Digital Key System Telephone, KS

OPERATIONAL DIRECTIONS

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1 GENERAL

This document describes functions to support various languages on digital telephones with alphanumeric display.

For newer terminals starting with version D4 Unicode characters and Unicode displays are used.

2 PREREQUISITES

An extension number series must be initiated.

3 PROCEDURE

To simplify initiation of the text string data, follow the work procedure described below:

1. Initiate the digital telephone. See the command description for *DIGITAL KEY SYSTEM TELEPHONE, KS*.
2. Initiate the language and text string data.

4 EXECUTION

4.1 DIGITAL KEY SYSTEM TELEPHONE

4.1.1 INITIATING A DIGITAL KEY SYSTEM TELEPHONE

General

A new extension with a digital key system telephone is initiated by affiliating a directory number to an equipment position and assigning it category characteristics. The latter can be assigned either as a common category code or by stating each category field. In addition the type of telephone to be connected shall be stated.

An answering position for a night-switched exchange shall not be assigned categories for Individual Do Not Disturb feature.

It is possible to initiate a series or number of different directory numbers at one time. The first equipment position in the command is then stated and the system searches for free and correctly equipped equipment positions.

The directory number that is affiliated to the extension in this manner is designated the extension's Own Directory Number.

If the customer function is used in the system all extensions shall belong to a customer.

For instruments in the DBC 200-series, the board type must be ELU33.

For multiple digital telephones in a hotel room, the additional digital telephone sets shall be initiated with a category which does not allow call back request. Moreover, the directory numbers associated to the additional digital extension sets must not be allowed to be dialed by the rest of the Hospitality extensions, except for the extensions which have a TCD category value equal to 15. See the command description for *NUMBER ANALYSIS*.

The keys possess the following functions after an initiation of a digital key system telephone:

Table 1 DBC 200-series

Key 00	Programming mode (Mute/Prog key on DBC 210).
Key 01	Automatic call back (not available on DBC 210).
Key 02	Diversion (not available on DBC 210).
Key 03	Telephone name selection (Single button access) (not available on DBC 210).
Key 04-05	Soft-keys F1-F2 (not available on DBC 201, DBC 202, DBC 210, DBC 211, and DBC 212).
Key 06-07	Soft-keys F3-F4 (not available on DBC 201, DBC 202, DBC 210, DBC 211, and DBC 212).
Key 08	Menu key (not available on DBC 201, DBC 202, DBC 210, DBC 211, and DBC 212).
Key 09	Own directory number, access 3 (Inquiry).
Key 10	Own directory number, access 2.
Key 11	Own directory number, access 1.

Key 14	Headset-key (only for DBC 210, DBC 211, DBC 212 and DBC 213 equipped with headset function).

Table 2 DBC 220-series

Key 00	Programming mode (Telephone name selection on DBC 223 and DBC 225.
Key 01	Automatic call back.
Key 02	Diversion.
Key 03	Telephone name selection.
Key 04-05	Soft-keys F1-F2 (not available on DBC 220, DBC 222).
Key 06-07	Soft-keys F3-F4 (not available on DBC 220, DBC 222).
Key 08	Telephone name selection (not available on DBC 220, DBC 222 and DBC 223).
Key 09	Own directory number, access 3 (Inquiry).
Key 10	Own directory number, access 2.
Key 11	Own directory number, access 1.

There are some optional services that must be initiated on a key with a LED. For further information please consult the command description for *DIGITAL KEY SYSTEM TELEPHONE* (KSFKC & KSFKP), and the parameter description for *DIGITAL KEY SYSTEM TELEPHONE* (ITYPE & KEY).

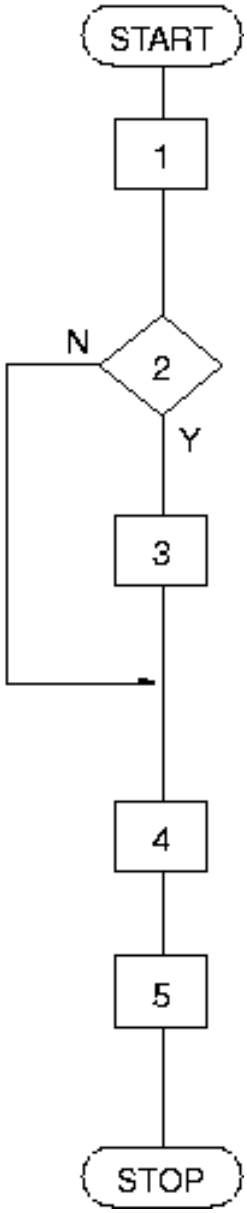
Prerequisites

If the category characteristics are to be stated with the aid of a common category code, the latter must be initiated.

Digital extension boards must be available.

Note: When the ELU33 board is used, individual 0 has to be activated (initiated) as the first individual on the board, and has to be removed as the last individual on the board.

Execution

		Measure/Question	Observation/ Comment
Flow 	1	Enter the command *resource_status -p* to verify which free equipment positions and board types that exist.	See the operational directions for *SYSTEM RESOURCE STATUS INFORMATION*.
	2	Are there category characteristics to be initiated with aid of common category code?	If NO, proceed to step 4.
	3	Enter the command *EXCCP* to verify that the category code agrees with those category characteristics the extension is to possess.	See the operational directions for *ANALOG EXTENSION*.
	4	Enter the command *KSEXI* to order initiation of the extension.	
	5	Enter the commands *KSDDP* and *KSCAP* to verify that initiation has been executed.	

