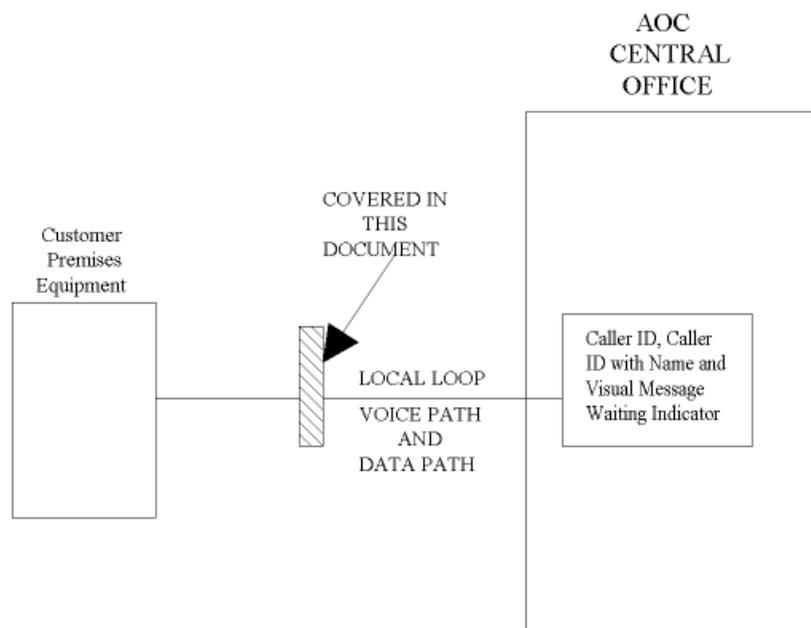
The older Caller ID Interface uses the Single Data Message Format (SDMF). With the addition of the remainder of the TR-30 Interface, Ameritech will be offering the Caller ID with Name and Visual Message Waiting Indicator, as well as the Caller ID. The Caller ID, Caller ID with Name and Visual Message Waiting Indicator use the Multiple Data Message Format (MDMF) and allow display of the Caller ID, Caller ID with Name and Visual Message Waiting Indicator. The CPE manufacturer should refer to Bellcore’s TR-NWT-000030 for detailed information.

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Ameritech will be using the SDMF for some older Caller ID offices and Ameritech will be using the MDMF for offices equipped with the Caller ID with Name and Visual Message Waiting Indicator capability. For the customer to receive the name associated with the Calling Telephone Number and/or the Visual Message Waiting Indicator, the customer must be CPE that is capable of detecting the MDMF signaling.

Figure 1. Typical Caller ID, Caller ID with Name and Visual Message Waiting Indicator Arrangement



3.3. Other Considerations

In order to increase slightly the Insertion Loss in the signal from the central office, and in order to indicate to the industry ideas for the Caller ID with Call Waiting technical interface, Bellcore has issued a Technical Advisory (TA) to TR-30 (TA-NWT-000030, SPCS-to-CPE Data Transmitter Generic Requirements, Issue 3, April 1992). In order to provide the CPE vendor community with useful, but not required, guidelines that the CPE vendor may find useful, Bellcore has issued a Special Report (SR-NWT-002024, Customer Premises Equipment Compatibility Considerations for the SPCS-to-CPE Data Transmission Interface, Issue 1, April 1992). CPE vendors and Central Office vendors may find the information in these documents useful.

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4. REFERENCES

1. "Data Set 212A Interface Specification", Bell Communications Research, Inc., PUB41214.
2. "SPCS Customer Premises Equipment Data Interface", TR-TSY-000030, Issue 1, November, 1988.
3. "Voiceband Data Transmission Interface Generic Requirements", TR-NWT-000030, Issue 2, October 1992.
4. "SPCS-to-CPE Data Transmitter Generic Requirements", TA-NWT-000030, Issue 3, April 1992.
5. "Customer Premises Equipment Compatibility Considerations for the SPCS-to-CPE Data Transmission Interface", SR-NWT-002024, Issue 1, April 1992.
6. "CLASS Calling Name Delivery Generic Requirements", TR-NWT-001188, Issue 1, December 1991.
7. "CLASS Feature: Calling Number Delivery", TR-TSY-000031, Issue 3, January 1990.

Any questions regarding this document, please contact the APEx Help Desk at 847-248-4328.