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Suppliers' Information Note

For The BT Network

BT FEATURELINE®

Service Description

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1 Introduction

This Suppliers Information Note (SIN) gives information about the BT Featureline Service.

Featureline is a service provided from BT's public exchanges that offers customers facilities similar to those of a small Private Branch Exchange (PBX), but without the need for the customer to have switching hardware on their premises.

2 Abbreviations

Table 1 contains a list of abbreviations used in this SIN.

| | |
|-------------|----------------------------------------------|
| CLI | Calling Line Identification |
| DEL | A PSTN Direct Exchange Line |
| DID | Direct Inward Dialling |
| MF | Multi Frequency |
| MTU | BT Multi-line Terminating Unit |
| NTP | Network Terminating Point |
| NTTA | Network Terminating and Test Apparatus |
| PBX | Private Branch Exchange |
| PSTN | Public Switched Telephone Network |
| SIN | Suppliers' Information Note (BT Publication) |
| TE | Terminal Equipment. |
| UXD5 | Unit eXchange Digital No. 5 |

Table 1. Abbreviations

3 Service Availability

The service was available to customers served on access lines by System X and AXE 10 Digital Local Exchanges. At the time of writing it is not available to customers served by UXD5 exchanges. This service, as of the 5th September 2023, was no longer available for new supply.

4 Access to Featureline

4.1 Access Lines.

Access to the Featureline service is via either a single line analogue interface, multi-line analogue interface.

The Featureline single line analogue interface is electrically equivalent to the Public Switched Telephone Network (PSTN) single line analogue interface, commonly known as a PSTN Direct Exchange Line (DEL), as described by SIN 351 ^[1].

The Featureline multi-line analogue interface (Featureline for Phone Systems) is electrically equivalent to the PSTN multi-line analogue interface, commonly known as a PSTN Private Branch Exchange (PBX) Line, as described by SIN 352 ^[2], and using either the loop calling-unguarded clearing, the loop calling-guarded clearing, the loop calling-disconnect clearing or the earth calling signalling system.

Note 1. The earth calling signalling method is supported on System X but not on AXE10.

Note 2. If required, a site can be supplied with a single presentation of the Featureline multi-line analogue interface.

4.2 Connection Arrangements

The Featureline interface at the Network Terminating Point (NTP) consists of two conductors designated as the 'A' and 'B' wires. The presentation of these conductors can be at a BT Master socket, a BT Multi-line Terminating Unit (MTU) or customer supplied Network Terminating and Test Apparatus (NTTA).

4.2.1 BT Master Sockets

Plugs which meet the requirements of BS6312:Part 1 ^[3] and are wired according to Table 2 will be compatible with the BT Master socket. Only the Featureline single line analogue interface is presented at a BT Master socket.

| | |
|---|---------------------------------|
| 1 | Not Used |
| 2 | 'A' wire or 'B' wire |
| 3 | Local earth when required |
| 4 | Shunt connection, when required |
| 5 | 'B' wire or 'A' wire |
| 6 | Not Used |

Note: Plug pin 6 is adjacent to the latch

Table 2. Plug Contacts

Connections for internal extension wiring to IDC within the BT Master socket are shown in the following table.

| | |
|---|------------------------------|
| 1 | Not Used for PSTN |
| 2 | 'A' wire or 'B' wire |
| 3 | Shunt connection (Bell wire) |
| 4 | Local Earth when required |
| 5 | 'B' wire or 'A' wire |
| 6 | Not Used for PSTN |

Table 3: NTE IDC Connections for Extension Wiring

Note 1: The different types of NTE currently deployed within the BT network present from 3 to 6 IDCs for the termination of extension wiring, however, the essential connections, IDC '2', '3' & '5', will always be present and the numbering kept consistent.

Note 2: There is no straight numerical relationship between IDC and Master Socket contacts (see Section 2.1.), for example the 'shunt connection' is presented on IDC '3' and at NTE Socket contact '4'.

4.2.2 Multi-line Terminating Unit

The BT Multi-line Terminating Unit contains Insulation Displacement Connectors (IDCs) to terminate customer's cabling. The IDCs will support the connection of solid copper conductors between 0.4 mm and 0.6 mm diameter.

