Call Forwarding Don't Answer After Call Waiting (CFDA After CW) (1093)

Call Forwarding Don't Answer After Call Waiting is a central office software capability that allows a client to utilize the Call Forwarding Don't Answer (CFDA) feature even though the client's line is also equipped with Call Waiting (CW).

CFDA/CW interaction was initially designed for CW to be dominant over CFDA. For a busy line equipped with both features (CFDA and CW), receiving an incoming call invoked the CW tone, but did not transfer to the CFDA forward-to number. This resulted in the CFDA feature being effective only when the line was not busy and not answered.

This capability improves the call waiting feature by allowing subscribers with the call waiting feature to specify the way an incoming call is to be treated when a call comes in while the subscriber is currently involved in a call with another party. When the call waiting tone is heard, the subscriber has the following options:

- initiate the standard call-waiting options (ignore, flash to put the existing call on hold and answer the second call, flash to go back to the first call, etc.)
- forward the call to another preselected directory number.

The busy and call forwarding options are selected by the subscriber pressing the appropriate key on a DTMF telephone set.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding Don't Answer After Call Waiting	AM - Alternate Answer After Call Waiting	CNS
	AM - Call Forwarding With Call Waiting	CNS
	BA - Call Forwarding Don't Answer	CNS*
	BS - Call Forwarding Don't Answer	CNS*
	NX - Call Forwarding II	CNS*
	PB - Modification of Call Waiting	CNS
	Qwest - Call Waiting	CNS

FEATURE OPERATION:

The new feature interaction allows a client to subscribe to both CFDA and CW, and receive the benefits of both features. An incoming call to a busy line will invoke the CW tone. The client can place the existing call on hold and answer the call, or by not answering the call, can allow the CFDA feature to assume control of the new call and transfer it to the CFDA forward-to number.

* This capability is inherent with Call Forwarding Don't Answer in Switches which have been modified. Check wire center deployment report for availability.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	**1A ESS**	**5ESS**	**DMS-100**
Earliest Generic Release	1AE10.11	5E7	BCS32

2. This feature is activated on an office basis. The AT&T switches (1A ESS and 5ESS) have a line-by-line override parameter to accommodate any customer situations where the capability may not be desired.

3. In the DMS-100 switch, the feature only affects those CFDA and CW customers served by RES. There is no line-by-line override parameter in the DMS-100 switch.

4. The line specific CFDA features (number of rings, inter/intraoffice forwarding) will operate the same as though the line were on-hook and not answered.

5. Standard CFDA and CW operation applies.

6. References:

   - GR-571 LSSGR: Call Waiting, FSD-01-02-1201 (A Module of LSSGR, FR-64), Issue 1 – June 2000 (replaces TR-TSY-000571 Issue 1 & Revision 1 – no technical changes) [includes CFDA interaction]

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Forwarding - Don't Answer Intraswitch (1050)

Call Forwarding Don't Answer (CFDA) is a central office software capability that allows a client to have an incoming call redirected to another Directory Number (DN) if the number dialed (the client's number) is not answered after a user-specified number of rings (or time interval). The service is activated by a service order. The called number and the redirected number (forwarded-to number) are coded in the central office memory and can only be changed through a service order. The customer may specify the number of rings (or time interval) at the time of the service order. The customer has the option of answering the call prior to its being forwarded, as long as the call is answered within the ringing cycle (time interval) selected. The called number and the redirected number (forwarded-to number) must be in the same central office switch. The service is deactivated, the forwarded-to number changed, or the number of rings (time interval) is changed only by a service order.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Don't Answer Intraswitch	AM - Alternate Answering	CNS
	BA - Fixed Call Forwarding	CNS
	BA - Call Forwarding Busy Line/Don't Answer	CNS
	BS - Call Forwarding Don't Answer	CNS
	NX - Call Forwarding 2	CNS
	PB - Call Forwarding Don't Answer	CNS
	SWB - Call Forwarding Don't Answer	CNS
	Qwest - Call Forwarding Don't Answer	CNS
	Qwest - Call Forwarding Busy Line/Don't Answer	CNS

FEATURE OPERATION:

This feature is activated/deactivated by a service order. The "forward-to" number and the number of rings (time interval) is also selected and preprogrammed at the time of the service order. (Refer to the capabilities called "Call Forwarding - Busy Line or Don't Answer - Customer Control of Activation/Deactivation" and "Call Forwarding - Busy Line or Don't Answer - Customer Control of Forward-To Number" for the services with customer control.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS24

2. Multiline customers can have CFDA on each line if desired.

3. Calls may be forwarded to any telephone number served by the same central office that serves the base station except DID numbers in the 1A ESS. Forwarding to DID numbers in the 1A ESS will be available in generic 1AE10.09*. (* References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.)

