

Distribution target:

TSX-xxxxxx-xxx-xxxx	KTS enhancing SIP interface specifications	Version 1.2	Correction -	Page 1/516
		Charge section		
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Revision history

Number of versions	Date	Content of change	Editor
0.1	2006/8/1	Draft first edition	NEC-i
0.2	2006/12/20	all aspects revision	NEC-i
0.3	2007/2/28	<ul style="list-style-type: none"> • The specification concerning the download tone is added. . The functional overview is added. . The definition of the Info-ToneArea parameter is deleted. . The definition of the Info-ToneData parameter is reviewed. • Terminal ID definition is reviewed. . The terminal type of the User-Agent header is changed to the fixed length. • The description concerning main device ID is reviewed. . The Server header is deleted, and the Info-SysType parameter new is added. . . IPS" is added to a main equipment type. . The format of version information is changed to an arbitrary character string. • The description concerning the fragmentation measures is corrected. . The Info-SysNego parameter new is added. • The parameter concerning the display display is reviewed. . The Ind-DispLine4 parameter new is added. . "Control lead" and "State information" of the Ind-DispLineN parameter are changed. . "Control lead" of the Ind-DispSoftN parameter is changed. • The definition of the Info-SysConfig parameter is reviewed. . F3 PBX4.0. D85 and Normal. D95 (PBX exclusive use) . [F4] Download. DL、Jananese. JP、English. EN . F12 deletion • Reflection of revision digital I/F matter . "Menu type" and "Right or wrong of the start" are added to the Info-SysService parameter. . "Menu type" is added to the ReqInfo-SysService parameter. . The Ind-ShortRing parameter is matched to the definition of digital. • The description concerning the option adaptor is corrected. . The function explanation is added. . The sequence is corrected. • The description concerning the terminal license is corrected. . Because Semi-Nodelock is not done, the description is deleted. • The character-code table is corrected. . ". " is added in 08h and notes concerning the allocation and the reservation area are added. • The changeable function key definition table is added. • The description concerning the fixed function key is corrected. . The shortfall is added to "Key name" of the Info-Fkey parameter. . The fixed function key definition table is corrected. • The icon number table is added. • [Ringa] instruction 2 that can be the tone specification is added. . Ind-Ringer2 parameter • The definition of the Ind-DispClear parameter is reviewed. . "Clear object equipment" is changed to . Main", . Sub", . Side", and . Bottom". • Change in override notification sequence . After the transmission timing of the Ind-ErrDsp parameter is registering released, it changes. • The description concerning right or wrong of sending key information is corrected. . The function explanation is added. . The Info-HandsetOrg parameter new is added (definition leakage). 	NEC-i

Number of versions	Date	Content of change	Editor
0.3	2007/2/28	<ul style="list-style-type: none"> • The definition of the Info-DialNo parameter is reviewed. <ul style="list-style-type: none"> . "0(judgment uncertainty)" is added to the line number. . "Number of name bytes" And, "Name" is added. • The definition of the Info-DirectIn/Info-CurrentNo parameter is reviewed. <ul style="list-style-type: none"> . "0(judgment uncertainty)" is added to "Line number". • The definition of the ReqEvent-Download/ReqEvent-FileTransfer parameter is reviewed. <ul style="list-style-type: none"> . . FQDN" is added to "Address type". • Additionally, error correction 	NEC-i
1.0	2007/3/28	<ul style="list-style-type: none"> • The boot sequence is changed. <ul style="list-style-type: none"> . The Info-TermInfo2Fin parameter new is added. • The sequence of the override notification is changed. <ul style="list-style-type: none"> . The Ind-ErrDsp parameter is 200 to REGISTER It adds to OK. • The definition of the Info-TermType parameter is reviewed. <ul style="list-style-type: none"> . A new definition of "Desktop-x" is stopped and it notifies by past "Terminal". • The definition of the Info-ToneData parameter is reviewed. <ul style="list-style-type: none"> . Modulating frequency m2 is added. . The definition value of the frequency is corrected. . Review of content of . condition etc. . • Definition review of Ind-ShortRing parameter <ul style="list-style-type: none"> . The definition value of the frequency is corrected. • Definition review of Ind-Ringer2 parameter <ul style="list-style-type: none"> . The definition value of the frequency is corrected. • The definition of the Ind-DispLineN parameter is reviewed. <ul style="list-style-type: none"> . Usage example 4) is deleted. • The definition of the Ind-DispDouble parameter is reviewed. <ul style="list-style-type: none"> . "Non-display line - number" is added instead of "Direction of double size". • The Ind-LogDsp/Ind-ErrDsp parameter is described clearly. • The description related to the icon control is reviewed. <ul style="list-style-type: none"> . The limitations of the Ind-DispIconN parameter are added. . The explanation of the Ind-IconMode parameter is corrected. • The description related to the menu control is reviewed. <ul style="list-style-type: none"> . The Ind-Menulcon parameter is deleted. . The Ind-SysService parameter new is added. . "Data existence" is added to the Info-SysService parameter. • The description related to the terminal function license is corrected. <ul style="list-style-type: none"> . The functional overview and the sequence are reviewed. . Definition review of ReqEvent-TermLicense parameter . Definition review of ResEvent-TermLicense parameter • The terminal option demand and the response are added. . Definition review of ReqEvent-TermOption parameter . Definition review of ResEvent-TermOption parameter • Correction of fixed function key definition table <ul style="list-style-type: none"> . . mic" is added to information on Info-Fkey of the domestic button kit. • The sequence concerning "Cygnus Link Fail-Over" is deleted. <ul style="list-style-type: none"> . Details are assumed to be an enhancement item because there is a problem on security. • The description of the parameter concerning the Bluetooth option is temporarily deleted. <ul style="list-style-type: none"> . It is assumed an enhancement item, and reflects it formally in the next version. 	NEC-i

Number of versions	Date	Content of change	Editor
1.0	2007/3/28	<ul style="list-style-type: none"> • The description related to NAT is corrected. . The Info-FixedPort parameter uses the PtoP function. . The Info-GlobalIP parameter uses the PtoP function. • Virtual description of the softphone DSS is added. • The sequence related to the call out is added. . The codec specification sequence to the INVITE request is added. • Additionally, error correction 	NEC-i
1.1	2007/4/27	<ul style="list-style-type: none"> • The description related to the volume control is corrected. . The sequence is reviewed. . Error correction of . condition etc. . of Ind-TermVolCtrl parameter . The number of Info-TermVolName parameters of maximum display characters is changed. . The range and the condition of the Info-TermVolLv parameter are corrected. . The range and the condition of the Info-TermVolLvAll parameter are corrected. . The range and the condition of the Ind-TermVolLv parameter are corrected. . The range and the condition of the Ind-TermVolRange parameter are corrected. • The description concerning the Bluetooth option is added. . The sequence new is added. . F12 is added to the Info-SysConfig parameter. . The Info-BthFkeyOrg parameter new is added. . "MbIncom" and "MbTalk" are added to "State of the terminal" of the Info-TermStatus parameter. . "BTH" is added to "Equipment type" of the Info-OptAdapter parameter. . The Ind-BthDispLineN parameter new is added. . The Ind-BthCurFlash parameter new is added. . The Ind-BthFkey parameter new is added. . The Ind-BthPkey parameter new is added. . The Ind-BthRinger parameter new is added. . The Ind-BtxCallDisc parameter new is added. . The Ind-BthPkeySelect parameter new is added. . The Ind-BtxVoicePath parameter new is added. . The Ind-BtxConnect parameter new is added. . The Event-BthPkey parameter new is added. . The Event-BthFkey parameter new is added. . The Event-BtxHook parameter new is added. • The description concerning the terminal resource control is corrected. . The sequence is reviewed. . "CLEAR" is added to the resource type in function F1 of the ReqEvent-TermOption parameter. • The number of IPS of accommodation trunks corrects the relating parameter for 512 or less. . The line number of the Info-DialNo parameter is "255" . "512. " . The line number of the Info-DirectIn parameter is "255" . "512. " . The line number of the Info-CurrentNo parameter is "255" . "512. " • The description of the fixed function key table is corrected. . The image chart of the button kit is renewed to the latest one. . The button arrangement image of the Bluetooth hand set is added. • The description of the changeable function key table is corrected. . The key numerical order of 24ADM is changed (digital and union). 	NEC-i

Number of versions	Date	Content of change	Editor
1.1	2007/4/27	<ul style="list-style-type: none"> • The description related to the terminal license is corrected. . The sequence is reviewed. . "License" is added to "Deletion data type" of the ReqEvent-DelTermData parameter, and, in addition, "Function identification code" new is added. . Parameter "Number of licenses" is added to ReqEvent-TermLicense. . Parameter "NG reason", and "Number of excess and deficiencies. " in ResEvent-TermLicense. . "Error code" and "Number of licenses" are added. • The description related to the menu is corrected. . The sequence is reviewed. . The Info-SysService/Ind-SysService parameter is deleted, and the Ind-MenuWakeUp parameter that integrates them new is added. . The ReqInfo-SysService parameter is deleted. . The Event-SysService parameter new is added. . The Ind-ShortcutIcon parameter new is added. . The maximum value of "Timeout period" of the Ind-MenuTimeout parameter is changed to "120" . "16", and it provides for default at four minutes (digital and union). . "Menu" is added to "Deletion data type" of the ReqEvent-DelTermData parameter. . "Menu" is added to "Forwarding data type" of the ReqEvent-FileTransfer/Event-FileTransfer parameter. • The description related to the terminal setting is corrected. . "Conftone" of "Terminal setting type" of the ReqInfo-TermConfig parameter is deleted and "Headset" is added. . "F2 (key pressing confirmation sound setting)" of the Info-TermConfig parameter is changed to "F2 (head set setting)". . The Ind-TermTouchPanel parameter new is added. • The description related to SDP is corrected. . Contents type (application/sdp) is deleted. . The payload number of the Ind-SendDTMF2 parameter is deleted. . The Ind-MediaCapRtp parameter new is added. . The Ind-MediaCapDtmf parameter new is added. • The description related to DESI-less is corrected. . "Page icon control" is added to the Ind-DesilessPage parameter. . The Ind-DesilessPageIcon parameter new is added. • Fragmentation measures . It corresponds to the division of information on the Info-OtherTermList parameter. . It corresponds to the division of information on the Info-PartyPID parameter. • The description of the icon number table is corrected. . The absent arrival of a message icon is added, and it allocates it in icon number 65. . The image of the desktop icon is updated 	NEC-i.

Number of versions	Date	Content of change	Editor
1.1	2007/4/27	<ul style="list-style-type: none"> • Others . The format of the Info-PartyPID parameter is changed. . The maximum value of "Ring passing switch time" of the Ind-RingerPath parameter is changed to "600" . "60" (digital and union). . "P", "R", and "@" are added to dial information on the Info-DialNo/Event-TelbookOrg parameter. . The sequence related to the terminal status is deleted, and the Info-CallStatus parameter is assumed to be an enhancement item. . The format of Ind-OptPkey/Ind-ConsolePkey is corrected. . Error correction 	NEC-i
1.2	2007/6/4	<ul style="list-style-type: none"> . The description related to the start is corrected. . "F4" is deleted from the Info-SysConfig parameter. . The explanation of each setting of the Info-SysConfig parameter is added. . The batch transmission sequence of terminal well informed man wisdom is added. . The description related to the tone is corrected. . "T64 "T1" -" is added to "Tone type" by the Ind-Tone parameter. . The pattern of "Specification at the cycle" of the Ind-ShortRing parameter is changed. . 508 The description related to the article is corrected. . The explanation of the Ind-CountryRule parameter is changed. . The condition of the Ind-KeyConfTone parameter is changed. . The description related to [ringa] is corrected. . The explanation of the Ind-RingerPath parameter is changed. . The description related to the display at call duration is corrected. . The display position specification is added to the Ind-Tktime2 parameter. . The Ind-Tktime3 parameter is deleted. . The definition of the Ind-BthTktime parameter is changed. . The display sequence of call duration is corrected. . The description related to media information is corrected. . "Payload type" of the Info-MediaCap parameter is described clearly. . "Payload type" of the Ind-MediaCapRtp parameter is described clearly. . The description related to the option is corrected. . The description of F1 of the ResEvent-TermOption parameter is corrected. • Post from NEC enhancing SIP I/F specifications . The Info-ToneArea parameter is added. . The Info-Language parameter is added. . The description related to presence is corrected. . Clarification of division specification of Info-Presence . The Encode parameter is deleted (whole). . "Nickname" specified parameter is added to ReqEvent-UpDatePres. . "Nickname" specified parameter is added to ReqEvent-AddBuddyList. . "Nickname" specified parameter is added to ReqEvent-DelBuddyList. . "Nickname" specified parameter is added to ReqEvent-ChgStatus. . "Only AGW" of "Condition etc." of ReqEvent-ChgStatus is "AGW/CTI. It ..seeing.. changes to " . "Nickname" specified parameter is added to ReqEvent-ChgComment. . Extension number/personal ID/nickname ..ReqEvent-ChgComment.. finger in " . The parameter that changes fixed [shite] is added (Only AGW/CTI :). . "Nickname" specified parameter is added to ResEvent-UpDatePres. 	NEC-i

Number of versions	Date	Content of change	Editor
1.2	2007/6/4	<ul style="list-style-type: none"> ・Content of adjustment with NEC enhancing SIP reflection ・ "UMS" is added to "Terminal type" of the User-Agent header. ・ "Equipment type" of ReqInfo-OptStatus and the Info-OptStatus parameter is changed only to "Psx". ・ The definition value is added to "Server type" of ReqInfo-ServerAdr and the Info-ServerAdr parameter. ・ The Info-DialNo parameter is replaced with "Info-DialNo2". ・ The Info-DirectIn parameter is replaced with "Info-DirectIn2". ・ The Info-CurrentNo parameter is replaced with "Info-CurrentNo2". ・ The Info-Fkey2Org parameter is replaced with "Info-JkeyOrg". ・ "Ums" is added to "Terminal type" of the Info-TermType parameter. ・ The condition of the Info-DisplayType parameter is changed. ・ "Disp" of "Optional function" of Info-Pkey and the Info-OptPkey parameter is changed to "DispXXpY". ・ "None" of "Additive information" of Info-Pkey and the Info-OptPkey parameter is changed to "-". ・ "None" of "Additive information" of Info-Fkey, Info-Jkey(Fkey2), and the Info-ConsolePkey parameter is deleted. ・ "Callerid" and "History" are deleted from "Functional information" of the Info-Feature parameter. ・ "Number of versions" of Info-Hardware and the Info-Firmware parameter is changed to "A.B.C.D". ・ The Info-Fkey2 parameter is replaced with "Info-Jkey". ・ Info-SubDispType and Info-DesilelessCap parameter deletion ・ The definition value of "Equipment type" of the Info-OptAdapter parameter and "Sales channel" is changed. ・ "State of a soft key" is added to the Event-Skey parameter. ・ The Event-Fkey2 parameter is replaced with "Event-Jkey". ・ ReqEvent-FileTransfer and Event-FileTransfer Park "Firmware" is added to "Forwarding data type" of the meter. ・ The Ind-PkeyDisp parameter is deleted from this specifications once. ・ The Ind-PkeyDispN parameter new is added. ・ "Display character-code" is added to the format of Ind-LogDsp and the Ind-ErrDsp parameter. ・ The Ind-DispLine1/2/3/4 parameter is deleted from this specifications once. ・ The definition value of "Notification key type" of the Ind-KeyupInfo parameter is changed. ・ The Ind-Fkey2 parameter is replaced with "Ind-Jkey". ・ The Ind-DisplconN parameter is replaced with "Ind-Displcon". ・ The format of the Ind-TermLoopback parameter is changed. ・ The Ind-OptPkeyDisp parameter is deleted from this specifications once. ・ The Ind-OptPkeyDispN parameter new is added. ・ "Busy. " in "Deletion result" of the ResEvent-DelTermData parameter [Wo] addition ・ The description related to the terminal license is corrected. ・ The condition of the ReqEvent-TermLicense parameter is changed. ・ A part of of ResEvent-TermLicense parameter giving condition is changed. ・ The error in writing of the example of ResEvent-TermLicense is corrected. 	NEC-i

Number of versions	Date	Content of change	Editor
1.2	2007/6/4	<ul style="list-style-type: none"> • The specification related to terminal "CTI" is reviewed. . The Info-CtiExt parameter new is added. . The Info-OtherTerm parameter is changed to the list form. . The disclaimer is added to the Info-PartyPID parameter. . Reason addition of 403 errors to response list of REGISTER request • The description related to the menu is corrected. . The Info-SysFeature parameter new is added. • Others <ul style="list-style-type: none"> . Error correction of explanation of "Fixation and position icon display" . Error correction of explanation and figure of "Side option I/F" . 403 error reason to the REGISTER request when having registered has already been added to the response list with MAC as which the NGT terminal is the same. 	NEC-i

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Line..key..event..notification.

Console..option.

Line..key..information..notification.
Line..key..event..notification.
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5.1.4 224 series number definition for CTI application

224 series number definition of 5.1.5 for application gateway server

224 series number definition of 5.1.6 for unified messaging system

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Well informed man..wisdom..demand..parameter..terminal..device.

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Presence..update..response.

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7 . A p p e n d i x .

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Original..character..code..table.

Original..code..alphanumeric..Japanese syllabary..mode.

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Changeable..function..key..definition..table.

D e s k t o p . . t e r m i n a l .

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D e s k t o p . . t e r m i n a l .

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7.3.2.2.	B u t t o n . . b u t t o n .
7.3.2.3.	B u t t o n .
7.3.2.4.	B u t t o n . . b u t t o n .
7.3.2.5.	B u t t o n . . b u t t o n .
7.3.2.6.	4 9 8
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7.3.2.8.	B u t t o n . . b u t t o n .
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501/Sophisticated 7.3.3 desktop Value-DES/less terminals terminals

7.3.3.1.	B u t t o n . . b u t t o n .
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7.3.3.4.	B u t t o n . . b u t t o n .

Fixation..function..key..definition..table.

503 button kit for 7.4.1 new user interface Japan

Present..retrofit..Japan..for..button..kit.

7.4.3 505 button kit for Japan with eight line key enhancing

User interface..foreign countries..for..button..kit.

Present..retrofit..foreign countries..for..button..kit.

User interface..North America..Europe..for..button..kit.

Present..retrofit..North America..Europe..for..button..kit.

510 button kit for 7.4.8 [ba-chikaruma-ketto]

Hand..set..button..arrangement.

I c o n . . n u m b e r . . t a b l e .

<i>I c o n .</i>
<i>Telephone book..icon.</i>
<i>Frame..number..icon.</i>
<i>Desktop icon.</i>
<i>Mail..icon.</i>
<i>Menu..item..for..icon.</i>
<i>Cursor..key..icon.</i>
<i>Control..icon.</i>

V e r s i o n c o r r e c t i o n	p a g e		
TSX-xxxxx-xxx-xxxx	1.2	-	19/516

1. Outline

1.1. Application

This specifications are applied to the terminal and the system that mounts the original SIP(Session Initiate Protocol) specification that NEC Inn frontier Ltd. enacts.

1.2. Outline

This specifications are summaries of the definition necessary to operate as a terminal made of the NEC Inn frontier SIP or a system, and the function, the composition, the operation sequence, and the detailed parameter definition are described.

Specifications related to 1.3

TSX-xxxxx-xxx-xxxx	Design input document name	Number of versions (date)
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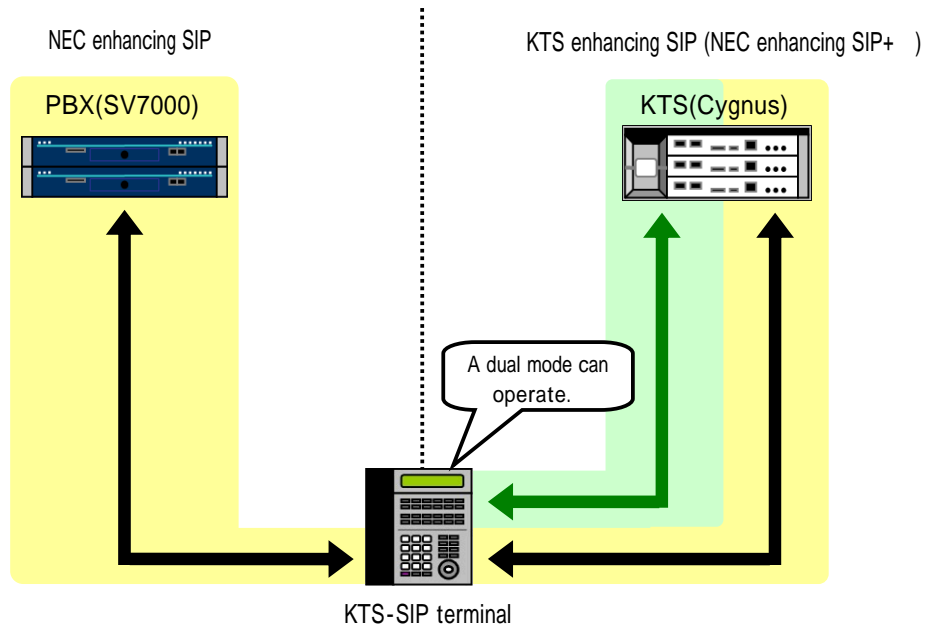
1.4. Reference document

TSX-xxxxx-xxx-xxxx	Reference document name	Number of versions (date)
--------------------	-------------------------	---------------------------

2. Outline of KTS enhancing SIP

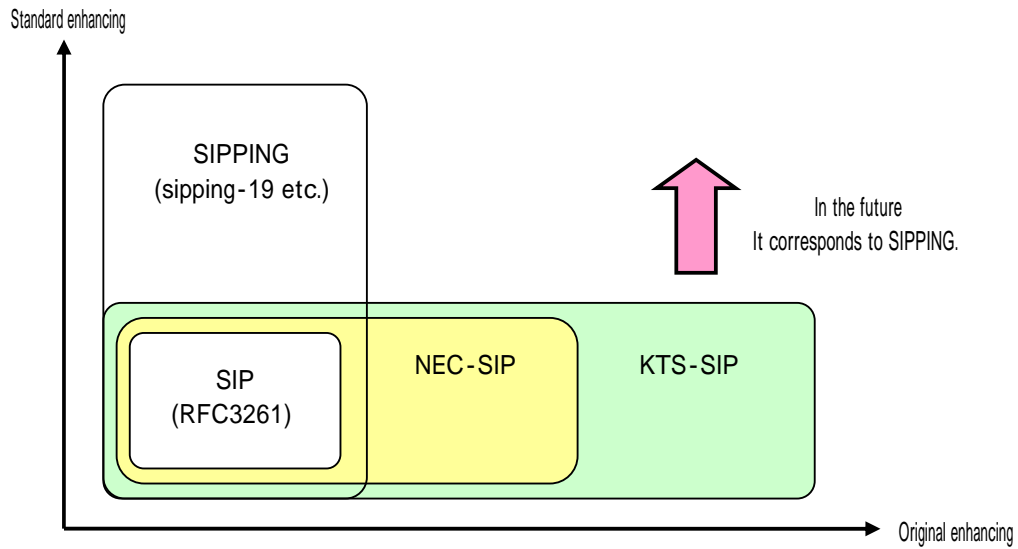
2.1. KTS enhancing SIP definition

"KTS enhancing SIP (hereafter, KTS-SIP)" is SIP by which NEC-Infrontia added an original definition necessary for the KTS function based on "NEC enhancing SIP (hereafter, NEC-SIP)" for which NEC provides. Because KTS-SIP uses NEC-SIP and a common parameter about the basic function, it can be compatible with NEC-SIP depending on mounting the terminal. When KTS(Cygnus) is connected as NEC-SIP terminal, it is also possible to operate as KTS-SIP terminal when PBX(SV7000) is connected in a word.



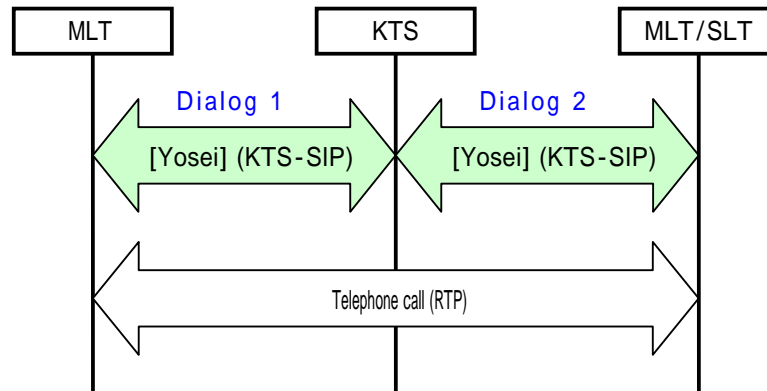
2.2. Directionality of KTS enhancing SIP

It conforms to PROTIMS that is NEC original protocol about the sequence (sending timing and direction of the message) though NEC-SIP of the message format conforms to standard (RFC3261). The sequence of each message is not required to deviate from the standard though the defined enhancing header and the format of the message of the enhancement parameter etc. are used together so that the base of KTS-SIP is NEC-SIP. As a result, KTS-SIP can flexibly correspond to the SIP standard enhancing (SIPPING etc.) in the future.



2.3. Design policy of KTS enhancing SIP

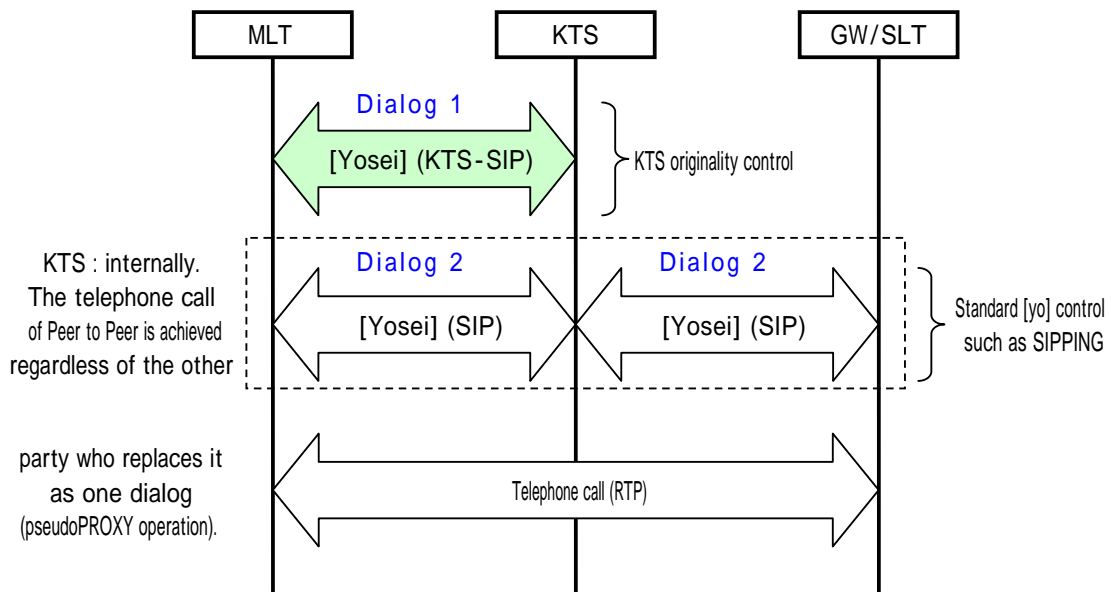
Two (..calling.. dialogs for terminal B2B UA [suru] ([bakkutou;bakkuyu-za-e-jento]) all ..between terminals.. as well as PBX(SV7000) KTS(Cygnus) as for [yosei] to operate as a server against one telephone call (RTP)) is generated. The purpose of this is to have to stop information that KTS should not transmit to the other party (forward), and to manage the sending timing of the message to achieve the KTS originality function.



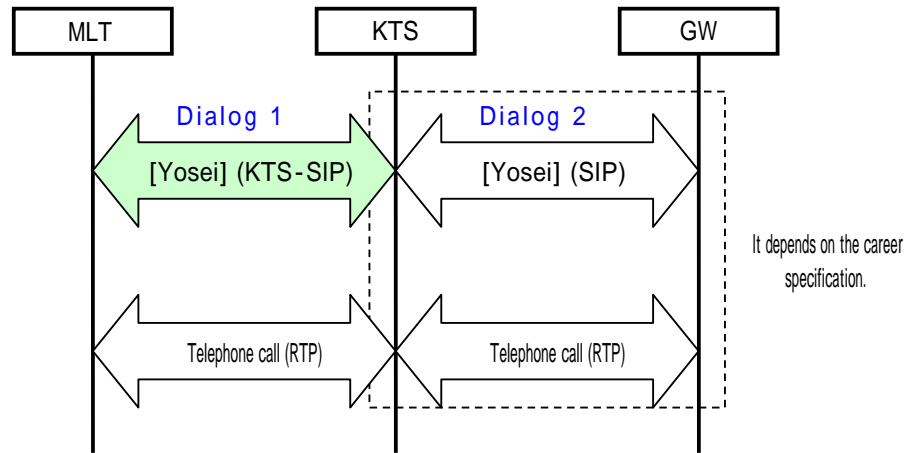
KTS-SIP is assumed to be the one that has the following policies to secure the KTS originality function achievement and the extendibility in the future and develops. *

- It conforms to the standard the sequence.
- The multi part is not used for the message as much as possible.

Enhancing that puts the connectivity in the future in view is done in KTS-SIP based on NEC-SIP. Therefore, the sequence that can penetrate the dialog and the message ..net or SLT.. are considered about standard [yo] controls such as terminal [suruga], standards SIP, and SIPPING as well as ..KTS originality function.. NEC-SIP [yosei]. Moreover, it finally examines it about telephone call (RTP) to connect it with Peer to Peer all for the VoIP resource effective use.



Do the terminal with both main ..[yosei] and session.. devices to communicate between the terminal and the net according to the specification of the career though the specification that pseudoPROXY operation as previously stated becomes possible is examined.



- Examine mounting about SIPPING-19 after it standardizes it because the draft at the time of the enactment of the specification.
- PseudoPROXY operation (dialog penetration) is only an examination in the first stage release, and a main device works as a complete B2B UA server.
- The multi part is scheduled not to be used and the message from the terminal is [maruchipa-to]ed when there is a main device instruction because there is a possibility that security decreases.

3. New feature in KTS enhancing SIP

3.1. Terminal ID main device ID

It is necessary to notify main device ID (information for the terminal to identify a main device) from a main device so that the terminal may correspond to a dual mode of NEC-SIP and KTS-SIP. A main device must notify the terminal main device ID by using the Server header etc. The KTS-SIP terminal is assumed to be the one to switch the SIP operational mode according to the following main devices ID.

Table 1 main device ID and terminal operation mode

Main device ID	Terminal operation mode	Remarks
NEC-KTS	KTS-SIP mode	It completely conforms to this specification.
NEC-PBX	NEC-SIP mode (new) *	It conforms partially of the specification.
There is no notification.	NEC-SIP mode (former)	It completely conforms to the NEC-SIP specification (retrofit).

- The mode that a part of PBX corresponds to an additional specification of KTS-SIP is indicated.

It is necessary to notify a main device corresponding to KTS-SIP from the terminal terminal ID (information for a main device to identify the terminal) oppositely. For instance, the terminal this part is changed to a different name as terminal ID in the KTS-SIP terminal corresponding to KTS-SIP can be notified though the NEC-SIP terminal is transmitted specifying information like ". NEC SIP PHONE" (part that can be arbitrarily defined with the terminal) for the User-Agent header of the first Register request.

It is common, unquestionable for terminal ID because KTS-SIP is assumed to be a common specification with a desktop terminal, wireless LAN terminal, and the softphone, and when the UserAgent header is used, it is necessary to investigate with information that an existing NEC-SIP terminal arbitrarily specifies so as not to come in succession.

User-Agent header of existing NEC-SIP terminal of Table 2

User-Agent header	Product name	Remarks
NEC SIP PHONE	DtermSIP(ITN)	Desktop phone (NEC-i)
NEC DtermSP30 versionX.X	DtermSP30	Softphone (NEC)
NEC-ML-SPT-8D-1D	NEterm50	Desktop phone (UNIDEN)
Uncertainty	NEterm60	Desktop phone (UNIDEN)
Uncertainty	N900iL	WiFi phone (NEC)

3.2. Operation mode

A main device corresponding to KTS-SIP must maintain and manage the operation mode in each system. Moreover, annul the plan of the extension number of an old mode when you switch the mode. Table 3 shows the kind of the operation mode and the purpose.

Kind and purpose of Table 3 operation mode

Operation mode	Purpose
Plug & play	Mode that doesn't execute user authentication when terminal to main device is connected. Location of simple installation mode for person in charge of construction who omits terminal setting work.
Automatic logon	Mode to execute user authentication by automatic operation when terminal to main device is connected. Location of security mode that omits the user's logon operation.
Manual log on	Mode that executes user authentication by hand power when terminal to main device is connected. Location of security mode that user executes logon operation.

The name of the user specified when KTS-SIP is put and it logs it on is defined, "Personal ID". User information for the attestation is the one to show the set of "Personal ID" and the "Password". Note neither the extension number nor the equal sign about "Personal ID".

3.2.1. Plug and play

The mode that connects the terminal that ships the factory without changing Configuration with a main device. Security is because there is no user authentication and is weakly a disadvantage that it is possible to connect it surely in case of the KTS-SIP terminal though there is an advantage of making it in the state that the telephone function of the system can be easily used even without knowledge with a special those who construct it charge, too.

Achieve the Internet Protocol address allocation to the terminal side and the Internet Protocol address notification of a main device by the DHCP server function that a main device mounts. A main device doesn't do user authentication, and allocate the extension number of the terminal automatically based on the MAC address notified from the terminal.

The DHCP server option number to notify Internet Protocol address of a main device must use other definitions and the one that doesn't come in succession. Moreover, turn off default when the terminal that mounts 802.1x corresponds to the plug and play. The logoff operation cannot be done because there is no concept of the attestation in this mode. Moreover, the error is notified only when the state of override (double registration) is not generated for a main device to judge and to allocate the extension number, and the number of maximum registration is exceeded.

3.2.1.1. The extension number is specified (option).

The option to achieve the plug that can be the extension specification and play is prepared by setting only "Extension number" of terminal Configuration as enhancing this mode. The allocation of the specified extension number is permitted if checking based on the MAC address and the extension number notified from the terminal, and not becoming double registration though a main device doesn't do user authentication similarly.

The terminal corresponding to this option must prepare the item that sets the extension number to Configuration. A main device notifies the error without processing override though there is a possibility that override (double registration) is generated when this option is used.

3.2.2. Automatic logon

The operation mode that sets user information set to a main device to terminal Configuration beforehand and connects it. There is an advantage that user's time is saved to attest it automatically by using user information that the terminal set and an illegal connection of the KTS-SIP terminal can be refused. Automatic logon is as a disadvantage by increasing of set work of the person in charge of construction to have to set user information on each terminal, and the terminal and has the point that there is no mechanism that illegal use of others is protected when the user removes the seat after it does.

It is difficult to secure the user security when it is absent at the level of the [yosei] specification. Consider security at another level by the terminal function.

The operation mode of a main device must return and a main device must return the error to the terminal that does the attestation demand back when same user information as two or more terminals Configuration is set in the state of "Automatic logon". Moreover, a main device must notify the error and press the setting of the terminal side when user information is not set to terminal Configuration.

Because this mode has the policy "Log it on in the automatic operation", the logoff operation cannot be done.

3.2.3. Manual log on

The operation mode that inputs user information set to a main device when the user uses the terminal and connects it. There is an advantage that illegal use when it is absent can be prevented by the logon logoff operation because the user is revokable ..state of the terminal of right or wrong of use.. if necessary and a free layout can be achieved. There is a point that there is no mechanism that illegal use of others is protected as well as the generation of time when the user does the logon logoff operation, not user's doing the logoff operation, removing the seat or automatic logon as a disadvantage.

It is difficult to secure the user security when it is absent at the level of the [yosei] specification. Consider security at another level by the terminal function.

The operation mode of a main device must execute and the terminal must execute the attestation processing automatically as well as automatic logon when user information is set to terminal Configuration in the state of ". For instance, the attestation by logon is demanded from the employee in the office, and when only a specific place in the conference room etc. is operated by automatic logon, it sets it.

Because this mode has the policy "Log it on by hand power", the logoff operation is possible. Therefore, if it automatic logs on and the logoff operation is executed to secure security even if user information is set to terminal Configuration to do, it is necessary to delete user information. However, because many such as conference rooms are not logoffed about the terminal used, it is preferable in the setting of a main device to be ..right or wrong of logoff.. revokable in each terminal.

3.2.3.1. Logon when resetting it is omitted (option).

The logon processing after the terminal is reset by preserving the personal ID and the password that the user input when the terminal logs it on as enhancing this mode in FROM is prepared and an omissible option is prepared. This is a useful option so as not to generate the situation that displays all logon screens by the system down due to the trouble that the power failure etc. do not intend by the terminal and becomes an input waiting state.

The terminal corresponding to this option must mount the mechanism that user information is automatically preserved in Configuration after it logs it on.

Terminal side user information management in Table 4 manual log on mode

State	User information	Remarks
Logon	Preservation	Personal ID/password input when the user logs it on is preserved in FROM of the terminal.
Logoff	Deletion	Personal ID/password preserved when logging it on is deleted from FROM of the terminal.
Reset	Keeping things as they are	The logon screen is displayed when the same operation as automatic logon is done when user information is preserved in FROM, and it is not preserved.

3.2.3.2. When logging it on again, the input of the personal ID is omitted (option).

The input of a personal ID and a repeated password is demanded when logging it in in deleting user information on terminal Configuration when logoffing and security has been improved usually. The input of the personal ID is prepared when logging it on again in deleting only the password when the terminal logoffs as enhancing this mode and an omissible option is prepared. A useful option usually for the saving of the time of re-logon when only I use the terminal though this is operated in the manual log in mode. No function to disturb logon of others by inputting the personal ID again only so that this option may save the time of not the one that the personal ID is made fixed but the input.

This option is a function that a main device on security should manage, and direct to delete it from a main device to the terminal when you logoff. A main device corresponding to this option must prepare the item that sets the content of the deletion instruction to Configuration.

3.3. Override (double registration)

A main device corresponding to KTS-SIP must mount the function to notify and to process the generation of the repetition of registration for the KTS-SIP terminal when the logon operation is done at the other end end though the logon condition by same user information by the use of specific user information already. Table 5 shows the occurrence condition of override different according to the operation mode.