4.1.2 REMOVING A DIGITAL KEY SYSTEM TELEPHONE

Prerequisites

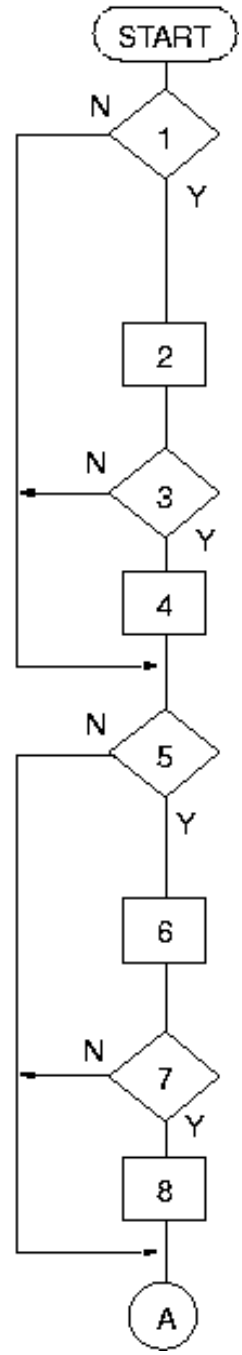
The extension number shall:

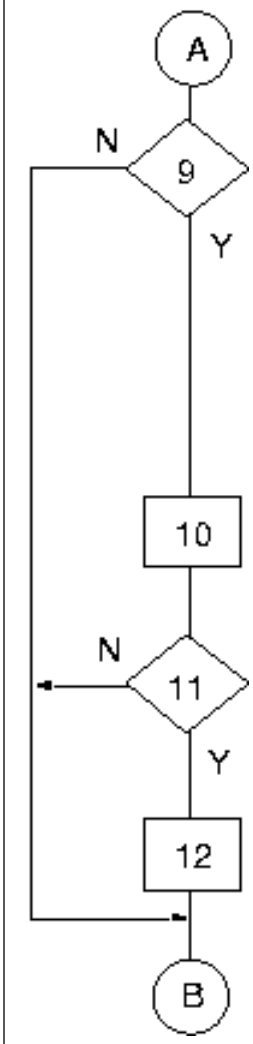
- Be Own Directory Number
- Not be multiple represented, neither as MDN nor MNS.
- Not have additional line
- Not be a non-dial connection to predefined answering position (hot-line)
- Not be an alarm extension
- Not be busy
- Not have individual authorization code

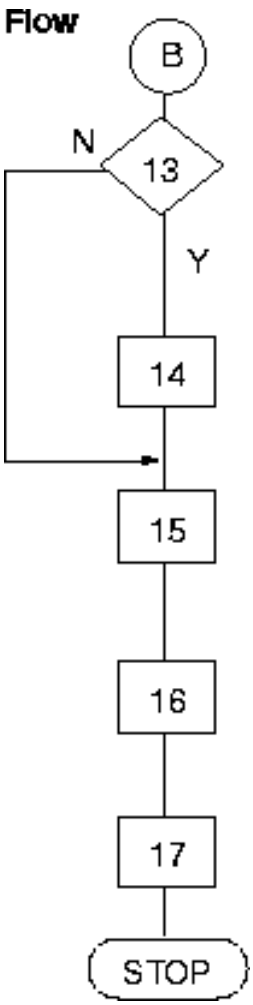
Charging data if any shall be printed out prior to removing the digital key system telephone.

Note: When the ELU33 board is used, individual 0 has to be removed as the last individual on the board.

Execution

		Measure/Question	Observation/ Comment
Flow 	1	Is the extension directory number a day/night service position? Enter the command *RODNP*.	See the operational directions for *ROUTE DATA*. If NO, proceed to step 5.
	2	Enter the command *RODNE* to erase the day/night service position.	
	3	Is a new day/night service position required?	If NO, proceed to step 5.
	4	Enter the command *RODNI* to initiate a new day/night service position.	
	5	Is the extension directory number a common divertee position? Enter the command *diversion_common -p*.	See operational directions for *CALL DIVERSION*. If NO, proceed to step 9.
	6	Enter the command *diversion_common -e* to erase the common divertee position.	
	7	Is a new common divertee position required?	If NO, proceed to step 9.
	8	Enter the command *diversion_common -i* to initiate a new common divertee position.	

		Measure/Question	Observation/ Comment
Flow 	9	Enter the command *ADCDP* to verify whether the extension is accessed via a common abbreviated number, that is, is the extension's directory number a complete number for any of the common abbreviated numbers?	See the operational directions for *ABBREVIATED DIALLING*. If NO, proceed to step 13.
	10	Enter the command *ADCOE* to erase the common abbreviated number.	
	11	Is a new answer position required for this common number?	If NO, proceed to step 13.
	12	Enter the command *ADCOI* to initiate a new common abbreviated number.	

		Measure/Question	Observation/ Comment
	13	Has the extension individual authorization code? If yes, enter the command *auth_code*. If no, proceed to step 15.	See the operational directions for *AUTHORIZATION CODE FOR EXTENSION*.
	14	Enter the command *auth_code* to erase the individual authorization code.	
	15	Enter the command *CHICP* to obtain a printout of call metering data (if any).	See the operational directions for *CHARGING*.
	16	Enter the command *KSEXE* to order erasure of the extension.	
	17	Enter the command *KSDDP* to verify that the erasure has been executed.	

4.1.3 ALTERATION OF OWN DIRECTORY NUMBER

General

Own Directory Number can be altered in two ways:

1) An extension is moved to a new, free directory number.
2) Two extensions exchange directory numbers in that extension A moves to a free directory number, B changes to the A former number and, finally, A changes to the B former number.

Prerequisites

If the extension has one of the following functions:

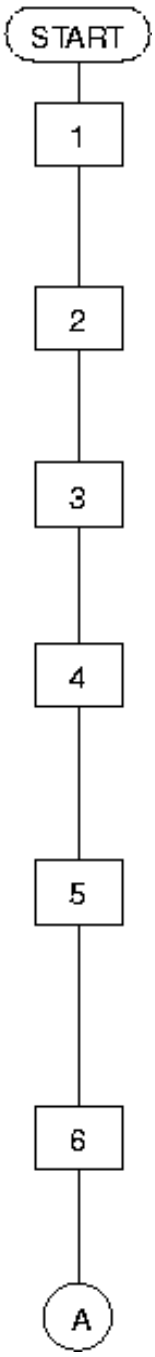
- Day or night service position
- Common or individual divertee position
- Message diversion (interception) position
- Message printout position
- Translated number for common abbreviated number

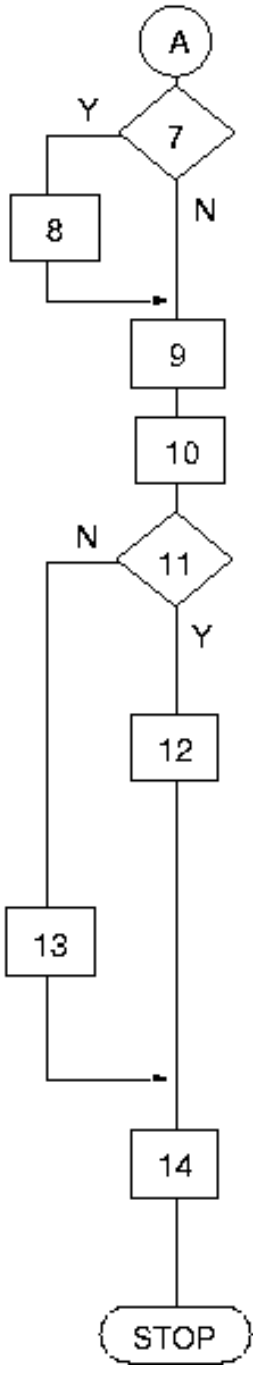
Then the facility is deleted for the extension's previous directory number. If the extension is to be used for one of the above functions, then the facility must be initiated again, after the directory number has been altered.