4. Subscribers may have CFDA with Call Forwarding Busy Line (CFBL), Call Forwarding Variable (CFV), and Call Waiting (CW). If a station has CFV and CFBL or CFDA active, then CFV will override the CFBL and/or CFDA features. If a station has CW and CFDA, CFDA will take precedence over the CW feature if the station is idle. However, if the station is busy, CW will take precedence and does not allow the CFDA feature to take effect if the waiting call is unanswered.

5. References:

   - SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-TSY-000504).

   - GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000586 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Forwarding - Don't Answer Interswitch (1051)

Call Forwarding Don't Answer (CFDA) is a central office software capability that allows a client to have an incoming call redirected to another Directory Number (DN) if the number dialed (the client's number) is not answered after a user-specified number of rings (or time interval). The service is activated by a service order. The called number and the redirected number (forwarded-to number) are coded in the central office memory and can only be changed through a service order. The customer may specify the number of rings (or time interval) at the time of the service order. The customer has the option of answering the call prior to its being forwarded, as long as the call is answered within the ringing cycle (time interval) selected. The called number and the redirected number (forwarded-to number) may be in the same or a different central office switch. The service is deactivated, the forwarded-to number changed, or the number of rings (time interval) is changed only by a service order.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Don't Answer Interswitch	AM - Alternate Answering	CNS
	BA - Fixed Call Forwarding	CNS
	BA - Call Forwarding Busy Line/Don't Answer	CNS
	BS - Call Forwarding Don't Answer	CNS
	NX - Call Forwarding 2	CNS
	PB - Call Forwarding Don't Answer Interswitch	CNS
	SWB - Call Forwarding Don't Answer	CNS
	Qwest - Call Forwarding Don't Answer (Expanded)	CNS
	Qwest - Call Forwarding Busy Line/Don't Answer (Expanded)	CNS

FEATURE OPERATION:

This feature is activated/deactivated by a service order. The "forward-to" number and the number of rings (time interval) is also selected and preprogrammed at the time of the service order. (Refer to the capabilities called "Call Forwarding - Busy Line or Don't Answer - Customer Control of Activation/Deactivation" and "Call Forwarding - Busy Line or Don't Answer - Customer Control of Forward-To Number" for the services with customer control.)

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE10.09*	5E2(2)	BCS24

* References to switching system generics that have not yet been released by the vendors are based on our current information about which features are planned for inclusion in those generic releases. If the vendors change the availability of any features for future generic releases that are referenced in this document, the availability of some services may be affected.

2. Multiline customers can have CFDA on each line if desired.

3. Calls may be forwarded to any telephone number, including DID numbers, served by the same or a different central office.

4. The caller may hear multiple call progress tones if the remote DN is busy.

5. Subscribers may have CFDA with Call Forwarding Busy Line (CFBL), Call Forwarding Variable (CFV), and Call Waiting (CW). If a station has CFV and CFBL or CFDA active, then CFV will override the CFBL and/or CFDA features. If a station has CW and CFDA, CFDA will take precedence over the CW feature if the station is idle. However, if the station is busy, CW will take precedence and does not allow the CFDA feature to take effect if the waiting call is unanswered.

6. References:

   - SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-TSY-000504).

   - GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000586 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Forwarding - Multiple Simultaneous Calls Interswitch (1052)

This feature provides the capability to specify the number of simultaneous incoming calls to forward from the same number to a hunt group or equivalent arrangement such as DID when the forwarding number and the hunt group (or equivalent) are served by a different central office switch.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Multiple Simultaneous Calls Interswitch	AM - Busy Line Transfer of Alternate Answer	CNS
	BA - Call Forwarding-Multiple Simultaneous Calls Interswitch	CNS
	BS - Call Forwarding Variable Multiple Simultaneous Calls	CNS
	BS - CF BL/DA Multiple Simultaneous Calls	CNS
	NX - Call Forwarding Variable	CNS
	PB - Call Forwarding Variable	CNS
	SWB - Simultaneous Call Forwarding	CNS
	Qwest - Call Forwarding Variable	CNS

FEATURE OPERATION:

The maximum number of multiple simultaneous call forwarding is Telephone Company defined on a per line basis, and on the basis of the type of call forwarding, at the time of service order entry.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS	DMS-100
Earliest Generic Release	5E2(2)	BCS28

2. This capability is available for the Call Forwarding Variable (CFV), Call Forwarding Busy Line (CFBL) and Call Forwarding Don't Answer (CFDA) features.