Table 5 operation mode and override

Operation mode	Override generation condition
Plug & play	Override is not generated. (Become an error when overlapping by the extension number specification option.)
Automatic logon	Override is not generated. (Become an error when overlapping by a double setting of terminal Configuration.)
Manual log on	Override is generated by the user's logon operation. (If it is an idol, the compulsion logoff of the override terminal.)

The condition that override is refused in a manual log on mode is as follows. •

- [Yojoutai] : excluding the idol at the edge end that a main device manages.
- Terminal..download..up-loading..execute.
- The logoff refusal is selected by setting a main device.
- The terminal local is being controlled (Config mode etc.).

Override is done regardless of the state of a local control as for the terminal in a case other than the above.

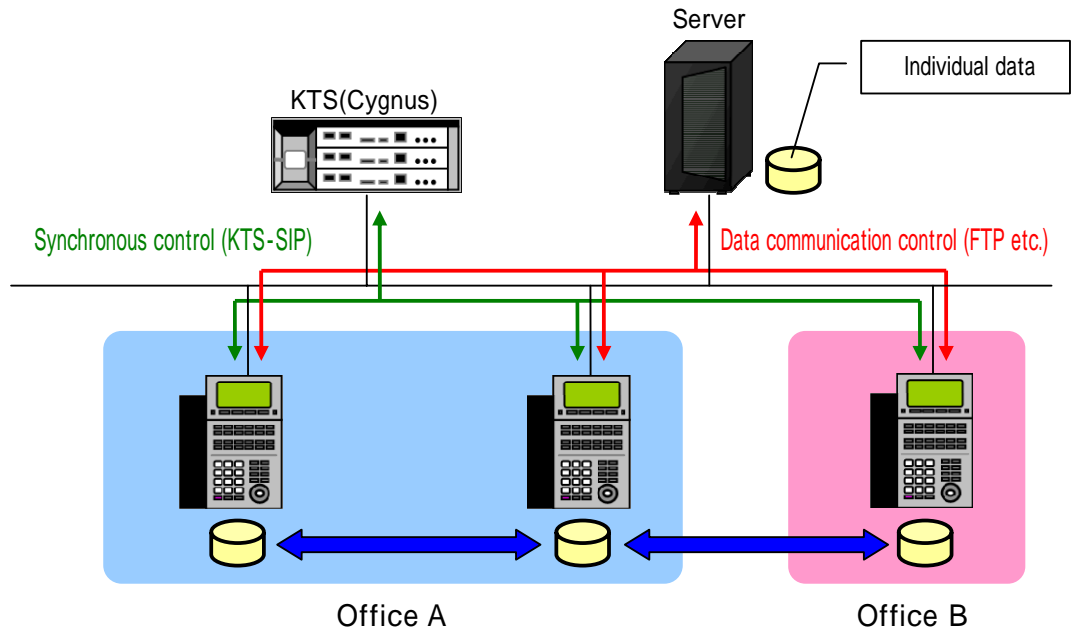
3.3.1. Personal data roaming

The function of personal data of preserved telephone book and arrival and departure Makoto history, etc. in a local terminal according to the transmission of data by way of an external server that can be used. a free location

3.3.1.1. Movement of the data between the same models

A main device that supports the personal data roaming during the same model (same terminal type) must execute up-loading/download of personal data according to timing where logoff and logon/override are generated. However, mounting is assumed to be main device dependence so that this function may need an external server. Therefore, the terminal that maintains personal data must consider mounting the function up-loading/to download by the terminal operation.

The communication protocol between a terminal and external server is made outside the coverage of this specifications.

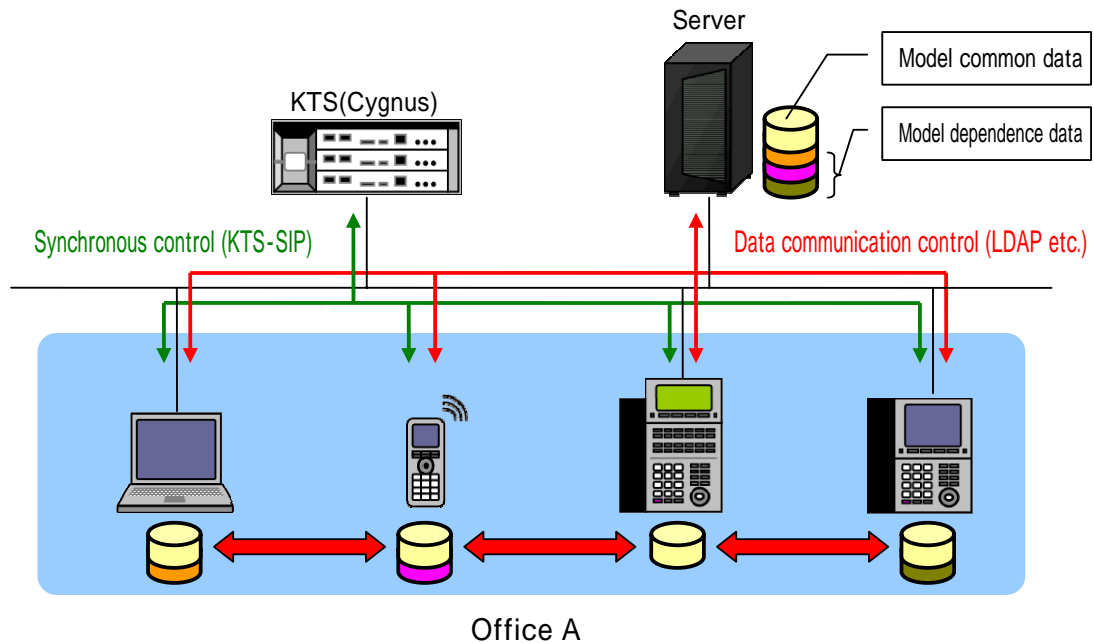


3.3.1.2. Movement of the data between different models

A main device that supports the personal data roaming during different model (Sophisticated/Value/Value-DESILESS/Econamoy) in a desktop terminal must execute up-loading/download of personal data according to timing where logon/logoff is generated. However, mounting is assumed to be main device dependence so that this function may need an external server. Therefore, the terminal that maintains personal data must consider mounting the function up-loading/to download by the terminal operation.

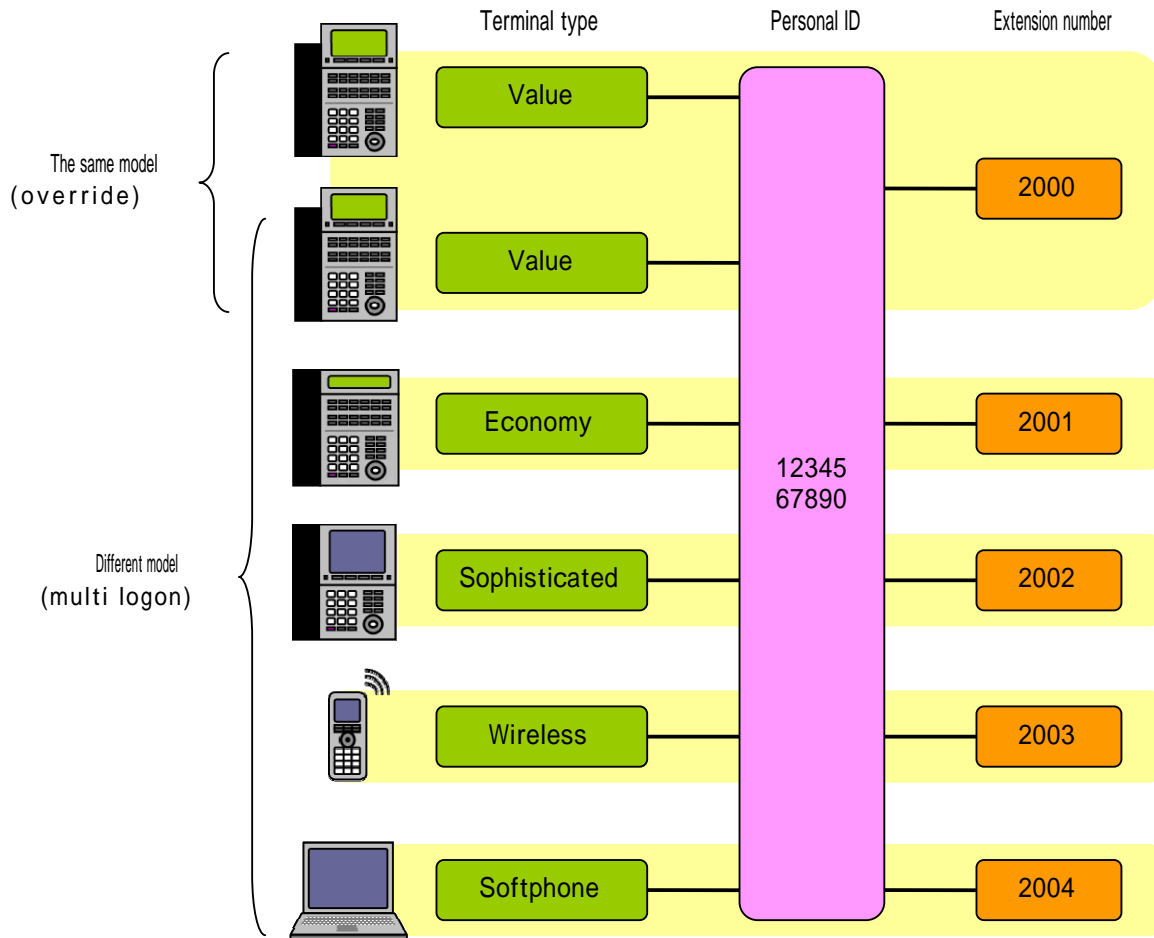
The communication protocol between a terminal and external server is made outside the coverage of this specifications. However, it is difficult to download and to use the data of a different model because the file format and the data size are different in each model when the file transfer protocol of the FTP etc. is used. In that case, it is necessary to consider mounting "Multi logon" function and limiting the data exchange between different models.

To have to consider the mechanism that the format of the data of each terminal is absorbed (conversion server, conversion client, and LDAP data base, etc.) as a system about the personal data roaming during a desktop terminal and other terminals (softphone or wireless terminal), it is assumed an enhancement matter.



3.3.2. Multi logon (simultaneous utilization in heterogeneous terminal)

A main device corresponding to KTS-SIP is assumed to be the one the terminal type, the personal ID unique ID of a main device that supports a simultaneous log of the terminal with a different terminal type on, and to allocate the extension number. However, the override processing is executed and it becomes exclusive use when logging it on at the same time with the same terminal of the terminal type.



3.4. Multicast

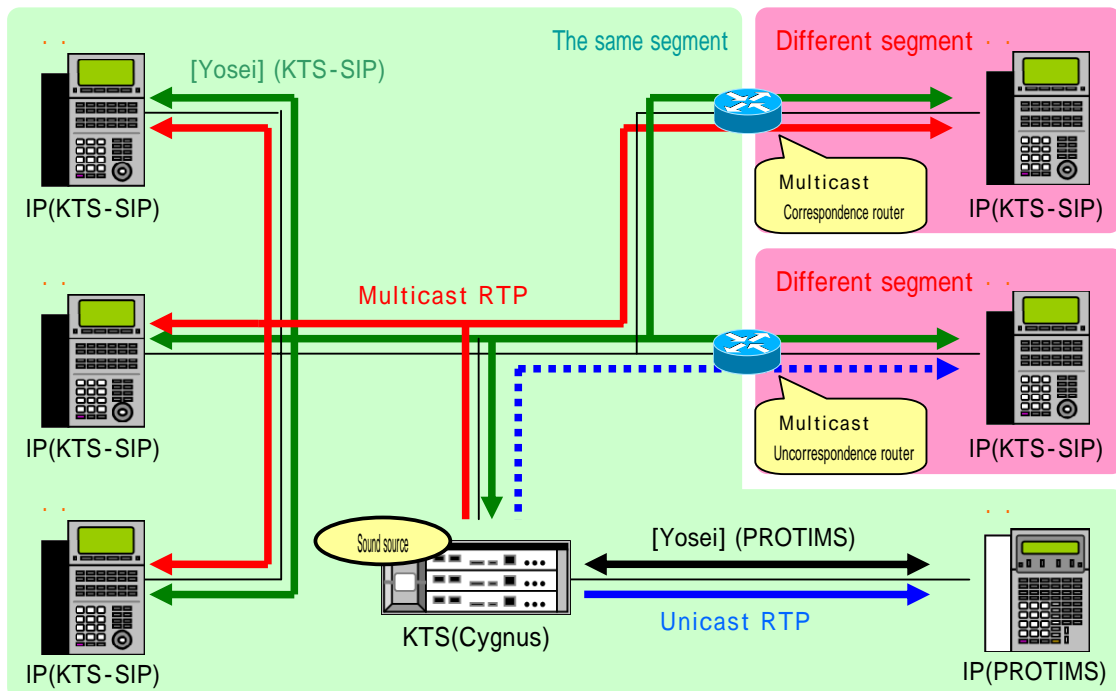
The RTP delivery of packets of a specific function by the multicast is supported so that KTS-SIP may effectively use VoIP resource (RTP) on the main device side. The KTS-SIP terminal must mount the function to transmit the RTP packet to the multicast Internet Protocol address appropriating that receives the RTP packet of specified multicast Internet Protocol address or is specified by the instruction from a main device. Table 6 shows the function to use the multicast.

Function to use Table 6 multicast

Function	Explanation
External holding tone/BGM	The voice to which a main device is output from the sound source is transmitted to the KTS-SIP terminal of the pending state (idol in case of BGM) by the multicast.
Paging (Internal Zone Paging)	The KTS-SIP terminal that operates the paging transmits the voice to the KTS-SIP terminal set to the paging group by the multicast.
The Internet radio	As for the communication with the Internet, AGW(Application GateWay Server) transmits the voice contents where terminal [shi] and the server accumulate to the KTS-SIP terminal by the multicast.

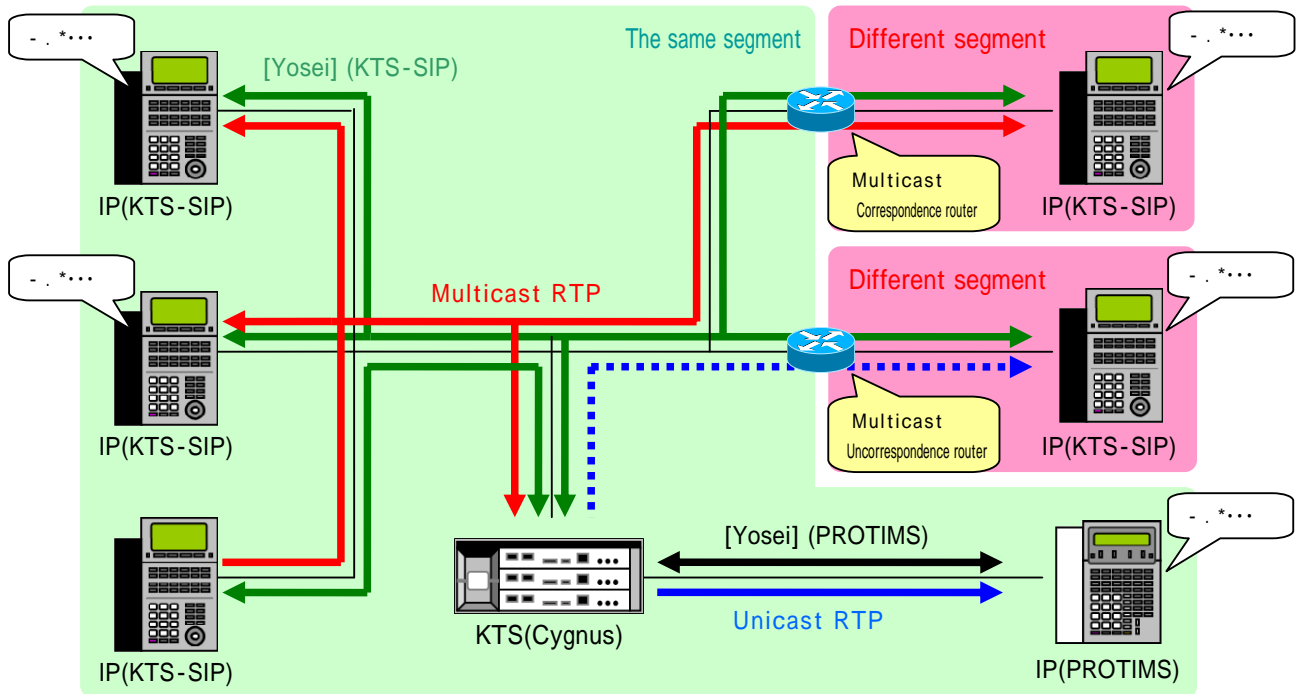
3.4.1. External holding tone/BGM

When entering the state of the idol when the BGM function is used when the reservation is operated, a main device directs the KTS-SIP terminal the reception beginning multicast RTP packet when an external holding tone is used. Moreover, when BGM external holding tone/is released, the reception stop of multicast RTP packet is directed.

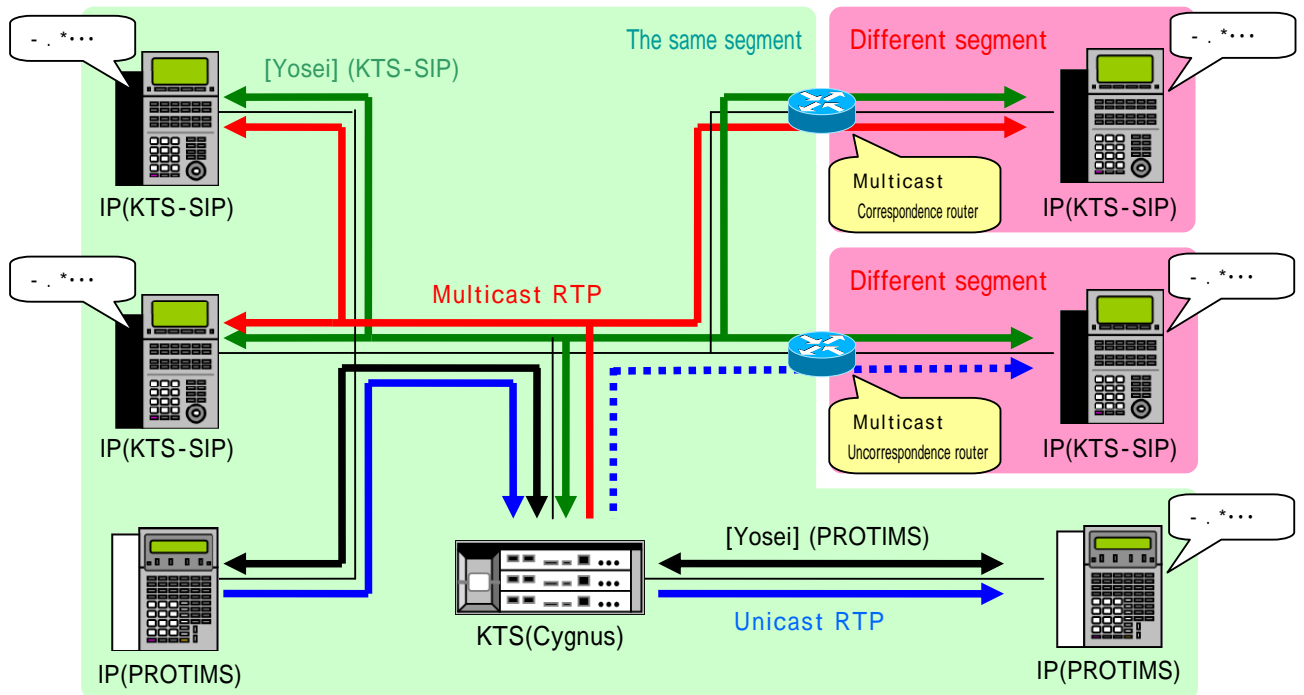


3.4.2. Paging

A main device is a multicast in each KTS-SIP terminal that directs the KTS-SIP terminal that operates the paging the transmission beginning multicast RTP packet, and is set to the paging group. The reception beginning the RTP packet is directed. It is preferable that a main device can also receive multicast RTP packet from the paging operation terminal at this time. The purpose of this is to forward the voice transmitted by the multicast to the terminal that doesn't correspond to terminal [shi] and the multicast and the terminal with routers previously by the unicast.



Moreover, it is preferable to be able to forward it to each KTS-SIP terminal where the voice from which a main device is transmitted by the unicast is set to the paging group by terminal [shi] and the multicast when the paging is operated from the terminal with the terminal and the router that doesn't correspond to the multicast previously.



3.5. Trilateral meeting

The multi person conference operation of KTS (Up to three people) is as follows. •

- It is talking over the telephone to the first person.
- "Conference" key pressing
- The telephone call with the first person is reserved.
- The telephone call begins calling the second person.
- "Conference" key pressing
- (The telephone call with the second person is reserved.)
- "Conference" key pressing
- The Cho substitution of the three people's telephone calls for the conference trunk.

Three person conference operation by the mixing function of a local terminal is as follows for this. This is the same as three person conference operation in PBX, and it entrusts the judgment whether to use the mixing function of a local terminal or to use the conference trunk of a main device to PBX. •

- It is talking over the telephone to the first person.
- "Reservation" key or "Hook" key pressing
- The telephone call with the first person is reserved.
- The telephone call begins calling the second person.
- "Conference" key pressing
- (The telephone call with the second person is reserved.)
- The Cho substitution for mixing or conference trunk. a local terminal of the three people's telephone calls

3.6. Multi part and encryption

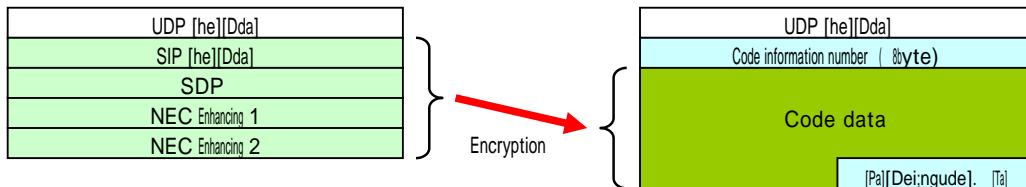
3.6.1. Outline of encryption

The encryption described with this specifications is applied to the encryption of SIP Signaling and RTP/RTCP. It conforms to encryption specification "SIP encryption interface specifications" of NEC enhancing SIP about the encryption method.

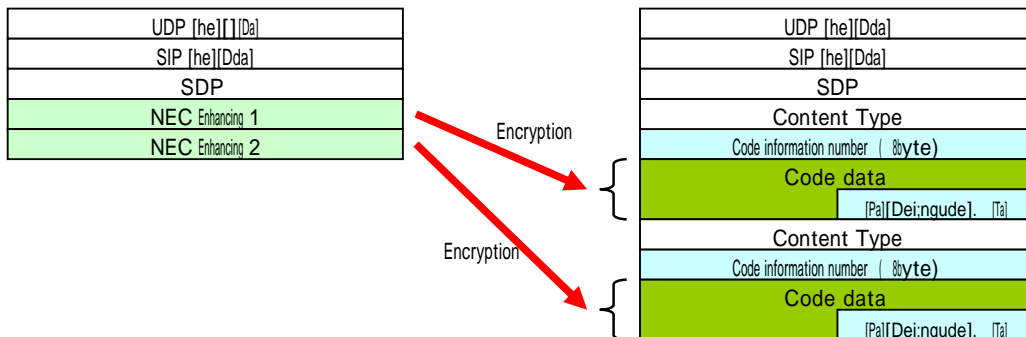
3.6.2. For SIP-ALG

When SIP Signaling is encrypted, two kinds of specification in case of the case to encrypt the entire SIP message when only the enhancing data is encrypted is enabled in consideration of SIP-ALG. Refer to "SIP encryption interface specifications" for the range specification of the encryption.

The entire SIP message is encrypted.



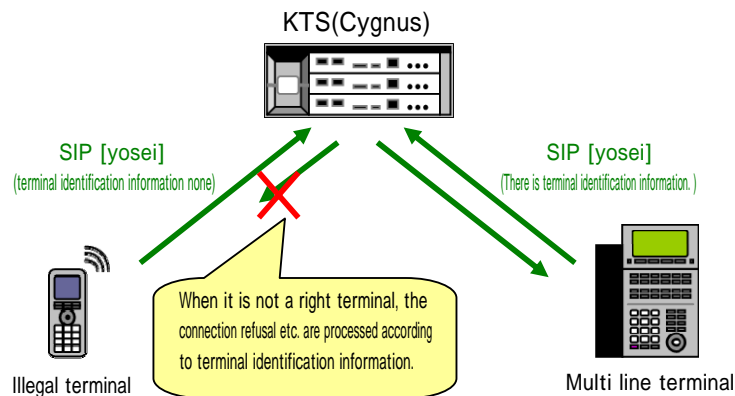
Only the enhancing data is encrypted (SIP-ALG is used).



3.6.3. Disguise prevention by terminal information

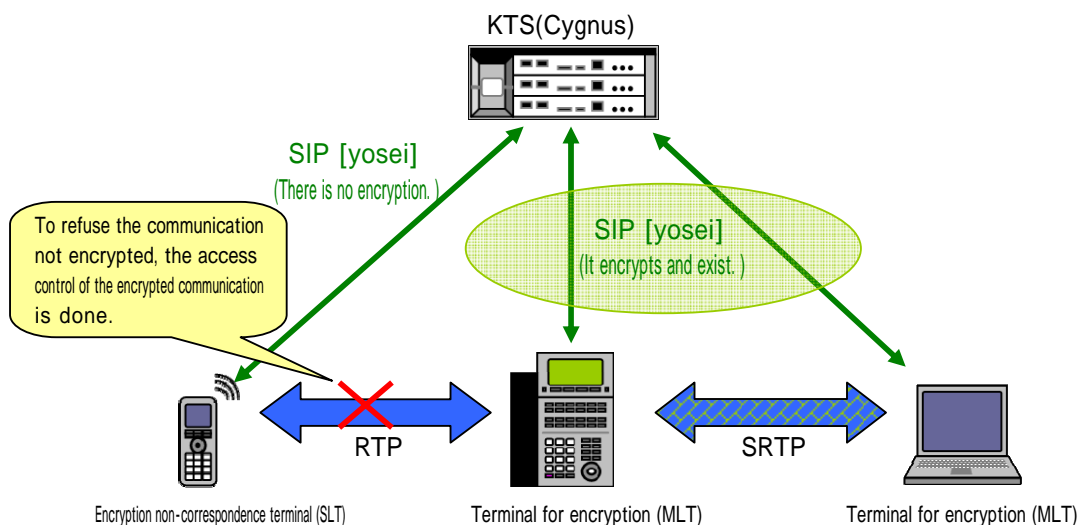
In NEC enhancing SIP, to judge standard SIP terminal and multi line SIP terminal, terminal information (Info-TermType) is supposed always to be added to the SIP message from the terminal. The disguise of the terminal can be prevented because terminal information that is the enhancing data is concealed without fail when encrypting it.

It is necessary to add terminal information (Info-TermType) for the disguise prevention of the terminal when encrypting it though multi line SIP judgment doesn't usually need terminal information (Info-TermType) in KTS-SIP to do from the UserAgent header when the terminal is registered. Therefore, it has the mode of terminal identification ON/OFF (there is terminal information/none), and when the terminal is registered, it directs it from a main device.



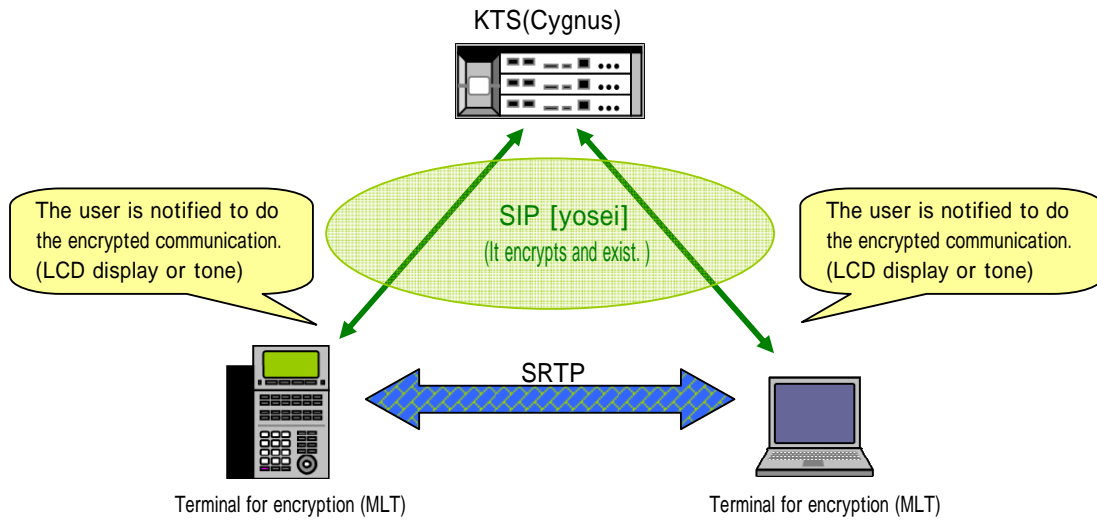
3.6.4. Access control of non-encrypted communication

The access control is done not receiving of/to receive the voice-data communication not encrypted by setting the system data.



3.6.5. Encryption state display when talking over the telephone

Information on the effect encrypted by the LCD display is notified to the user when the encrypted voice-data communication is done.



3.7. Presence

This function is a function that presence information (status and on the register information) current of the employee etc. can be confirmed by the presence function of the standard SIP Phone machine (example FOMA) and the MLT SIP Phone machine. Confirming the status of the member who wants to contact beforehand by using the presence function, and selecting communications matched to other party's status become possible.

3.7.1. System configuration and outline of operation

The limitations in the system configuration and each composition in which the presence function is achieved are described.

3.7.2. Terminal that can refer to presence

The terminal list that can refer to presence information is shown below.

- IP value
- IP sophisticated
- SoftPhone
- CTI client (SIP MLT support)
- WiFi SIP terminal (SIP MLT support)
- Standard SIP (FOMA (note 1) etc.)

Note 1:The

reference becomes possible at the CPU2 piece composition.

Presence cannot be referred to over the legacy telephone.

3.7.3. State of presence that can be referred

The equipment and the content of presence that can be referred from the terminal that can refer to presence are shown as follows.

Terminal	Content of presence
SIP MLT terminal	The main status and substatus
Standard SIP terminal	The main status and substatus
Legacy terminal	The main status
SLT telephone	The main status
DtermIP (NGT)	The main status

3.7.4. System operation condition

The memory is consumed ..probably because of Buddy List etc. that should preserve SRAM... Therefore, when the pre-sense is operated, the enhancing memory board is necessary. (note: After executing the memory estimate, the examination is necessary again.)

3.7.4.1. One CPU composition

Figure 1 shows the system configuration when presence is composed of one CPU.

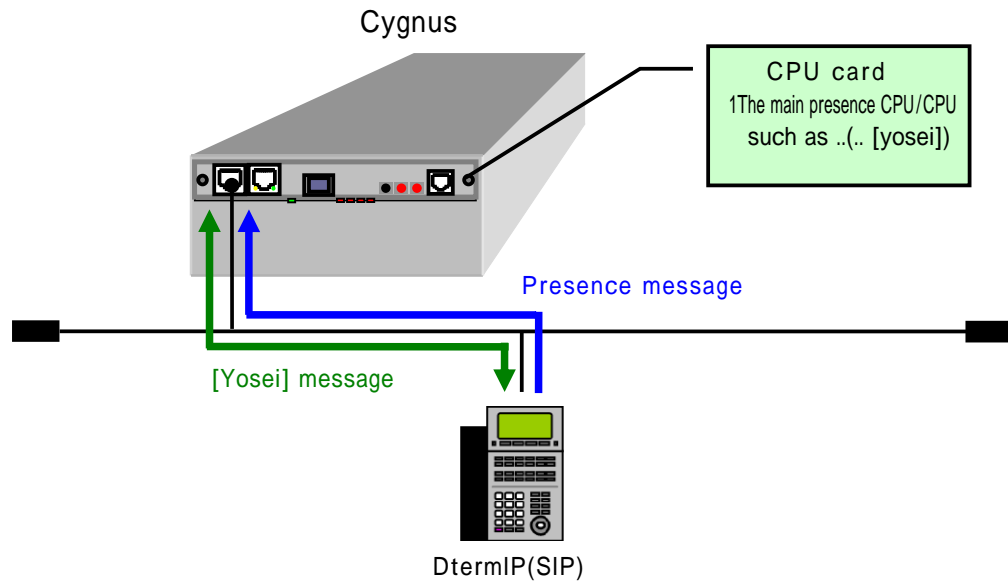


Figure 1 One CPU composition

At this composition, only the terminal that supports NEC-I enhancing SIP can display presence. The procedure for exchanging the presence message is NEC-I enhancing originality method, and it doesn't follow the procedure of RFC3856. Operation for one CPU is described.

Method of updating presence

- The changed state of presence is transmitted to the watcher who is doing the subscription demand at once after it changes.
- When watcher's terminal gives the update request, the presence of the user who has the demand is sent.

Method of subscribing to presence

- The watcher does the subscription demand to the presence server for the user who wants to learn presence information.
- The user who wants to subscribe to presence information by the system data can be specified.

Change in state of presence

- The state of presence can be changed by the update or the system data by the operation of the telephone side.
- State update operation with soft key and state change operation with Func key

3.7.4.2. Two CPU composition

Figure 2 shows the system configuration when presence is composed of two CPU.

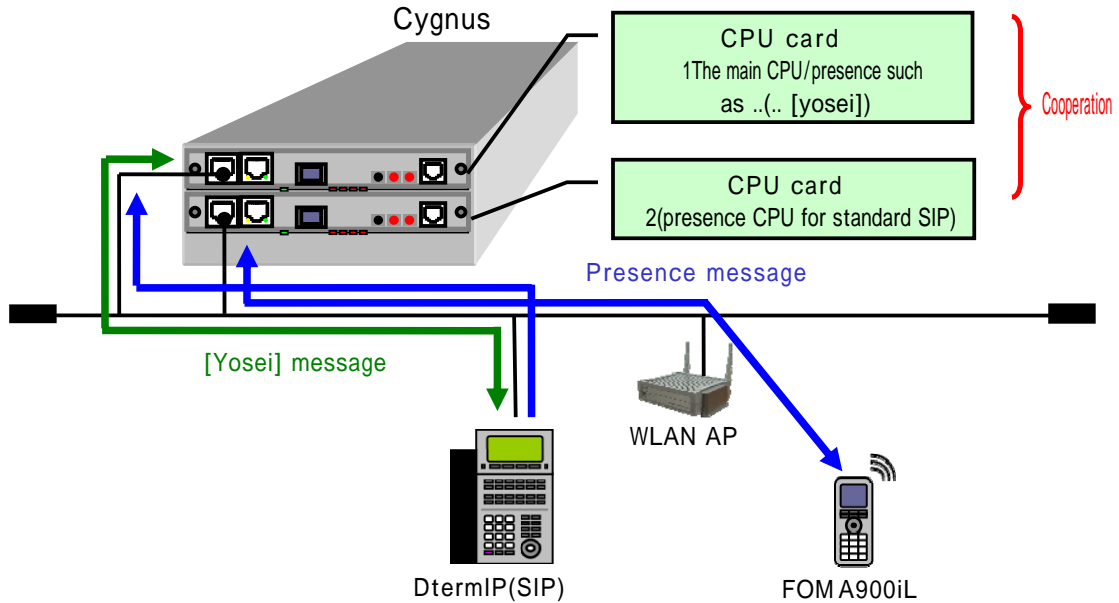


Figure 2 Two CPU composition

Figure 1 shows the system configuration when presence is composed of one CPU. It is assumed that it composes at two of two CPU compositions (CPU for NEC-I enhancing SIP support and CPU for standard SIP support). The terminal that supports NEC-I enhancing SIP exchanges CPU1 with presence information, and the method is done by an original definition of NEC-I enhancing SIP (It is the same as one CPU composition). Standard SIP terminal that doesn't support NEC-I enhancing SIP exchanges CPU2 with presence information, and the method follows the procedure of RFC3856. It becomes the following operation at two CPU. The terminal that does NEC-I enhancing SIP support is the same as the CPU1 composition.

Method of updating presence

- The changed state of presence is transmitted to the watcher who is doing the subscription demand at once after it changes.
- When watcher's terminal gives the update request, the presence of the user who has the demand is sent.

Method of subscribing to presence

- The watcher does the subscription demand to the presence server for the user who wants to learn presence information.

Update of state of presence

- The state of presence is updated by operating the telephone side.

3.7.5. Connection with AGW

The presence function should synchronize with AGW (application gateway) and operate. AGW synchronizes with an outside presence server etc. , and has the needed function to change the state of presence of a main device automatically. Therefore, a main device should offer AGW presence information on all terminals.

3.7.6. Method to AGW of presence giving information

The method of the presence giving information will use same I/F as other presence client terminals. However, Buddy List is not managed for AGW, and presence information on all registered terminals is sent.

3.7.7. Presence operation at the other end end to AGW

Because AGW synchronizes with an outside presence server etc. , the function to change the state of presence of the client terminal (DeskTop terminal and SoftPhone) compulsorily is provided. Original presence makes presence information on all terminals rewritable in AGW only a specific user though it is not revokable.