Other facilities will remain unchanged after alteration of directory number, such as different types of group affiliation.

The extension must not be multiple represented.

Execution

		Measure/Question	Observation/ Comment
Flow 	1	Enter the command *RODNP* to verify whether the extension is a night or day service position.	See the operational directions for *ROUTE DATA*.
	2	Enter the command *diversion_common -p* to verify whether the extension is a common divertee position.	See the operational directions for *CALL DIVERSION*.
	3	Enter the command *diversion -p* to verify whether the extension is an individual divertee position.	
	4	Enter the command *ISEPP* to verify whether the extension is a message diversion position or a message printout position.	See the operational directions for *INTERCEPTION SERVICE*.
	5	Enter the command *ADCDP* to verify whether the extension's directory number isa translated number for a common abbreviated number.	See the operational directions for *ABBREVIATED DIALLING*.
	6	Enter the command *SPEXP* to verify whether the extension's directory number represents a non-dialled connection number.	See the operational directions for *SPECIAL PURPOSE EXTENSION*.

		Measure/Question	Observation/ Comment
Flow  	7	Is the directory number multiple represented? Enter the command *KSMDP* or, for a generic extension *extension_key -p* to check.	If YES, proceed to step 9.
	8	Enter the command *KSMDE* and/or *extension_key -e* to remove the multiple representation.	
	9	Enter the command *KSEXE* to remove the directory number.	
	10	Enter the command *KSEXI* to initiated a new directory number.	
	11	Is it permitted to send the extension's directory number to the public exchange?	If NO, proceed to step 12.
	12	Enter the command *KSCAC* to set the extension's category to permitted to send directory number to the public exchange.	
	13	Enter the command *KSCAC* to set the extension category to not permitted to send directory number to the public exchange.	
	14	Enter the commands *KSDDP* and *KSCAP* to verify the result.	

4.1.4 MOVING A DIGITAL KEY SYSTEM TELEPHONE

General

There are two ways to move a digital telephone set:

1) An extension is moved to a new equipment position.
2) Two extensions change equipment positions. Extension A moves to a free equipment position, B changes to A's former position and, finally, A changes to B's former position.

Prerequisites

The new equipment position must be correctly equipped and free. Additionally, the extension must be free from traffic when the moving takes place.

The following feature cannot be moved:

- Extension cannot be alarm extension.

The following states cannot be moved:

- Blocked extension
- Locked telephone by authorization code

Activation that are made from the telephone are not moved.

Execution

1. Enter the command *KSEXE*.
2. Enter the command *KSEXI*.
3. Enter the command *KSDDP* to verify that the extension has been moved.

4.1.5 EXCHANGE OF EQUIPMENT POSITIONS FOR TWO EXTENSIONS

General

To exchange the equipment positions of two digital key system telephones.

Prerequisites

The extensions must not be alarm extensions. Additionally the extensions must be free when the exchange takes place.

Execution

1. Enter the command *resource_status -p* to search for a free equipment position.
2. Enter the command *KSEXE* to end the first extension.
3. Enter the command *KSEXI* to initiate the first extension on a temporary multiple position.
4. Enter the command *KSEXE* to end the second extension.
5. Enter the command *KSEXI* to initiate the second extension on the position originally occupied by the first extension.
6. Enter the command *KSEXE* to end the first extension on the temporary multiple position.
7. Enter the command *KSEXI* to initiate the first extension on the position originally occupied by the second extension.
8. Enter the command *KSDDP* to verify that the replacement has been executed.

4.1.6 CHANGING CATEGORY CHARACTERISTICS OR TYPE OF DIGITAL KEY SYSTEM TELEPHONE

General

A digital key system telephone can be assigned new category characteristics. These new values can be assigned either as an existing common category code or by stating each and every of those category parameters that are to be altered. Alteration of the type is achieved by stating the type of the new telephone.

It is possible to alter a series or a number of different directory numbers at the same time.

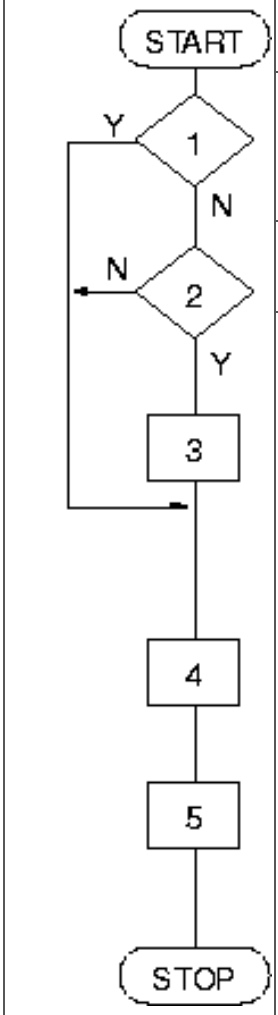
Prerequisites

The extension number must be an Own Directory Number, or an Additional Directory Number.

If the category characteristics are to be stated with a category code, the latter must be initiated.

If the size is to be reduced, those buttons that are not of the type Telephone Name Selection are to be redefined to this type.

Execution

		Measure/Question	Observation/ Comment
Flow 	1	Is it only type to be altered?	If YES, proceed to step 4.
	2	Are there category characteristics to be altered via category code?	If NO, proceed to step 4.
	3	Enter the command *EXCCP* to verify that the common category code agrees with those characteristics to be possessed by the extension.	See the operational directions for *ANALOG EXTENSION*.
	4	Enter the command *KSCAC* to order alteration of categories and/or type.	
	5	Enter the command *KSCAP* to verify that the alteration has been executed.	