3. In the 5ESS switch the number of simultaneous calls allowed can range in size from one to ninety-nine. In the DMS-100 the size can range from 1 to 1024 via the Residential Enhanced Services.

4. In the DMS-100 switches, there may be some limitations on providing this for CFBL or CFDA depending on the current Generic program of the serving central office.

5. Reference for Call Forwarding Variable:

   - GR-580 LSSGR: Call Forwarding Variable, FSD 01-02-1401 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000580 Issue 1 – no technical changes).

   - GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of FR-64) Issue 1, June 2000 (replaces TR-TSY-000586 Issue 1 – no technical changes).

Call Forwarding - Variable (1053)

This capability provides the ESP's client with the ability to forward all calls to a second directory number for handling. As part of the activation of the feature, an associated call is placed to the ESP's forward-to number.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Variable	AM - Call Forwarding Variable	CNS
	BA - Call Forwarding	CNS
	BS - Call Forwarding Variable	CNS
	NX - Call Forwarding	CNS
	PB - Call Forwarding Variable	CNS
	SWB - Call Forwarding	CNS
	Qwest - Call Forwarding Variable	CNS

FEATURE OPERATION:

To activate call forwarding variable with the ESP's number as the forward-to number, the ESP's client dials the call forwarding variable activation code. A recall dial tone (stutter dial tone) is provided, and then the ESP's client dials the ESP's number. When the ESP answers the call, activation is complete. (If the ESP does not answer, the customer may repeat the process within a specified amount of time, e.g., one minute, and the feature will be activated.) Depending on the type of central office switch serving the ESP's client, while call forwarding variable is active, the ESP's client's line will receive a reminder ring whenever a call is forwarded.

To deactivate the feature, the ESP's client dials the call forwarding variable deactivation code.

When call forwarding variable is active, the ESP's client's ability to originate calls will be unaffected.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS23

2. Call Forwarding Variable will override Call Forwarding Don't Answer and Call Forwarding Busy Line if all three features are active at the same time.

3. Calls may be forwarded to any telephone number including DID numbers served by the same or a different central office.

4. References:

- GR-580 LSSGR: Call Forwarding Variable, FSD 01-02-1401 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000580 Issue 1 – no technical changes).

- GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000586 Issue 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Call Forwarding - Variable - Activation Without Courtesy Call (1054)

This capability provides the ESP's client with the ability to activate the call forwarding variable (forward all calls) feature without completing a call to the ESP's forward-to number.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Variable - Activation Without Courtesy Call	AM - Call Forwarding Variable	CNS
	BA - Call Forwarding-Variable-Activation Without Courtesy Call	CNS
	BS - Remote Access - Call Forwarding Variable	CNS
	NX - CallAbility[SM] Feature Access	CNS
	PB - Call Forwarding Variable	CNS
	Qwest - Call Forwarding Variable Without Call Completion	CNS

FEATURE OPERATION:

To activate call forwarding variable with the ESP's number as the forward-to number, the ESP's client either dials the call forwarding variable activation code of the form *XX or an access number.

1. Dialing an activation code (i.e., Ameritech, Bell Atlantic, BellSouth, Pacific Bell and Qwest). A recall dial tone (stutter dial tone) is provided, and then the ESP's client inputs the ESP's number by dialing it. If the activation can be accomplished for the designated forward-to address, then the switch responds with confirmation tone.

2. Dialing an Access Number (i.e., NYNEX). The customer dials an access number (e.g., an 800 number or a regular NPA-NXX-XXXX number) from any station. An announcement is returned asking for the customer directory number and a security code. If the dialed directory number and security code match and the customer subscribes to the service a prompt to select the feature (e.g., CFV) and the specific action (i.e., activation) is returned. After making the change the customer can wait for a confirmation or use, at any time, the verify capability to determine the feature status and forward to number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	5ESS
Earliest Generic Release	5E2(2)*

   * Requires Business and Residence Custom Service (BRCS).

2. When call forwarding variable is active, the ESP's client's ability to originate calls will be unaffected.

3. References:

   - GR-586 LSSGR: Call Forwarding Subfeatures, FSD 01-02-1450, Issue 1, June 2000

   - GR-580 Call Forwarding Variable FSD 01-02-1401, Issue 1, June 2000.