3.7.8. Connection of CTI client

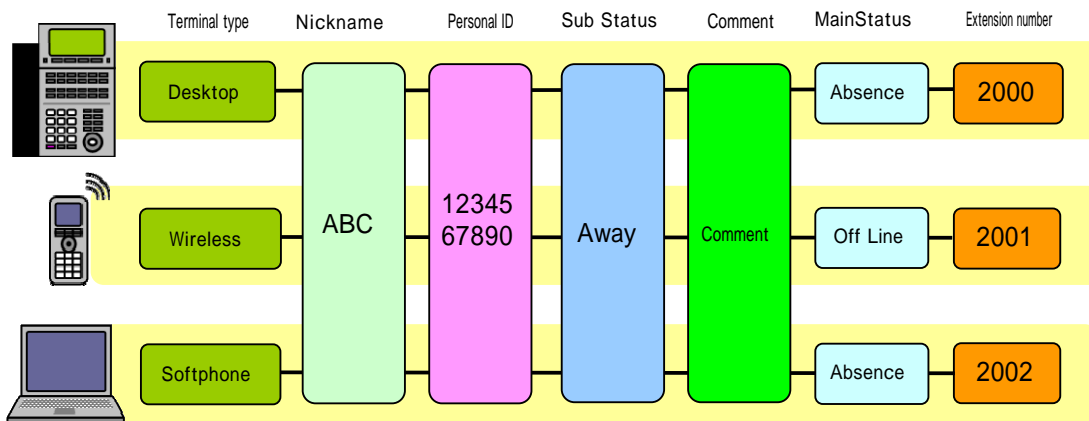
It is enabled the reference to the presence status of the legacy telephone and the presence status at the other end end by introducing the CTI client. The CTI client is installed NEC-i enhancing SIP, and executes the communication of [yosei] information between a main device and the client. Therefore, the CTI client is consumed to one similar port SIP MLT (the same one as the SIP MLT terminal and the port that is located, and allocated). It is necessary to make the limitation not put on the main device side to do the function to change other presence information like 5.6 AGW because the CTI client can operate the presence of the legacy terminal. The method of limiting a revokable client terminal is executed on the CTI client side.

3.7.9. Status

3.7.9.1. Relation between personal ID information and status

There are a personal ID and nickname who shows the terminal owner in KTS-SIP. It is used for the attestation etc. , and the personal ID is the one to specify the user himself, and information not open to the public except the person in question who uses it. The one opened to the public to other users though nickname differs from the personal ID, and specifies the user himself. Therefore, the personal ID and nickname are in the relation of couple 1, and are [torumotosuru] in the system as for a unique value. (Refer to KTS enhancing SIP interface.)It

is assumed the data that exists for one personal ID for the substatus. Because KTS-SIP is a specification that can register the terminal with a different terminal type in the personal ID, the change of individual substatus is enabled from any terminal. Moreover, ..comment concerning the substatus.. popular is made. The comment is assumed to be data that exists for one personal ID as well as the substatus. A related chart of each information is shown below.



Example 1: State transition when substatus is changed to . - " . . Away" with DeskTop

	Before it changes		.	After it changes	
Terminal type	Main Status	Sub Status	.	Main Status	Sub Status
Desktop	Online	No Plan	.	Absence	Away
WiFi	Off Line		.	Off Line	
SoftPhone	Online		.	Absence	

Example 2: State transition when substatus is talked over the telephone with DeskTop terminal

	Before it changes		.	After it changes	
Terminal type	Main Status	Sub Status	.	Main Status	Sub Status
Desktop	Absence	Away	.	On Phone	Away
WiFi	Off Line		.	Off Line	
SoftPhone	Absence		.	Absence	

3.7.9.2. Status list

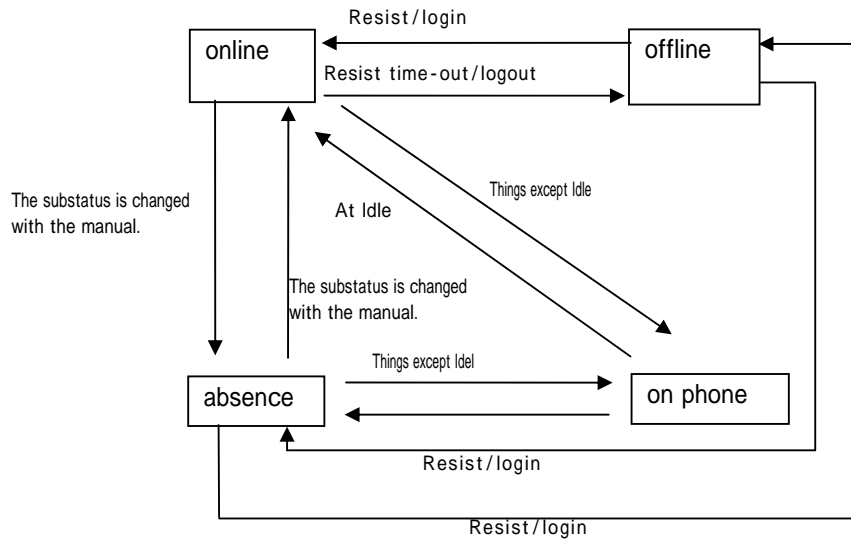
Figure 2 shows the system configuration when presence is composed of two CPU. Managed status and content of the display are as follows. The system data, the change enabling the substatus, and the user is made to be able to set it freely. The setting is enabled.

The main status are enabled each definition of 4 and the substatus of Online, On_Phone, Absence, and Offline up to 15 for Online and for Absence. Examination of another country word correspondence separately.

The main status	Substatus (overseas initial value)	Substatus (domestic initial value)
Online	-	[Seki] lives/online
Online	Busy	Busy
on_phone	-	It is calling.
on_phone	Step out	It is calling.
on_phone	Away	It is calling.
on_phone	Meeting	It is calling.
on_phone	Biz trip	It is calling.
on_phone	Meal	It is calling.
on_phone	Break	It is calling.
on_phone	go home	It is calling.
on_phone	Secret	It is calling.
on_phone	vacation	It is calling.
Absence	Step out	Leave seat
Absence	Away	O u t
Absence	Meeting	It is conferring.
Absence	Biz trip	On a business trip
Absence	Meal	It is eating.
Absence	Break	It is taking a rest.
Absence	go home	It is taking a rest.
Absence	Secret	Secret
Absence	vacation	On vacation
Offline	No plan	Absence
Offline	Step out	Leave seat
Offline	Away	O u t
Offline	meeting	It is conferring.
Offline	biz trip	On a business trip
Offline	meal	It is eating.
Offline	break	It is taking a rest.
Offline	go home	It is taking a rest.
Offline	secret	Secret
Offline	vacation	On vacation

Note: Refer to specifications of each terminal for the icon displayed in the terminal.

3.7.9.3. Status transition



Method of changing status:

- Change in status by soft key operation
- Change by correcting the system data
- Change by change request from terminal

3.7.9.4. Status maintenance

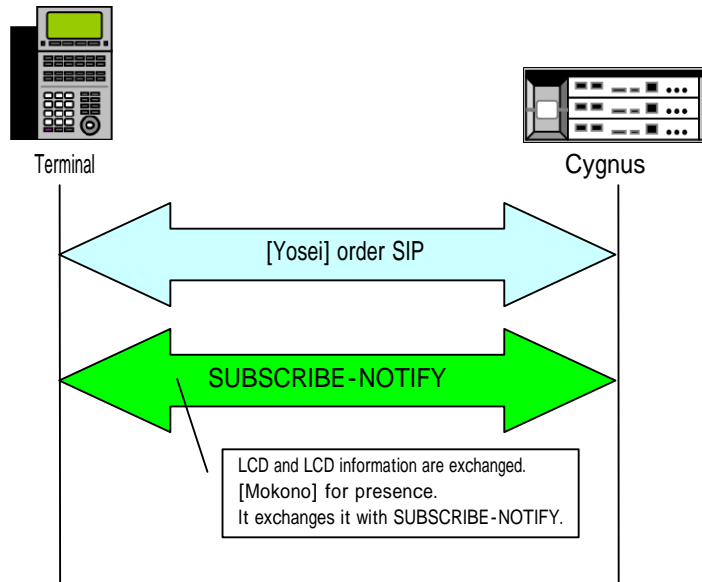
The status of each terminal is basically managed in a main device, and status is not maintained on the terminal side. The status disagreement between a main device and the terminal etc. can be evaded by doing so. However, there is a possibility that status in a main device, the status of the terminal, and the difference are generated because status is managed in the terminal as for standard SIP terminal. It is assumed to be a specification limitation.

3.7.9.5. Comment concerning substatus

The comment concerning the substatus can be input. The length of the comment is assumed until the normal-width 20 characters (em-size ten characters), and can be defined in one personal ID. The change in the comment enables the change by the command from the terminal and the change by correcting the system data.

3.7.10. Method of sending and receiving presence data

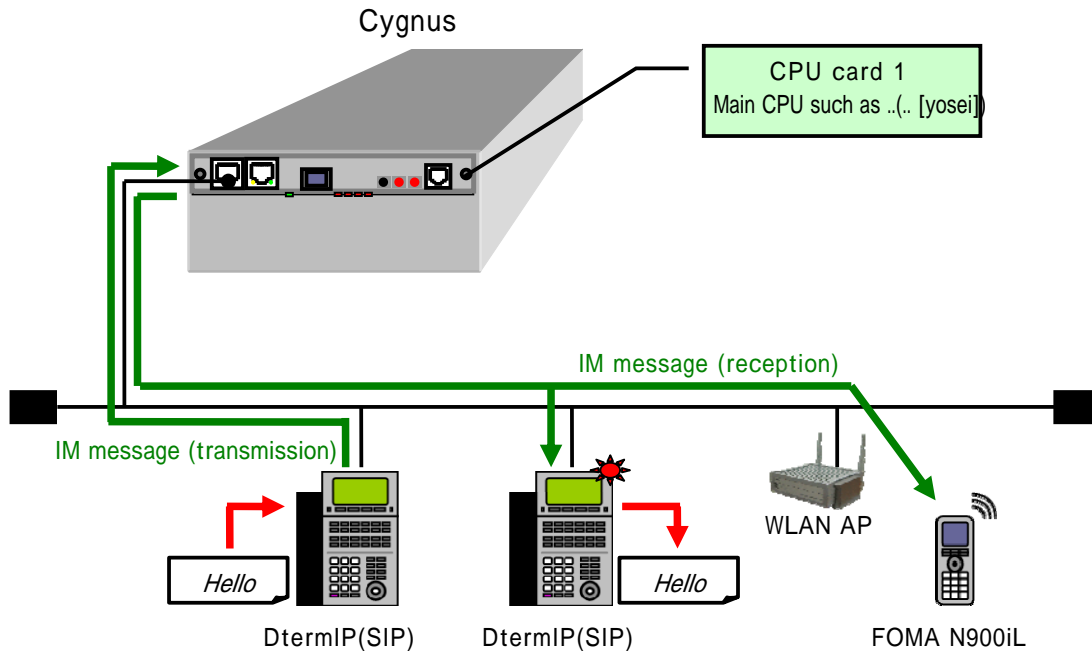
Information on presence is exchanged as one of the parameters of contents type (application/X-NECSIPEXT2MLv1) by using the SUBSCRIBE-NOTIFY message defined by KTS-SIP besides the [yosei] message of SIP.



3.8. Instant message (IM)

Instant message (IM) is supported as an option of KTS-SIP. However, conform to "SIP Phone instant message interface specifications for the office" because it doesn't newly define the specification as KTS-SIP. Because the IM message is done in SIP [yosei] same to message port, a peculiar attestation to IM etc. are not done, and substituted by attesting Register. Moreover, it encrypts it by the same method as the SIP [yosei] message.

When the specification is enhanced with KTS-SIP, additional externals are defined by treating the super-set.



3.9. NAT connection

The NAT connection of the terminal is supported.

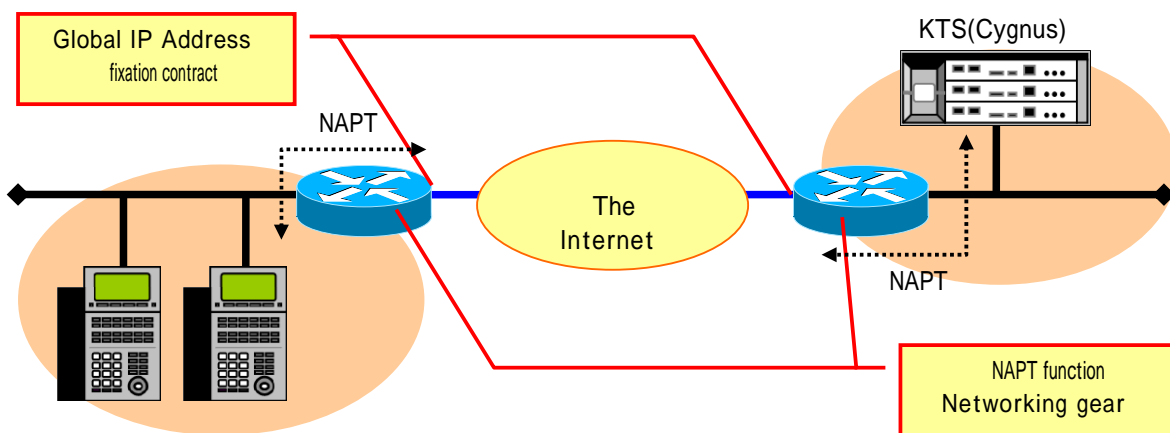
To connect NAT, the networking gear that has the NAPT function (acceptable the manual setting) becomes indispensable.

However, do not allow the multistep connection of the NAPT function network equipment.

3.9.1. Connection by way of the Internet NAT

When the Internet is contracted, the global Internet Protocol address fixation contract becomes indispensable.

As for the IP header, the networking gear that has the NAPT function converts local Internet Protocol address into the global IP address.



It is necessary to rewrite local Internet Protocol address to a global IP terminal about the header and SDP in the SIP message that the terminal transmits.

Therefore, Internet Protocol address (contracted fixation and global Internet Protocol address when Internet passing NAT is connected) should be able to be set after NAPT is converted with Configuration of a local terminal, and to reflect it in Internet Protocol address in the SIP message. 1

It is necessary to set it to the repetition of neither the port number of the SIP message transmitted with each terminal nor the port number of RTP when two or more terminals are connected under the control of [tsuno] NAPT function network equipment.

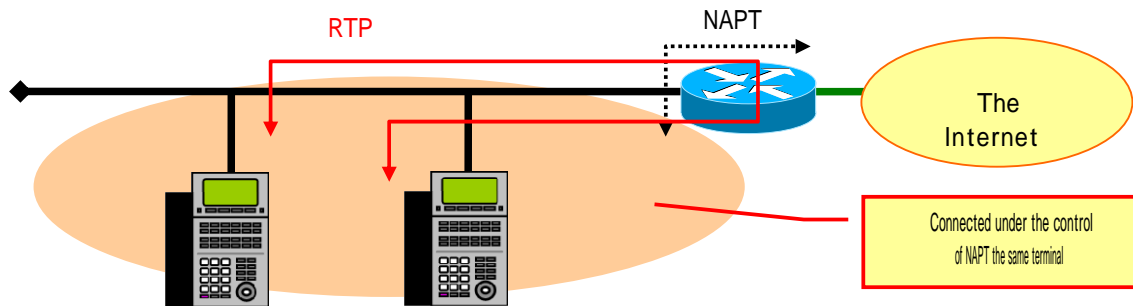
Therefore, the port number after NAPT is converted with Configuration of a local terminal (SIP message port number and RTP port number) should be able to be set, and to reflect it in the port number in the SIP message. -

Wireless, the mechanism that the setting is dynamically switched with the profile etc. is necessary.

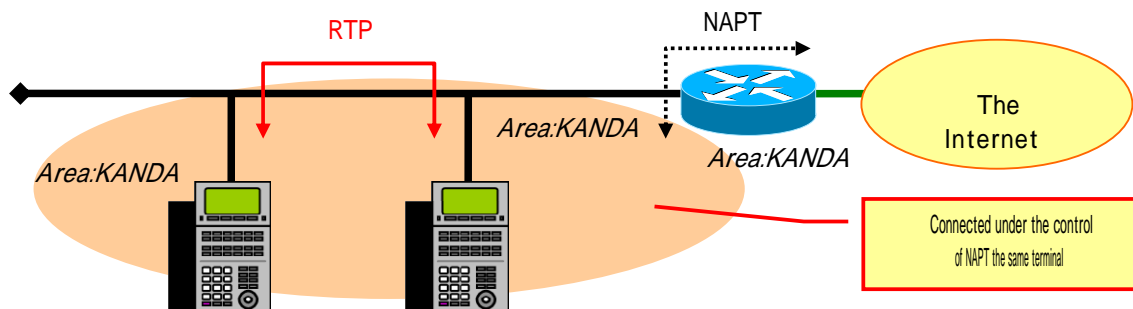
3.9.2. RTP Peer to Peer between terminals under the control of NAPT the same

When Internet Protocol address and the port number after NAPT is always converted into SDP in the SIP message are set when NAPT is connected, the RTP packet between the same NAPT connection destination terminals will be turned with the NAPT function network equipment.

In this case, it leads to the voice delay of the telephone call of the network load between the increase and the terminal.



When the terminal is registered, a main device can understand to which NAPT connection area the terminal belongs because the terminal notifies a main device the NAPT connection area (The example: KANDA). The originating terminal becomes possible because it notifies the terminal whether the response terminal belongs to the same NAPT connection area when sending it (The "200 OK" response of the response terminal is also similar) the judgment whether to set the global IP address (port number) whether to set local Internet Protocol address (port number) to SDP of the "INVITE" request. Therefore, the telephone call to the terminal that belongs to the same NAPT connection area becomes possible the setting of local Internet Protocol address of SDP, and, as a result, it becomes RTP Peer to Peer between connected under the control of NAPT the same terminals.

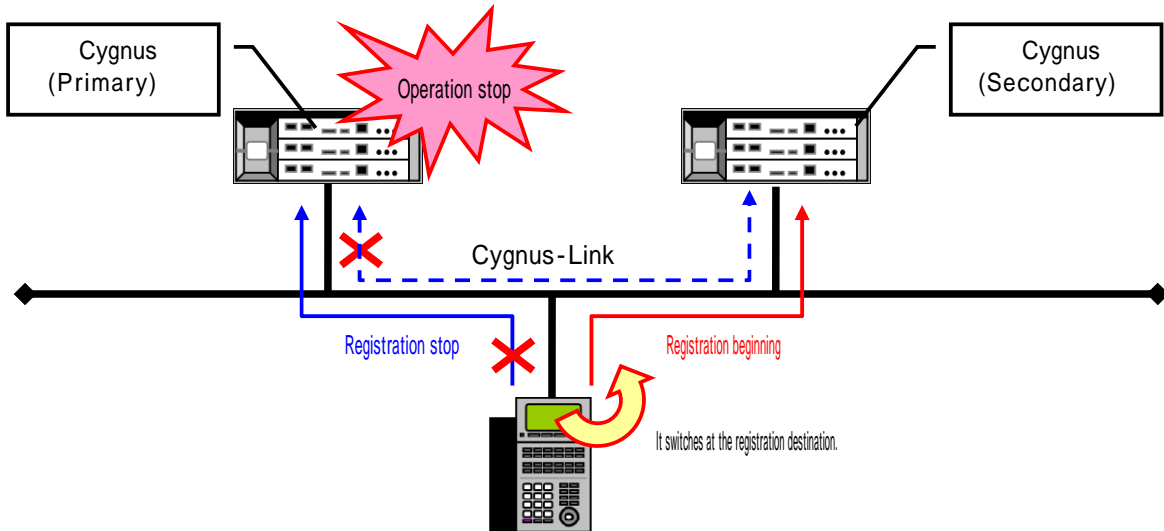


Be the NAPT connection area can set with Configuration of a local terminal, and revokable by the instruction from a main device. Internet Protocol address and the port number of SDP

3.10. Cygnus-Link

3.10.1. Fail Over function

When operation stops due to the trouble of the power failure etc. , a main device has the function to switch operation to a main device of Secondary. A main device of Primary transmits the switch instruction from a main device of Secondary to the terminal at the registration destination when operation changes into a main device of the operation stop doing and Secondary. The terminal must have a revokable function according to the instruction from a main device at the registration destination.



To have to consider the security of the method of instructing the switch at the registration destination, it is assumed an enhancement item.

3.11. Terminal function license management

3.11.1. Semi-Floating license

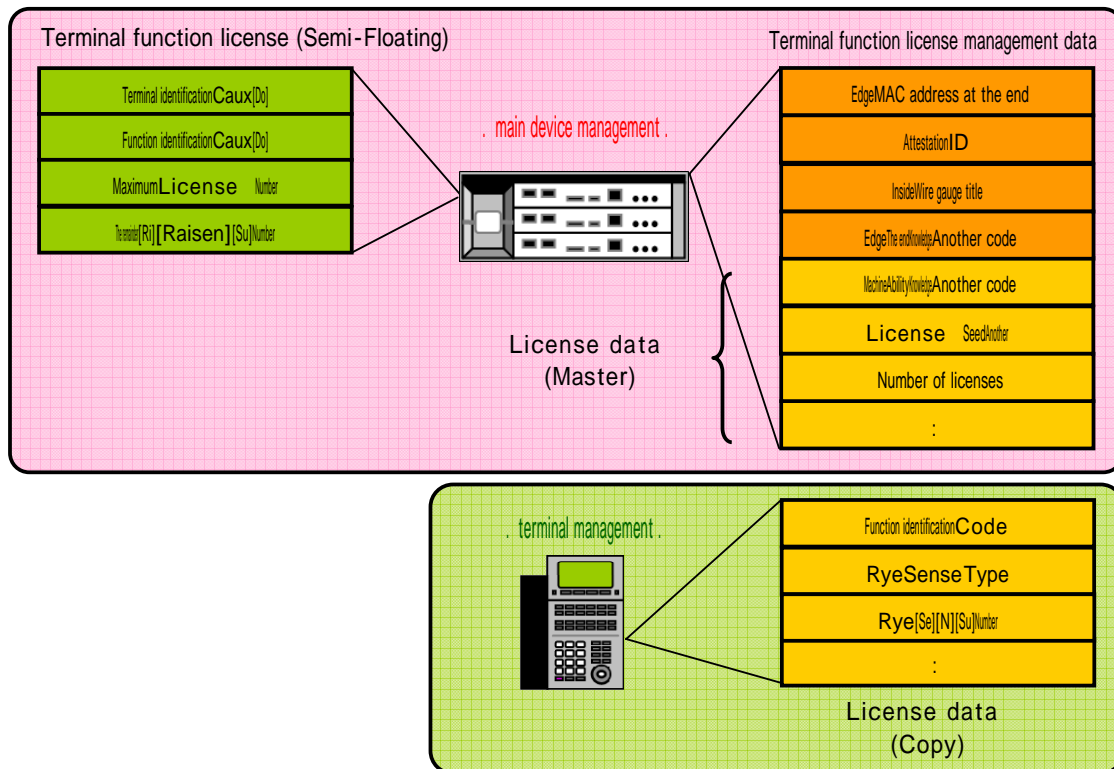
It is possible to refer, to allocate, and to release the terminal function license that makes KTS-SIP an interface, and is preserved in be a main device to the terminal. However, because a main device doesn't take part in the content of the terminal function license, the influence of the license extension by the enhance date of the terminal is not received.

3.11.1.1. Main device management data and terminal management data

All the following data concerning the terminal function license is managed on the main device side. *

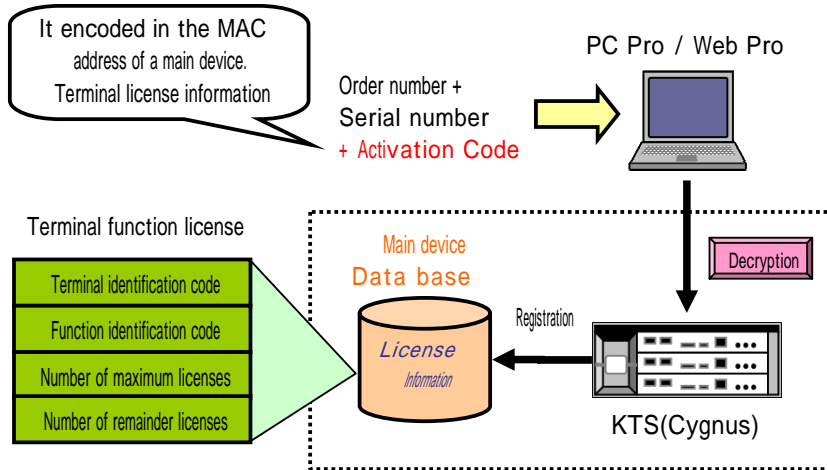
- Terminal function license (Semi-Floating)
 - Terminal function license management data
 - License data (Master)

Do not assume acquired license data (Copy) to be only temporary maintenance, and do not preserve the terminal in the nonvolatile memory etc. so that the license data may master the main device side, and handle the terminal as a slave.



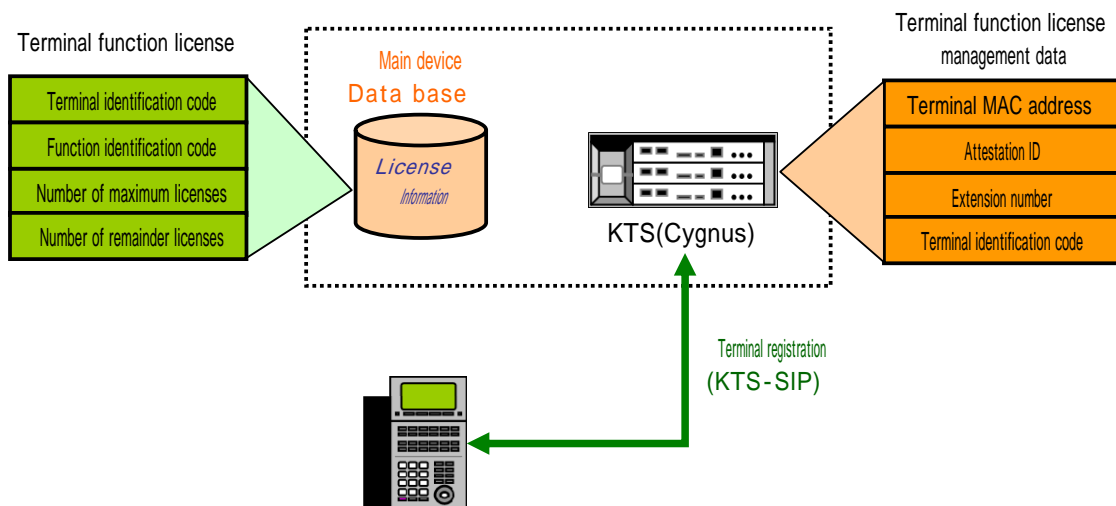
3.11.1.2. Installation of license data

Amount of information on the terminal function license is preserved in the main device data base by misappropriating the mechanism of the issue of the port license of Cygnus main device. Because the Activation code in which the MAC address of a main device is made a key is used for the installation, illegal use to other main devices can be prevented.



3.11.1.3. Making of license management data

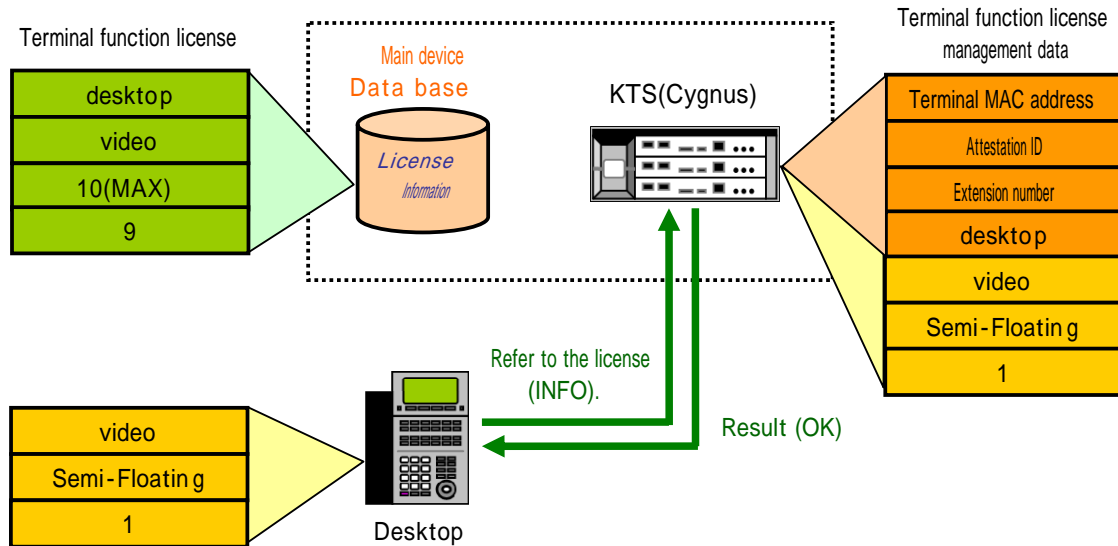
A main device can make "Terminal function license management data" according to the extension number allocated in "Terminal MAC address", "Attestation ID", "Terminal identification code" acquired in the registration processing by KTS-SIP, and the terminal. This administrative information manages the link information on the license data that is allocated and released by the demand by the terminal.



3.11.1.4. Reference to license data

The terminal can demand the reference to the terminal function license from a main device. The example is given and it explains operation as follows.

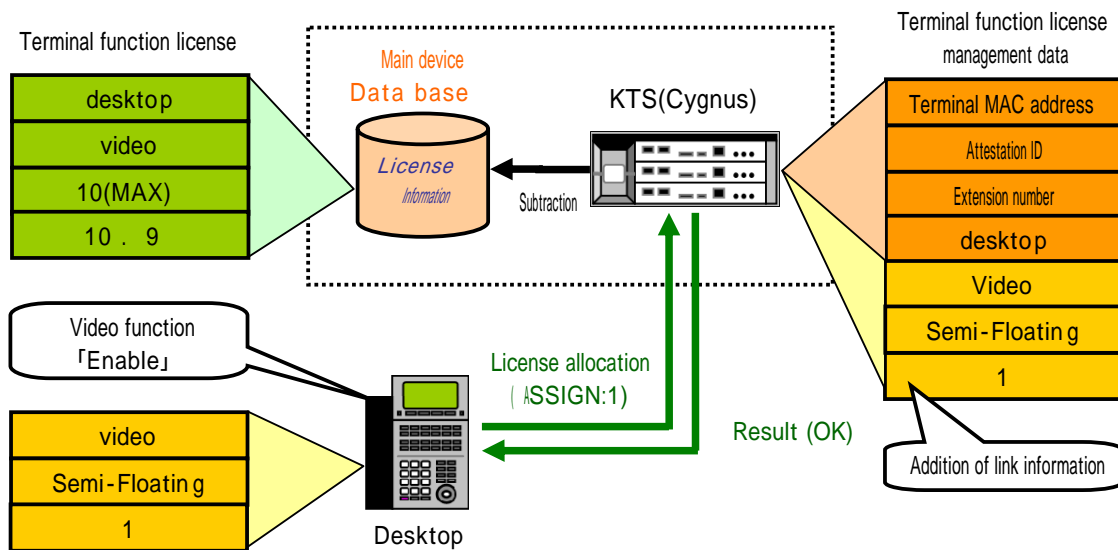
The reference to the license data is demanded from a main device so that the terminal may confirm a present license allocation situation when starting. A main device is transmitted adding the license data linked with the terminal function license management data as this response as it is. When it can be confirmed the added data is analyzed, and it has the "video" license for instance, the terminal makes the Video function effective.



3.11.1.5. Allocation of license data (success)

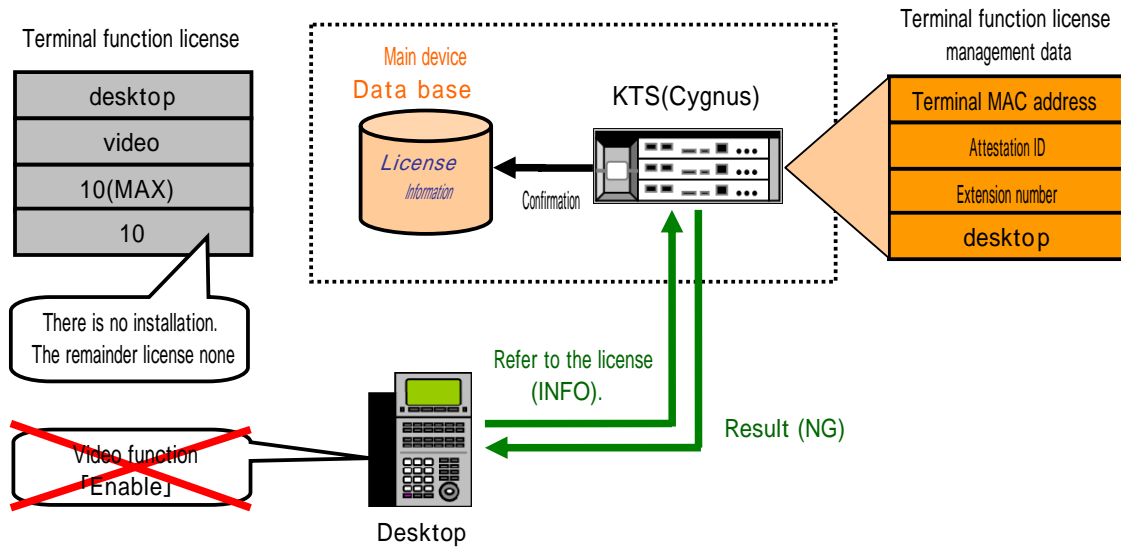
The terminal can demand the allocation of the terminal function license from a main device. The example is given and it explains operation as follows.

For instance, when the response is . NG" as a result of demanding the reference to the terminal function license from a main device (Refer to the preceding clause), the terminal continuously demands the allocation of the terminal function license for necessary a few minutes of the license. A main device searches for the terminal function license to which demanded "Function identification code" and "Terminal identification code" are made a retrieval key and it is corresponding in the data base. The number of decreases from which the number of remainder licenses is demanded are counted when corresponding information is found, the link information is added to the terminal function license management data, and the result is transmitted to the terminal. When the response is . OK", the terminal demands the reference to the license data again and makes the Video function effective.



3.11.1.6. Allocation of license data (failure)

The response becomes . NG" when the terminal function license is not installed or all the terminal function licenses are disbursed and there is no remainder and invalidating about the terminal is Video function. Moreover, the number of demand licenses remains, it becomes . NG" response when it is more than the number of licenses, and any license is not allocated.



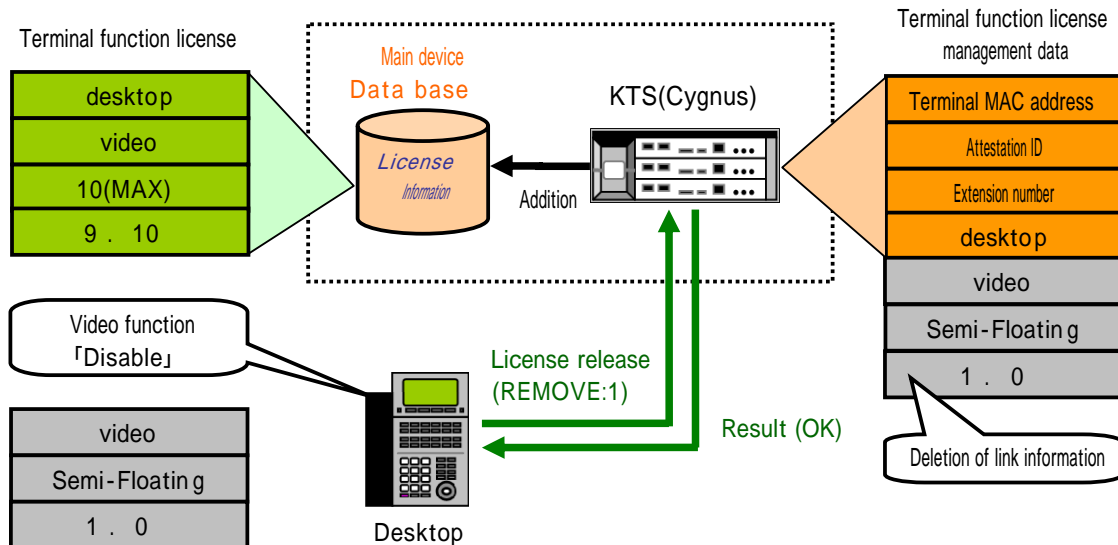
3.11.1.7. Release of license data

The terminal can demand the release of the terminal function license from a main device. The example is given and it explains operation as follows.

For instance, when the Video function is changed to . Disable" by the setting, the terminal demands the release of the terminal function license for necessary a few minutes of the license. A main device searches for the terminal function license to which demanded "Function identification code" and "Terminal identification code" are made a retrieval key and it is corresponding in the data base. When it adds for a few minutes from which the number of remainder licenses was demanded when corresponding information is found, it subtracts from the terminal function license management data for demanded a few minutes, and the number of allocation licenses becomes 0 as a result, the link information is deleted, and the result is transmitted to the terminal. When the response is . OK", the terminal demands the reference to the license data again and invalidates the Video function.

At this time, when it is more than the number of licenses that the number of release demand licenses has allocated, the number of licenses that has been allocated releases only release though it is assumed "NG" response. In a word, the number of remainder licenses becomes 0.

Urge the Video function not to do to be invalid, to display the error message, and to execute the license release again when the response is . NG".

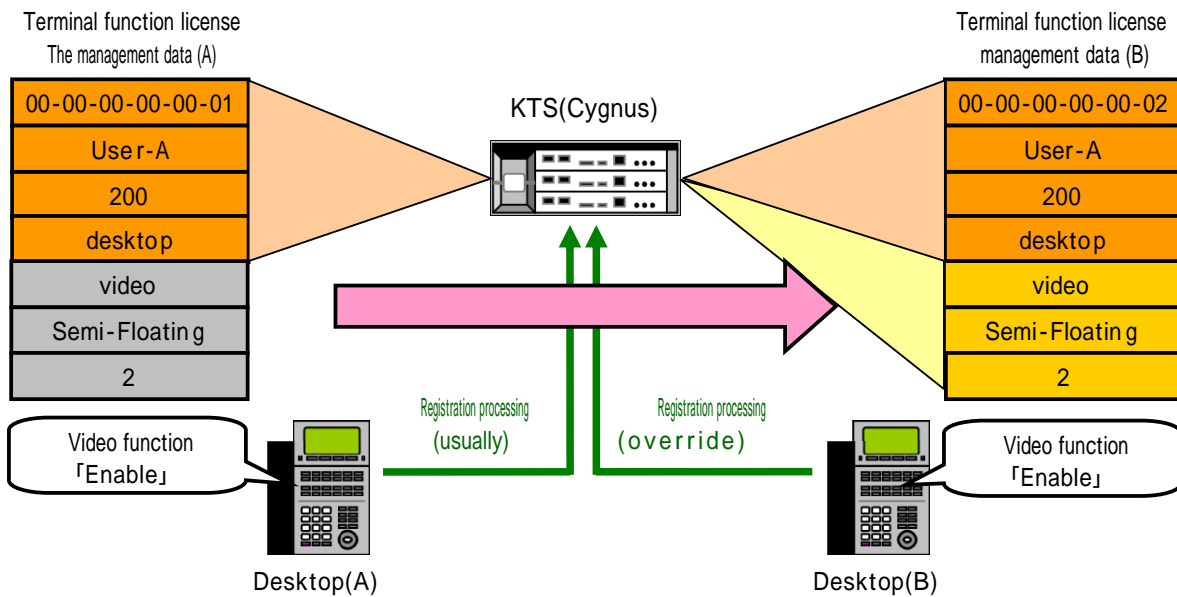


3.11.1.8. Succession of license data

The terminal can succeed to the terminal function license by the override function of KTS-SIP. The example is given and it explains operation as follows.