4.1.7 ALTERATION OF A FUNCTION KEY

General

Alteration of a function key on the digital key system telephone. The following are examples of key functions:

- Telephone name selection
- Multiple name selection (executive/secretary function)
- Automatic call back
- Diversion
- Conference

Prerequisites

The key that is to be assigned a new function (extension facility) shall earlier already have been defined as a function key, that is, not Own Directory Number, Additional Directory Number, or line pickup, or a data button.

However for the executive/secretary function the key must be Line pickup. The executive/secretary function is a Line pickup key with a telephone name selection number attached.

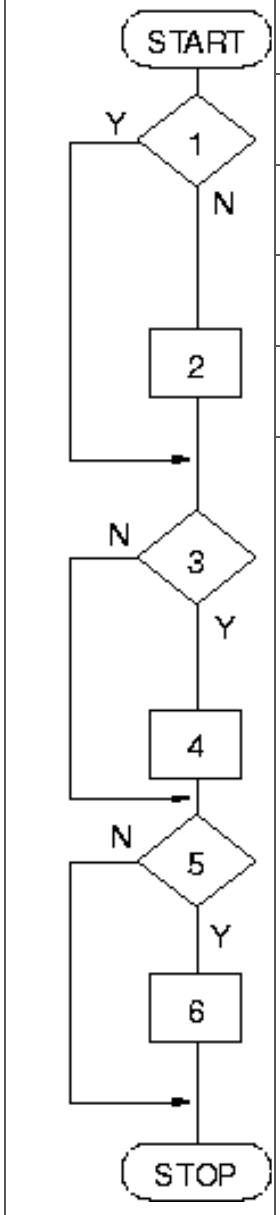
DBC 210, DBC 211, DBC 212, and DBC 213 models with headset functionality have a predefined key acting as headset-key. From the exchange point of view it is possible to change the functionality of this key but changes will not take effect. That is to say, from the user point of view this key acts as a fixed key. When the headset function is not used the key can be used for other functions.

DBC 222, DBC 223, and DBC 225 have separate headset-keys with fixed functionality. The headset-key is used to activate/deactivate the voice transmission mode.

Execution

1. Enter the command *KSFKC*.
2. Enter the command *KSFKP* to verify that the alteration is executed.

4.1.8 PRINTING THE DIGITAL KEY SYSTEM TELEPHONE DATA

		Measure/Question	Observation/ Comment
Flow 	1	Is a printout of multiple position and/or categorycode and/or appurtenant ADDITIONAL DIRECTORY NUMBER required?	If YES, proceed to step 3.
	2	Enter the command *KSDDP* to get the related data.	
	3	Is a printout of category field and/or telephone size required?	If NO, proceed to step 5.
	4	Enter the command *KSCAP* to get the related data.	
	5	Is a printout of function button data required?	If NO, proceed to STOP.
	6	Enter the command *KSFKP* to get the related data.	

4.2 ADDITIONAL DIRECTORY NUMBER

4.2.1 INITIATING ADDITIONAL DIRECTORY NUMBER

General

An Additional Directory Number can be affiliated to an extension that possesses a digital key system telephone. The category characteristics affiliated to this number do not need to be the same as for the Own Directory Number of the extension. These categories can be assigned either as a common category code or by stating each category parameter.

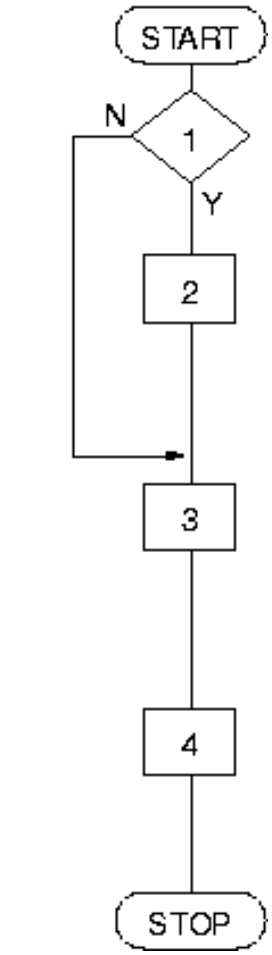
If the customer function is used in the system, all extensions must belong to a customer.

Prerequisites

The key on which the Additional Directory Number is to be initiated shall be of a telephone name selection type.

If the category characteristics are to be stated with the aid of a common category code the latter must be initiated.

Execution

		Measure/Question	Observation/ Comment
Flow  	1	Are there category characteristics to be initiated with common category code?	If NO, proceed to step 3.
	2	Enter the command *EXCCP* to verify that the category code agrees with those category characteristics to be initiated.	See the operational directions for *ANALOG EXTENSION*.
	3	Enter the command *KSANI* to order initiation of the Additional Directory Number.	
	4	Enter the command *KSDDP* to verify that the initiation has been executed.	

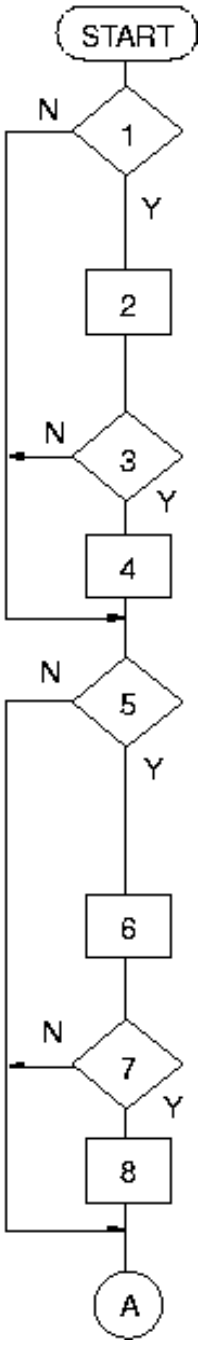
4.2.2 REMOVING ADDITIONAL DIRECTORY NUMBERS

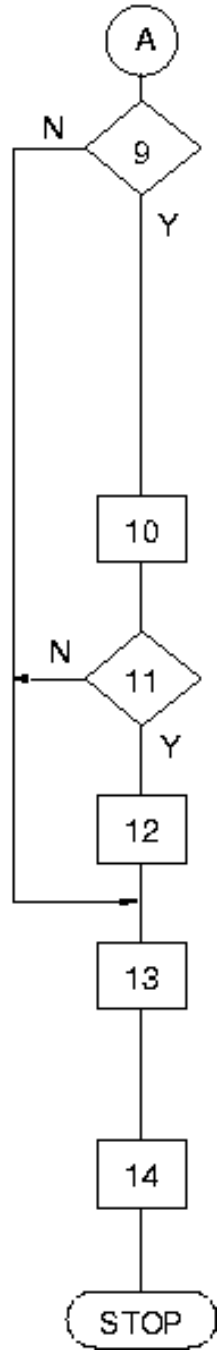
Prerequisites

The extension number must meet the following conditions:

- It shall be an Additional Directory Number.
- It shall not have multiple representation.
- It shall not be a hot-line, a non-dial connection to a predefined answering position.
- It shall not be an alarm extension.
- It shall not be busy.