[SM] CallAbility is a registered service mark of NYNEX. CallAbility will be offered from selected digital switches.

Call Forwarding - Variable - Remote Activation/Control (1055)

This capability gives the ESP's client the ability to activate or deactivate the call forwarding variable (forward all calls) feature from remote locations other than their base station. The signaling used to activate or deactivate the call forwarding feature from the remote location must be from a Dual Tone Multi- Frequency (DTMF) set.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding - Variable - Remote Activation/Control	AM - Call Forwarding - Variable - Remote Activation/Control	CNS
	BA - Ultra Forward	CNS
	BS - Remote Activation of Call Forwarding	CNS
	NX - CallAbility[SM] Feature Access	CNS
	PB - Call Forwarding-Variable-Remote Activation/Control	CNS
	SWB - Remote Activation of Call Forwarding	CNS
	Qwest - Remote Access Forwarding	CNS

FEATURE OPERATION:

The ESP's client has two options for changing the forward-to number from a remote station:

1. The remote activation of call forwarding variable feature provides a dedicated directory number that can be used for remote activation (i.e., Ameritech, Bell Atlantic, BellSouth, Pacific Bell, Southwestern Bell). A caller may place a call to this remote activation directory number from any station. Calls to this number are answered with a tone or announcement. The caller then dials, on a DTMF station from his/her remote location, his/her home (base station) directory number and a security code. If the dialed directory number and security code match and that customer subscribes to remote activation, confirmation tone followed by dial tone is returned. The customer then proceeds through the call forwarding activation/deactivation procedure as if at home (at the base station).

2. Dialing an Access Number (i.e., NYNEX, Qwest). The customer dials an access number (e.g., an 800 number or a regular NPA-NXX-XXXX number) from any station. An announcement is returned asking for the customer directory number and a security code. If the dialed directory number and security code match and the customer subscribes to remote activation, a prompt to select the feature (e.g., CFV) and the specific action (e.g., activation or deactivation) is returned. After entering their selection, the customer can wait for a confirmation or use, at any time, the verify capability to determine the feature status and the forward to number.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS*	5ESS*	DMS-100*
Earliest Generic Release	1AE10	5E5	BCS28

Note: * This service may be provided via a switching feature in the switch or via an adjunct processor.

[SM] CallAbility is a registered service mark of NYNEX. CallAbility will be offered from selected digital switches.

2. Reference:

- SR-504 SPCS Capabilities and Features (A Module of LSSGR, FR-64), Issue 1, March 1996 (formerly TR-NWT-000504)

Call Forwarding With Variable Rings (1102)

In the event that the called telephone number is not answered within a designated parameter, normally three to four rings, the Call Forwarding Don't Answer feature automatically forwards incoming calls to a predetermined, dialable telephone number served by the same central office switch, or provides interswitch forwarding to a predetermined, dialable telephone number. This feature provides the ability to change the operative number of rings prior to call forwarding.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Forwarding With Variable Rings	AM - Customer Changeable Number of Rings	CNS
	BA - Ring Count Change	CNS
	NX - CallAbility[SM] Feature Access	CNS

FEATURE OPERATION:

This feature is modified on a line basis by a service order. The number of rings (time interval) is selected at the time of the service origination or at any time the customer requests a change.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE11.03	5E6	BCS 29

2. The minimum and maximum number of rings (time interval) is limited on a per switch basis. The normal time range is 0 to 60 seconds.

3. Reference:

- GR-1520 Ring Control, FSD 01-02-2200, Issue 2, October 1994 (component of FR-64)

[SM] CallAbility is a registered service mark of NYNEX. CallAbility will be offered from selected digital switches.

Call Waiting - Cancel (1056)

Cancel Call Waiting allows a subscriber with the Call Waiting feature to inhibit reception of the Call Waiting Tone for the duration of a single call. This prevents interruption of data traffic or interruption during an important telephone call.