4.2.3 Customer supplied NTTA

BT will present unterminated solid copper conductors of between 0.4 mm and 0.6 mm diameter to be terminated on a customer supplied NTTA. Only the Featureline multi-line analogue interface is connected by this method.

Note. An example of customer supplied NTTA is the Test Jack Frame of a PBX.

5 Service Outline

5.1 General

Featureline is a service that provides a closed user group with facilities similar to those received at the extensions of a small PBX. Thus, there is no usage-based tariff for calls to other extensions in the same closed user group. These calls are set up by dialling a 2 digit number. Calls to the PSTN are dialled by inserting the digit 9 before the PSTN number and are charged at the usage based public tariff. Other facilities, such as Call Diversion, Call Pick-up and Call Waiting, are invoked by the use of multi-frequency (MF) *, # and digit code sequences and the Recall signal. There are minor differences in the service provided from the System X and AXE 10 exchanges. These are shown in Appendix A. A list of facility activation codes is given in Appendices B and C.

Featureline does not provide specific support for an operator's console, however, terminals with suitable features can be configured to provide a centralised answering function.

5.2 Numbering

To receive incoming calls from the PSTN, Featureline lines can have individual numbers in the public numbering range or a number of lines can be linked in a hunt group. Hunt groups can either have sequential or cyclic hunting. A line included in a hunt group will also have an individual number in the public numbering range.

5.3 Featureline Local Link

Featureline Local Link extends the Featureline service across more than one site, allowing internal dialling (with no usage based tariff) and feature interworking between up to five locations, where all locations are within the same BT local exchange area.

5.4 Customer Line Identification

5.4.1 Calls terminated on Featureline terminals

Calling Line Identification (CLI) signalling compliant with SIN 227 ^[4] is available with the Featureline service. It enables suitable Caller Display terminals to display the external telephone number or Featureline extension number of the person calling. When the call is from an external caller the number presented to the terminal has an additional digit “9” inserted before the directory number.

5.4.2 Calls originated by Featureline terminals

For outgoing calls to the PSTN, Featureline has a service option to either release CLI information by default, but to withhold it on a per call basis, or to withhold CLI information by default but to release it on a per call basis. Activation codes for CLI per call release or withhold are listed in Appendices B and C.

When CLI information is released for single lines this information is the directory number of the originating line. For lines in hunt groups the CLI information released depends upon the serving exchange type. System X releases the directory number of the hunt group whilst AXE 10 releases the directory number of the originating line.

6 Terminal Equipment Compatibility

To access the full range of facilities terminal equipment (TE) must be capable of generating a timed break register recall signal and multi-frequency (MF) tone signals for digits 0 to 9 and symbols * and #.

In addition to the standard PSTN ringing cadence, Featureline uses Distinctive Ringing cadences. Distinctive Ringing Type 1 is used for internal calls, Type 2 for ring back facilities and Type 3 for calls diverted from internal extensions. (See SIN 351 ^[1] for details of Distinctive Ringing cadences). TEs need to be compatible with these ringing cadences to access the full range of FeatureLine facilities. (Examples of incompatible equipment are certain PBXs that cannot reproduce Distinctive Ringing at their extension terminals).

7 Tariffs

Tariffs for the Featureline service are published in the BT Price List.

8 Further information

Further information about the Featureline service can be obtained from the Featureline Customer Web Chat at www.bt.com/business/featurelinechat

Alternatively, please contact either:

- Your companies BT Account Manager,
- For Business customers, BT Sales 0800 400 400 for product and service information, sales and rental enquiries, or
- If you have questions relating to this document then please contact: sinet.helpdesk@bt.com

9 References

| | | | |
|-----|---------|---------------------------------------------------------------------------------------|------|
| | | | |
| [1] | SIN 351 | Technical Characteristics Of The Single Analogue Line Interface | |
| [2] | SIN 352 | Technical Characteristics Of The Multi-Line Analogue Line Interface | |
| [3] | BS 6312 | Connectors for analogue telecommunication interfaces. Part 1. Specification for plugs | 1994 |
| [4] | SIN 227 | CDS Calling Line Identification Service - Service Description | |