For instance, when user A logs it on from another desktop terminal B in same user ID, override is generated in the environment for which user A logs on from desktop terminal A and the Video function is used. At this time, a main device moves the link information on the terminal function license management data with the execution of override. User A comes to be able to use the Video function with desktop terminal B by this succession function.

When terminals of the breakdown etc. are exchanged, this function is effective. The user or those who construct it need not consider the movement of the license.



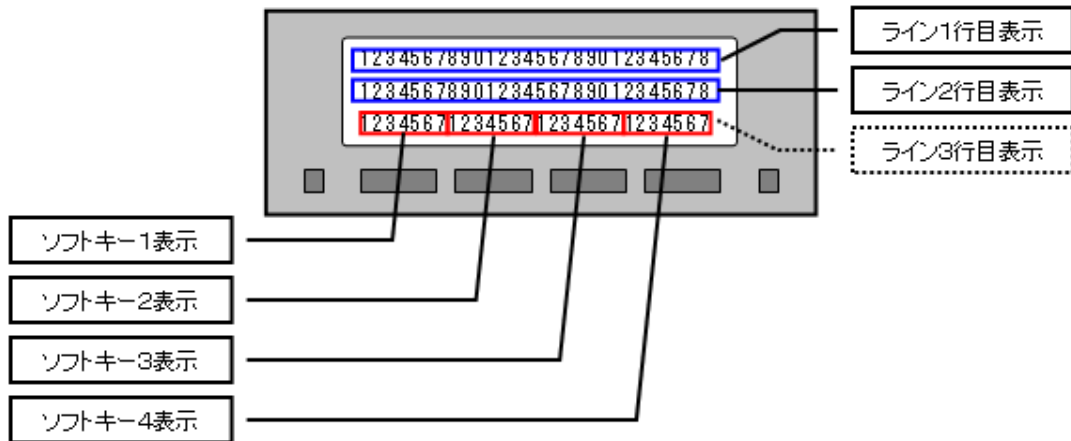
3.12. Desktop terminal originality function

3.12.1. Display enhancing

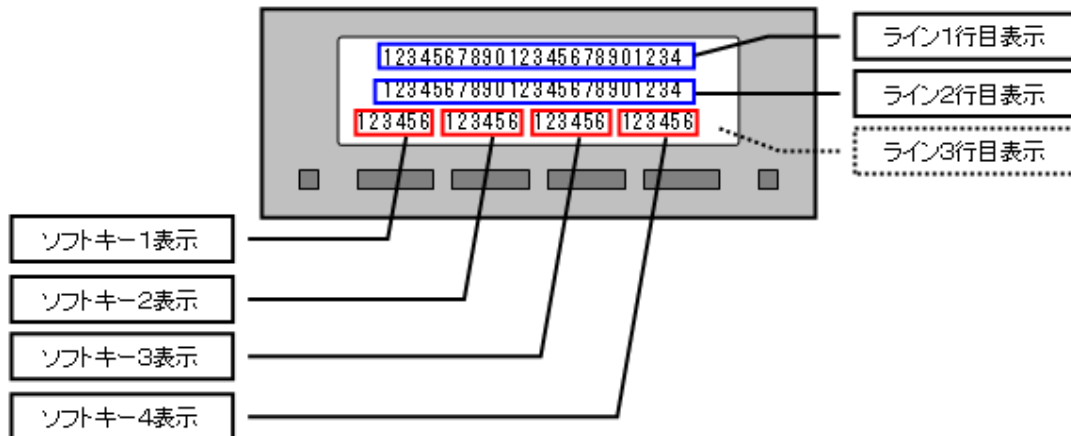
3.12.1.1. Display ability

- Economy

The Economy terminal with the display offers the area of the display of the character of 28 character x 3 line to a main device. It is enabled to direct it specifying it as a soft key display (seven characters or less) though the soft key display can be directed as the third line line display like the past.

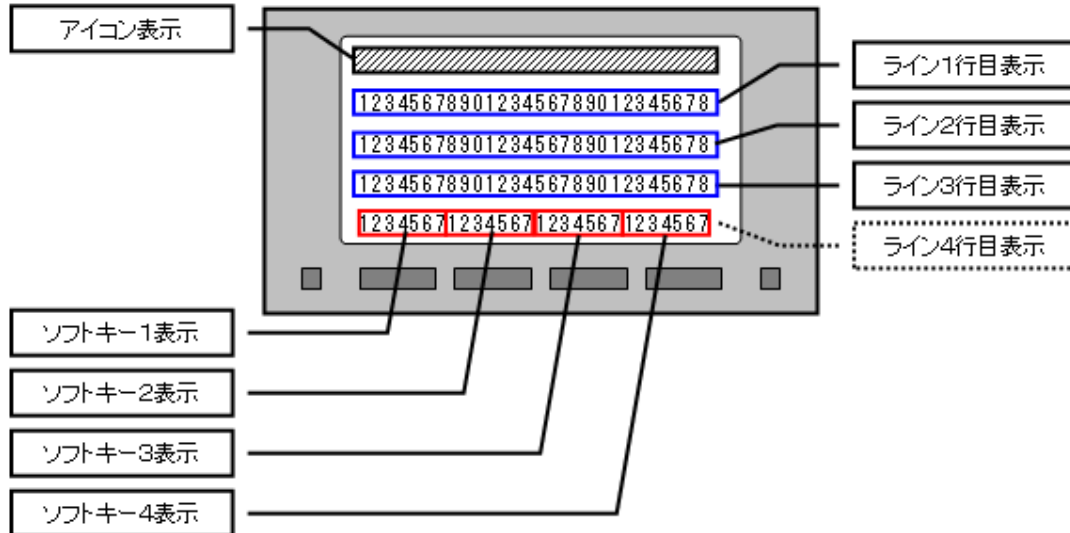


When 24 character x 3 line is displaying specified from a main device, directed line display information is centered with the terminal and displayed.

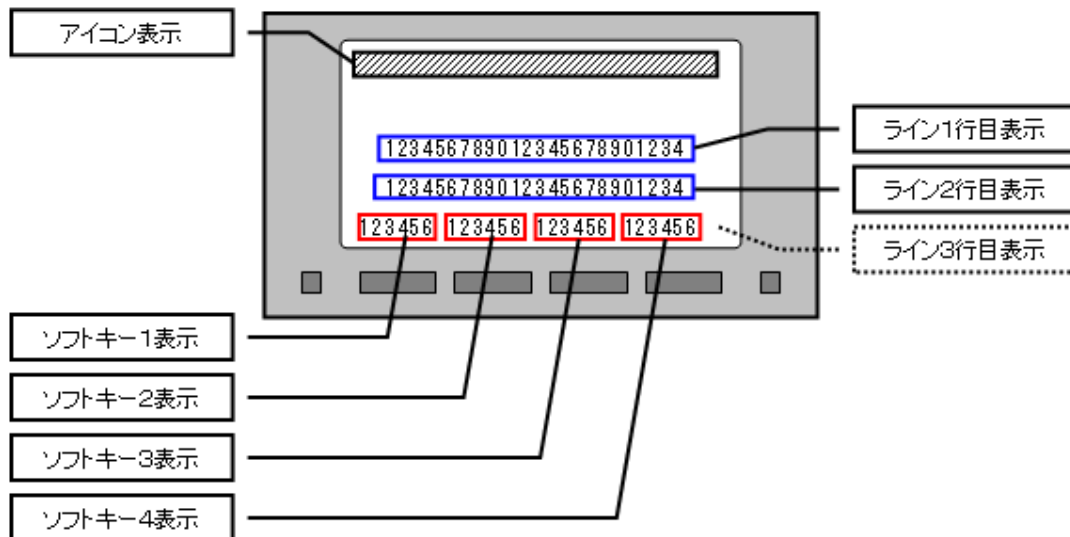


- Value

The Value terminal offers the area of the display of the character of 28 character x 4 line to a main device. It is enabled to direct it specifying it as a soft key display (seven characters or less) though the soft key display can be newly directed as the fourth line line display.

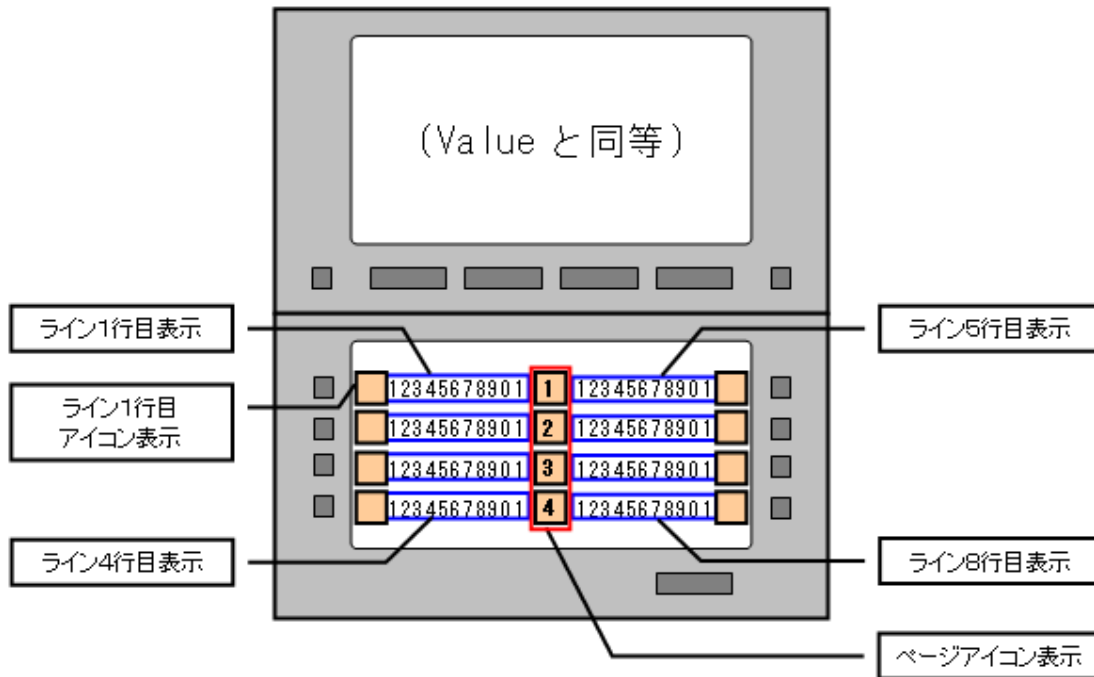


Directed the first line line display information is read in a different way as the second line line information when 24 character x 3 line is displaying specified from a main device, it centers with the terminal, and it displays it.



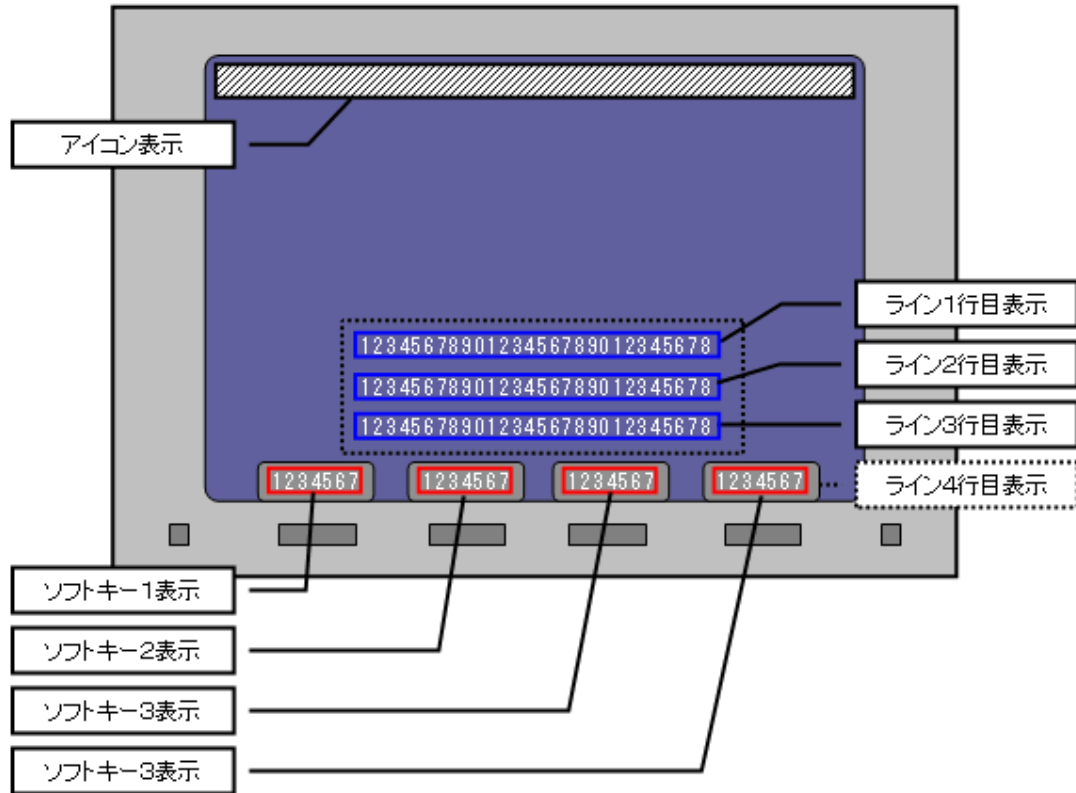
- Value(DESI-less)

The Value terminal with DESI-less mounts two displays. An upper display offers the area of the display of the character of 28 character x 4 line as well as a usual Value terminal. A lower display is enabled for the normal-width 11 characters and icons of each line to be displayed as a part DESI-less. Moreover, the area of eight line key character x 4 (maximum) display can be offered to a main device virtual, and respect switch information be displayed with the icon at the center of the display.

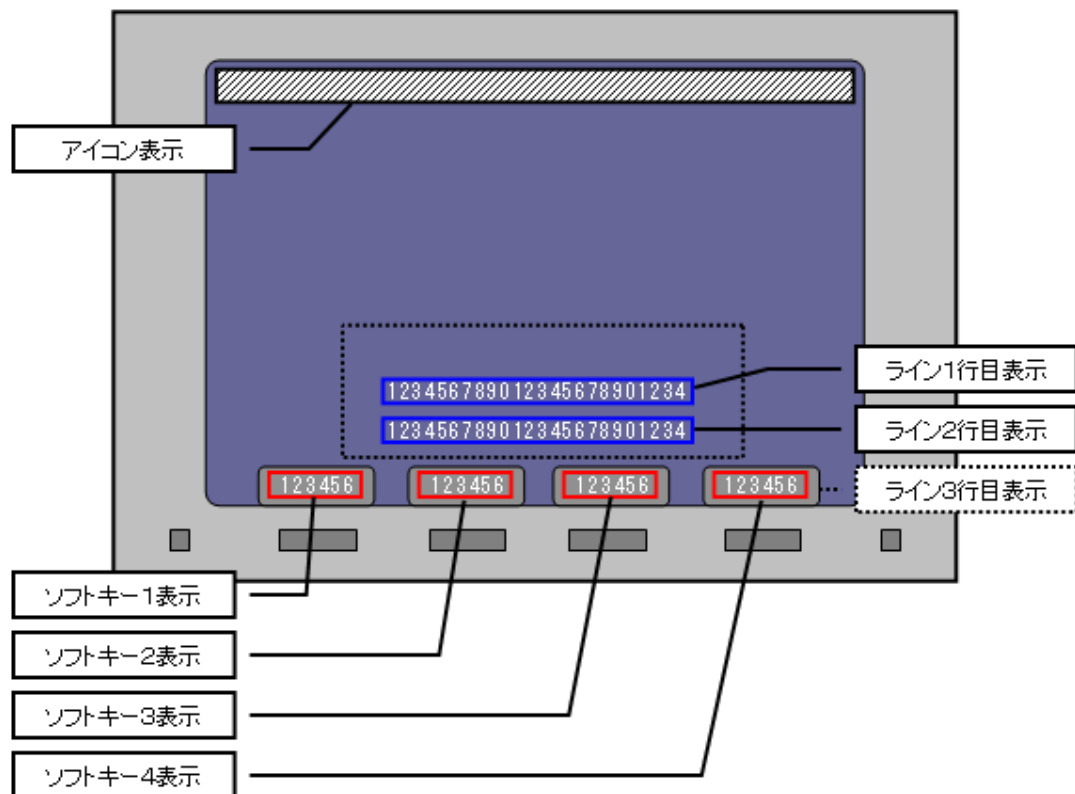


- Sophisticated

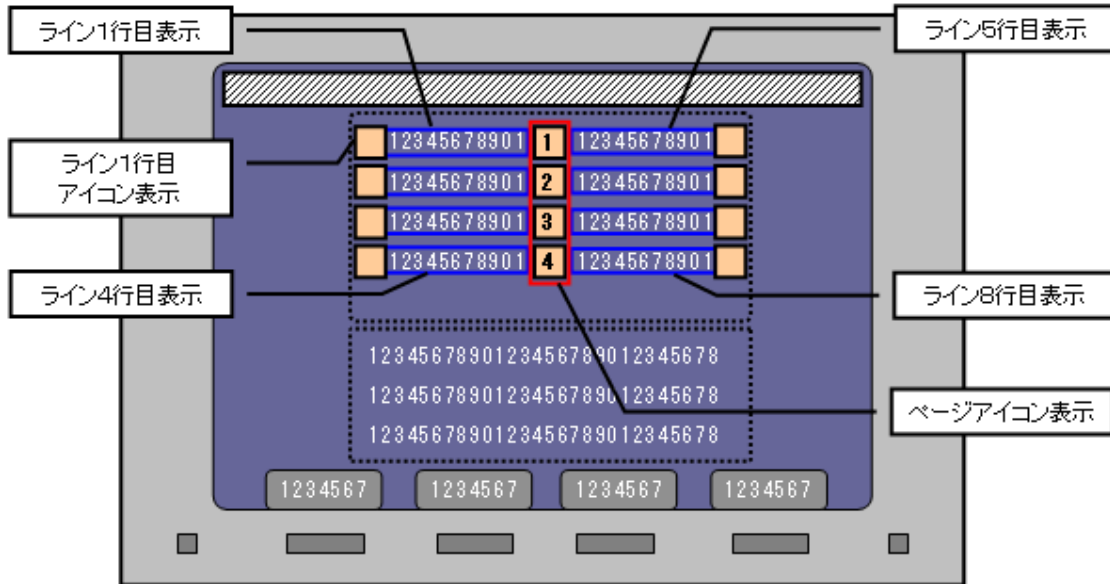
The Sophisticated terminal offers the area of the display of the character of 28 character x 4 line to a main device as well as the Value terminal. It is enabled to direct it specifying it as a soft key display (seven characters or less) though the soft key display can be newly directed as the fourth line line display.



Directed the first line line display information is read in a different way as the second line line information when 24 character x 3 line is displaying specified from a main device, it centers with the terminal, and it displays it.



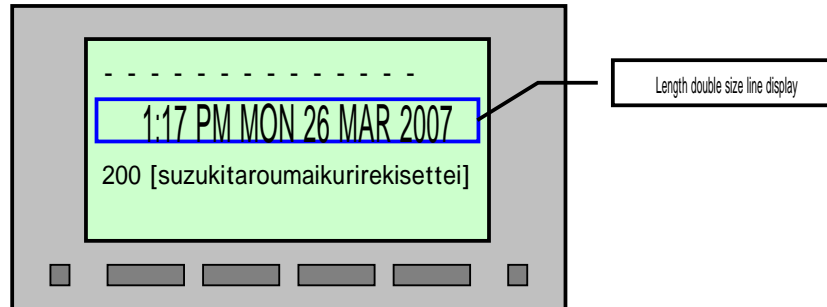
The Sophisticated terminal mounts virtual DESI-less in the display. It is enabled the display of the normal-width 11 characters and icons of each line as the part DESI-less. Moreover, the area of eight line key character x 4 (maximum) display can be offered to a main device virtual, and respect switch information be displayed with the icon at the center of the display.



3.12.1.2. Length double size line display

The Value/DESI-less/Sophisticated terminal enables a specified line of the display by the instruction from a main device and the length double size is enabled to be displayed.

When the Economy terminal is directed, it is disregarded.



3.12.1.3. Monochrome reversing display

The Economy/Value/DESI-less terminal enables the monochrome reversing display on the display by the instruction from a main device.

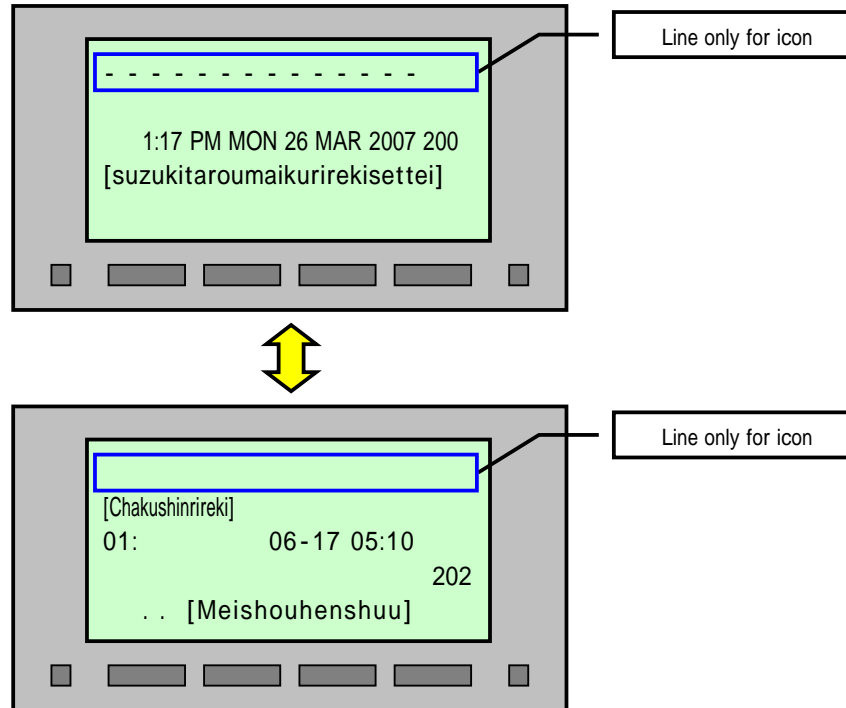
When the Sophisticated terminal is directed, it is disregarded.



3.12.1.4. Line display/non-display only for icon

The Value/DESI-less terminal enables the switch of display/non-display of the line only for the icon by the instruction from a main device.

When the Economy/Sophisticated terminal is directed, it is disregarded.

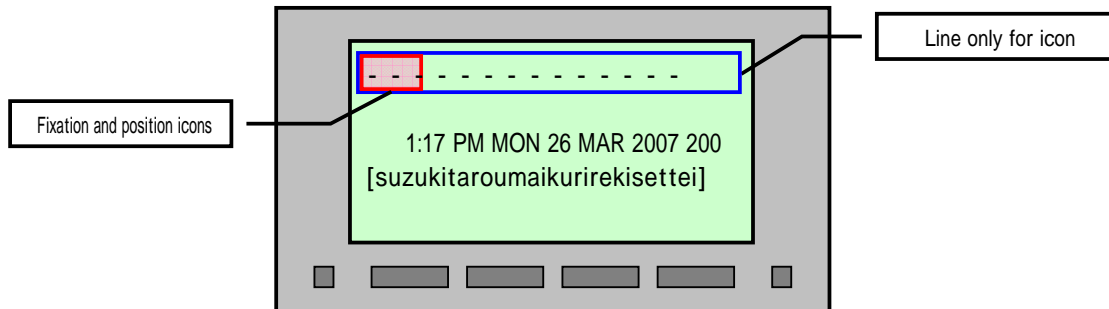


3.12.1.5. Fixation and position icon display

The Value/DESI-less/Sophisticated terminal enables the switch of non-fixation and the position icon display/display displayed in the line only for the icon by the instruction from a main device. When the function is not effective or the number of cases is 0, fixation and the position icons are assumed to be non-display. Fixation and the position icons that can be switched are as follows. •

- Absent message history
- Voice mail

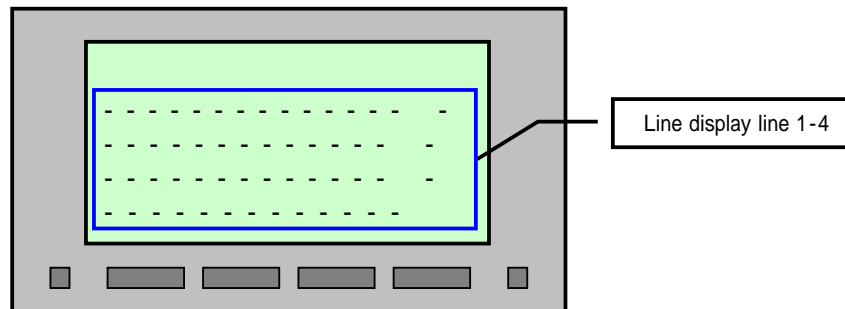
When the Economy terminal is directed, it is disregarded.



3.12.1.6. Specification and position icon display

The icon is enabled to be displayed in an arbitrary line display line by the instruction from a main device. However, the icon that can be displayed at the same time is assumed in the maximum until 16 pieces.

When the fourth line is directed to the Economy terminal, it is disregarded.

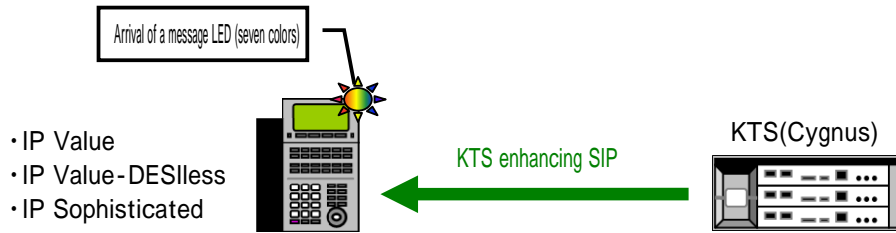


3.12.2. LED enhancing

A desktop terminal mounts seven colors LED on the incoming light in the following models. •

- IP Sophisticated
- IP Value
- IP Value-DESIlless

The control command is availably defined in the enhancement parameter of KTS enhancing SIP by the main device application though it usually uses for the state control by a local application.



Seven color LED control of the incoming light by the main device application is assumed to be an optional feature, and the support is assumed to be main device dependence.

3.12.3. Key enhancing

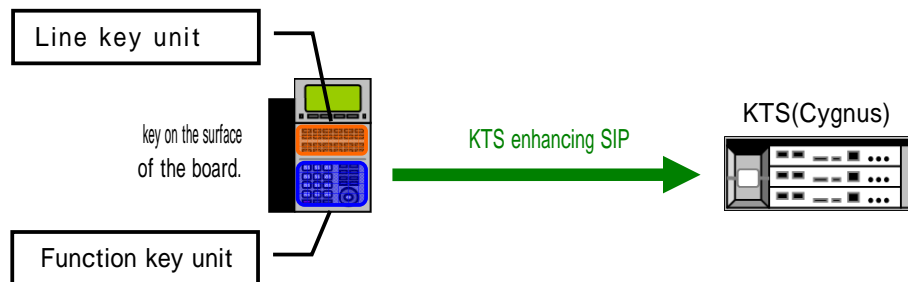
3.12.3.1. Customizing of key surface of the board

Because the line key and the function key part can be detached in a desktop terminal, the number, the function key type of the line key to the surface of the board, and arrangement can be customized according to the market as follows. •

Line key unit (2/6/12/24)

- Function key unit (15 kinds or less)

Refer to the appendix for the kind of the function key unit.



3.12.3.2. New, additional key

The following and new the key operation becomes possible by the model or the key surface of the board customizing in a desktop terminal. However, do not notify a main device the key event when using it only for a local control. •

- The menu key It depends on the key surface of the board.
- The cursor key It depends on the key surface of the board.
- The decision key It depends on the key surface of the board.
- A clear key Only the new user interface surface of the board for Japan ∴
- Page switch key Value-DESIIess/Sophisticated(*)
- The terminal protection key Economy is excluded.

- Desktop IP Phone that displays a virtual key on LCD though there is no physical

3.12.3.3. Right or wrong of sending key information

It is enabled the reception of information to judge whether to consider the operation to be a sending operation when the key operation in the telephone surface of the board is done besides the sending operation that the application offers with the terminal from a main device.

The terminal is whether it is operation to which the off hook operation can be sent by using this information when the hand set is done in the offhook with the telephone number displayed by the telephone book and the arrival and departure Makoto history application when a concrete usage example of right or wrong of sending key information is enumerated is judged. The kind of the key that a main device notifies for the right or wrong of sending judgment is as follows. •

- Changeable function key
- Fixed function key
- Hand set
- Option changeability function key
- Option fixation function key

3.12.4. Tone enhancing

3.12.4.1. Download tone control

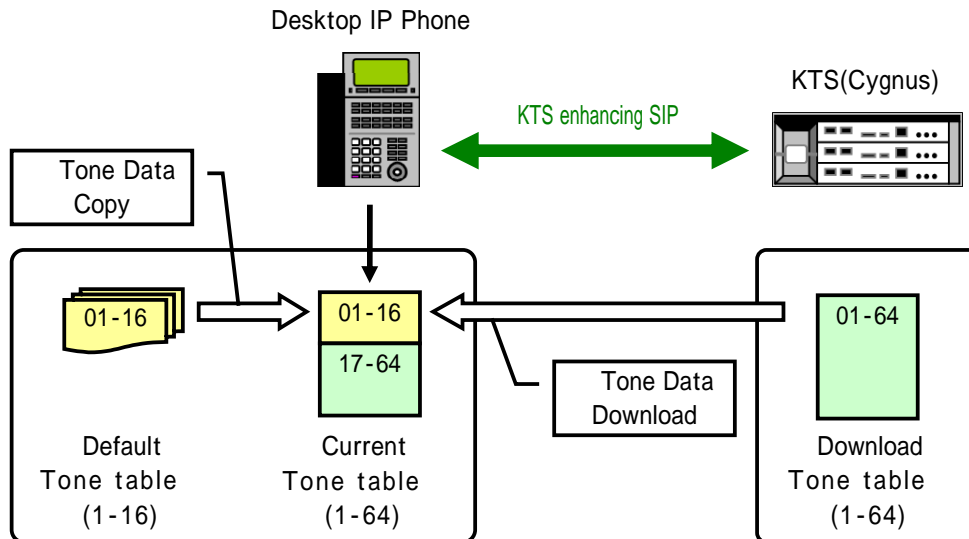
A desktop terminal controls the tone data downloaded from a main device with call progress tone information that each each country prepared. The number of tones to be able to control a desktop terminal internally executes the tone rumbling by using the tone data set to the current tone table after it is assumed that 64 patterns or less, and is executed the tone initialization according to the procedure for explaining as follows.

Tone Data Copy

The terminal copies the tone data of default (16 patterns or less) onto the area of current tone table No.1-16 based on area ID specified from a main device when starting.

Tone Data Download

When the download tone is instructed from a main device, the terminal copies data onto the area of table No for which the current tone table is specified. At this time, it becomes rewriting the default tone data when No.1-16 is specified, and when No.17-64 is specified, it becomes a new addition of the tone data.



An existing default tone pattern is defined to specify it by no "Table No", and "Tone name". Convert into "Table No" in a desktop terminal when "Tone name" is specified by assuming the one specified by "Table No", and using an existing interface and control the current tone table for the download tone function.

V e r s i o n c o r r e c t i o n	p a g e		
TSX-xxxxx-xxx-xxxx	1.2	-	72/516

3.12.4.2. Short ring control

The function of a sound at the cycle that is shorter than usual [ringa] rumbling to direct rumbling by the one shot. It chiefly uses it for the operation confirmation sound etc. of the service set tone etc. in the application on the main device side.

3.12.4.3. New ring control (addition of tone specification)

The interface to enhance the specification of the tone to usual [ringa] rumbling is prepared.

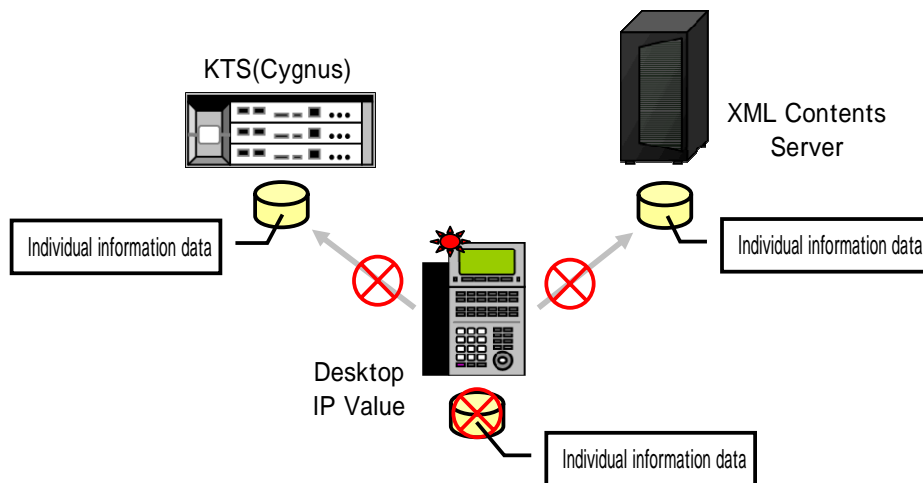
3.12.5. Terminal protection

The function to protect the data that can be referred and the unlawful computer access to the service that can be used from the terminal. Security can be made effective one-touch by pressing the protection key to the terminal. The user can select the protection level of High/Middle/Low of three stages, and locks all the call services that exclude an urgent dial for the High level. The user inputs the password, the lock release is done, and it is also possible to put the limitation and the password input lock of the trial frequency to prevent unlawful computer access.

3.12.5.1. Protection of personal information (Low level)

The level by which the access to the individual information data that exists in a local terminal, a main device, and the server is locked. The selection of the menu entry to access individual information becomes invalid while executing the terminal protection.

The individual information data that can be locked with the terminal is limited to the one accessed by way of the menu. The access by the operation (special show etc.) not to be able to judge the terminal should judge the lock with a main device. The individual information lock function by the main device judgment is assumed to be an option, and the support is assumed to be main device dependence.



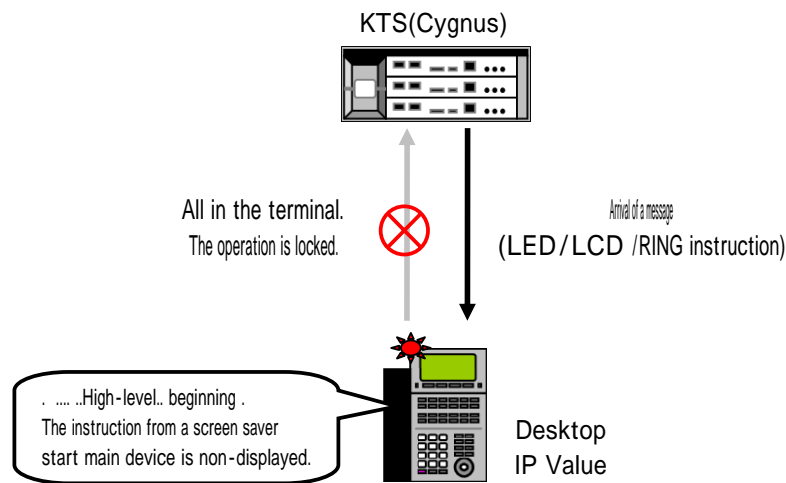
3.12.5.2. Protection of corporate information (Middle level)

The level by which the access to the corporate information data that exists in a main device and the server in addition to the protection of personal information is locked. The selection of the menu entry to access individual information and corporate information becomes invalid while executing the terminal protection.

The corporate information data that can be locked with the terminal is limited to the one accessed by way of the menu. The access by the operation (special show etc.) not to be able to judge the terminal should judge the lock with a main device. The individual information lock function by the main device judgment is assumed to be an option, and the support is assumed to be main device dependence.

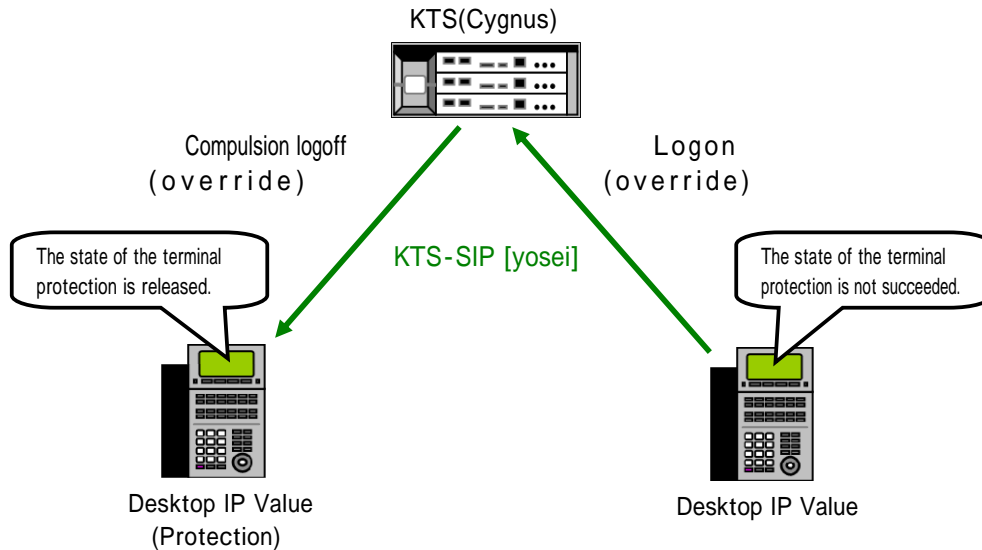
3.12.5.3. Protection of call service (High level)

The level by which all the accesses to the call service are locked. The screen saver starts, and the event is not notified to a main device as long as it doesn't unlock while executing the terminal protection at all by the password input. Moreover, the arrival of a message control instruction from a main device is assumed to be the one to control only arrival of a message LED and the ring rumbling, and neither other LCD displays nor line key LED controls are executed.