Execution

		Measure/Question	Observation/ Comment
Flow 	1	Is any Additional Directory Number a day/night service position? Enter the command *RODNP*.	See the operational directions for *ROUTE DATA*. If NO, proceed to step 5.
	2	Enter the command *RODNE* to erase day/night service position.	
	3	Is a new day/night service position required?	If NO, proceed to step 5.
	4	Enter the command *RODNI* to initiate a new day/night service position.	
	5	Is any Additional Directory Number a common divertee position? Enter the command *diversion_common -p*.	See the operational directions for *CALL DIVERSION*. If NO, proceed to step 9.
	6	Enter the command *diversion_common -e* to erase the common divertee position.	
	7	Is a new common divertee position required?	If NO, proceed to step 9.
	8	Enter the command *diversion_common -i* to initiate a new common divertee position.	

		Measure/Question	Observation/ Comment
Flow 	9	Enter the command *ADCDP* to verify whether the Additional Directory Number is accessed from a common abbreviated number. That is, is the extension's directory number a complete number for any of the common abbreviated numbers?	See the operational directions for *ABBREVIATED DIALLING*. If NO, proceed to step 13.
	10	Enter the command *ADCOE* to erase the common abbreviated number.	
	11	Is a new answer position required for this common abbreviated number?	If NO, proceed to step 13.
	12	Enter the command *ADCOI* to initiate the new common abbreviated number.	
	13	Enter the command *KSANE* to initiate erasure of the Additional Directory Number.	
	14	Enter the command *KSDDP* to verify that the erasure has been executed.	

4.2.3 ALTERING ADDITIONAL DIRECTORY NUMBER

See the section Alteration of Own Directory Number.

4.2.4 ALTERING PRIMARY RESPONSIBILITIES FOR ADDITIONAL DIRECTORY NUMBER

General

To move the primary responsibility for an Additional Directory Number from one digital key system telephone (extension) to another.

Prerequisites

The number of the new extension with primary responsibility shall be an Own Directory Number and the number that is to be moved shall be an Additional Directory Number.

The key on the new telephone to which the number is to be affiliated shall either be defined as telephone name selection or have the relevant Additional Directory Number as line pickup. Furthermore, the Additional Directory Number shall not be an alarm extension.

Execution

1. Enter the command *KSANC*.
2. Enter the command *KSDDP* to verify the replacement (change).

4.2.5 ALTERING CATEGORY CHARACTERISTICS FOR ADDITIONAL DIRECTORY NUMBER

General

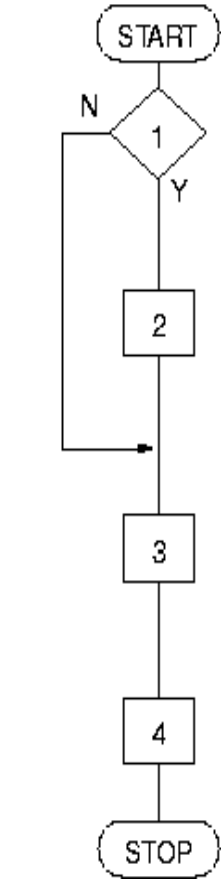
An Additional Directory Number can be assigned new category characteristics by writing the new values over the previous characteristics. These new values can be assigned either as an existing common category code or by stating each and every one of the category parameters that are to be altered.

It is possible to alter the category characteristics for a series or a number of different directory members at one and the same time.

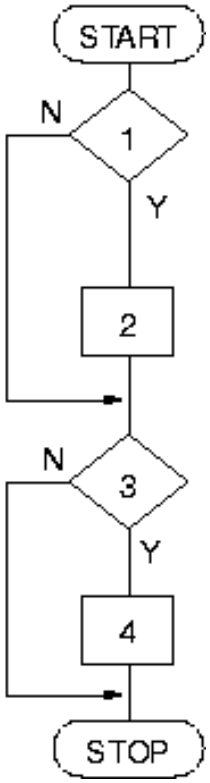
Prerequisites

If the category characteristics are to be stated with a common category code, the latter must be initiated.

Execution

		Measure/Question	Observation/Comment
Flow 	1	Are there category characteristics to be altered with aid of the common category code?	If NO, proceed to step 3.
	2	Enter the command *EXCCP* to verify that the common category code agrees with those characteristics that the extension is to possess.	See the operational directions for *ANALOG EXTENSION*.
	3	Enter the command *KSCAC* to order the alteration of categories.	
	4	Enter the command *KSCAP* to verify that the alteration has been executed.	

4.2.6 PRINTING DATA FOR ADDITIONAL DIRECTORY NUMBER

		Measure/Question	Observation/ Comment
Flow 	1	Is a printout of extension with primary responsibility for Own Directory Number or category code required?	If NO, proceed to step 3.
	2	Enter the command *KSDDP* to get the printout.	
	3	Is a printout of category fields required?	If NO, proceed to STOP.
	4	Enter the command *KSCAP* to get the printout.	

4.3 MULTIPLE REPRESENTATION OF DIRECTORY NUMBER

4.3.1 INITIATING MULTIPLE REPRESENTATION

Prerequisites

The number that is to be multiple represented shall be an Additional Directory Number or an Own Directory Number.

The button on which multiple representation is to be initiated shall be a Telephone Name Selection type.

Note: An analog extension is blocked from making new calls while its Multiple Directory Number (MDN) is in use. It is possible to use two way name selection instead.

Execution

1. Enter the command *KSMDI*.
2. Enter the command *KSMDP* for verification.

4.3.2 REMOVING MULTIPLE REPRESENTATION

Prerequisites

The number that is to be erased shall be represented as multiple representation on the digital key system telephone from which it is to be erased.