10 History

| | | |
|-----------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Issue 1 | March 1998 | First Issue |
| Issue 2 | July 1999 | Hunt Group Diversion, Customer Controlled Call Barring, Hunt Group Call Queuing and Remote Diversion added for AXE 10. Editorial changes |
| Issue 3 | May 2000 | Business Highway added, earth calling added and general review changes |
| Issue 3.1 | May 2001 | Editorial Changes |
| Issue 4.0 | September 2002 | Editorial Changes Addition of 1471 Erasure. Addition of Master Socket internal extension connections. Reference for Distictive Ringing changed from SIN 249 to SIN 351 |
| Issue 4.1 | November 2003 | Editorial Changes Terminal Equipment approval clause removed, information available via www.sinet.bt.com Useful Contacts page. |
| Issue 4.2 | May 2010 | Editorial Changes BT Highway removed Diversion Override added for AXE10. Bypass Numbers withdrawn. |
| Issue 4.3 | October 2014 | Change to customer contact details for further information in Section 8. Change SINet site references from http://www.sinet.bt.com to http://www.btplc.com/sinet/ |
| Issue 4.4 | July 2020 | Change SINet site references from http://www.btplc.com/sinet/ to https://www.bt.com/about/sinet |
| Issue 4.5 | April 2024 | Update to Product availability |

APPENDIX A. FEATURELINE PRODUCT OVERVIEW

| BASE PACKAGE | SYSTEM X | | AXE 10 | |
|----------------------------------|------------------------|------------------------|------------------------|------------------------|
| | INDIVIDUAL LINE | HUNT GROUP LINE | INDIVIDUAL LINE | HUNT GROUP LINE |
| Call Diversion | Yes | No (Note 1) | Yes | Yes |
| Call Diversion Override | Yes | Yes (Note 2) | Yes (Note 3) | Yes (Note3) |
| Call Offer | Yes | Yes | Yes | Yes |
| Call Pick-up | Yes | Yes | Yes | Yes |
| Call Pick-up Directed | Yes | Yes | Yes | Yes |
| Call Transfer | Yes | Yes | Yes | Yes |
| Call Waiting | Yes | No | Yes | Yes |
| Charge Advice | Yes | Yes | No | No |
| CLI Released & Per Call Withheld | Yes | Yes | Yes | Yes |
| Code Calling | Yes | Yes | Yes | Yes |
| General Interrogation | Yes | Yes | No | No |
| Reminder Call | Yes | Yes | No | No |
| Repeat Last Call | Yes | Yes | Yes | Yes |
| Ring Back When Free | Yes | No | Yes | Yes |
| Ring Back When Next Used | Yes | No | Yes | Yes |
| Three Way Calling | Yes | Yes | Yes | Yes |
| 1471 Erasure | Yes | Yes (Note 4) | Yes | Yes |

| | |
|--------|---------------------------------------------------------------------------------------------------|
| Note 1 | For Hunt Group lines use Hunt Group Diversion (diverts main H/Group number). |
| Note 2 | Available on Hunt Group line when individual line has diverted to you. |
| Note 3 | Diversion Bypass requests accepted (as System X) and also possible to request Diversion Override. |
| Note 4 | 1471 Erasure service does not always work on System X hunt group numbers |

Appendix A (continued)

| SERVICE OPTIONS | SYSTEM X | | AXE 10 | |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|
| | INDIVIDUAL LINE | HUNT GROUP LINE | INDIVIDUAL LINE | HUNT GROUP LINE |
| Bypass Numbers | No (Note 1) | No (Note 1) | No | No |
| Call Barring - BT Controlled | Yes | Yes | Yes | Yes |
| Call Barring - Customer Controlled | Yes | Yes | Yes | Yes |
| Caller Display | Yes | Yes | Yes | Yes |
| CLI Withheld & Per Call Release | Yes | Yes | Yes | Yes |
| Customer Originated Trace | Yes | Yes | Yes | Yes |
| Direct Call | Yes | Yes | Yes | Yes |
| Hunt Group Sequential Hunting | No | Yes | No | Yes |
| Hunt Group Cyclical Hunting | No | Yes | No | Yes |
| Hunt Group DID Numbers | No | Yes | No | Yes |
| Hunt Group Diversion | No | Yes | No | Yes |
| Hunt Group Do Not Disturb | No | Yes | No | Yes |
| Hunt Group Interrogation | No | Yes | No | No |
| Hunt Group Call Queuing | No | Yes | No | Yes |
| Local Link | Yes | Yes (Note 3) | Yes | Yes (Note 3) |
| Remote Diversion | Yes | Yes (Note 2) | Yes | Yes (Note 2) |
| Telemarketing Services | Yes | Yes | Yes | Yes |