3.12.5.4. Operation at override

The lock of the terminal protection is released when logging it on from other same type terminals when the terminal protection is being executed (override). It is because there is no obstacle on security because the compulsion logoff is done as for the terminal where override is done even if the lock is released the purpose is to be able to judge that this executed override from other terminals so that the user may use the telephone. At this time, it differs from the roaming of personal data, and the lock of the terminal protection is not succeeded to the override side terminal. This means the lock of the terminal protection accompanies "Terminal".



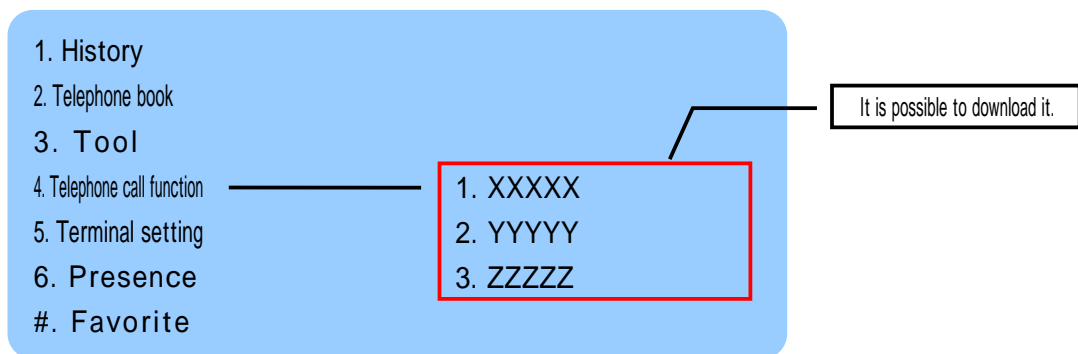
3.12.6. Terminal menu

3.12.6.1. Menu composition

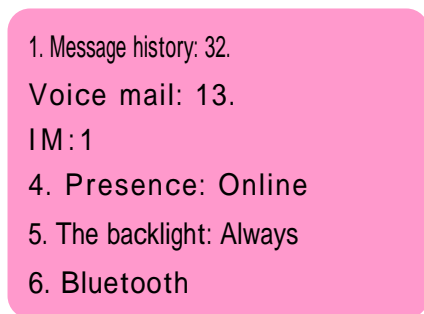
The menu that can be displayed with the terminal is assumed to be two "Local menu" and "Short cut menu" roughly separately. "Local menu" is composed of the today's special etc. that an application, a terminal setting, and a main device of an original terminal offer, and "Short cut menu" is composed of the service that the user frequently uses.

The menu tree after the main device today's special "Telephone call function" in "Local menu" is selected is enabled for service different according to download in each main device to be provided.

. local menu .



. short cut menu .



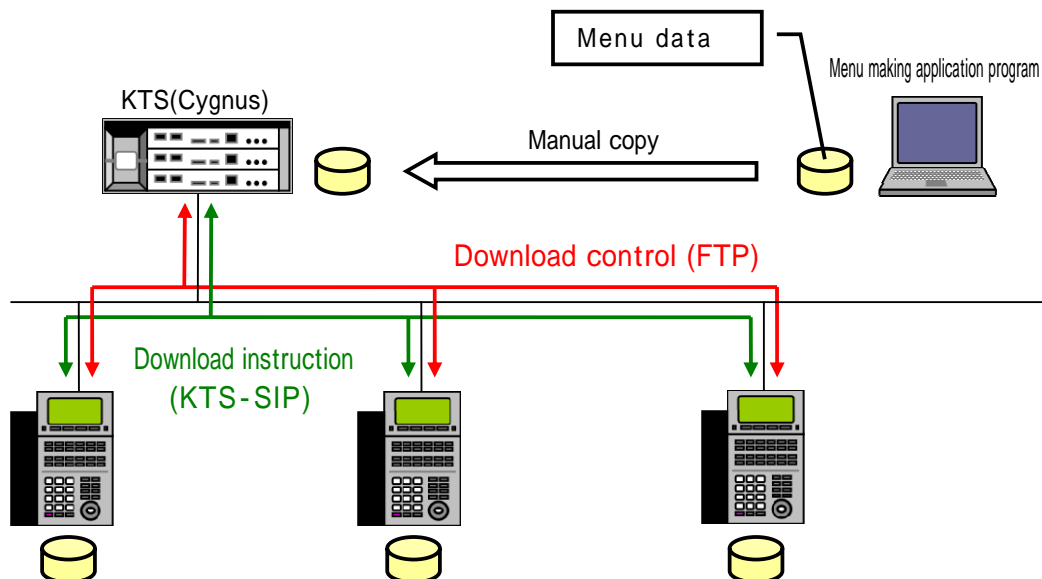
3.12.6.2. Menu download

The main device today's special is made according to the menu making application program only for a desktop terminal. The menu making is enabled to be made easily by inputting the event when the tree composition, the item name, and the item is selected by GUI that the application offers. The made menu is different though automatically makes to data, compresses, and outputs it by the application by the file format that can be downloaded according to the presence of the FTP server of the means to download the output menu data file to a desktop terminal.

- When you mount the FTP server on a main device

The menu data that the application made is copied onto the memory in a main device when the FTP server is mounted on a main device and it downloads it to the terminal. Support both the method that directs from a main device and the method to execute by the terminal operation about beginning of download.

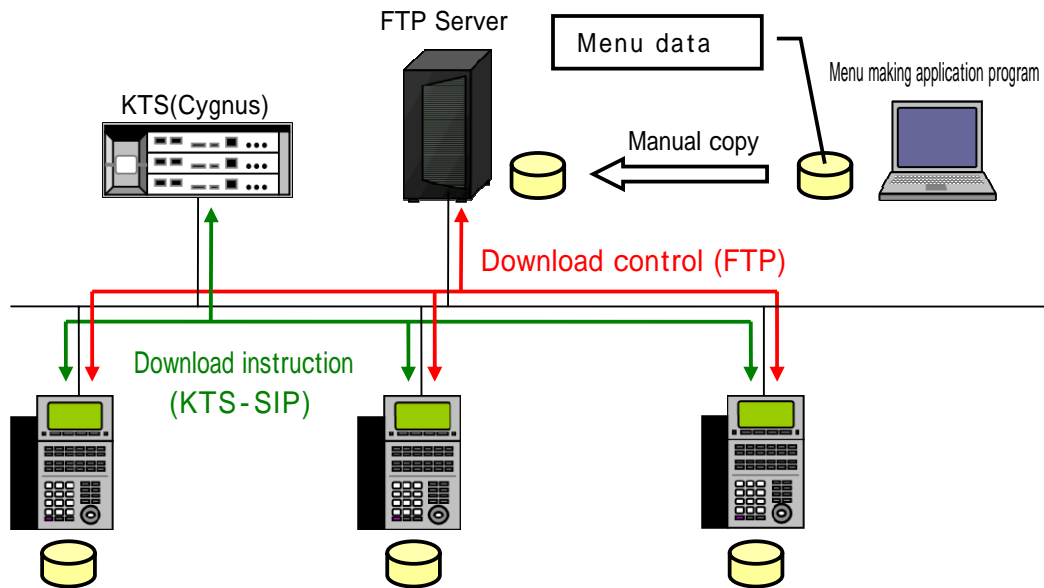
Download doesn't begin automatically in each method. Keep assuming the one preserved in the nonvolatile memory of the terminal, and maintain the downloaded menu data as long as it is not directed to delete it from a main device.



- When you do not mount the FTP server on a main device (The external FTP server is used)

The FTP server is not mounted on a main device, and the menu data that the application made is copied onto the memory in the FTP server when downloading it by using the external FTP server and it downloads it to the terminal. Support both the method that directs from a main device and the method to execute by the terminal operation about beginning of download.

Download doesn't begin automatically in each method. Keep assuming the one preserved in the nonvolatile memory of the terminal, and maintain the downloaded menu data as long as it is not directed to delete it from a main device.

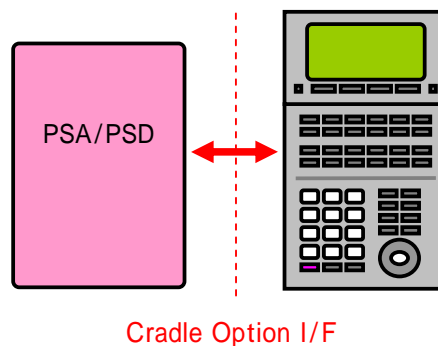


3.12.7. Option equipment only for desktop terminal

The connection of the option equipment is supported in desktop terminals except Economy. Three (Cradle option I/F (left side), side option I/F (right side), and bottom option I/F (lower side)) are prepared in a desktop terminal as an interface for the option equipment connection.

3.12.7.1. Cradle option I/F

In the default composition, a standard hand set and standard Cradle are physically arranged at the position in which the Cradle option is connected. When Cradle option I/F is used, it becomes a standard hand set, standard Cradle, and exclusive use. Moreover, to arrange Cradle for BTH at this position physically when BTC is connected with bottom option I/F, I/F becomes exclusive use similarly though it doesn't use. -

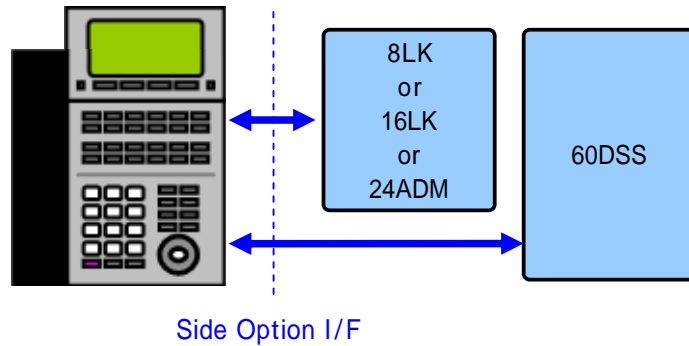


PSA/PSD

The option equipment of the line accommodation adaptor for the power failure. It recognizes it as "Power failure adaptor" regardless of the type of ..desktop telephone.. line though there are two kinds of . PSD" that can connect the ISDN line.

3.12.7.2. Side option I/F

The options that can be connected with side option I/F are 4 of the following, and are "8LK" "16LK" among these "24ADM" becomes an exclusive connection. -



8LK/16LK

The option equipment for the line key increase. -

60DSS

The option equipment of the DSS console with 60 line keys.

- This function might be used as virtual DSS option in the softphone.

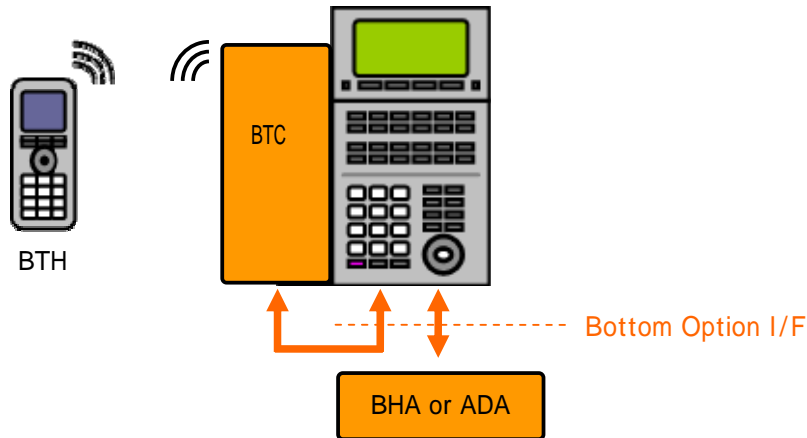
- 24ADM

- It is assumed an enhancement item now.

The option equipment of an add-on module with the line key with 24 displays.

3.12.7.3. Bottom option I/F

The option that can be connected with bottom option I/F is 3 of the following, and becomes an exclusive connection. Moreover, when the BTC option is used, it becomes exclusive use with the Cradle option equipment.



- ADA

The option equipment of the adaptor for the recording. The telephone call recording and the message reproduction service by the PC application through the recording adaptor can be achieved by specifying the switch of an analog voice passing from a main device for a desktop terminal and the recording adaptor. -

BHA(Bluetooth Hub Adapter)

- It is assumed an enhancement item now.

The option equipment of the bluetooth hub adaptor. It is possible to use it by connecting a general-purpose bluetooth equipment.

- BTC(Bluetooth Cradle)& BTH(Bluetooth Handset)

- It is assumed an enhancement item now.

BTH is a bluetooth made of its company hand set, and BTC is an option equipment of Cradle where a special access point where it accommodates BTH is mounted.

4. Basic sequence of KTS enhancing SIP

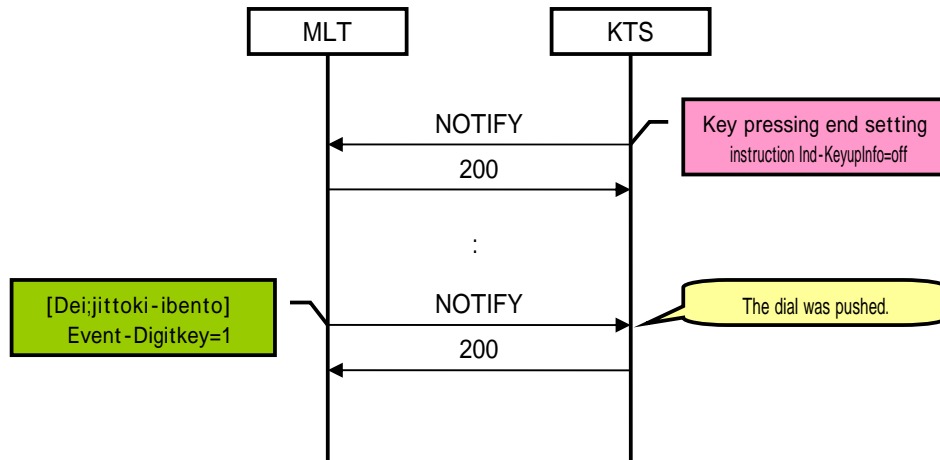
4.1. Dial notification

4.1.1. Key pressing state notification

4.1.1.1. Terminal key event notification (There is no pressing end notification).

The terminal notifies the terminal key event when key pressing end setting instruction (Ind-KeyupInfo) parameter is not directed from a main device or . off" is specified from a main device specifying it according to timing in which the surface of the board key is pressed.

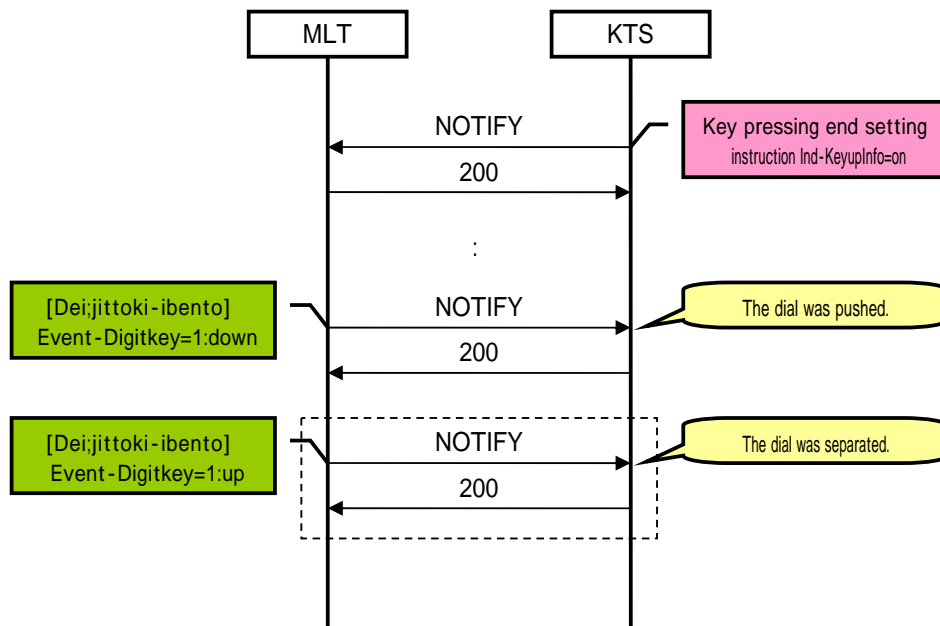
The key long push event is not supported. Moreover, the key must consider not to notify the key event of pushing on the terminal side simultaneously because it doesn't correspond basically about pushing on the main device side simultaneously.



4.1.1.2. Terminal key event notification (Pressing end notification and exist).

The key was pushed from the terminal for KTS-SIP to provide original service by the state of the key pressing in KTS and the state notification is needed apart. The terminal for KTS-SIP must do the state notification after that according to not only the key pressing notification but also timing in which the key is separated when the key pressing state notification beginning demand by a main device is received. However, the notification of the state to separate the key is made only about the changeable function key and [dei;jittoki-].

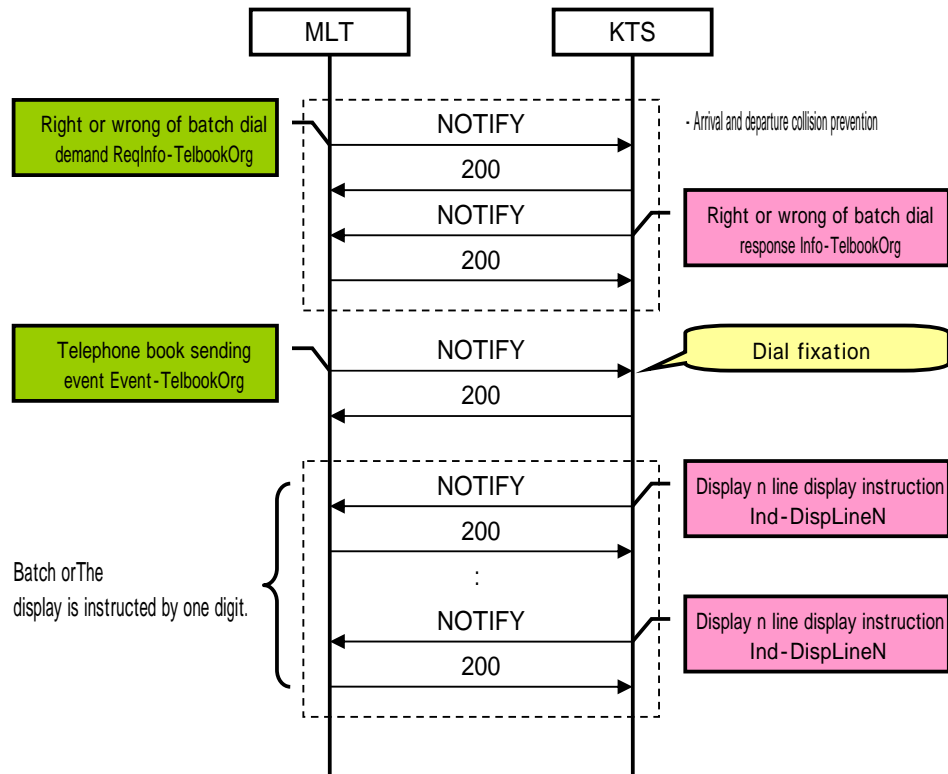
The key long push event is not supported. Moreover, the key must consider not to notify the key event of pushing on the terminal side simultaneously because it doesn't correspond basically about pushing on the main device side simultaneously.



4.1.2. Batch dial notification

Multi..line..terminal..local..telephone book..already..fix..dial..informatio
n..request..device..batch..notify.The number is fixed judging number information from the batch dial notification event,
and [tokoro] call in reasons to the arrival of a message side are begun.

The digit number that can be specified in the batch dial notification event is assumed until 32 digits or less, and [deijitto] information that exceeds it is disregarded on the main device side. Moreover, the batch or one digit is transmitted from the main device side by the NOTIFY request about the LCD display instruction.

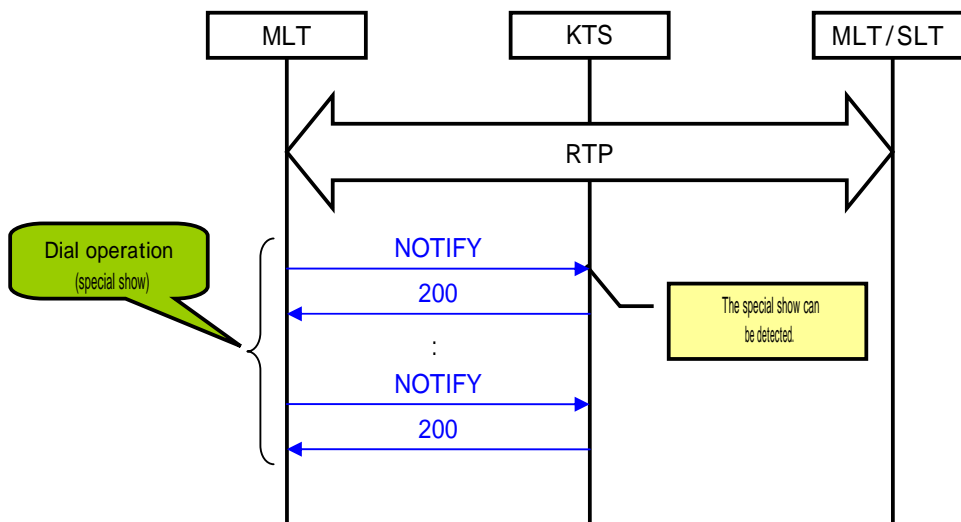


4.1.3. Special show operation (additional dial)

Various functions can be achieved as a main device function by the special show operation (additional dial) in the state while talking over the telephone (RTP establishment). It becomes dial well informed man wisdom by DTMF (Inband or Outband) by the NOTIFY message as a means to notify a main device the special show operation when being talking over the telephone in dial well informed man wisdom and standard SIP in KTS-SIP.

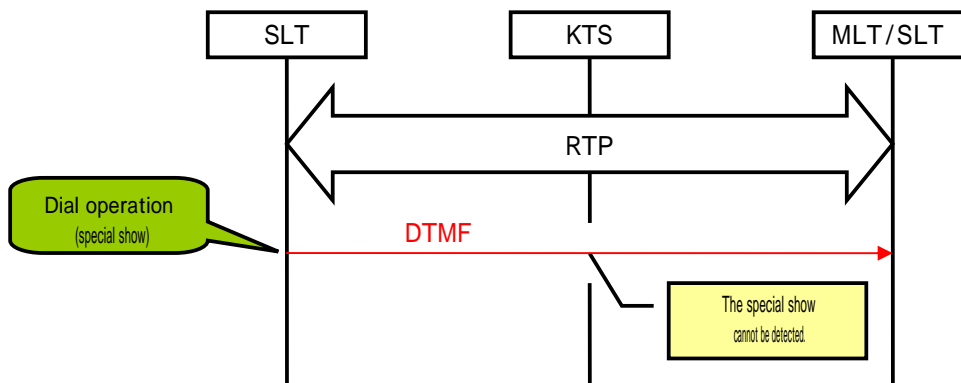
4.1.3.1. For KTS-SIP

The special show detection with a main device becomes possible because it notifies a main device dial information by the NOTIFY message when RTP session Peer to Peer is connected between terminals. Therefore, when RTP session Peer to Peer is connected between terminals, the special show operation from the KTS-SIP terminal is assumed to be executable.



4.1.3.2. For standard SIP

The RTP packet comes not to pass a main device easily to notify dial information with DTMF (Inband or Outband) when RTP session Peer to Peer is connected between terminals, and the special show detection with a main device becomes impossible. Therefore, when RTP session Peer to Peer is connected between terminals, the special show operation from standard SIP terminal is assumed to be a functional restriction because it becomes impracticability.

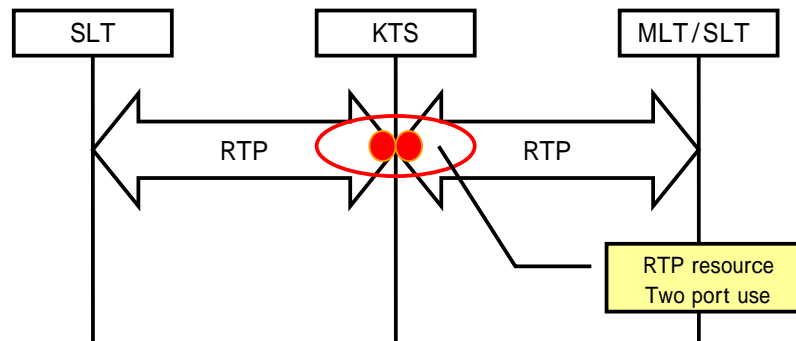


4.2. Peer To Peer mode in RTP session

The special show operation from standard SIP terminal is impracticability though the special show operation from KTS-SIP is executable when RTP session Peer to Peer is connected between terminals. The DTMF detection with a main device becomes possible because it connects not RTP session Peer to Peer connection but main device RTP session terminal between terminals because the special show operation (additional dial) from standard SIP terminal becomes DTMF (Inband or Outband) sending. The special show operation is released with a main device, and therefore, the special show operation from standard SIP terminal becomes executable because detection becomes possible, and the functional restriction can be released. However, a simultaneous number of telephone calls as the entire system will decrease because the RTP resource also has the limit by being use a lot of RTP resources of a main device compared with connecting RTP session Peer to Peer between terminals when main device RTP session terminal is connected.

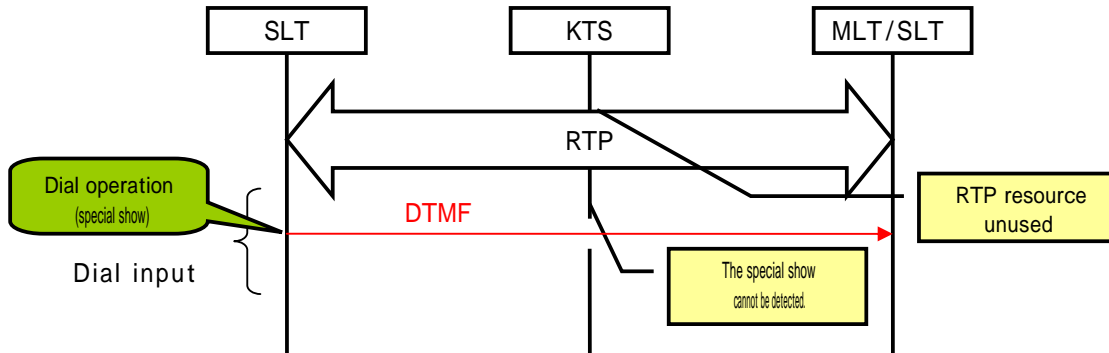
Install "RTP Peer to Peer mode (Japanese syllabary name)" in the setting of a main device as the above-mentioned measures, and select whether to give priority to RTP Peer to Peer to standard SIP by the user's operation.

However, always operate in the RTP Peer to Peer mode in the telephone call between KTS-SIP terminals regardless of this setting because there is no limitation concerning RTP Peer to Peer. Moreover, it is SIP outside. RTP Peer to Peer of the terminal and H.323 outside line/NGT terminal is assumed to be the one that KTS-SIP and standard SIP terminal are not done.



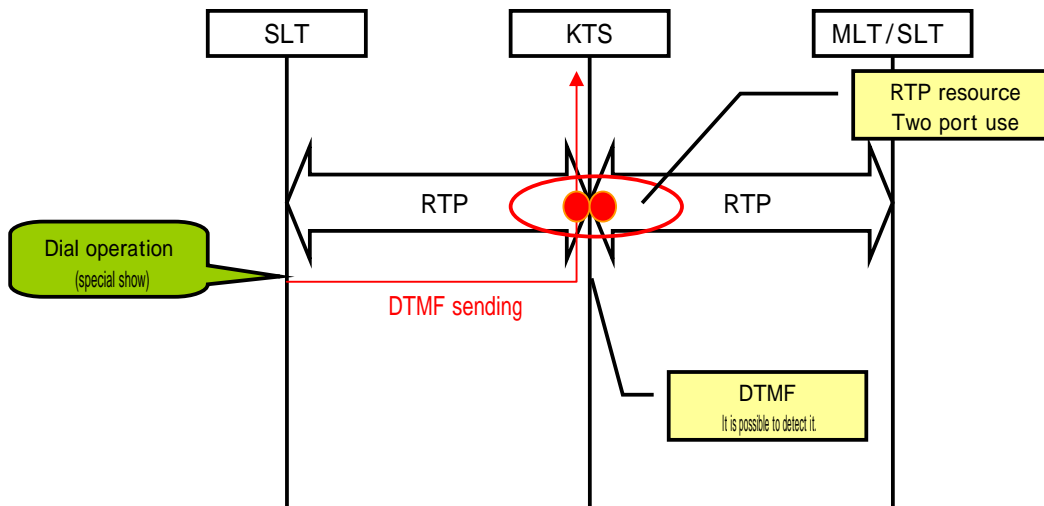
4.2.1. Peer To Peer mode: Turning on (main device RTP resource priority)

It is assumed RTP session Peer to Peer connection between terminals regardless of KTS-SIP/standard SIP. The special show operation function from standard SIP terminal when being talking over the telephone becomes impossible though a lot of simultaneous numbers of telephone calls as the entire system can be secured by connecting RTP session Peer to Peer between terminals because the RTP resource of a main device is not used.



4.2.2. Peer To Peer mode: Turning off (standard SIP special show function priority)

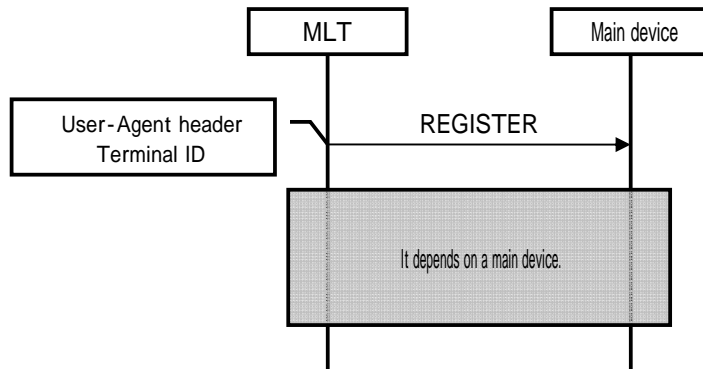
When either terminal is standard SIP, it is assumed main device RTP session terminal connection. Because the RTP resource of a main device also has the limit, a simultaneous number of telephone calls as the entire system decreases the RTP session by the RTP resource of a main device though the special show operation function becomes possible because it can detect DTMF (additional dial) in the special show operation from standard SIP terminal by terminal [suru] use.



4.3. Registration

4.3.1. Terminal identification and main device identification

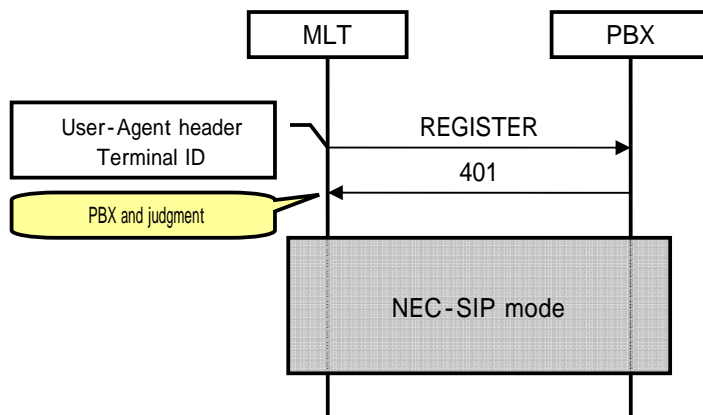
The difference between NEC-SIP and KTS-SIP in registration is the points that the character string set to the User-Agent header of the REGISTER request transmitted from the terminal is considered, "Arbitrary character string" by a main device or is considered to be "Terminal ID".



Specification	Difference point
NEC-SIP	The terminal sets specified character string . (NECSIPEXT2MLUA_v1)" that shows conforming to an arbitrary character string and NEC-SIP that shows the terminal type like vender information etc. in the User-Agent header. Main device (PBX) checks only the character string in parentheses.
KTS-SIP	The terminal sets specified character string that shows terminal ID in the User-Agent header and specified character string . (NECSIPEXT2MLUA_v1)" that shows conforming to NEC-SIP. Both terminal ID and character strings in parentheses main devices (KTS) are checked.

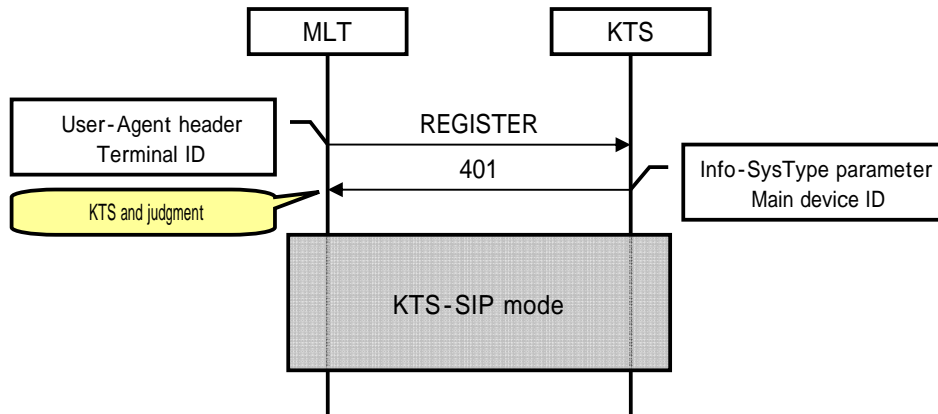
4.3.1.1. When a main device is PBX

Because the character string that the terminal for KTS-SIP set to the User-Agent header as "Terminal ID" is not checked as an arbitrary character string when a main device is PBX, it doesn't influence the NEC-SIP operation. Moreover, because the Server header that sets main device ID to 401 responses of which PBX replies is not contained, the terminal for KTS-SIP can identify "PBX" a main device, and switch operation to the NEC-SIP mode.



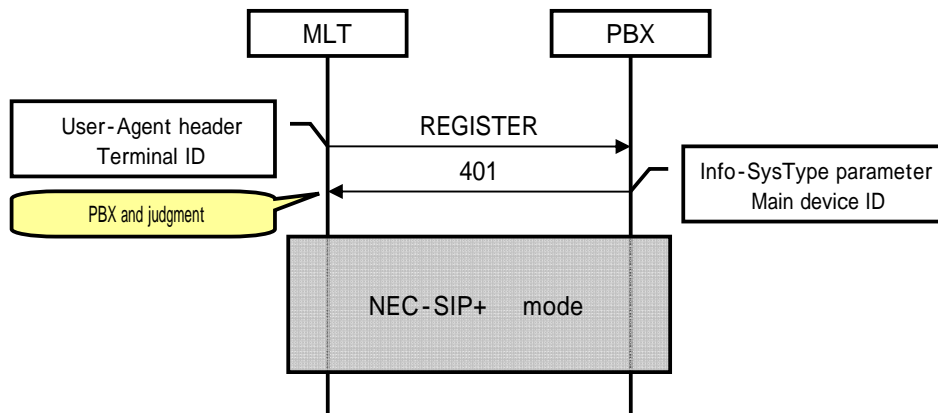
4.3.1.2. When a main device is KTS

When a main device is KTS, the character string that the terminal for KTS-SIP set to the User-Agent header as "Terminal ID" is checked as information that shows the terminal type, and controlled as KTS-SIP terminal. Moreover, because system type information (Info-SysType) parameter that sets main device ID to 401 responses of which KTS replies is included, the terminal for KTS-SIP can identify "KTS" a main device, and switch operation to the KTS-SIP mode.



4.3.1.3. For PBX that a part of main device corresponds to the new feature

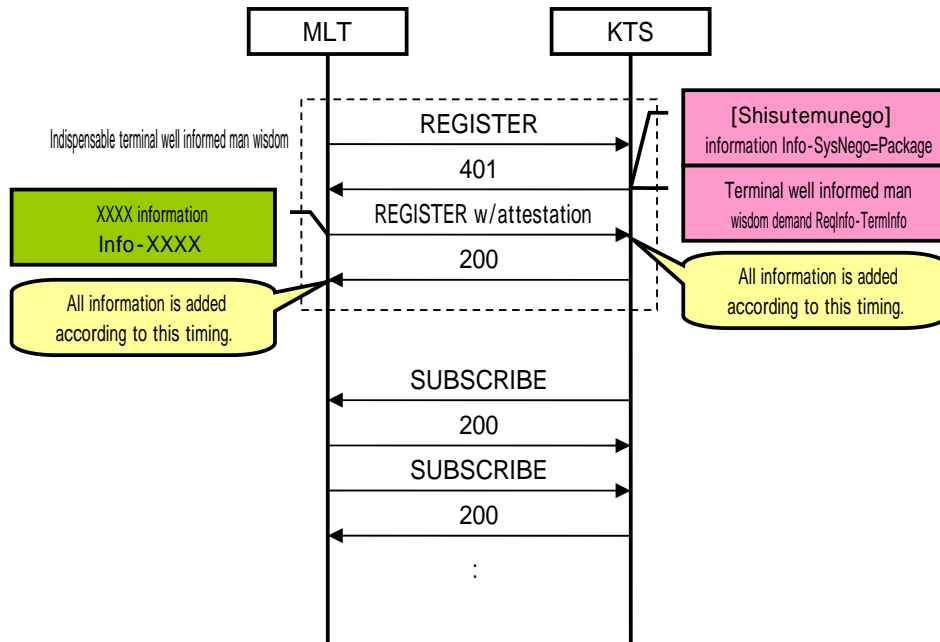
The character string that the terminal for KTS-SIP set to the User-Agent header as "Terminal ID" is checked as information that shows the terminal type, and controlled as KTS-SIP terminal for PBX that a part of main device corresponds to the new feature. Moreover, because the Server header that sets main device ID to 401 responses of which KTS replies is contained, it can be identified that a main device is "PBX", and switch the terminal for KTS-SIP to operation that adds a part of new feature to the NEC-SIP mode.