Execution

1. Enter the command *KSMDE*.
2. Enter the command *KSMDP* for verification.

4.3.3 PRINTING DATA FOR MULTIPLE REPRESENTATION

General

A printout of those digital key system telephones on which a specific directory number is represented.

Prerequisites

A printout is obtained only if the number is represented on another telephone than that of the extension with primary responsibility, that is, as multiple representation.

Execution

Enter the command *KSMDP*.

4.4 EXCLUSIVE EXTERNAL LINE

This facility reserves a specific external line for traffic to and from a specific extension number. The extension number can be represented on one or more digital key system telephones.

The facility presupposes that a specific route is defined in the system. The lines included in the route are those used for this facility.

4.4.1 INITIATING EXCLUSIVE EXTERNAL LINE

General

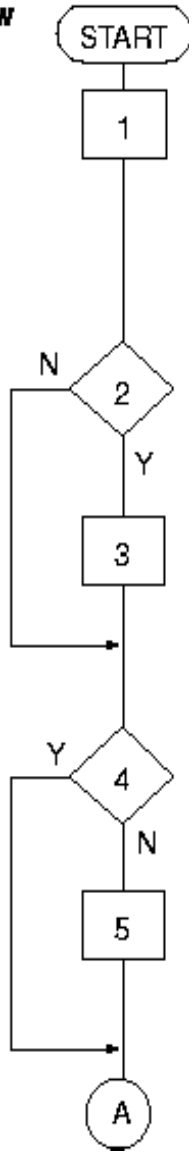
The facility is realized by inserting the procedure, call to individual external line on a button on the digital key system telephone. The procedure is inserted as a hot line number.

Prerequisites

The route access code for the route to be used for the facility shall be initiated in the number analysis.

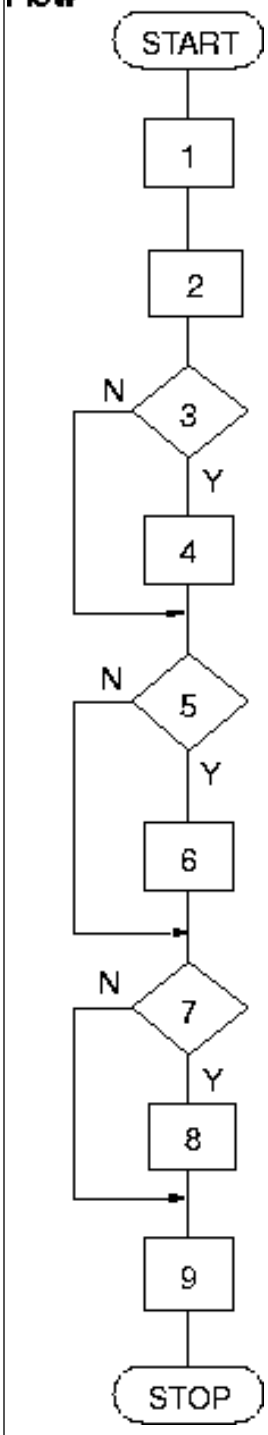
To prevent the route from being used by extensions who do not have the facility exclusive external line, the route access code for the route is not included in TCD. If the facility is inserted as hot line number no TCD will take place when a call is initiated on exclusive external line from those digital key system telephones that possess this facility. Hot-line calls are not subjected to TCD analysis.

Execution

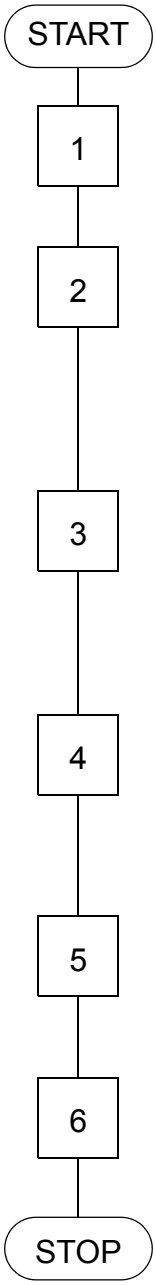
		Measure/Question	Observation/ Comment
Flow 	1	Enter the command *KSANI* to initiate an Additional Directory Number on the digital key system telephone that is to be assigned exclusive external line.	
	2	Shall exclusive external line be represented on several digital key system telephones?	If NO, proceed to step 4.
	3	Enter the command *KSMDI* to achieve multiple representation of the exclusive external line on relevant digital key system telephones.	
	4	Is a suitable route available for exclusive external lines?	If NO, proceed to step 6.
	5	Initiate a both-way route that, category-wise, only can be accessed from this ADN. Use Route commands.	See the operational directions for *ROUTE DATA*.

		Measure/Question	Observation/ Comment
Flow 	6	Enter the command *ROEQI* to initiate a line in the route.	
	7	Enter the command *SPEXI* to initiate the ADN as hot-line to the line initiated above. The hot-line is stated thereby as a procedure. (A, individual line number, B, external destination code).	See the operational directions for *SPECIAL PURPOSE EXTENSION*.
	8	Enter the command *RODNI* to initiate day and night service for the individual external line to the ADDITIONAL DIRECTORY NUMBER.	

4.4.2 REMOVING AN EXCLUSIVE EXTERNAL LINE

		Measure/Question	Observation/ Comment
Flow 	1	Remove the hot-line function for the ADDITIONAL DIRECTORY NUMBER. Use command *SPEXE*.	See the operational directions for *SPECIAL PURPOSE EXTENSION*.
	2	Check metering information (if any) to find out whether the route is included in a metering group or has individual metering.	See the operational directions for *CHARGING*.
	3	Is a line to be erased?	If NO, proceed to step 5.
	4	Enter the command *ROEQE* to erase the line.	
	5	Is it a route to be erased?	If NO, proceed to step 7.
	6	Enter the command *ROUTE* to erase the route.	See the operational directions for *ROUTE DATA*.
	7	Has the Additional Directory Number multiple representation?	If NO, proceed to step 9.
	8	Enter the command *KSMDE* to erase the multiple representation.	
	9	Enter the command *KSANE* to erase the Additional Directory Number.	

