

# Simulating POTS Calls with Sonata

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Application Note ANSON\_3

Testing the World's Digital Networks



TrendCommunications

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## ISDN & TELEPHONY

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### Supplementary Service check

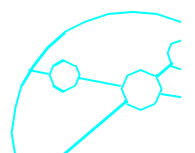
The analogue network is now capable, using the appropriate message support, of delivering some supplementary services such as CPN, CLI & Charge to the customer.

As these are all value added services i.e. they cost the user money to have and generate revenue for the service provider, therefore the service provider has to ensure they are correctly set up and working.

### Dial and recall capabilities check

It is important to be able to verify that either a Pulse or DTMF dial regime is working correctly through a given PBX. It could be that the time constants or frequency responses between equipment is creating connection problems. The ability to confirm that the Terminal equipment is producing a “standard” output can help to isolate where the fault lies.

Similarly, with national variations in timed break recall and “earth loop” capability, a check using a standard can help to



verify the Hold and Retrieve capability in the analogue network.

### Analogue monitoring

As with all types of intermittent fault it is useful to be able to monitor quality without taking down the service. This applies equally to analogue. The ability to listen to audio quality, which may be questionable, as far as the user is concerned, but continue to allow the service to be used minimises loss of revenue and inconvenience on both sides. This method can also be used to verify the delivery of some in-band supplementary services, again without taking the line out of commission.

Monitoring allows the user to verify the following:-

- DTMF: the transmission and reception of DTMF tones.
  - CLASS: V23 encoded CLI or call waiting CLASS service message delivery.
  - CHARGE: the transport of charging pulses.
  - DATA: Monitoring can also indicate whether the 2 wire interface being tested is analogue or ISDN by showing if data is present.
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