4.3.2. Batch transmission of terminal well informed man wisdom

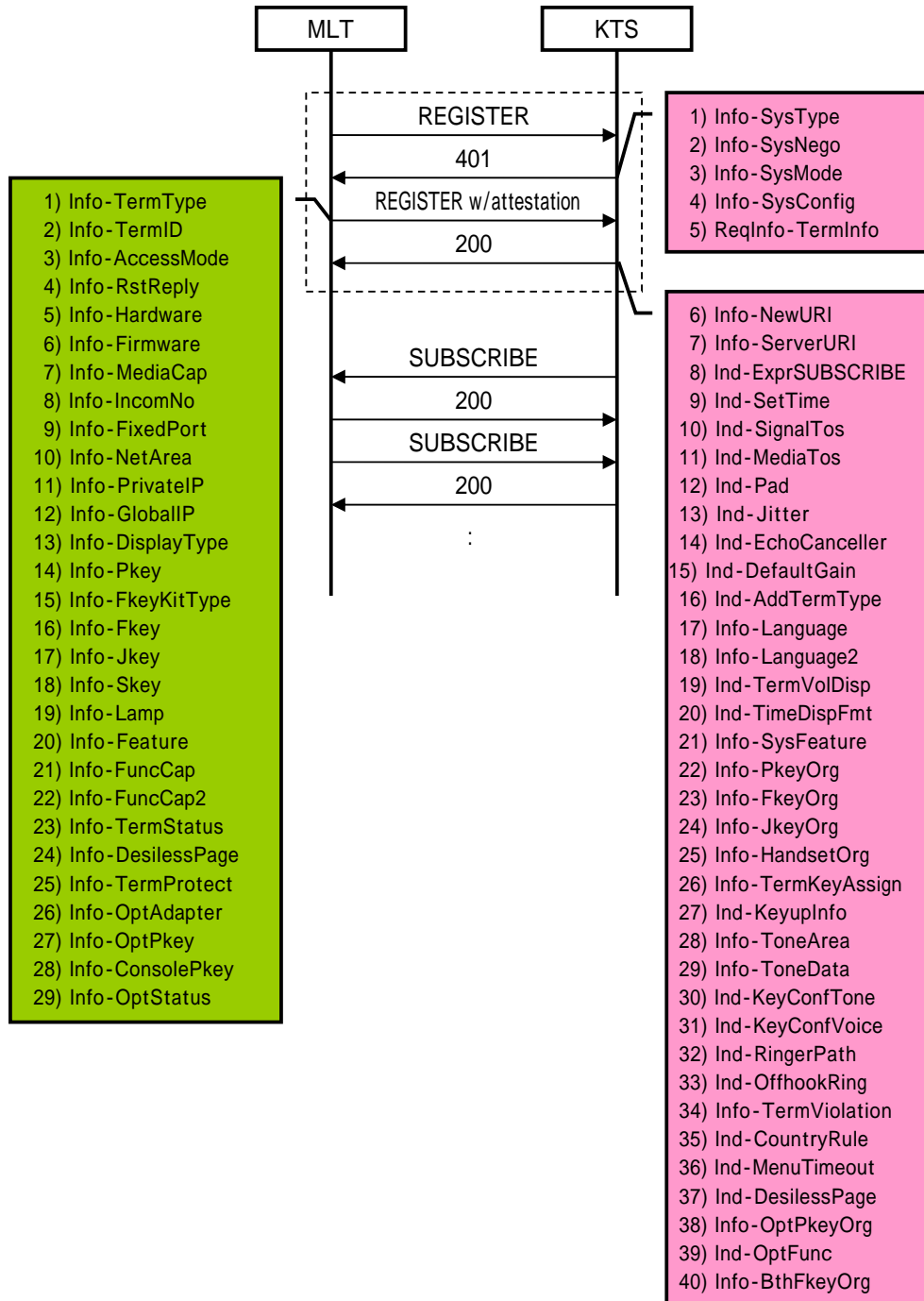
When "Package" is specified for [shisutemunego] information (Info-SysNego) parameter added to 401 responses to an initial REGISTER request from the terminal, the terminal is transmitted adding all the enhancement parameters necessary for the start to the REGISTER request with the attestation. On the other hand, a main device also transmits adding all the enhancement parameters necessary for the start to 200 responses similarly.

The fragmentation of the packet is not correctly executed in the network environment with which SIP-ALG etc. are connected so that the size of the packet of one message may exceed 1500 bytes, and the problem that the registration processing cannot be normally completed occurs. However, this batch transmission sequence is the one using it on the assumption of the network environment to which the communication is normally done even if the fragmentation of the packet is generated, and it is effective to shorten the uptime of the terminal.



4.3.2.1. Information exchanged by REGISTER transaction

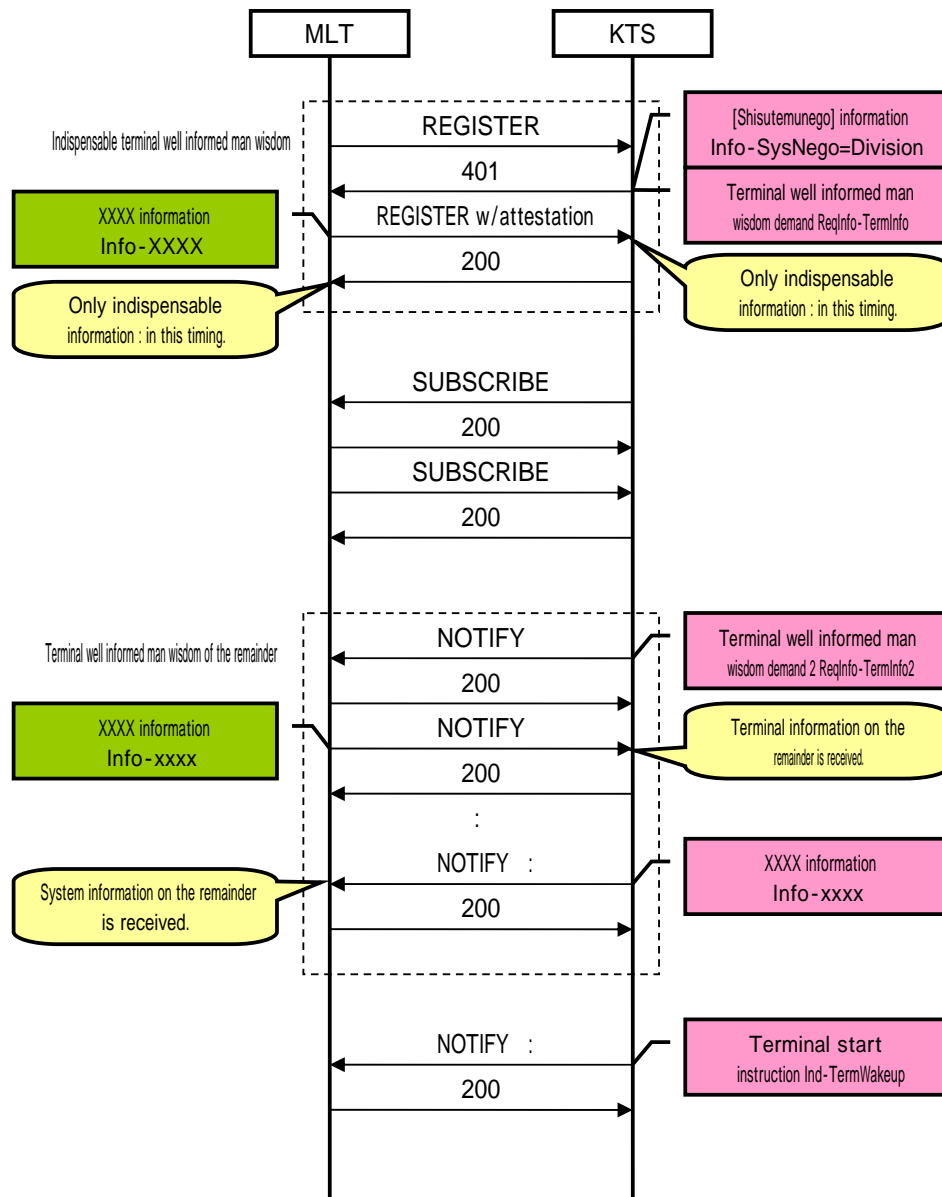
Information exchanged by the REGISTER transaction when the terminal starts is assumed to be all information necessary to operate as KTS-SIP terminal. Do not depend on the instruction of be a main device after of be the mutual subscription establishment and can start the terminal.



4.3.3. Division transmission of terminal well informed man wisdom

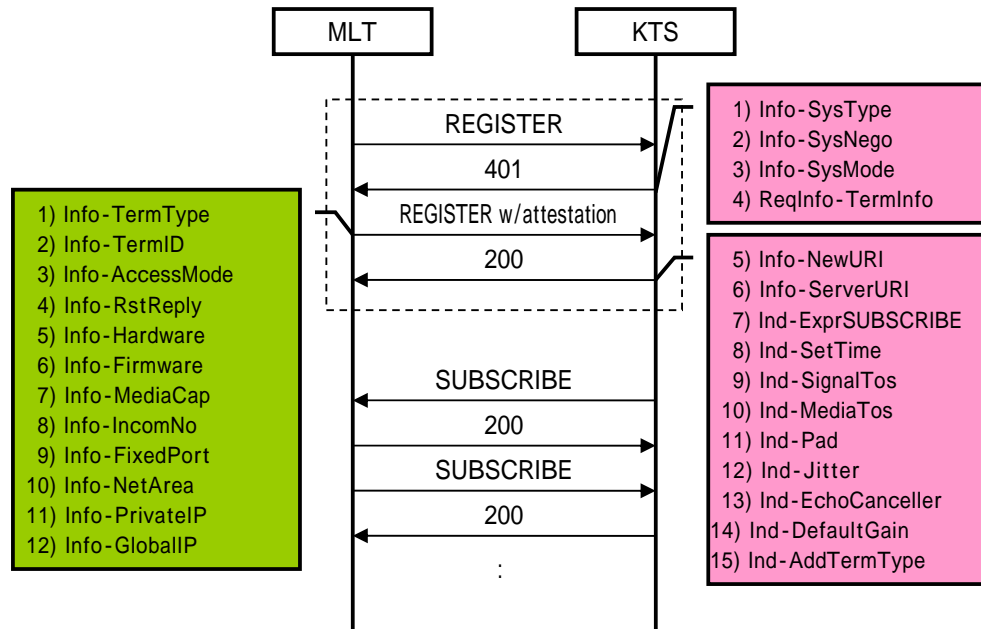
The terminal transmits adding various terminal information to the REGISTER request with the attestation for terminal well informed man wisdom demand (ReqInfo-TermInfo) by a main device in NEC-SIP. However, the fragmentation of the packet is not executed according to the networking gear that the size of the packet exceeds 1500 bytes according to the condition like an increase of the number of buttons mounted on the terminal and the increase of the size of the header by the encryption, etc. , and SIP-ALG etc. connect, and the problem that the registration processing cannot be normally completed occurs. Therefore, the transmission is executed by dividing terminal information into two or more times by instructing a main device in KTS-SIP.

It enters the state of the idol when the SUBSCRIBE transaction from the terminal is normally completed in NEC-SIP, and it changes to the state of the idol by terminal start instruction (Ind-TermWakeup) from a main device when the transmission of terminal information is divided into plurals in KTS-SIP.



4.3.3.1. Information exchanged by REGISTER transaction

Information exchanged by the REGISTER transaction when the terminal starts specializes in at least necessary for operate as KTS-SIP terminal information. After mutual subscription is established, information that depends on the terminal type is exchanged by the NOTIFY transaction. When a necessary information exchange is completed by the REGISTER transaction, a main device may start the terminal by terminal start instruction (Ind-TermWakeup) parameter. -



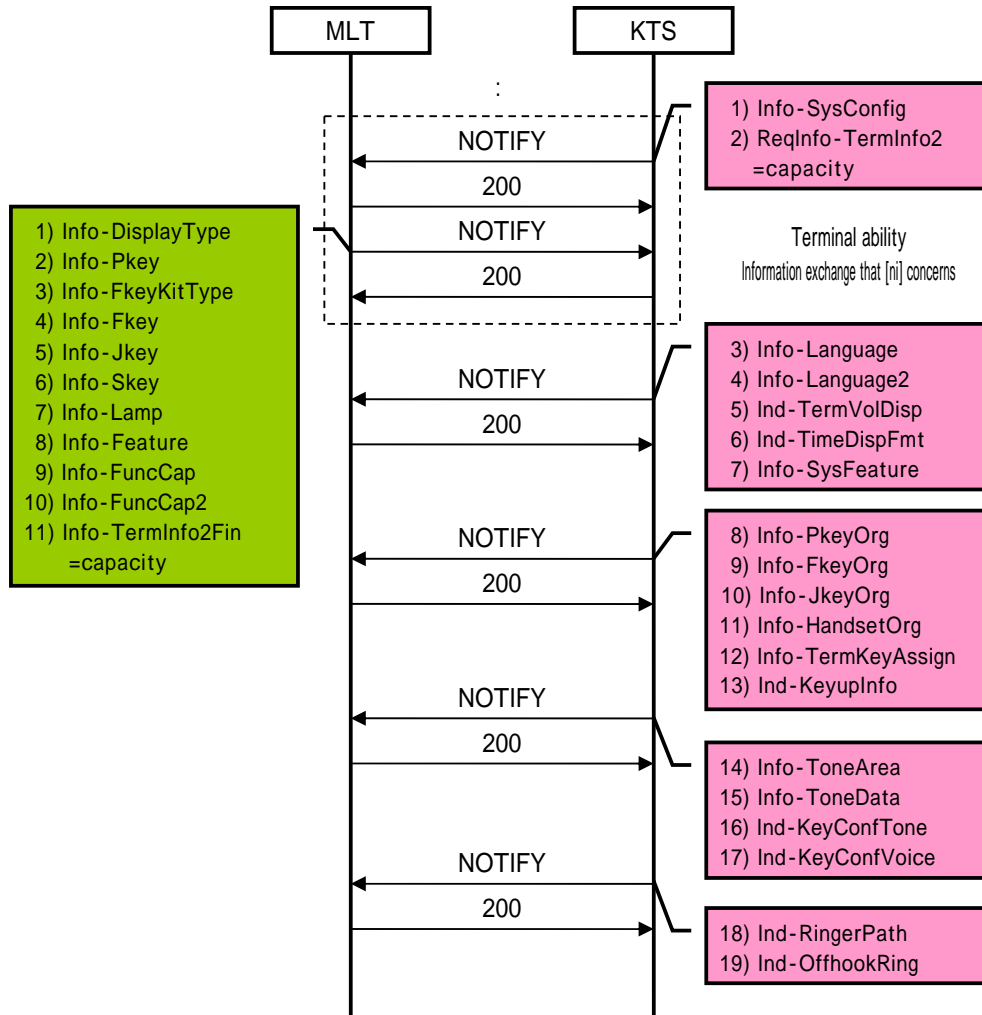
When the terminal doesn't use the extension specification function, terminal transmission parameter 8) is not transmitted.

- When the terminal doesn't use the PtoP function, Terminal transmission parameter 9) 11) is not transmitted.

- When the terminal doesn't use the NAT function, Terminal transmission parameter 10) 12) is not transmitted.

4.3.3.2. Information exchanged by NOTIFY transaction (terminal ability)

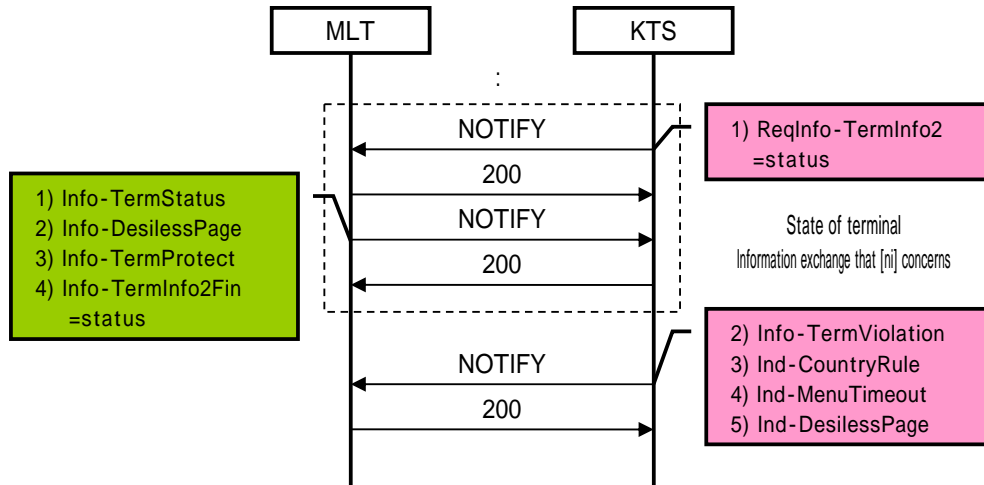
Information exchanged by the NOTIFY transaction after mutual subscription is established is different depending on the terminal type of the KTS-SIP terminal. To understand the ability of each terminal, a main device exchanges information on the terminal ability. The example of the information exchange sequence is shown as follows.



- The transmission timing of Main device transmission parameter 3) -19) is assumed to be main device dependence.
- You may not transmit When fixed function key information mounted on the terminal by terminal transmission parameter 3) on the main device side is judged, the terminal is 4) And, 5).
- Transmit terminal transmission parameter 11) in addition.

4.3.3.3. Information exchanged by NOTIFY transaction (state of terminal)

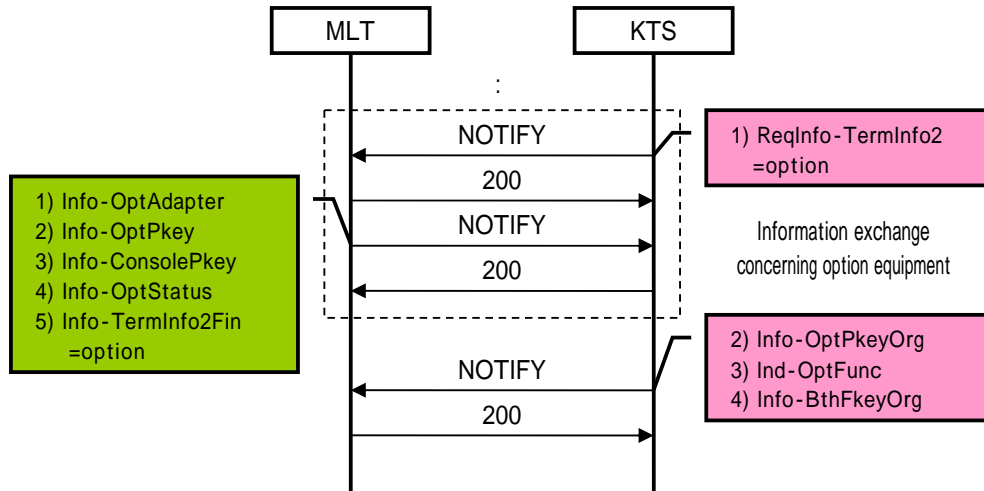
Information exchanged by the NOTIFY transaction after mutual subscription is established is different depending on the terminal type of the KTS-SIP terminal. To understand the state of each terminal, a main device exchanges information on the state of the terminal. The example of the information exchange sequence is shown as follows.



- Transmit terminal transmission parameter 4) in addition.

4.3.3.4. Information exchanged by NOTIFY transaction (option equipment)

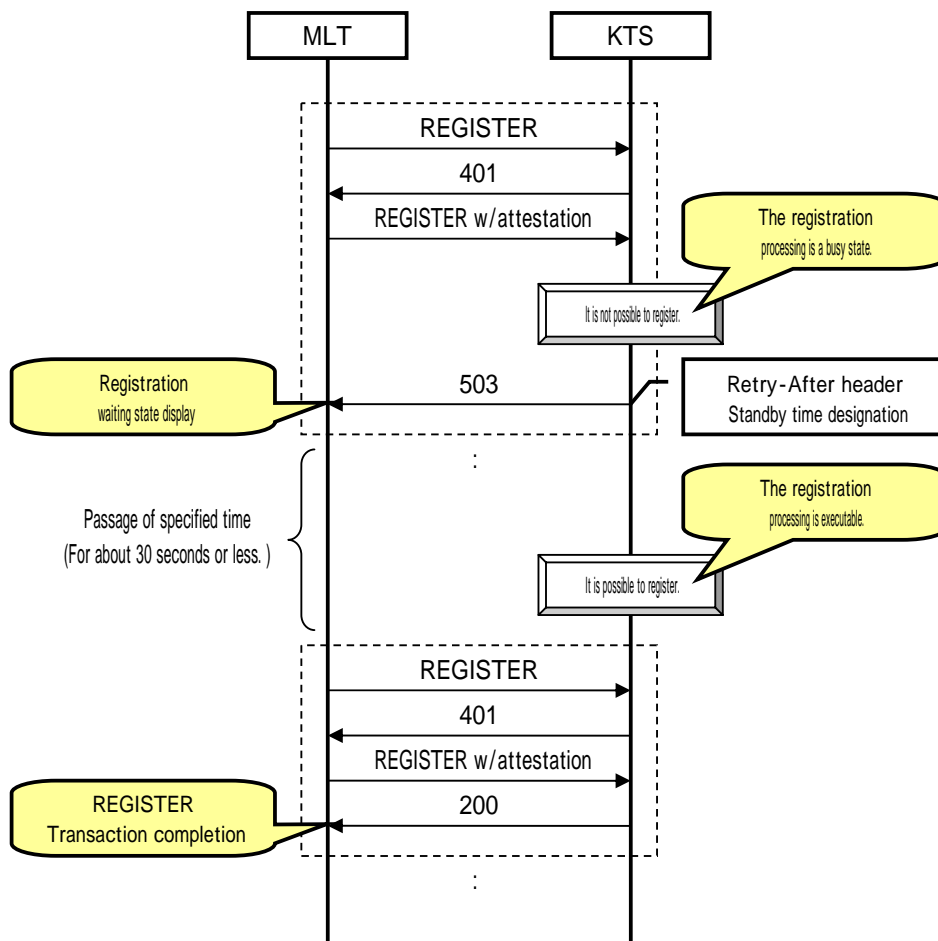
Information exchanged by the NOTIFY transaction after mutual subscription is established is different depending on the terminal type of the KTS-SIP terminal. To understand the ability and the state of the option equipment connected with a desktop terminal, a main device exchanges information on the option equipment. The example of the information exchange sequence is shown as follows.



- Terminal..transmission..parameter..transmit..either..become.
- Transmit terminal transmission parameter 5) in addition.
- Only when "BTH" is connected with the terminal, main device transmission parameter 4) is transmitted.

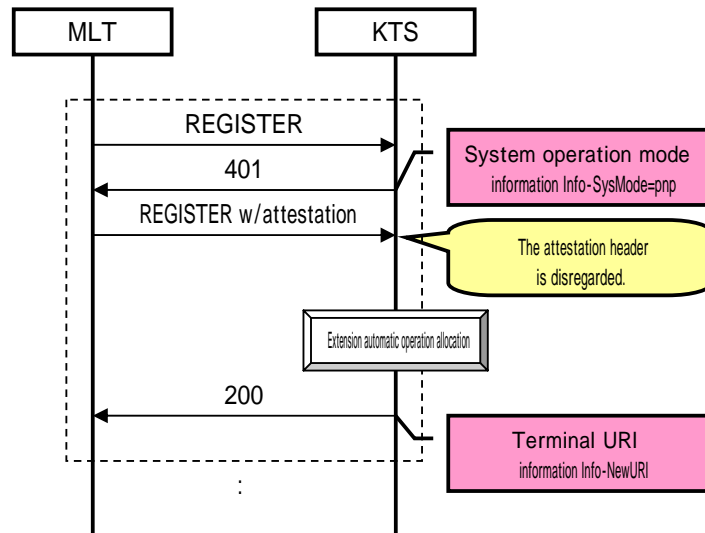
4.3.4. Load-balancing (timing decentralization)

KTS-SIP is high the processing load of a main device, and supports the function to reserve the registration demand by the terminal temporarily. A main device temporarily directs the reservation of registration adding the RetryAfter header to 503 responses for the REGISTER request with the authentication information from the terminal. The terminal for KTS-SIP must execute the registration processing again after the time specified for the Retry-After header passes.



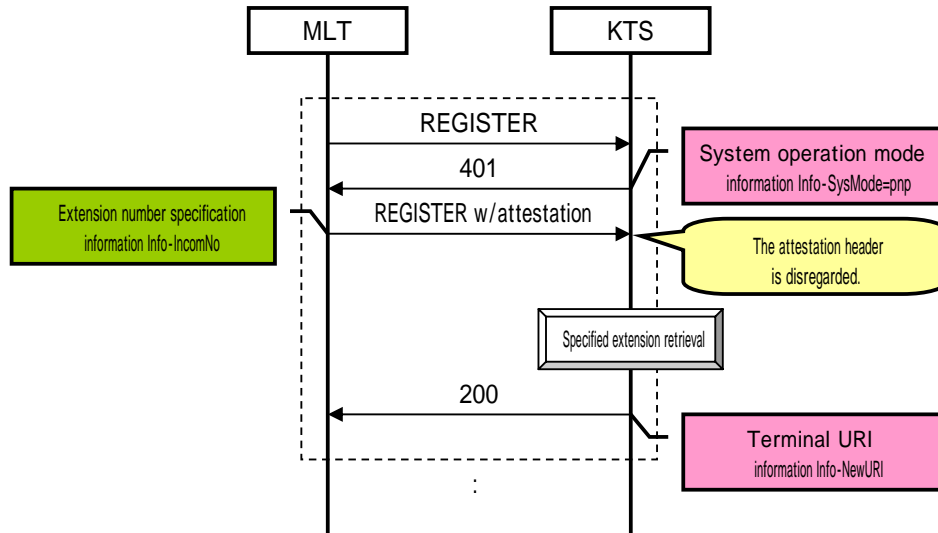
4.3.5. Plug and play

"Plug and play" sequence of KTS-SIP is the same as "MAC attestation" sequence of NEC-SIP. When user information is set to terminal Configuration, the KTS-SIP terminal may add a correct Authorization header to the REGISTER request. However, a main device corresponding to KTS-SIP must reply 200 responses regardless of the success or failure of the attestation header as long as the extension number can be allocated. Moreover, a main device must mount the automatic allocation processing of the extension number to achieve the plug and play.



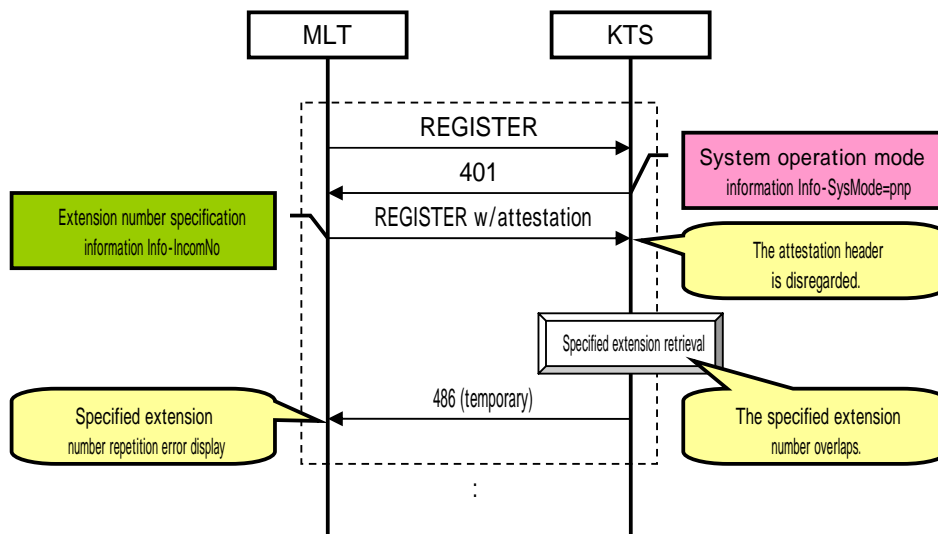
4.3.5.1. Extension number specification from terminal (Succeed).

The KTS-SIP terminal must add the enhancement parameter that specifies the extension number for the REGISTER request when the specified extension number is set to terminal Configuration in "Plug and play" mode. It puts and a main device corresponding to KTS-SIP replies to 200 responses the specified extension number as well as the above-mentioned if right or wrong of the allocation of the specified extension number is checked, and it is possible.



4.3.5.2. Extension number specification from terminal (failure)

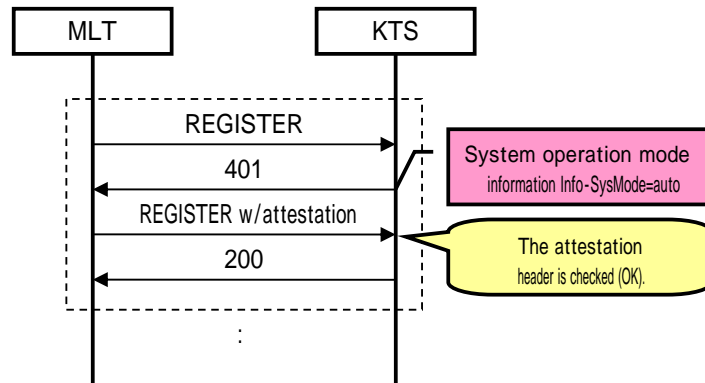
Notify the repetition error for a main device not to do the override processing when the extension number that the terminal specified overlaps, to reply 486 responses (temporary), and to have occurred.



4.3.6. Automatic logon

4.3.6.1. Attestation success

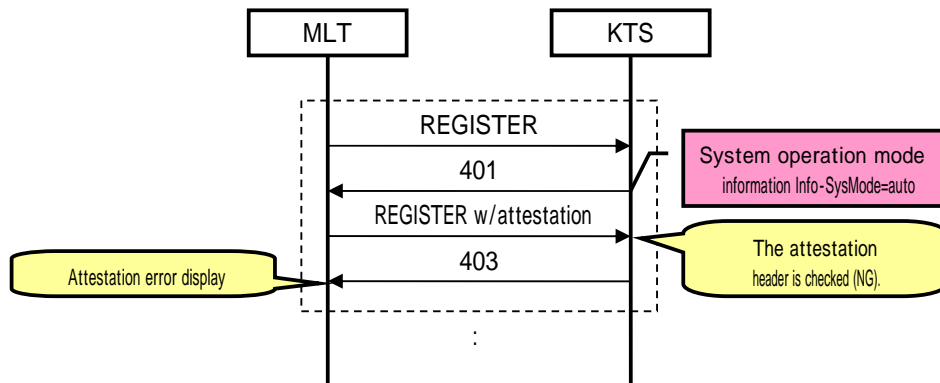
"Automatic logon" sequence of KTS-SIP is the same as "Password authentication" sequence of NEC-SIP. As for this mode, user information is required to be set to terminal Configuration.



4.3.6.2. Attestation failure

A main device corresponding to KTS-SIP must notify the terminal the occurrence of the attestation error by 403 responses when user information is not set to terminal Configuration or same user information as the registered terminal has already been set when wrong user information is set.

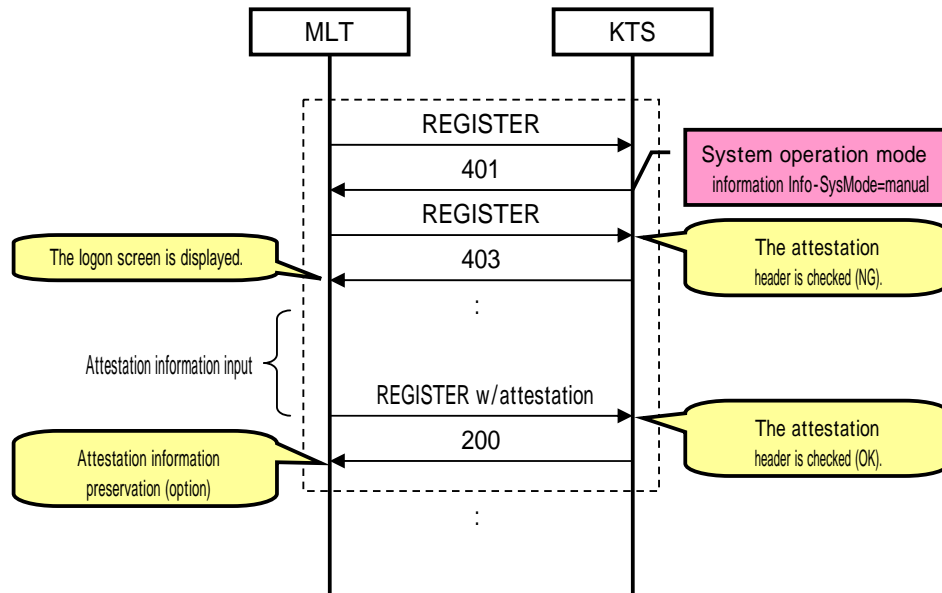
The KTS-SIP terminal must not display the logon screen and, instead, display the attestation error screen when you receive 403 responses in "Automatic logon" mode.



4.3.7. Manual log on

" sequence of KTS-SIP is the same as "Attestation NG" sequence of NEC-SIP.
As for this mode, user information is not required to be set to terminal Configuration. When user information is set, it becomes the same operation as the sequence of "Automatic logon".

The KTS-SIP terminal must display the logon screen when you receive 403 responses in " mode.

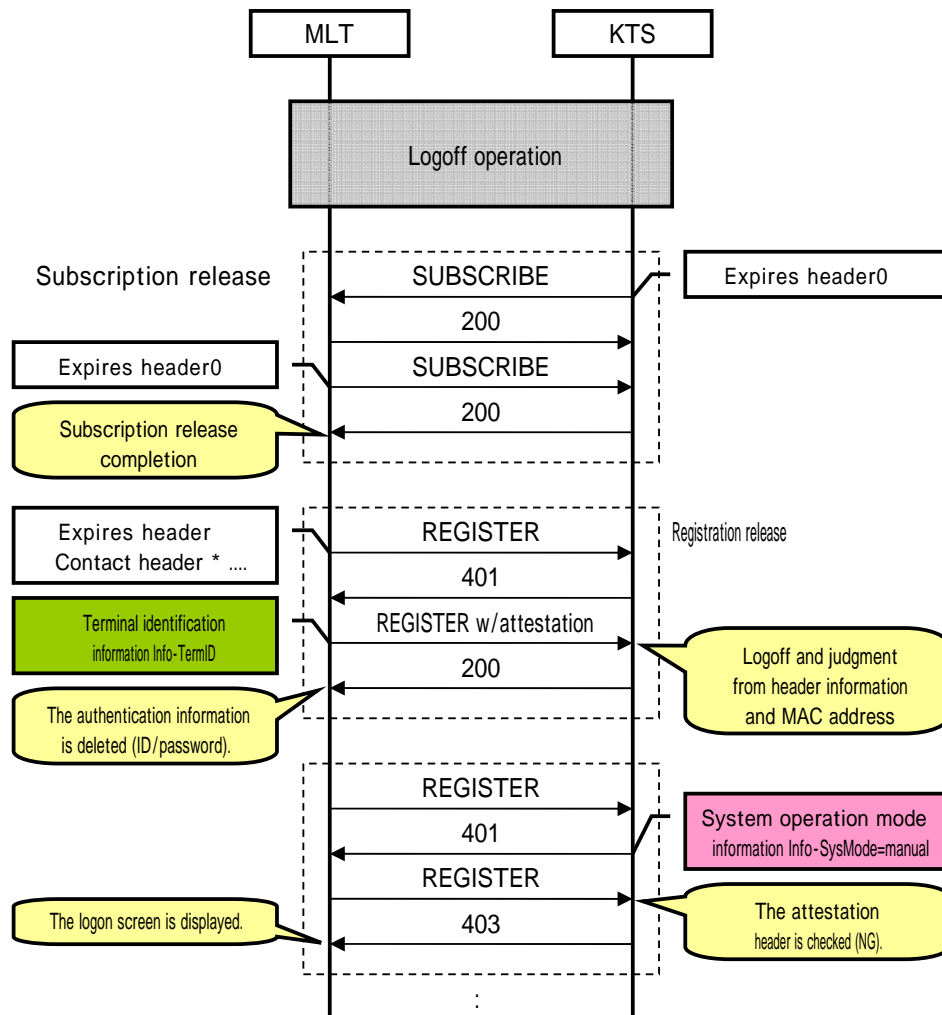


4.3.7.1. Logon when resetting it is omitted.

The terminal for KTS-SIP must preserve user information input on the logon screen in the nonvolatile memory with 200 response reception to the REGISTER request with the attestation when you support the option to omit logon when it resets it. It is necessary not to delete preserved user information as long as the logoff operation is not executed.

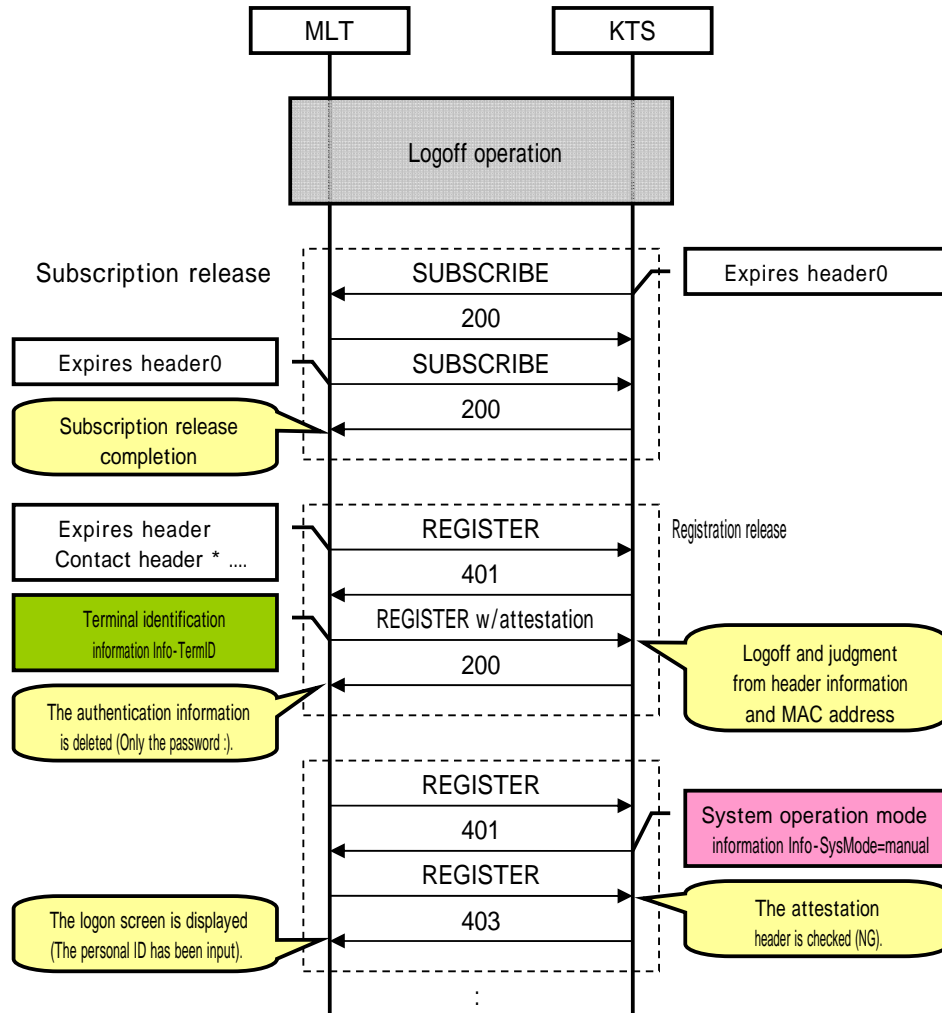
4.3.8. Manual logoff

The release processing of the subscription established mutually first of all is executed by the logoff operation of the terminal in KTS-SIP. To release the subscription that transmits the event from the terminal to a main device, a main device transmits the SUBSCRIBE request that specifies . 0" for the Expires header. On the other hand, to release the subscription that transmits the event from a main device to the terminal, the terminal transmits the SUBSCRIBE request that specifies . 0" for the Expires header similarly. Next, the terminal executes the deletion processing of registration with the reception of 200 responses to the transmitted SUBSCRIBE request. The terminal is judged to transmit the REGISTER request that specifies . 0" for the Expires header, and to have completed the logoff processing with the reception of 200 responses to this. Display the logon screen by generating attestation NG by a manual log on by transmitting the REGISTER request without the attestation again after the logoff processing is completed.