4.4.3 PRINTING DATA FOR EXCLUSIVE EXTERNAL LINE



	Measure/Question	Observation/ Comment
1	Enter the command *KSFKP* for a printout of data relevant to the digital key system telephone with primary responsibility for the exclusive external line.	
2	Enter the command *KSFKP* for a printout of data for the internal number stated from the button on which the exclusive external line is represented.	
3	Enter the command *KSMDP* to obtain a printout of those digital key system telephones on which the exclusive external line is represented.	
4	Enter the command *SPEXP* to obtain a printout of route and line to be used.	See the operational directions for *SPECIAL PURPOSE EXTENSION*.
5	Enter the command *RODAP* to obtain a printout of route data.	See the operational directions for *ROUTE DATA*.
6	Enter the commands *ROEDP* and *RODNP* to obtain a printout of line data.	

4.5 SUPERVISION OF ANALOG TELEPHONES

4.5.1 INITIATING SUPERVISION

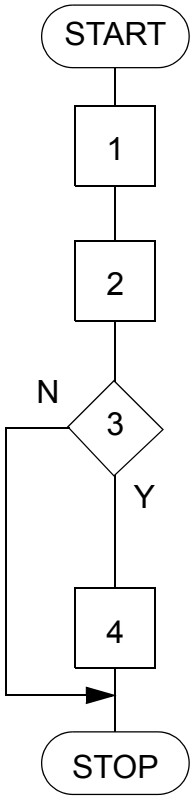
General

Supervision means that the analog telephone is diverted to an Additional Directory Number on one or more digital key system telephones.

Execution

1. Initiate an Additional Directory Number in the digital key system telephone that is to supervise the analog telephones (that is, function as divertee position). See section Additional Directory Number in these operational directions.
2. Enter the command *KSDDP* for verification.
3. Initiate an individual divertee number (position) for those analog telephones (extensions) to be supervised (diverted). As divertee position number the Additional Directory Number initiated above is to be selected. See operational directions for *CALL DIVERSION*.
4. Enter the command *diversion -i* for verification.

4.5.2 REMOVING SUPERVISION OF ADDITIONAL DIRECTORY NUMBER



	Measure/Question	Observation/ Comment
1	Erase the individual divertee position number from those analog extensions that are no longer to be supervised.	See the operational directions for *CALL DIVERSION*.
2	Enter the command *diversion -p* for verification of the erasure.	
3	Are there any analog extensions still supervised?	If NO, proceed to STOP.
4	Erase the Additional Directory Number from the digital key system telephone. Enter the command *KSDDP* to verify the erasure.	See section: 4.2.2 Removing Additional Directory Numbers on page 22Removing Additional Directory Numbers, in this operational directions.

4.6 TWO-WAY NAME SELECTION

The two-way name selection facility permits two digital key system telephones to be interconnected by a connection that is always available. To reach the other digital key system telephone, party A has to press a button on its digital key system telephone, with the result that a button on the B party digital key system telephone will light up, indicating a call from the A party digital key system telephone. An example of the use of this facility is the executive-secretary function.

The two-way name selection facility saves one key per extension as compared to other ways of implementing a similar function. In the latter case, two buttons would be needed - one to call up the other extension, the other to indicate a call coming from the other extension.

Two-way name selection is used for similar purpose as multiple representation of directory number with name selection, for example the executive-secretary function. The main difference is that two-way name selection provides originating and reception of calls using one single button. On the other hand, multiple representation of directory number with name selection includes multiple representation.

4.6.1 INITIATING A TWO-WAY NAME SELECTION

General

The facility is realized by assigning each of the two extensions to be connected to an Additional Directory Number. The Additional Directory Number of one extension is connected to the Additional Directory Number of the other as direct connection number, and vice versa.

Prerequisites

In order to stop unauthorized calls reaching Additional Directory Number used for two-way name selection, the following should be done: one traffic group (See the operational directions for *TRAFFIC CONNECTION MATRIX*) is reserved for those Additional Directory Numbers that are to be used for two-way name selection.

This traffic group must be set in such a way that other extensions are not permitted to connect to the Additional Directory Numbers. Additional Directory Numbers, on the other hand, must of course be permitted to connect to one another. When Additional Directory Numbers are initiated, the traffic group reserved for two-way name selection will be selected on setting a value for category parameter TRAF.

Execution

1. Enter the command *KSANI* to initiate an ADDITIONAL DIRECTORY NUMBER for each of the two digital key system telephones to be connected to one another
2. The Additional Directory Number of the first extension is connected to the ADDITIONAL DIRECTORY NUMBER of the second one as a direct connection number. Use command *SPEXI*.
3. Repeat the procedure under 2 for the second extension
4. Enter the command *SPEXP* to verify the result

4.6.2 REMOVING TWO-WAY NAME SELECTION

1. Enter the command *SPEXE* to remove the direct connection number from the Additional Directory Number of the first extension
2. Repeat the procedure under 1 for the second extension.
3. Enter the command *KSANE* to erase the two Additional Directory Numbers from both extensions.
4. Enter the command *KSDDP* to verify that the two ADDITIONAL DIRECTORY NUMBERS have been removed.

4.6.3 PRINTING DATA CONCERNING TWO-WAY NAME SELECTION

1. Enter the command *KSDDP* to obtain information concerning the Additional Directory Numbers.
2. Enter the command *SPEXP* to obtain information concerning direct connection numbers.

4.7 MULTIPLE REPRESENTATION OF DIRECTORY NUMBER WITH NAME SELECTION

4.7.1 INITIATION OF MULTIPLE REPRESENTATION WITH NAME SELECTION

General

The MULTIPLE REPRESENTATION WITH NAME SELECTION key is a multiple representation key with telephone name selection attached to the number that is multiple represented.

Execution

1. Enter the command *KSMDI* to initiate the key as a multiple representation with name selection (MNS) key.
2. Enter the command *KSMDP* for verification.

4.7.2 REMOVING MULTIPLE REPRESENTATION WITH NAME SELECTION

1. Enter the command *KSMDE* to end the multiple representation with name selection.
2. Enter the command *KSMDP* for verification.

4.7.3 PRINTING DATA FOR MULTIPLE REPRESENTATION WITH NAME SELECTION

Enter the command *KSMDP* for the multiple representation information and *KSFKP* for the telephone name selection information.

4.8 SELECTION OF FREE EQUIPMENT POSITION

Enter the command *resource_status -p* to print out of free equipment positions.

4.9 PRINT EXTENSIONS CONNECTED TO A SPECIFIC EQUIPMENT POSITION

Enter the command *resource_status -p* to obtain a printout.

4.10 SELECTION OF FREE EXTENSION NUMBER

Enter the command *vacant_number -p* to order a printout of vacant numbers.