Generic Name of ONA Service	Product Name	BSE or CNS
Call Waiting - Cancel	AM - Call Waiting	CNS
	BA - Tone Block	CNS
	BS - Call Waiting	CNS
	NX - Cancel Call Waiting	CNS
	PB - Call Waiting	CNS
	SWB - Cancel Call Waiting	CNS
	Qwest - Call Waiting	CNS

FEATURE OPERATION:

1. When a subscriber with the Call Waiting Feature wishes to cancel the Call Waiting feature during the call, they must depress the receiver button, listen for dial tone, and dial Star (*) plus 70 for touchtone (DTMF) phones or dial 1170 for rotary dial (DP) phones (Cancel Call Waiting Code) for a POTS line or a Business Group line. After dialing the code, the subscriber listens for confirmation tone and is then automatically reconnected to the call in progress. The Call Waiting feature has then been deactivated and no interruptions are allowed during the call.

2. When a subscriber with the Call Waiting Feature wishes to cancel the Call Waiting Feature prior to making a call, they must lift the receiver, listen for dial tone, and dial Star (*) plus 70 for touchtone (DTMF) phones or dial 1170 for rotary (DP) phones (Cancel Call Waiting Code) for a POTS line or a Business Group line. After dialing the code, the subscriber listens for confirmation tone followed by dial tone. The Call Waiting Feature has then been deactivated and no interruptions are allowed during the call.

3. Call Waiting will be re-established when the call is terminated.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS24

2. Call Forwarding Variable is compatible with Call Waiting and Cancel Call Waiting service.

3. Call Hold and Call Waiting with the Cancel option can be assigned to the same line.

4. Call Pickup and Call Waiting with the Cancel option can be assigned to the same line.

5. Speed Calling and Call Waiting with the Cancel option can be assigned to the same line.

6. Call Waiting with the Cancel option may be assigned to either or both parties on a Two-Party Line.

7. Cancel Call Waiting may not be provided on the following lines:

   - Coin Lines
   - Denied Originating Lines
   - Four and Eight Party Lines
   - PBX Lines
   - Hotel/Motel Calls Routed to TSPS

8. References:

   - GR-572 LSSGR: Cancel Call Waiting, FSD 01-02-1204 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000572 Issue 1 & Revision 1 – no technical changes).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

Called Directory Number Delivery via DID (1057)

This service allows the central office switch to deliver all or part of the destination address to the ESP at the time the call is established. Usually, the destination address delivered is the same as the number originally dialed. When number translations have occurred, e.g., 800 calls, the DID number delivered is not the called number.

Generic Name of ONA Service	Product Name	BSE or CNS
Called Directory Number Delivery via DID	AM - Direct Inward Dialing Trunk Termination	BSE
	BA - Direct Inward Dialing Service	BSE
	BS - Direct Inward Dialing	BSE
	NX - DID	BSE
	PB - Direct Inward Dial Service	BSE
	SWB - Direct Inward Dialing	BSE
	Qwest - Called Directory Number Delivery (DID)	BSE

FEATURE OPERATION:

1. Customers order this service from the telephone company. A client calling a customer is generally unaware that the customer has Direct Inward Dialing (DID) service. The client is not required to perform any additional actions to have the call delivered via a DID trunk group.

2. In a PBX type application, the service allows a client to reach a specific PBX station without the assistance of an attendant or other intermediary.

3. The number of digits forwarded by the central office switch is determined at the time the service is ordered. The customer must also arrange for a block of telephone numbers to be associated with the DID trunks.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS17

2. A customer may elect to receive Dial Pulse or Dual Tone Multifrequency (DTMF) signaling when using analog facilities. Some companies may offer Multifrequency (MF) outpulsing/signaling to the ESP community. If both the central office switch and the customer's equipment are digital, the customer may be able to order DID trunks with digital connectivity.

3. This service is an incoming service (to the customer's CPE) and is typically a "trunk side" service.

4. References:

   - GR-524 LSSGR: Attendant and Customer Switching System Features and Customer Interfaces, FSD 04-01-0000 through 04-05-0000 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000524 Issue 2 & Revision 1 – no technical changes).

This service, if offered as a BSE, may be associated with the Circuit Switched Line or Trunk basic serving arrangement, as stated in the individual ONA plans.

Called Directory Number Delivery via ISDN Q.931 *

*** A waiver for Switched Access Feature Group K service was denied by the FCC, in CC Docket 89-79, Order dated 7/11/91. As a result, Southwestern Bell Telephone Company was unable to file a tariff on Called Directory Number Delivery via ISDN Q.931.**

Called Directory Number Delivery via 900NXX (1059)

This capability will provide the ESP with the directory number that terminated the call via a circuit switched trunk access arrangement. The method used is 900NXX dialing and Feature Group D (FG D) signaling protocol. The called directory number information (900NXXXXXX) is included within the FG D signaling protocol. The assignment of a 900NXX number to each ESP provides the ESP the capability to assign up to 9999 line numbers. With this capability, the FG D signaling protocol would deliver the specific dialed line number (900NXXXXXX) to the ESP.