| | |
|--------|----------------------------------------------------|
| Note 1 | Bypass Numbers withdrawn from Featureline service. |
| Note 2 | Diverts the main Hunt Group number. |
| Note 3 | A Hunt Group cannot be split between sites. |

APPENDIX B. FEATURELINE FEATURE ACCESS CODES - SYSTEM X EXCHANGES

| Feature | Activation codes | | | notes |
|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------|------------------------------|------------------------------------------------------------------------------------|
| | on | check | off | |
| Call barring - customer controlled | *34[o]# | *#34# | #34[o]*[PIN]# | o = Option number in range of 1 to 5 |
| Call diversions - - all calls - on busy - on no reply - on busy & no reply | *21*[number]# *67*[number]# *61*[number]# *66*[number]# | *#21# *#67# *#61# *#66# | #21# #67# #61# #66# | number = Telephone/extension number |
| Caller return | 1471 | | | |
| Calling line identity - - per call release (external call) - per call withhold (external call) | 1470 9 [number] 141 9 [number] | | | number = telephone number being called |
| Call offer (to busy extension) - accept call (hold original) - accept call (release original) - reject call | R*95# R2 R1 R0 | | | Internal use only Original call on hold Original call released R = Recall |

Featureline Feature Access Codes - System X Exchanges (Continued)

| Feature | Activation codes | | | notes |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------|-----|-----------------------------------------------------------------------------------|
| | on | check | off | |
| Call pick-up from free line - any call - directed Call pick-up from busy line - any call - directed | *52# *52*[ext]# R*52# R*52*[ext]# | | | ext = extension number R = Recall |
| Call transfer - internal - external | R[extension] R 9 [number] | | | For blind transfer - replace handset on receipt of ring tone. R = Recall |
| Call transfer - enquiry call - to switch between calls - end enquiry - return to original | R2 R1 | | | Starts as Call transfer. R = Recall |
| Call transfer - announce call - abort transfer - no reply | R1 R | | | Starts as Call transfer. Ends transfer call and return to caller R = Recall |
| Call transfer - to busy - return to caller - transfer to busy | R R*24# | | | Starts as Call transfer. R = Recall |

Featureline Feature Access Codes - System X Exchanges (continued)

| Feature | Activation codes | | | notes |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------|-----------|--------------------------------|
| | on | check | off | |
| Call waiting - activate - accept call (hold original) - accept call (end original) - reject waiting call | *43# R2 R1 R0 | *#43# | #43# | R = Recall |
| Charge advice - booking - before call - during call - for all calls | *40*9[number] *40# *411# | *#411# | #411# | |
| Code calling - to store - to dial (stored number) | *51*[nn]*[number] #**[nn] | *#51*[nn]# | #51*[nn]# | nn is number in range 10 to 29 |
| Customer originated trace - during call - after call completed | R1477 1477 | | | R = Recall |
| Direct call | “lift handset” and wait 4 seconds | | | |
| General interrogation | | *#001# | | |

Featureline Feature Access Codes - System X Exchanges (continued)

| Feature | Activation codes | | | notes |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------------|---------------------------|
| | on | check | off | |
| Hunt group diversion - all incoming calls - on busy - on no reply - on busy & no reply | *121*[number]# *167*[number]# *161*[number]# *166*[number]# | *#121# *#167# *#161# *#166# | #121# #167# #161# #166# | |
| Hunt group do not disturb | *261# | *#261# | #261# | |
| Hunt group interrogation | | *#003# | | |
| Reminder call | *55*[hhmm]# | *#55# | #55# | hhmm = 24 hour clock time |
| Remote diversion - all incoming calls - on busy - on no reply | *44*PIN*[tn]* [tn2]# *65*PIN*[tn]* [tn2]# *64*PIN*[tn]* [tn2]# | *#44*PIN*[tn] # *#65*PIN*[tn] # *#64*PIN*[tn] # | #44*PIN*[tn]# #65*PIN*[tn]# #64*PIN*[tn]# | |
| Ring back when free | R*37# | *#37# | #37# | R = Recall |
| Ring back when next used | | | | see Ring back when free |
| Three way call | R[number] | | | R = Recall |
| 1471 Erasure | 1475 | 1471 | | |