See operational directions for *VACANT NUMBERS*.

Select an unused number from the extension number series.

4.11 ALTERATION OF CUSTOMER NUMBER

General

Alteration of a customer number is executed when an extension is to belong to another customer and the command is also used when the extension is to be erased and no longer belong to any customer.

Prerequisites

The extension directory number must be initiated.

Execution

1. Enter the command *KSCUC* to alter the customer number.
2. Enter the command *KSDDP* to verify the result.

4.12 SINGLE NUMBER INDICATION

The feature Single Number Indication is to set an additional number to an extension which can be used to display on other party's display. As a result, the B-extension always receives the same directory number independent of which telephone the A-extension is using if all the telephones of A have the same additional number.

To offer this possibility, each extension should have both directory number and an additional number.

Note: Single Number Indication has some limitations in certain private network services, since only one number can be conveyed in the network. For example, the features Diversion, Callback, and Call Information Logging will use the directory number, not the additional directory number.

4.12.1 ALTERING ADDITIONAL DATA

General

The additional number, by default, is the same as the directory number of the extension. The additional number has to be altered when an extension wants to display some other number on the other party's display by use the command *KSADC*.

Prerequisites

The additional number should be the directory number of an initiated extension.

Execution

1. Enter the command *KSADP* to verify the additional number and to check if the additional number requires alteration.
2. Enter the command *KSADC* to alter the additional number.
3. Enter the command *KSADP* to verify whether the additional number data has been successfully changed.

4.12.2 REMOVING ADDITIONAL DATA

General

It is not possible to remove the additional number. The only possibility is to revert to the default additional number.

Execution

Enter the command *KSADC* and set the additional number equal to the directory number.

4.12.3 PRINTING ADDITIONAL DATA

Enter the command *KSADP* to obtain a printout.

The additional numbers for the initiated digital extensions will be printed.

4.13 TEXT STRINGS FOR ALPHANUMERIC DISPLAY

Text strings are shown on the display for different traffic cases and states. The text strings are initiated with messages according to different market demands and standards. There are ten different text string sets, each for a different language.

Note: Text string messages are only shown on the telephones with alphanumeric display.

4.13.1 EXCHANGE LANGUAGE

The *exchange language* is an alias for one of the ten available languages. It will be used when no particular language is stated.

Extensions can have their language set to the exchange language. These extensions will display the text messages in whichever language is selected as exchange language at the moment of displaying the message.

4.13.2 CHANGING TEXT STRINGS

1. Enter the command *extension_text -c* to change a text string for a specific message in a particular language.

2. Enter the command *extension_text -p* to verify that the change has been carried out successfully.

4.13.3 PRINTING TEXT STRINGS

Enter the command *extension_text -p* to print a text string for a specific message in a particular language.

4.14 SPECIAL CHARACTERS

4.14.1 GENERAL

Note: Valid only for D3 and older terminals.

Up to eight special characters can be defined for each one of the ten available languages. Special characters can be created or modified to represent characters not included in the character set of the alphanumeric displays. See the parameter description for *DIGITAL KEY SYSTEM TELEPHONE, KS* figure ALPHANUMERICAL TELEPHONE DISPLAY CHARACTER SET.

Special characters can represent international characters, such as Å,Ä,Æ,Ö,Ø, and Ñ. They can also represent signs or symbols, such as the corporate logo. See the command *KSCHC*.

The special characters can be included in any text string with the text string commands.

4.14.2 CHANGING AND CREATING SPECIAL CHARACTERS

1. Enter the command *KSCHC* to change or create any special character in a particular language.
2. Enter the command *KSCHP* for verification.

4.14.3 PRINTING SPECIAL CHARACTER DATA

Enter the command *KSCHP* to print out the bitmap or data for any specific special character in a particular language.

4.15 ALPHANUMERIC DISPLAY CONVERSION TABLE

4.15.1 GENERAL

Note: Valid only for D3 and older terminals.

The alphanumeric display of the digital telephones with alphanumeric display can handle a proprietary set of characters. See the parameter description for *DIGITAL KEY SYSTEM TELEPHONE, KS* figure ALPHANUMERICAL TELEPHONE DISPLAY CHARACTER SET. The strings inside the MX-ONE Service Node should be defined with the ISO 8859-1 characters to have a coherent display over the different terminals in the system (IP extension, Remote extension, ...). To display strings containing characters not supported by the terminal, there is a conversion table to translate the ISO 8859-1 character values into the most similar character that the alphanumeric display

can handle, including the special characters. There is a conversion table for each of the ten available l languages.

The special characters, which must be previously defined by command, can be assigned to an entry in the conversion table to be displayed on the digital key system telephone. This assignment makes it possible to define strings containing ISO 8859-1 characters not supported by the terminal and the conversion table will be in charge of converting these characters into the values that the terminal display can handle, which are the defined as special characters. To illustrate this function see the following example:

Example

The Nordic character Å (ISO 8859-1 character value C5) is not in the set of characters of the alphanumeric display of the terminal. To display this character, two steps must be followed:

- The character Å must be defined as a special character, 4.14 Special Characters on page 40 . If character Å is stored as special character 3, the terminal will show this special character when the corresponding value (03) is received to be displayed.
- The entry of the alphanumeric telephone display conversion table corresponding to the ISO 8859-1 value of character Å (C5) must be set to the special character 3 value (03). The ISO 8859-1 character Å will be shown on the terminal display and a coherent display of Å will be performed in the entire system.

4.15.2 CHANGING ALPHANUMERIC DISPLAY CONVERSION TABLE ENTRY VALUES

1. Enter the command *KSCHC* to change the value to which an entry in the table is converted in a particular language.
2. Enter the command *KSCHP* for verification.

4.15.3 PRINTING ALPHANUMERIC DISPLAY CONVERSION TABLE ENTRY VALUES

Enter the command *KSCHP* to print out the value to which an entry in the table is converted in a particular language.

4.16 ALTERATION OF RING SIGNAL

It is possible to alter the ring signal on ODN2 when ODN1 is busy. The DTS must support the service Free-on-second-line or allow Call Waiting.

Enter the command *ASPAC* with *PARNUM = 222* to alter the ring signal.

5 TERMINATION

If extension numbers have been initiated or erased supply the person or department responsible for internal directory updating with the relevant information.

A dump onto backup media shall be performed if any extension, text string, or special character data have been changed.