Generic Name of ONA Service	Product Name	BSE or CNS
Called Directory Number Delivery via 900NXX	AM - Called Directory Number Delivery	BSE
	BA - 900 Access Service	BSE
	NX - 900 Access Service	BSE
	SWB - Circuit Switched - Trunk Side Alternative D Basic Serving Arrangement (BSA-D)	BSA *

FEATURE OPERATION:

This feature is activated/deactivated by an Access Service Order.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS17

2. The service is LATA wide and can be accessed either at the tandem or at the end office. Both access arrangements must be properly equipped with Feature Group D protocol trunks to the 900NXX serving carrier.

3. Calls that originate from non-FG D protocol offices will be handed off to the ESP at the access tandem using the FG D protocol.

4. References:

   - Feature Group D protocol is described in GR-690 Exchange Access Interconnection FSD 20-24-0000 (A Module of LSSGR, FR-64), Issue 2, September 1995, Revision 1 - October 1996.

   - GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994.

This service is associated with the Circuit Switched Trunk basic serving arrangement.

* For Southwestern Bell Telephone Company, this is an inherent feature of Circuit Switched - Trunk Side Alternative D Basic Serving Arrangement (BSA-D) service.

Calling Billing Number Delivery - FG B Protocol (1060)

This arrangement allows the ESP to receive the billing number (ANI - 7 digit) of the party who originated the call to the ESP with the signaling information that is transmitted to the ESP during call setup. This signaling information will be transmitted using a Feature Group B protocol over a direct circuit switched trunk side connection.

Generic Name of ONA Service	Product Name	BSE or CNS
Calling Billing Number Delivery - FG B Protocol	BA - Automatic Number Identification (ANI) - Trunk Side BSA-950 Option	BSE
	BS - Called/Calling Number Information - ANI Via FG B/TSBSA Technical Option 1 *	BSE
	NX - Automatic Number Identification	BSE
	Qwest - Automatic Number Identification	BSE

FEATURE OPERATION:

1. An ESP's client will dial (1)+950+0XXX or (1)+950+1XXX to reach the ESP. The XXX is the ESP's Carrier Identification Code (CIC).

2. ESP equipment may need to prompt the end user (e.g., via second dial tone) for additional information in order for the ESP to process the call.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS19

2. ESPs that purchase trunk side access service utilizing FG B protocol will be assigned a Carrier Identification Code (CIC) and must establish a Point of Presence (POP) in each LATA served. The CIC code will be the same for both FG B protocol and FG D protocol. However, in the future, CIC codes for trunk side access services utilizing FG B protocol and FG D protocol may be assigned independently.

3. ESPs must order direct trunks between each FG B protocol end office switch they wish to serve and their POP. The ANI optional feature must be ordered on all trunks. (Calling Billing Number Delivery - FG B Protocol cannot be provided using tandem arrangements, as the tandems utilizing FG B protocol do not have the ability to pass ANI.)

4. The ANI data forwarded to the ESP consists of the seven (7) digit billing number of the station originating the call and one ANI information digit.

* BellSouth will only offer this service on an interLATA basis.

5. Destination code information, such as the called number, may be transmitted to the ESP from rotary stations provided the ESP orders the Rotary Dial Station Signaling option. This feature is available only from suitably equipped end offices.

6. Calls may be forwarded to ESPs using call forwarding services.

7. This service may be available in other switches equipped for Equal Access service.

8. References:

   - GR-698 LSSGR: Feature Group B FSD 20-24-0300 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-TSY-000698 Issue 1 & Revision 1 – no technical changes).

   - TR-NPL-000175 Compatibility Information for Feature Group B Switched Access Service, Issue 1, July 1985.

   - GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994.

This service, if offered as a BSE, is associated with the Circuit Switched Trunk basic serving arrangement.

Calling Billing Number Delivery - FG D Protocol (1061)

This arrangement allows the ESP to receive the billing number (ANI - 10 digit) of the party who originated the call to the ESP with the signaling information that is transmitted to the ESP during call setup. This signaling information will be transmitted using a Feature Group D protocol over a circuit switched trunk side connection.