APPENDIX C. FEATURELINE FEATURE ACCESS CODES - AXE 10 EXCHANGES

| Feature | Activation codes | | | notes |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------|----------------------|------------------------------------------------------------------------------------|
| | on | check | off | |
| Call barring | *34*[o]# | *#34# | #34*[o]*[PIN]# | o = Option number in range of 1 to 5 |
| Call diversions - - all calls - on busy - on no reply | *21*[number]# *67*[number]# *61*[number]# | *#21# *#67# *#61# | #21# #67# #61# | number = Telephone/extension number |
| Caller return | 1471 | | | Planned to introduce this January - March 1998 |
| Calling line identity - - per call release (external call) - per call withhold (external call) | 147#9 [number] 141 9 [number] | | | number = telephone number being called |
| Call offer (to busy extension) - accept call (hold original) - accept call (release original) - reject call | R*95# R2 R1 R0 | | | Internal use only Original call on hold Original call released R = Recall |

Featureline Feature Access Codes - AXE 10 Exchanges (continued)

| Feature | Activation codes | | | notes |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------|-----|-----------------------------------------------------------------------------------|
| | on | check | off | |
| Call pick-up from free line - any call - directed Call pick-up from busy line - any call - directed | *52# *58*[ext]# R*52# R*58*[ext]# | | | ext = extension number R = Recall |
| Call transfer - internal - external | R[extension] R 9 [number] | | | For blind transfer - replace handset on receipt of ring tone. R = Recall |
| Call transfer - enquiry call - to switch between calls - end enquiry - return to original | R2 R1 | | | Starts as Call transfer. R = Recall |
| Call transfer - announce call - abort transfer - no reply | R1 R | | | Starts as Call transfer. Ends transfer call and return to caller R = Recall |

Featureline Feature Access Codes - AXE 10 Exchanges (continued)

| Feature | Activation codes | | | notes |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------|-------|----------------------------------------|
| | on | check | off | |
| Call transfer - to busy - return to caller - transfer to busy | R1 R[ext] | | | Starts as Call transfer. R = Recall |
| Call waiting - activate - accept call (hold original) - accept call (end original) - reject waiting call | *43# R2 R1 R0 | *#43# | #43# | R = Recall |
| Code calling - to store - to dial (stored number) | *51*[n]*[number] # **[n] | *#51# | **[n] | n is code in range 0 to 9 |
| Customer originated trace - during call | R*268# | | | R = Recall |
| Direct call | “lift handset” and wait 4 seconds | | | |

Featureline Feature Access Codes - AXE 10 Exchanges (continued)

| Feature | Activation codes | | | notes |
|---------------------------|--------------------------|---------------------------|----------------|-------------------------|
| | on | check | off | |
| Hunt group diversion | | | | |
| - all incoming calls | *121*[number]# | *#121# | #121# | |
| - on busy & no reply | *166*[number]# | *#166# | #166# | |
| Hunt group do not disturb | *261# | *#261# | #261# | |
| Remote diversion | | | | |
| - all incoming calls | [tn]*PIN##*21* [tn2]# | [tn]*PIN##*#21* * # | [tn]*PIN##21*# | |
| - on busy | [tn]*PIN##*67* [tn2]# | [tn]*PIN##*#67* * # | [tn]*PIN##67*# | |
| - on no reply | [tn]*PIN##*61* [tn2]# | [tn]*PIN##*#61* *# | [tn]*PIN##61*# | |
| Repeat last call | *** | | | |
| Ring back when free | R*37# | *#37# | #37# | R = Recall |
| Ring back when next used | | | | see Ring back when free |
| Three way call | R[number] | | | R = Recall |
| 1471 Erasure | 1475 | 1471 | | |

-END-