4.3.8.1. When logging it on again, the input of the personal ID is omitted.

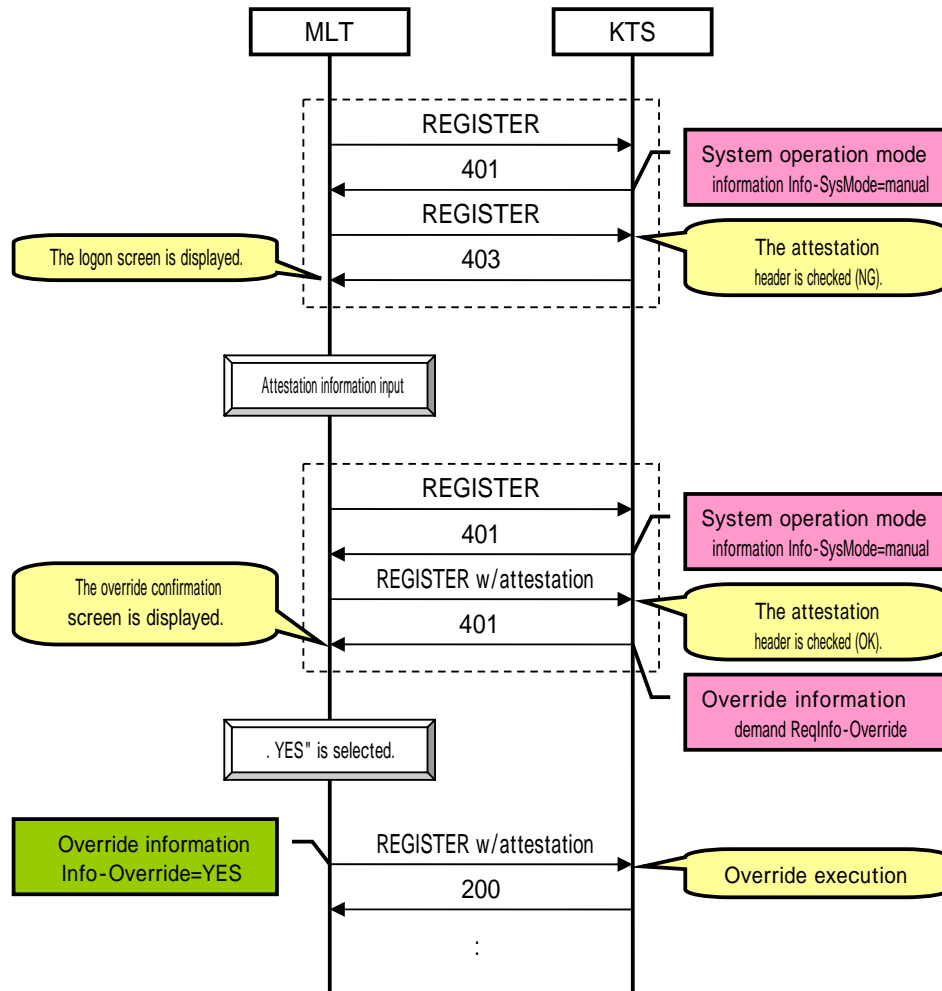
After it logoffs, the authentication information input when logging it on is deleted for the security securing usually. However, when the attestation information deletion instruction parameter is added to 200 responses to the REGISTER request for the registration deletion as an option, only the password is deleted. As a result, the re-input of the personal ID when the user will be logged on next time is omitted.



4.3.9. Override

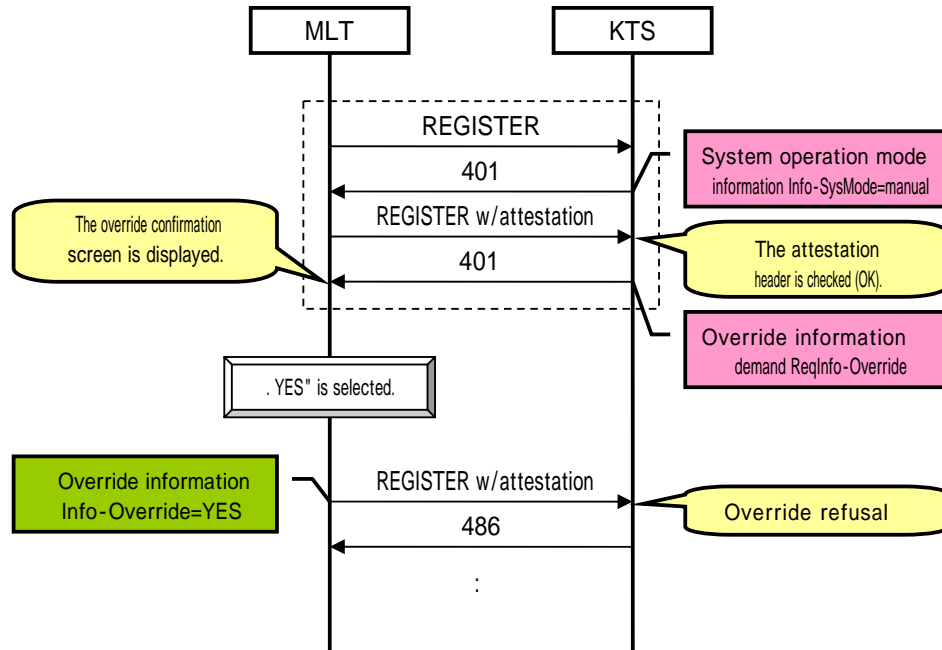
4.3.9.1. Override success

It is confirmed whether to execute override from a main device according to override information demand (ReqInfo-Override) parameter when the logon operation is mounted by using the same personal ID/password from other terminals with there a terminal from which logon has already been executed. The terminal notifies the execution of override by override information (Info-Override) parameter when . YES" is selected on the override confirmation screen.



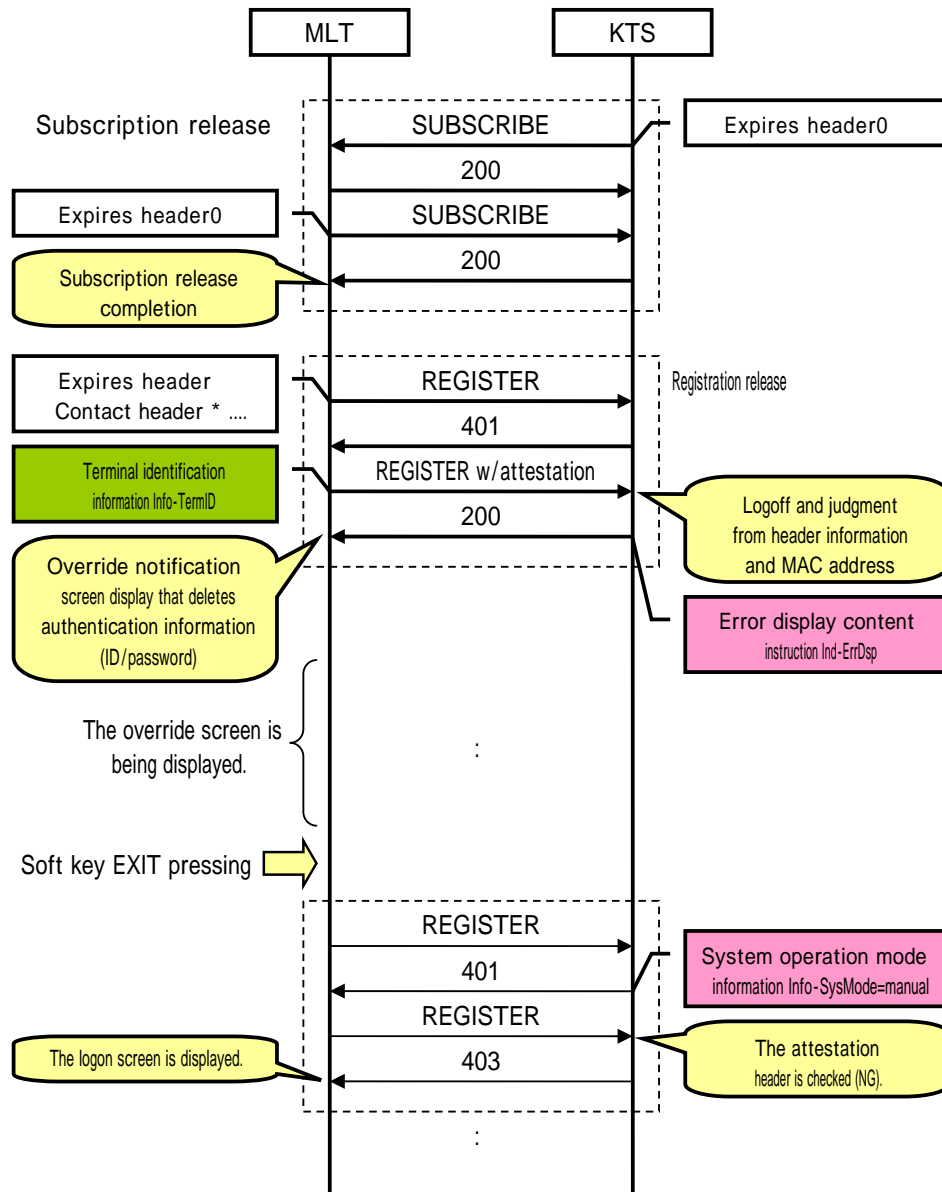
4.3.9.2. Override refusal

A main device refuses if the override terminal is able not to be logged and a main device when judged refuses override to the REGISTER request with the attestation from the terminal by 486 responses though . YES" was selected on the override confirmation screen.



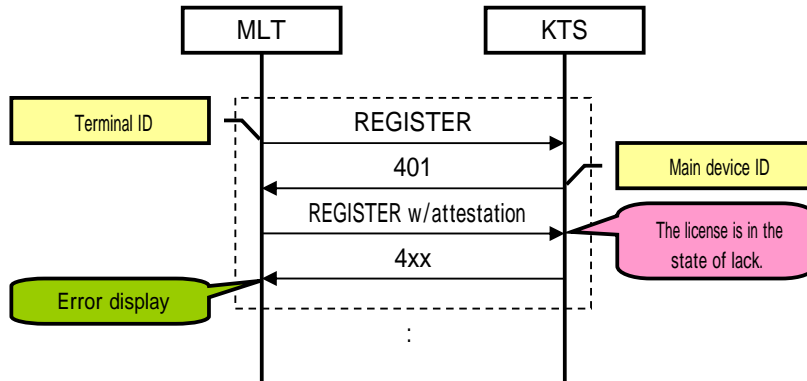
4.3.9.3. Override notification

The processing sequence of override in KTS-SIP is the same as NEC-SIP. However, override is notified to have been done by error display content instruction (Ind-ErrDsp) parameter in KTS-SIP after the release of the subscription and the release of registration are executed for the override terminal. The terminal keeps must displaying the override screen as long as the user operation is not done. Moreover, when the override screen is ended by the user operation, the terminal displays the logon screen by generating attestation NG by a manual log on by not executing hard reset and transmitting the REGISTER request without the attestation header again. When the attestation information deletion instruction parameter is added with the override notification, you may support the option to omit the input of the personal ID when logging it on again.



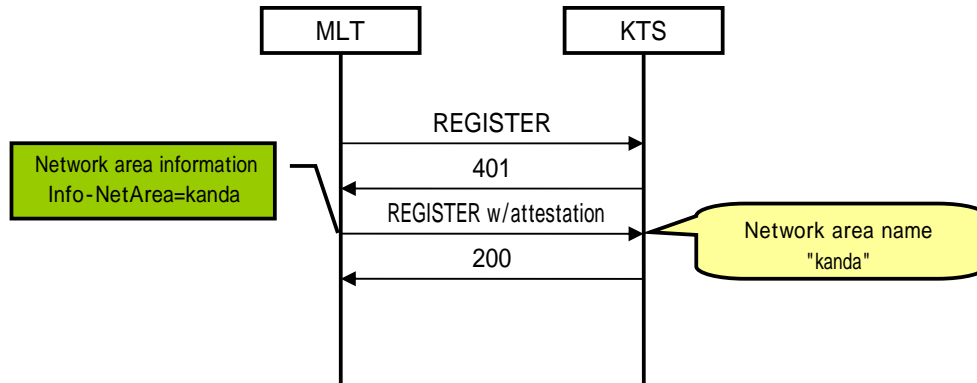
4.3.10. Main device port license

4xx response is returned to the REGISTER request that exceeds the number of licenses so that a main device may manage the license by a simultaneous connected number (simultaneous number of registration).



4.3.11. Connection by way of NAT

Because the terminal notifies a main device network area information (connection by way of NAT subordinate), a main device becomes possible the grasp the terminal's to which network area (connection by way of NAT subordinate) it belonging.



Moreover, it is maintained whether I am in the same network area as a main device with Configuration, and the set one of the terminal is content of the Contact header of the REGISTER request as follows according to the condition.

. same to main device network .

Contact: User ID @ my local IP: Local port number for my SIP

. network different from main device .

Contact: User ID @ global IP of router that I connect:

Global port number of router allocated for my SIP

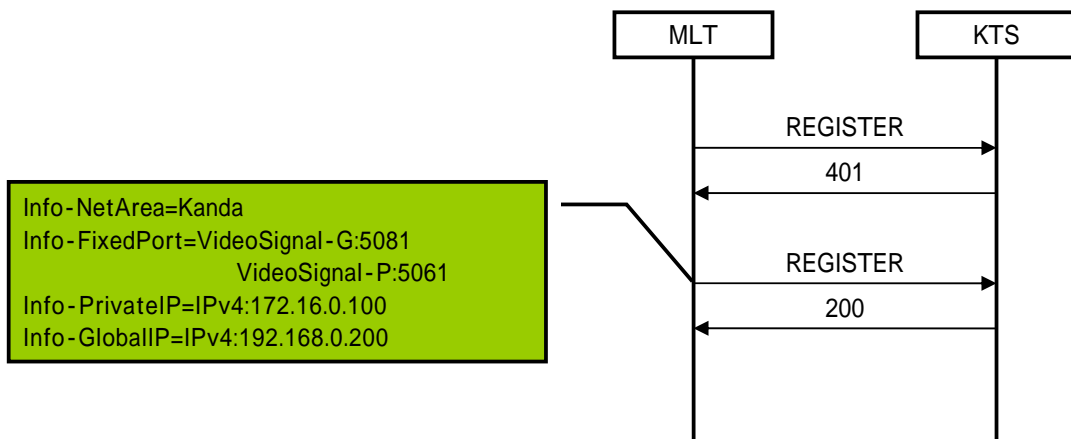
4.3.12. PtoP connection

The following information is notified to a main device to connect PtoP by way of NAT when logging it in, and when it is necessary, the terminal is inquired.

Notified information	Enhancing parameter name	Remarks
Global IP of router that terminal connects	Info-GlobalIP	It is necessary by way of NAT.
Local IP of terminal	Info-PrivateIP	
Global port number of router allocated in Cigna ring for videoconferencing	Info-FixedPort (VideoSignal-G)	It is necessary by way of NAT.
Local port number of Cigna ring for videoconferencing	Info-FixedPort (VideoSignal-P)	

The following settings are necessary for the terminal, and the enhancement parameter added to the REGISTER request sent to a main device becomes as follows when NAT's passing.

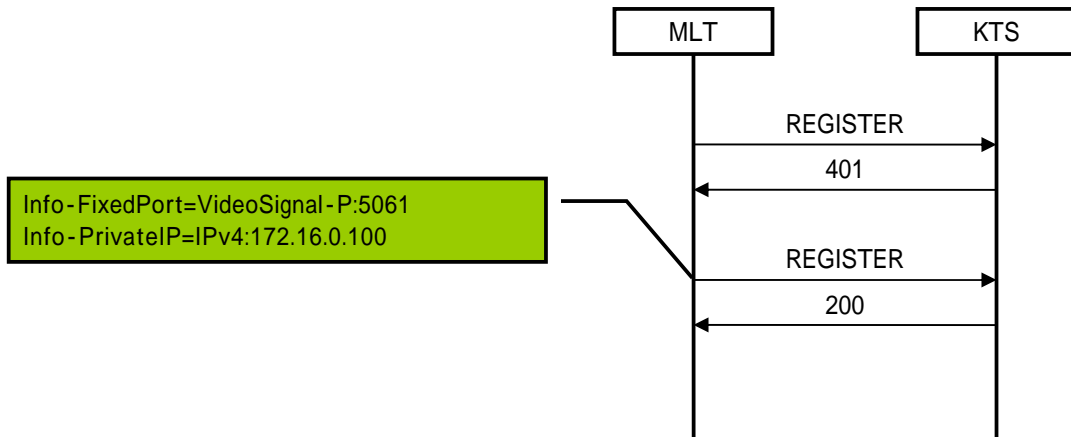
Network area name「Kanda」
Global port of Cigna ring for videoconferencing「5081」
Local port of Cigna ring for videoconferencing「5061」
Local IP of terminal「172.16.0.100」
Global IP of terminal「192.168.0.200」



When NAT is not passed easily, the following settings are necessary for the terminal, and the enhancement parameter added to the REGISTER request sent to a main device becomes as follows.

Local port of Cigna ring for videoconferencing「5061」

Local IP of terminal「172.16.0.100」

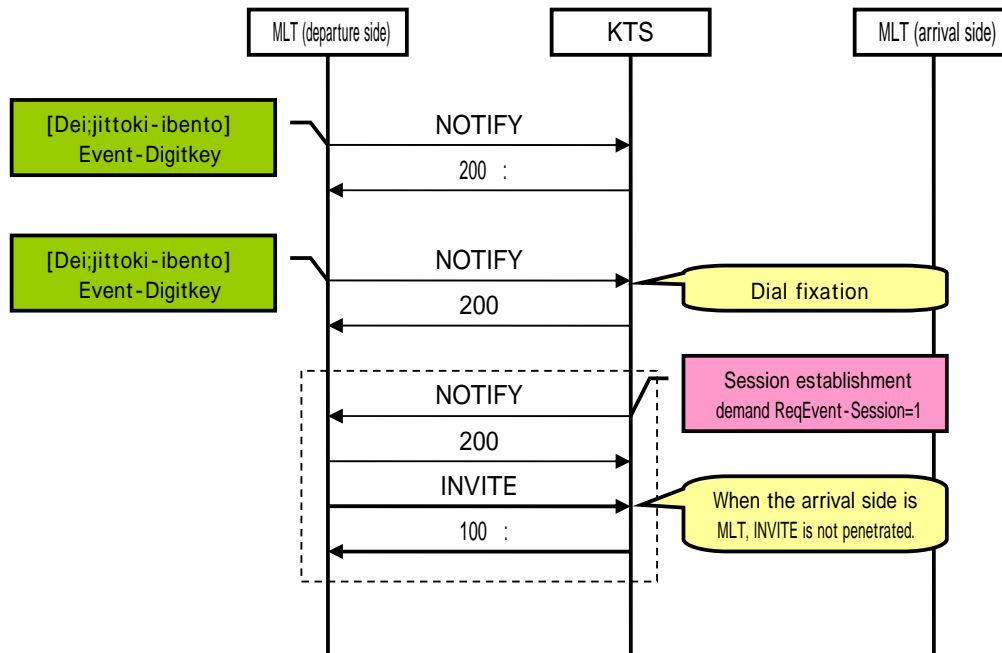


4.4. Call out

4.4.1. Transmission timing of INVITE request

After the dial is fixed, timing in which the session establishment demand by main device (KTS) is transmitted at the call out is changed based on the shift in the future to the PROXY processing though the point to direct the terminal the call out (INVITE request) by transmitting the session establishment demand from a main device is common.

A main device cannot forward the request when the call out to SLT is shifted to the PROXY processing to transmit the INVITE request of the address indetermination in NEC-SIP before the dial is fixed (Forward) and there is a problem of becoming an error.



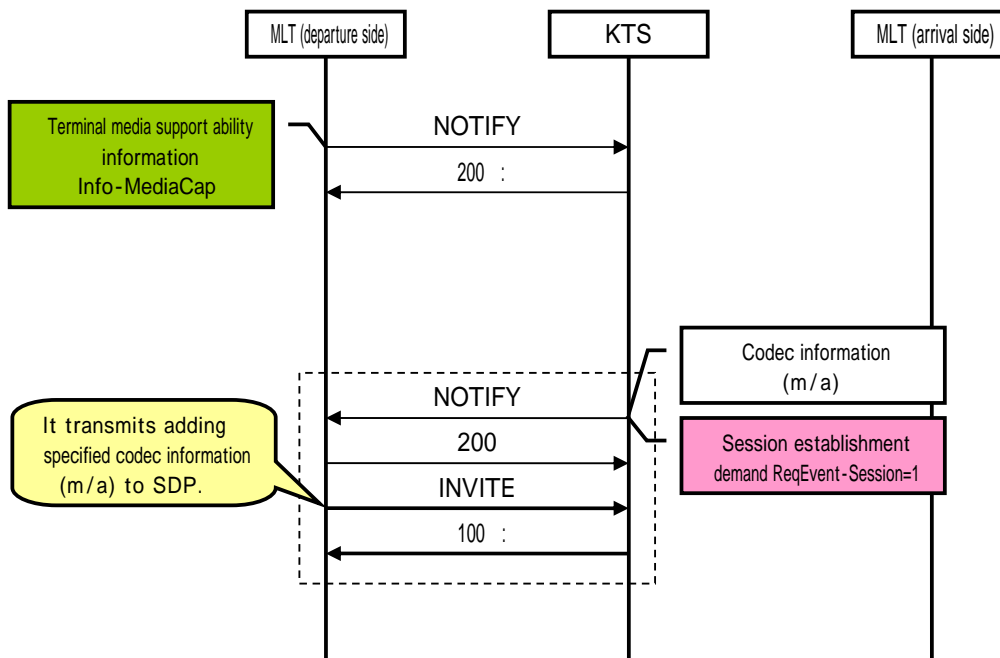
4.4.1.1. Reason why INVITE request is not penetrated to arrival side

A main device is a specification that only the number of line keys can execute the arrival of a message display for the terminal in functions of general arrival of a message and the group arrival of a message, etc. Therefore, if the INVITE request penetration to the arrival of a message terminal is allowed, mounting the SIP stack that can manage dialog information on a few minutes of the line key as an ability of the terminal for KTS-SIP becomes indispensable. The INVITE penetration is not permitted as KTS-SIP specification because there is a possibility of mounting the line key that exceeds 100 according to the terminal, too.

4.4.2. Codec specification for INVITE request

A main device can control SDP information on the INVITE request transmitted from the terminal by specifying codec information by the multi part with session establishment demand (ReqEvent-Session) parameter that is the enhancement parameter.

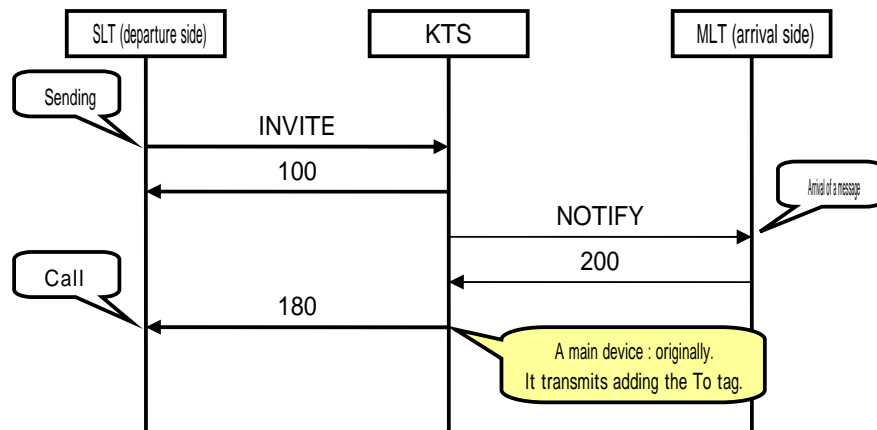
The terminal must describe m line and a line specified for SDP information on the INVITE request as it is when codec information is specified. However, do not specify codecs other than the terminal's notifying by terminal support media ability information (Info-MediaCap) parameter for a main device.



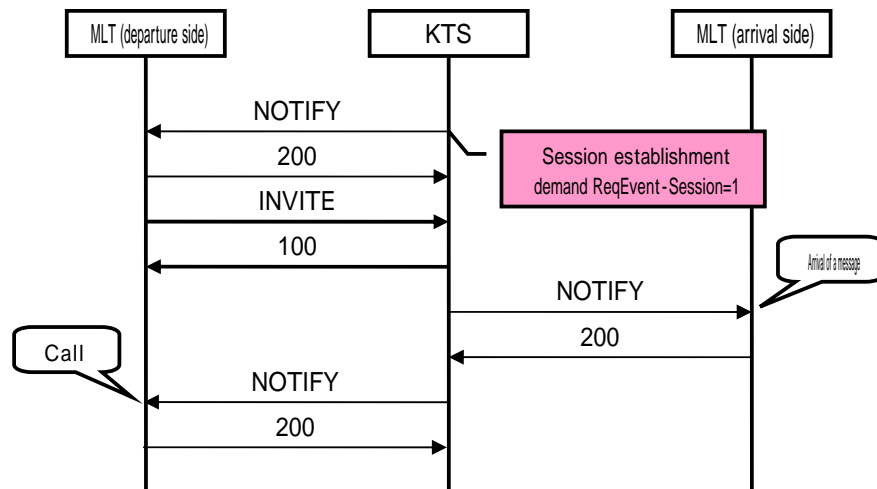
4.4.3. 180 responses to terminal when being calling it

It is a specification that the arrival of a message terminal responds in KTS-SIP to prevent an excessive INVITE request to the terminal for KTS-SIP being sent to which the INVITE request is not penetrated with a main device. Therefore, 180 responses from the arrival side terminal cannot be forwarded to the departure side terminal, and when the departure side terminal is standard SIP terminal, the phenomenon of the Ringbakk tone's not rumbling is generated in a main device until the arrival side terminal responds. *Departure..side..terminal..standard..terminal..arrival..side..terminal..for..terminal..device..original..response..generate..departure..side..terminal..sent*

to.Because To-tag is different because of "180 Ringing/200 OK" that penetrates from "180 Ringing" and the arrival side terminal originally sent from KTS as a condition for standard SIP terminal to send it to the terminal for KTS-SIP normally, two or more dialogs should be able to be managed on the terminal side. Confirming the operation of the supported standard SIP terminal is necessary.



A main device doesn't originally generate 180 responses when both departure side terminals and the arrival side terminals are terminals for KTS-SIP, and the rumbling of the Ringbakk tone is directed by the NOTIFY request. The purpose of this is for you can not support the above-mentioned, two or more dialog management with the terminal for KTS-SIP. Because a main device can penetrate INVITE from the departure side when the arrival side terminal is standard SIP terminal, it only has to penetrate 180 responses from the arrival side.

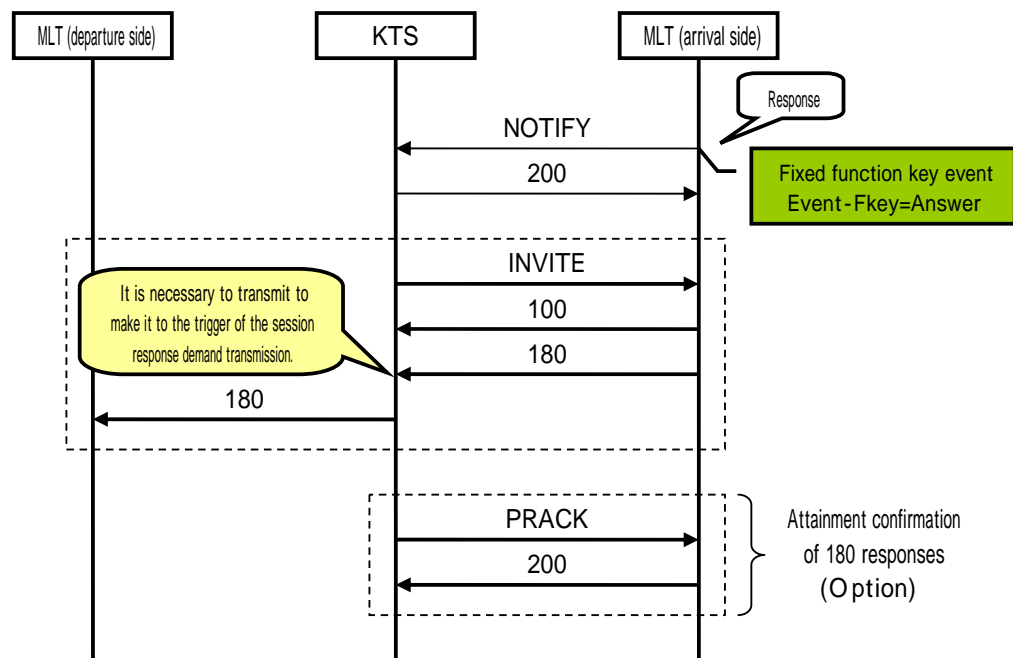


4.5. Arrival of a message response

4.5.1. Penetration timing of INVITE request

When arrival of a message responds as pseudoPROXY processing, the INVITE request is penetrated from main device (KTS) to arrival of a message side MLT in KTS-SIP though a main device establishes the session by the initiation in transmitting the session establishment demand to the arrival side terminal according to the timing of the response in NEC-SIP, and transmitting the INVITE request from the arrival of a message terminal. When the INVITE request is received, the terminal for KTS-SIP is assumed to be the one for 180 responses to reply without fail, and a main device makes 180 responses from the arrival side terminal a trigger and transmits the session response demand.

There is a problem that it is not possible to correspond to the standard issue with the Proxy base because the sequence that can be achieved only by B2B UA processing though there is an advantage that a main device can mediate the session in NEC-SIP.

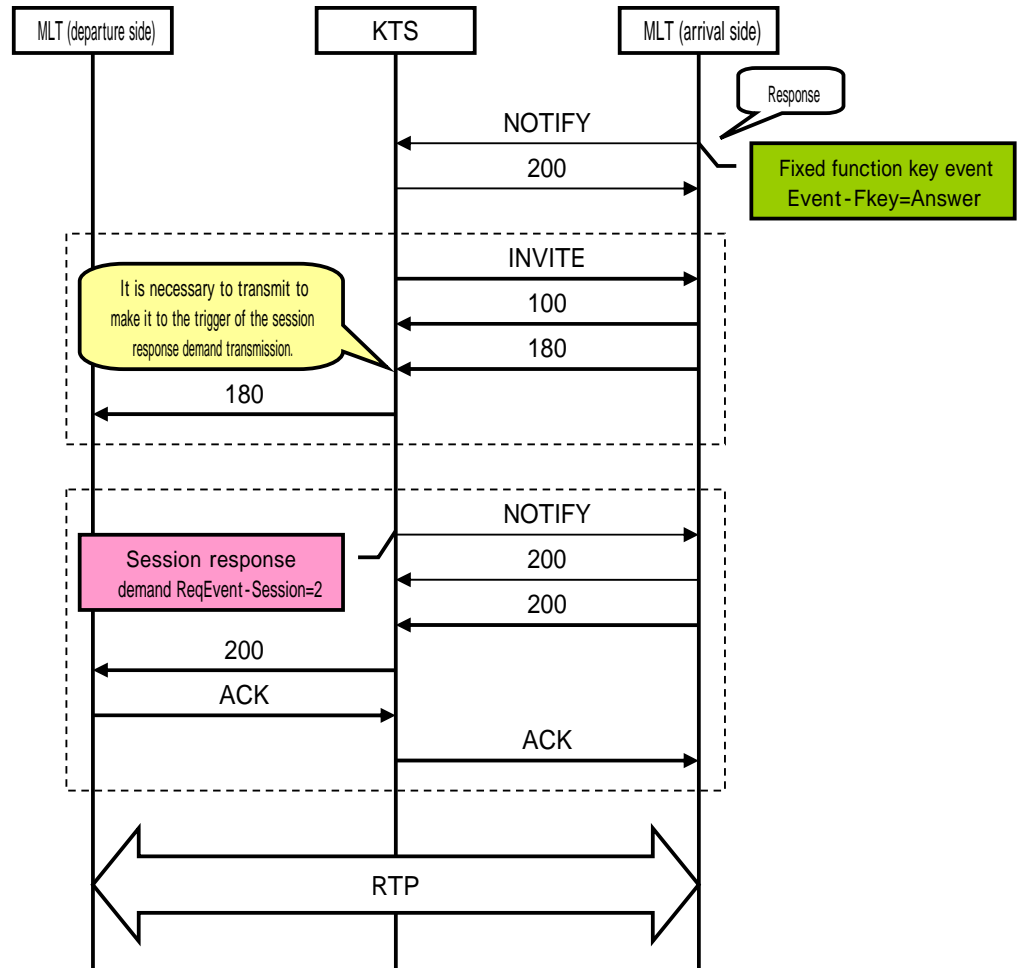


4.5.1.1. Attainment security of 180 responses from arrival side terminal

The problem that it is not possible to respond to arrival of a message when the packet does lost because there is no reliability in 180 responses made the trigger of the session response demand occurs. Because 180 responses are used as a judgment element of the attainment confirmation of the INVITE request that main device (KTS) transmitted in KTS-SIP, mounting RFC3262(100rel) that guarantees the reliability of 180 responses is recommended to the terminal for KTS-SIP.

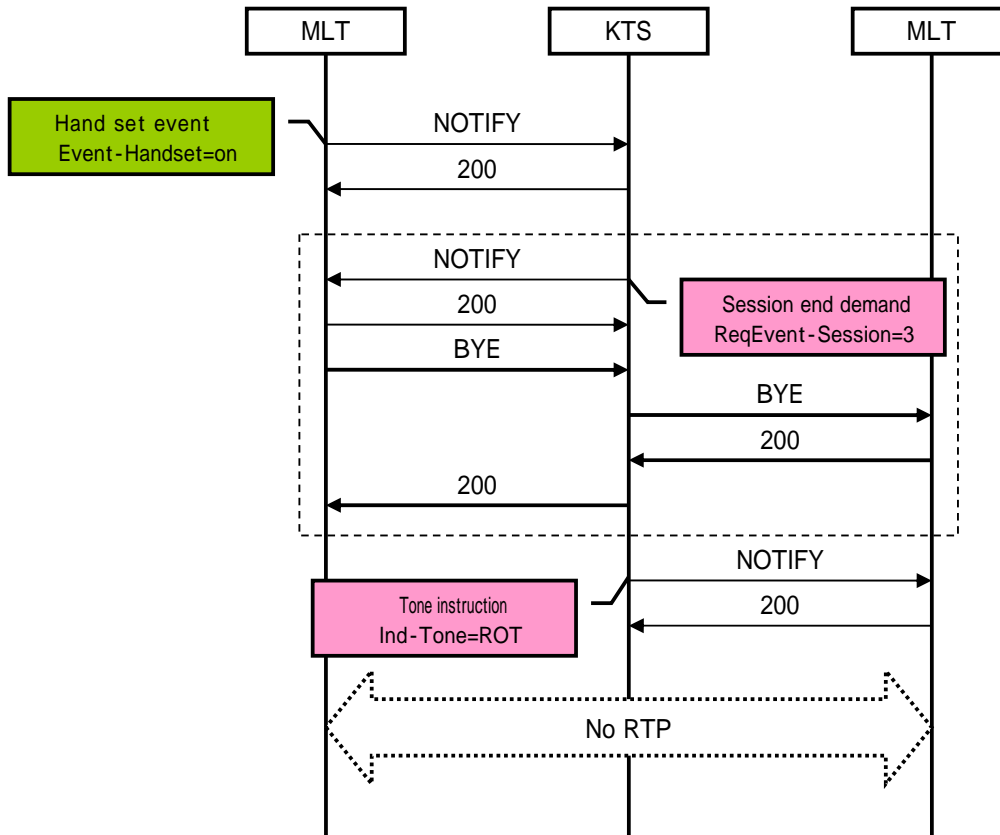
4.5.2. Session response of arrival side terminal

The arrival side from main device (KTS) when the INVITE request is penetrated when arrival of a message responds in KTS-SIP The control that directs MLT the response is needed. Main device (KTS) must make 180 responses from the arrival side terminal a trigger, transmit the session response demand to arrival of a message MLT, and direct the transmission of 200 responses.



4.6. Cutting

A main device directs the cutting side terminal the transmission of the BYE request by the session end demand in case of the [onfukku] while talked over the telephone. At this time, the session is maintained until main device (PBX) transmits the re-INVITE request to the side terminal to be cut in NEC-SIP and the session is [onfukku]ed the state of the reservation and assuming once. Main device (KTS) penetrates the BYE request to the side terminal cut as pseudoPROXY operation in KTS-SIP.