Generic Name of ONA Service	Product Name	BSE or CNS
Calling Billing Number Delivery - FG D Protocol	AM - Calling Billing Number Delivery (i.e., ANI)	BSE
	BA - Automatic Number Identification (ANI) - Trunk Side BSA - 10XXX Option	BSE
	BS - ANI	BSE
	NX - Automatic Number Identification	BSE
	PB - Automatic Number Identification	BSE
	SWB - Automatic Number Identification	BSE
	Qwest - Automatic Number Identification	BSE

FEATURE OPERATION:

1. An ESP's client that is presubscribed to that ESP will dial (1) + 7/10 digits to reach the ESP. If the ESP's client chooses another carrier as his/her presubscribed carrier, the ESP's client would dial 10XXX (and/or 101XXXX) + (1) + 7/10 digits or 10XXX (and/or 101XXXX)+# to reach the ESP. The XXX (and/or XXXX) would be the ESP's Carrier Identification Code (CIC).

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. ESPs that purchase trunk side access service utilizing FG D protocol will be assigned a Carrier Identification Code (CIC) and must establish a Point of Presence (POP) in each LATA served.

2. ESPs may order (1) direct trunks between each equal access switch and the ESP's POP, or (2) trunks between FG D protocol equal access tandems and the ESP's POP, or (3) a combination of direct and tandem trunks. The trunks must be ordered with the ANI feature where ANI is an optional feature, in order for the ESP to receive the calling billing number.

3. Calls may be forwarded to the ESP using call forwarding services.

4. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE8A	5E2(2)	BCS19

5. The service may be available in other switches equipped for Equal Access service.

6. This service may be available with CCS7 protocol.

7. References:

   - GR-690 Exchange Access Interconnection FSD 20-24-0000 (A Module of LSSGR, FR-64), Issue 2, September 1995, Rev 1 - October 1996.

   - TR-NPL-000258 Compatibility Information for Feature Group D Switched Access Service, Issue 1, October 1985.

   - GR-334 Switched Access Service: Transmission Parameter Limits and Interface Combinations, Issue 1, June 1994.

8. References for CCS7:

   - GR-905 Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and ISDN User Part (ISDNUP), Issue 2, December 1996, Revision 1 - December 1997, Revision 2 – December 1998 (replaces TR-TSV-000905, Issue 2), Issue 3 – December 1999.

   - GR-394 Switching System Generic Requirements for Interexchange Carrier Interconnection (ICI) Using the Integrated Services Digital Network User Part (ISDNUP), (A Module of LSSGR, FR-64), Issue 2, December 1997, Revision 1, November 1998 (replaces TR-NWT-000394, Issue 4), Issue 3 – November 1999.

This service, if offered as a BSE, is associated with the Circuit Switched Trunk basic serving arrangement.

Calling Billing Number Delivery - via ISDN Q.931 Protocol *

*** A waiver for Switched Access Feature Group K service was denied by the FCC, in CC Docket 89-79, Order dated 7/11/91. As a result, Southwestern Bell Telephone Company was unable to file a tariff on Calling Billing Number Delivery via ISDN Q.931.**

Calling Directory Number Delivery - via ICLID (1064)

Calling Directory Number Delivery via Calling Number Delivery (CND) (CLASS[SM]) allows the subscriber to receive the telephone number of the caller prior to answering the call.

When Calling Number Delivery (CND) is assigned to the subscriber's line, the directory number of the calling party, the time of the call and the date are sent to, and displayed on, the called party's Customer Premises Equipment (CPE) during the first long silent interval of the ringing cycle (between the first and second rings). If the calling party is outside the area in which the service works, the called party's CPE will receive an "O" which in most cases is displayed as "Out of Area" (actual display is the function of the CPE used).

Generic Name of ONA Service	Product Name	BSE or CNS
Calling Directory Number Delivery- via ICLID	AM - Caller ID	CNS
	AM - Caller ID With Call Waiting	CNS
	BA - Caller ID	BSE
	BS - Caller ID	CNS
	NX - Caller ID	CNS
	PB - Caller ID	BSE
	SWB - Caller ID	CNS
	Qwest - Caller Identification - Number	BSE

FEATURE OPERATION:

The customer must contact the telephone company to have the Calling Directory Number Delivery service activated. Once the translation changes have been made to the customer's line and the customer has installed the appropriate CPE, the calling number, date and time of the call is automatically transmitted to the customer's CPE. If the service is offered on a usage-sensitive basis, the customer has the option of turning the display device on and off by using the service access codes *65 or 1165 for activation and *85 or 1185 for deactivation. If the service is offered on a flat-rate basis, the display device cannot be turned on and off using the access codes.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. This feature is available in the following central office switches:

Switch Type	1A ESS	5ESS	DMS-100
Earliest Generic Release	1AE10*	5E5	BCS28

NOTE: * Available on intraoffice basis with generic 1AE9.

[SM] CLASS is a service mark of Telcordia Technologies, Inc. (formerly Bellcore)

2. The serving central office switch must be equipped with the appropriate CLASS[SM] Calling Number Delivery software and hardware. In order for this service to work on an interoffice basis, both the originating and terminating switches must be equipped with the CLASS[SM] and the Common Channel Signaling (CCS) SS7 software and hardware and the interoffice trunks must be converted to SS7.

3. This service is a "line" service and therefore cannot be assigned to subscribers with trunk terminations (i.e., PBX with DID). This service is also unavailable to multiparty lines, coin terminating and 1A ESS remote switching system (RSS) lines. This service requires on-hook transmission, therefore there may be instances (MFT, Channel Banks) where this service may not work. An exception is Ameritech's offering of "Caller ID With Call Waiting."

4. The subscriber must have a station set or a display device adjunct to the station set capable of receiving and displaying the calling directory number. The subscriber is responsible for the purchase and installation of this display device.

5. If the subscriber answers the telephone during the first ringing interval, the calling directory number will not be displayed at the CPE.

6. References:

   - GR-31 LSSGR: CLASS[SM] Feature: Calling Number Delivery, FSD 01-02-1051 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-NWT-000031 Issue 4 – no technical changes).

   - GR-30 LSSGR Voiceband Data Transmission Interface Section 6.6 (A Module of LSSGR, FR-64), Issue 2, December 1998 (replaces TR-NWT-000030, Issue 2).

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.

[SM] CLASS is a service mark of Telcordia Technologies, Inc. (formerly Bellcore)

Carrier Selection On Reverse Charge (1065)

800 Service is a telecommunications service in which any charges for the call are paid by the called party rather than the calling party. Dial access for the service is in the form of 1-800-NXX-XXXX. [Note: 888, 877, 866 and 855 are now equivalent to 800.]

The 800 Service subscriber purchases service from particular areas and incurs all the costs associated with processing calls for the calling parties. The unique reverse billing feature provides the calling party with "free" calls, while allowing the 800 Service customer, the called party, to encourage calls from parties of choice.

Generic Name of ONA Service	Product Name	BSE or CNS
Carrier Selection On Reverse Charge	AM - 800 Dialing Alternative	BSA *
	BA - 800 Access Service	BSE
	BS - 800 Service	BSA
	NX - 800	BSE
	PB - 800 Access Service	BSA **
	Qwest - 800 Service	BSA *

FEATURE OPERATION:

BOC 800 Service provides for the assignment of a single ten digit 800 Number (i.e., 800+XXX+XXXX) to the customer which can be used on a statewide basis for intraLATA calling. The service can be selected for an area consisting of less than an entire state by specifying a desired area of service.

The basic BOC 800 Service to an individual customer consists of the following capabilities:

1. The assignment of a single 800 number, which allows but does not require the subscriber to use one 800 number nationwide.

2. A termination that connects a location specified by the customer to the BOC's switched facilities.

3. Access to a single exchange or interexchange carrier for intraLATA transport.

4. Carrier selection.

5. Customer defined area of service.

6. The offering of national directory assistance listings to be passed to the national directory assistance provider.

* For Ameritech and Qwest, this is a Circuit Switched Trunk Type BSA alternative.
** For Pacific Bell, this is a Circuit Switched Line Type BSA alternative.

TECHNOLOGICAL AND FEATURE INTERACTION CONSIDERATIONS:

1. References:

   - SR-2275 Telcordia Notes on the Networks, Issue 4, October 2000 (replaces SR-TSV-002275, Issue 3)

   - GR-508 LSSGR: Automatic Message Accounting (AMA) Section 8, (A module of LSSGR FR-64) Issue 2, December 1997, Revision 1 – December 1998 (replaces TR-TSY-000508, Issue 3).

   - GR-533 LSSGR: Database Services - Service Switching Points, FSD 31-01-0000 (A Module of LSSGR, FR-64), Issue 1, June 2000 (replaces TR-NWT-000533 Issue 3 – no technical changes).

   - Qwest document 77318 Compatibility Information for 800 Service Switched Access, May 1986.

This service, if offered as a BSE, is associated with the Circuit Switched Line basic serving arrangement.