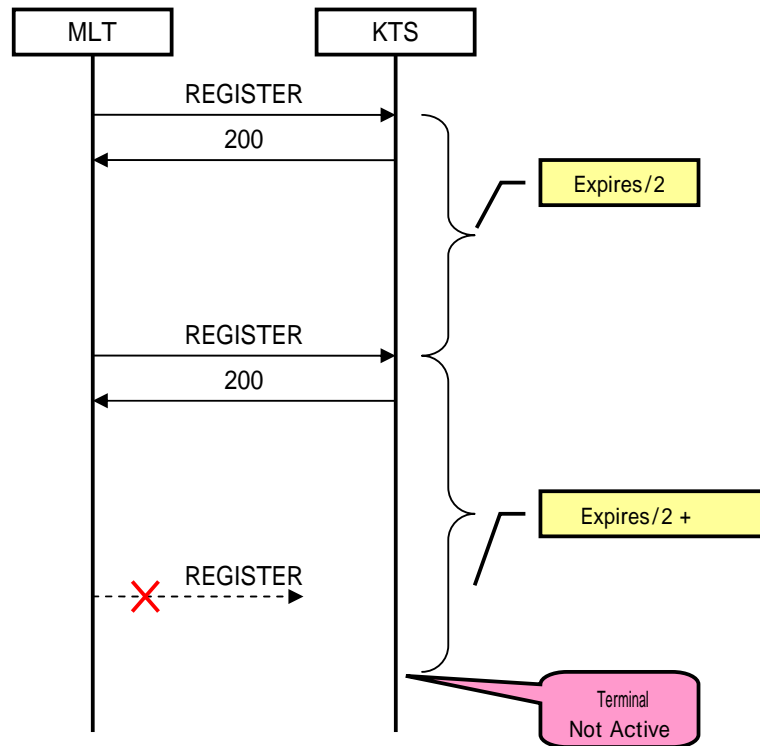


4.7. Keep alive

4.7.1. Terminal watch

The keep alive (living confirmation) that observes the session with the terminal whether continued normally and normally after registration is completed uses the REGISTER message.

When a main device cannot receive the REGISTER request (update) from the terminal even if a few seconds have passed since half the time of the Expires header expired after receiving the REGISTER request, a main device judges the terminal to be "Out of the sphere".



4.7.2. Telephone call watch

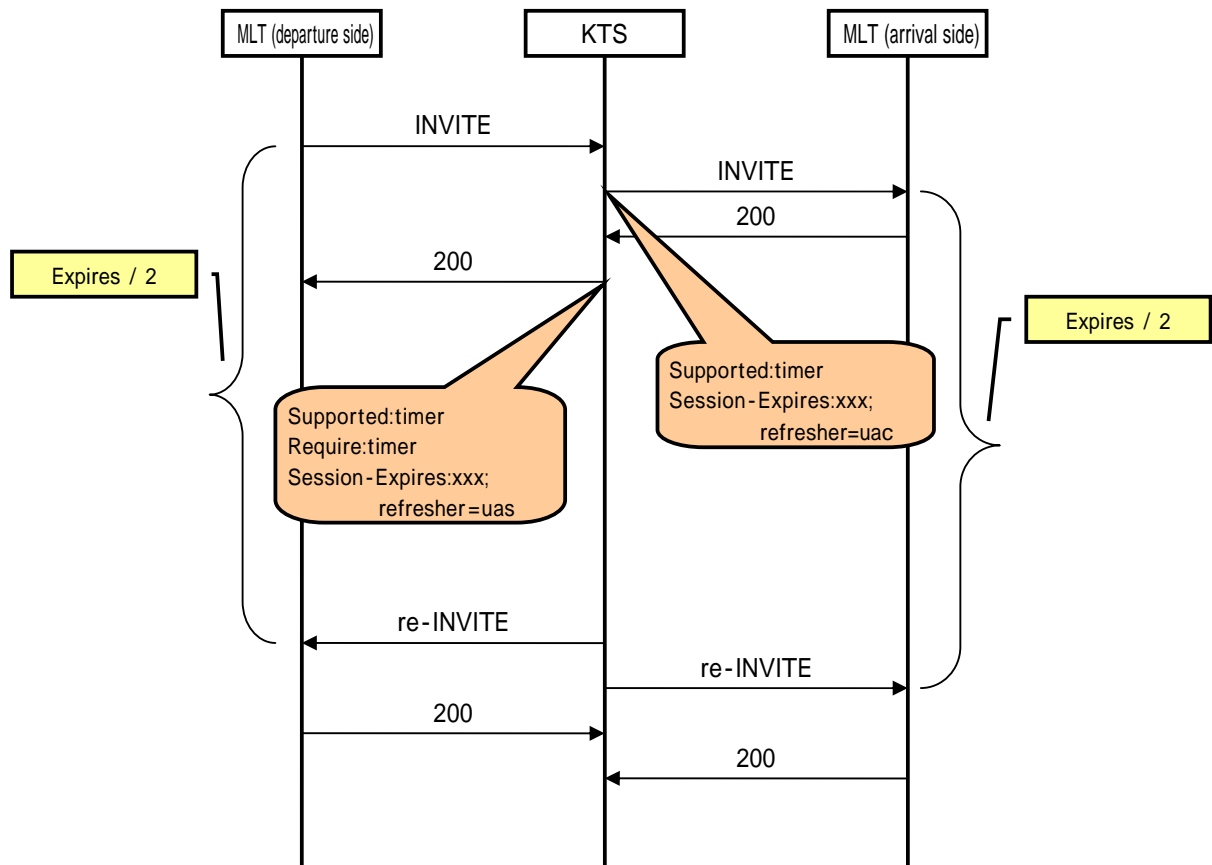
Wireless LAN mobile terminal etc. aim at consumption patty Lee's decrease when standing by, and operation that lengthens the update time of REGISTER is thought, too. For this case, use the session timer to the telephone call session separately so that the keep alive to the telephone call session may become a long time.

Response 200 to INVITE sent from the terminal when the session timer is used
Session timer (refresher=uas) is set to OK, and the session timer is set to INVITE sent to the terminal (refresher=uac).

Therefore, do the session refreshing after the session is established from a main device when you use the session timer.

The terminal type doesn't penetrate to the header concerning the session timer though the INVITE request is penetrated as pseudoPROXY operation in KTS-SIP.

When it doesn't depend on the terminal type, and the update time of REGISTER or SUBSCRIBE is long, the session timer is assumed to be indispensable.

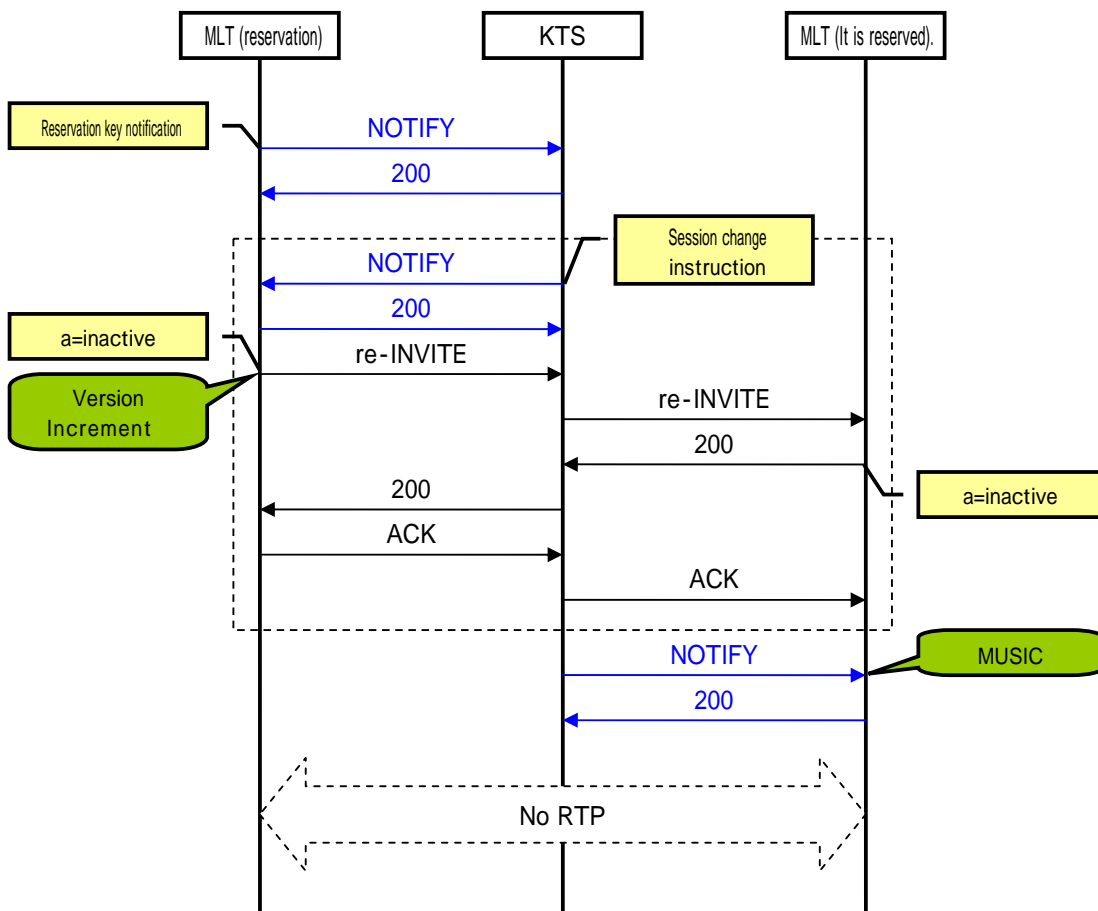


4.8. Media change

4.8.1. Reservation beginning

The reservation operation of the terminal is made a trigger in NEC-SIP, and a main device transmits the re-INVITE request to the reservation side and both side to be reserved. The NEC-SIP terminal stops the sending and receiving of the RTP packet based on reservation condition . c=0.0.0.0" described in SDP and begins reserving. On the other hand, the session change demand is transmitted to the terminal for KTS-SIP as pseudoPROXY operation in KTS-SIP, and the reservation begins by the re-INVITE request from the terminal. The reservation beginning condition in KTS-SIP is made as follows.

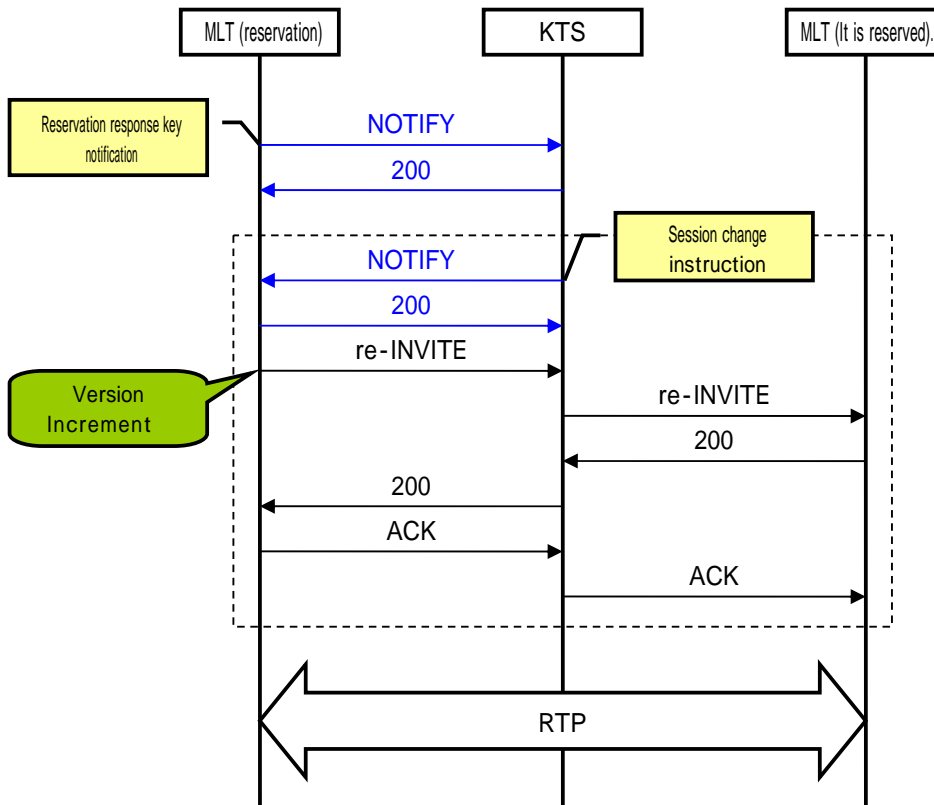
- . inactive" is specified for a parameter of SDP.
- The increment of the version number of o parameter of SDP.



4.8.2. Reservation release

The reservation release operation of the terminal is made a trigger in NEC-SIP, and a main device transmits the re-INVITE request to the reservation side and both side to be reserved. The NEC-SIP terminal begins the sending and receiving of the RTP packet for Internet Protocol address of c parameter described in SDP. On the other hand, the session change demand is transmitted to the terminal for KTS-SIP as pseudoPROXY operation in KTS-SIP, and the reservation is released by the re-INVITE request from the terminal. The reservation beginning condition in KTS-SIP is made as follows. •

- "sendrecv" is specified for a parameter of SDP (It is possible to omit it).
- The increment of the version number of o parameter of SDP.



4.8.3. Media repapering

The pattern of the following media repapering exists to achieve the main device function. •

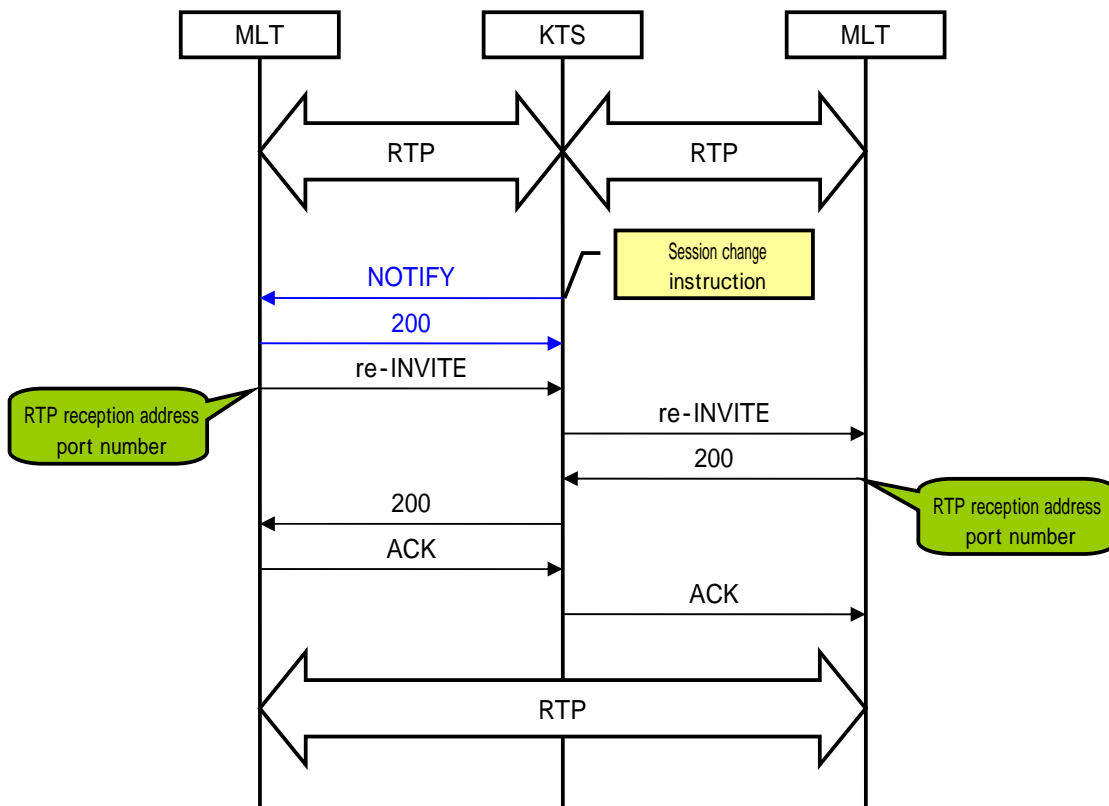
RTP session Peer to Peer connection . main device RTP session terminal connection between terminals
(example: Shift to conference telephone call etc.)

- RTP session Peer to Peer connection between main device RTP session terminal connection . terminals (Example: Shift from conference telephone call to 2 person telephone call etc.)

These media repapering is achieved by changing connection destination information described in SDP according to the re-INVITE message. However, note that the penetration of the dialog of re-INVITE is not guaranteed by repapering media.

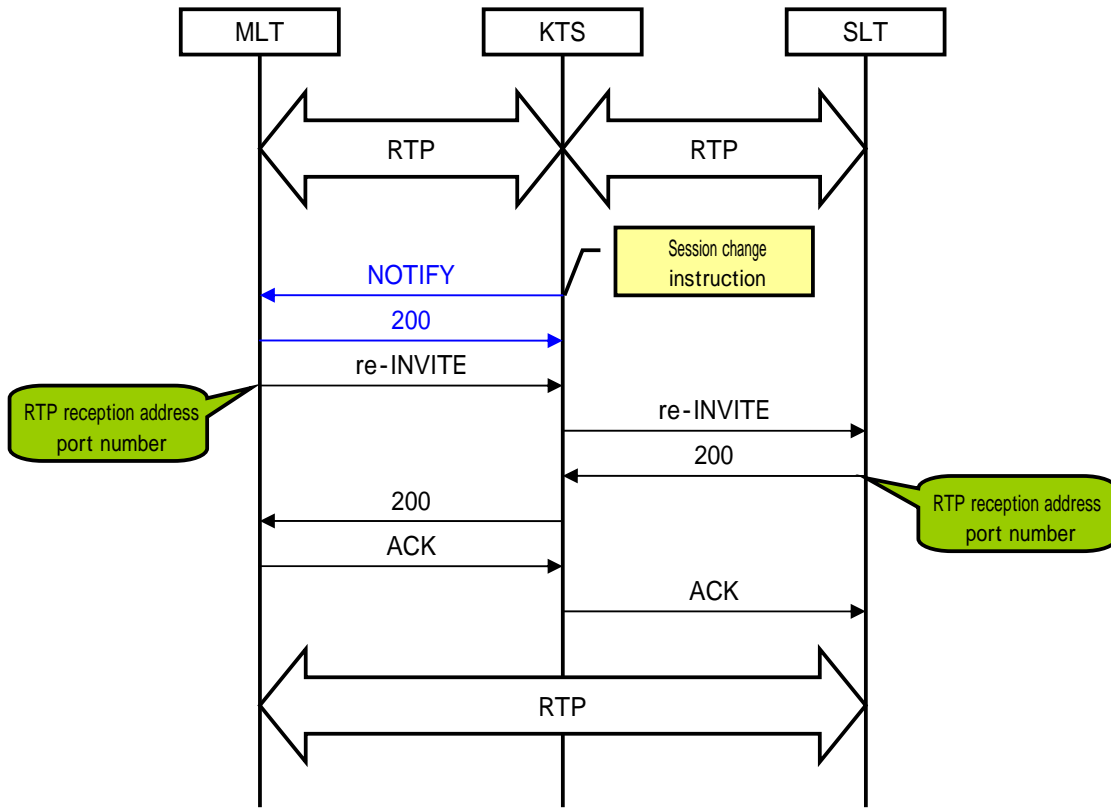
4.8.3.1. For the KTS-SIP terminal

The RTP session between terminals can be repapered to the Peer to Peer connection about the communication of the KTS-SIP terminal regardless of "RTP Peer to Peer mode" of a main device. This is because media by re-INVITE can change from the KTS-SIP terminal by directing the transmission of the NOTIFY request from a main device by the session change demand, and pseudoPROXY operation can be achieved. Even when the reception port of each RTP session changes on the terminal side to execute the negotiation of media information with [endotou;endo], pseudoPROXY processing can correctly achieve the RTP Peer to Peer connection.



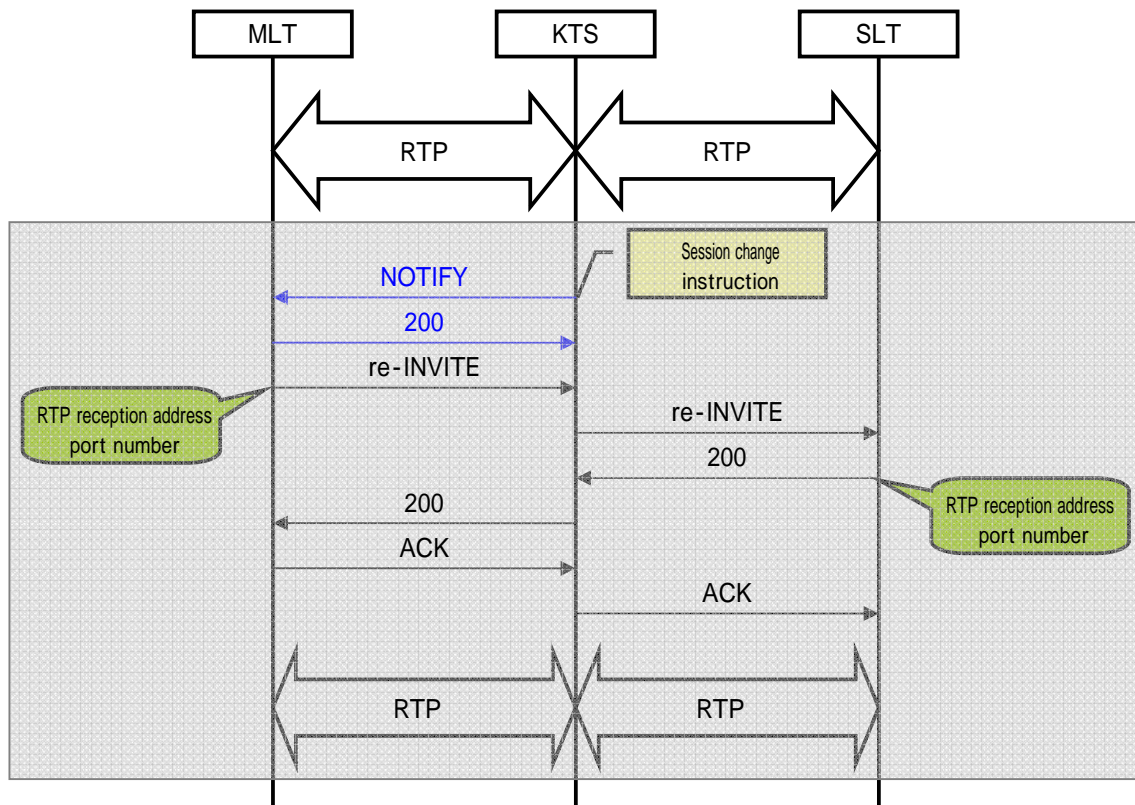
4.8.3.2. For KTS-SIP terminal and standard SIP terminal (pattern 1)

It is assumed RTP session Peer to Peer connection between terminals for set "RTP Peer to Peer mode: turn on (main device RTP resource priority)" of a main device. Media by Re-INVITE are changed from the KTS-SIP terminal sent to the KTS-SIP terminal the NOTIFY message of the session change demand a main device. Session RTP Peer to Peer connection between terminals becomes possible because it becomes Proxy sequence because Re-INVITE is transmitted from the KTS-SIP terminal, and it can do the negotiation of media information for standard SIP terminal of the specification to which the RTP reception port is changed with Re-INVITE between terminals.



4.8.3.3. For KTS-SIP terminal and standard SIP terminal (pattern 2)

A main device in case of set "RTP Peer to Peer mode: turn off (standard SIP special show function priority)" of a main device It assumes it like the RTP session terminal connection. The connection destination of the telephone call session becomes a terminal, and it will not be changed establishing ahead of the RTP session because it becomes main device RTP session terminal when the RTP Peer to Peer mode is turning off at the switch from the conference telephone call to 2 person telephone call etc. Therefore, because the sequence of Re-INVITE becomes unnecessary, the NOTIFY message of the session change demand is not transmitted from a main device to the KTS-SIP terminal. The telephone call passing is switched in a main device, and the terminal listens to received RTP.



4.8.3.4. For standard SIP terminal

It becomes similar in case of KTS-SIP terminal and standard SIP (pattern 2).

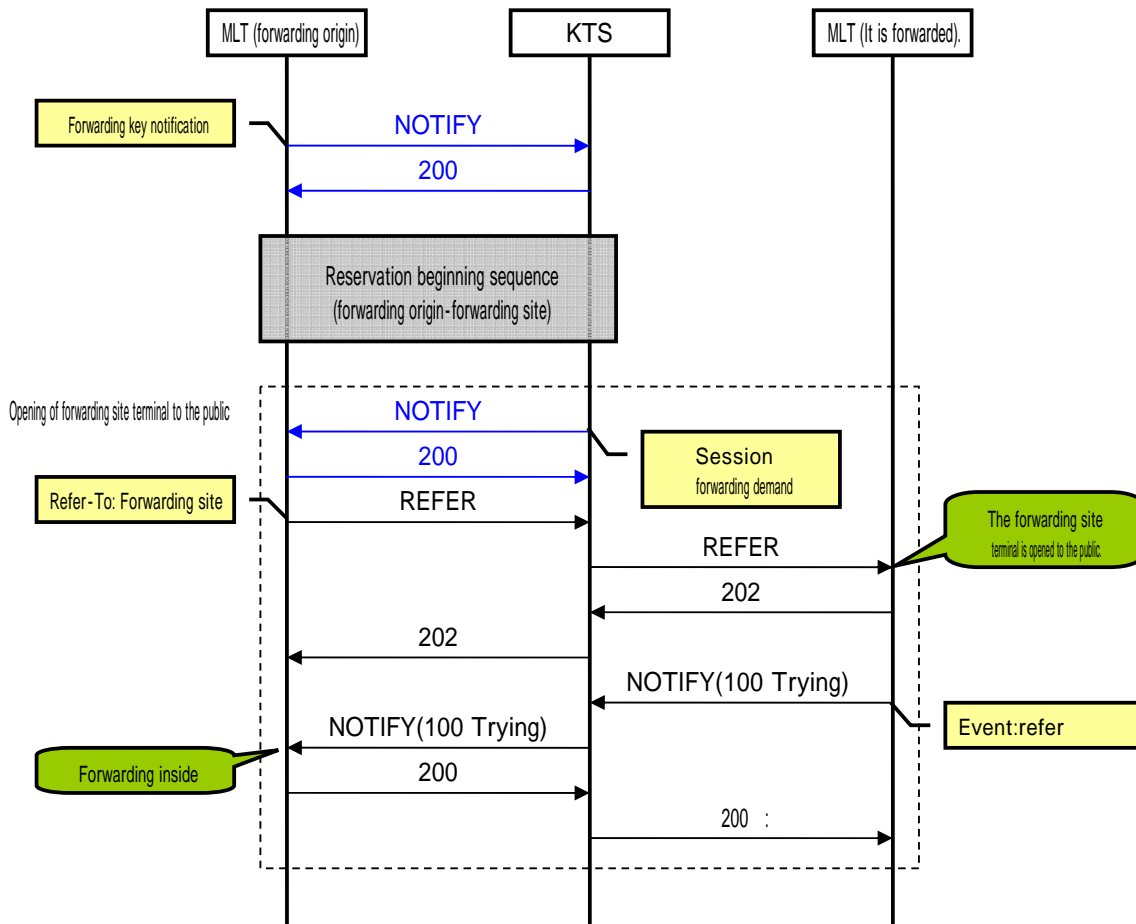
4.9. Forwarding

4.9.1. Forwarding after it responds (Attended Transfer)

The data transfer sequence conforms to "It secondary forward-calls and exist" defined by SIPING as pseudoPROXY operation after it responds in KTS-SIP.

4.9.1.1. Opening of forwarding site to the public

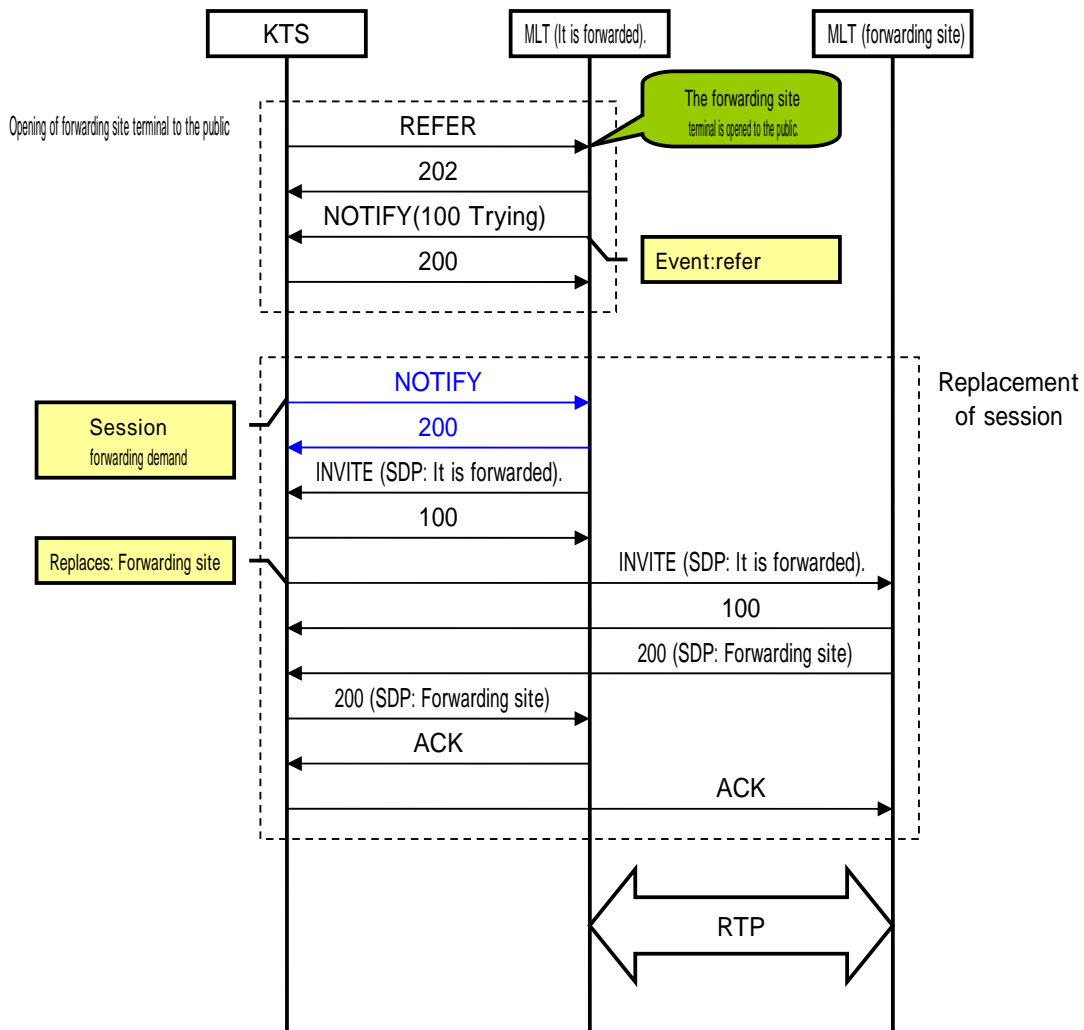
A main device directs a forwarding former terminal the transmission of the REFER request by the session forwarding demand (forwarding instruction). When the REFER request is transmitted in the same dialog when dialog information is specified for the session forwarding demand, and dialog information is not specified, the terminal transmits the REFER request by a new dialog. A forwarding former terminal is passed to the terminal forwarded adding dialog information on forwarding site URI, the forwarding site, and the established session to the Refer-To header of the REFER request. It is shown the terminal to be forwarded is to pass NOTIFY request (100 Trying) that automatically adds . refer" to the Event header to a forwarding former terminal after the REFER request is permitted by 202 responses, and to be trying forwarding.



4.9.1.2. Replacement of session

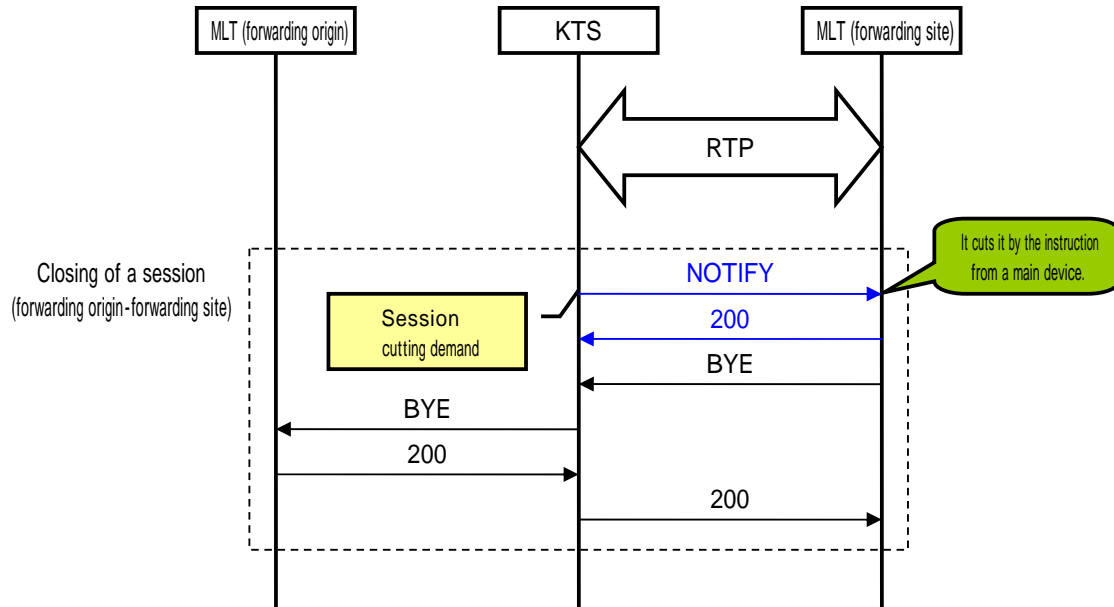
After opening the forwarding site to the public to the terminal to be forwarded, a main device directs the terminal forwarded by the session forwarding demand (substitution instruction) the transmission of the INVITE request. The terminal to be forwarded is transmitted adding dialog information on the forwarding origin specified for the Replaces header of the INVITE request with the Refer-To header of the REFER request, and adding SDP information on the body. The forwarding site terminal automatically returns 200 responses after the INVITE request is received with the Replaces header and replaces the session with a forwarding former terminal with the session with the terminal to be forwarded.

Not the main device instruction but the terminal should automatically return 200 responses to the INVITE request with the Replaces header. The purpose of this is to delay 200 response attainment to the terminal forwarded by the time lag of the necessity of 180 responses from the forwarding site terminal as the trigger by which a main device directs to respond, and the response instruction, and for the influence to go out to the receiving talk of the terminal forwarded as a result.



4.9.1.3. Liberating of dialog of forwarding origin-forwarding site

After completing the session replacement, a main device directs the forwarding site terminal the transmission of the BYE request by the session cutting demand. Session..replace..unnecessary..become..forward..forwarding site..dialog..liberate.

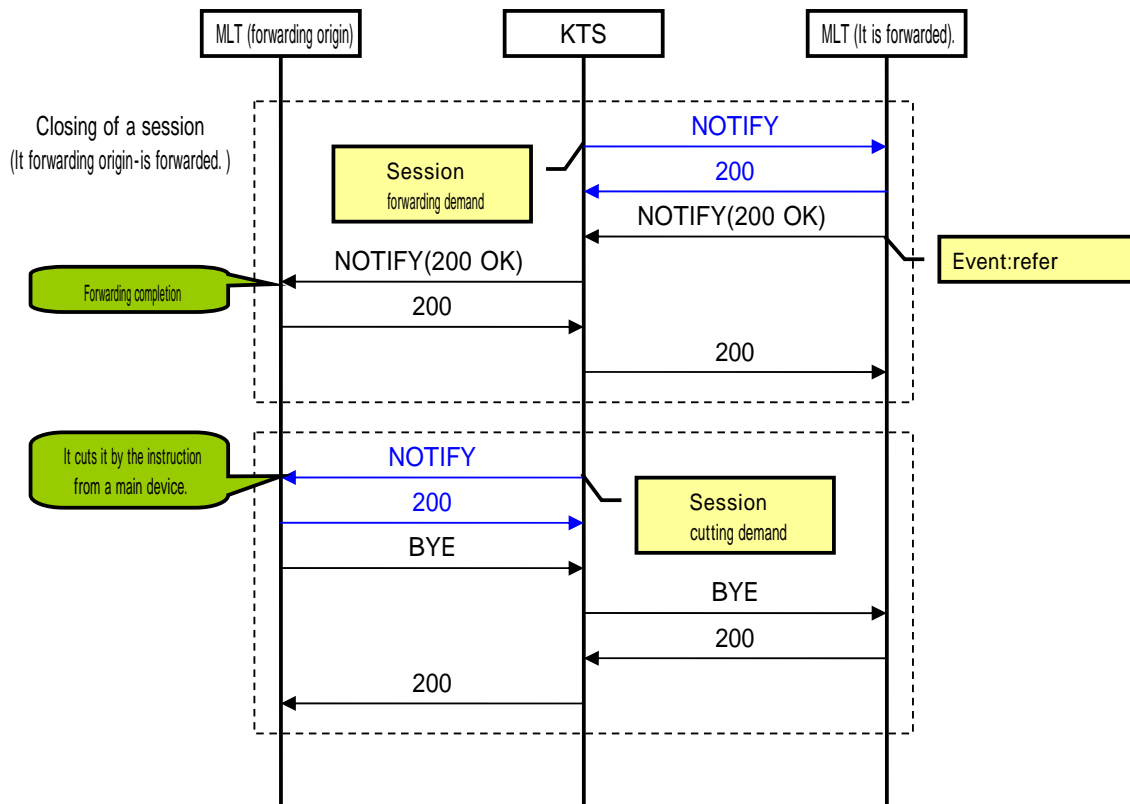


4.9.1.4. Liberating the dialog in forwarding result notification, forwarding origin, and being forwarded

After completing the session replacement, a main device directs the terminal forwarded by the session forwarding demand (result instruction) the transmission of the NOTIFY request. The terminal to be forwarded shows that NOTIFY request (200 OK) that adds . refer" to the Event header is passed to a forwarding former terminal, and forwarding was completed normally.

Follow the forwarding result of the description in the session forwarding demand (result instruction) by a main device about the forwarding result of the notification of the terminal to be forwarded.

After completing the forwarding result notification to a forwarding former terminal, a main device directs a forwarding former terminal the transmission of the BYE request by the session cutting demand. Session..replace..unnecessary..become..forwa rd..forward..dialog..liberate.

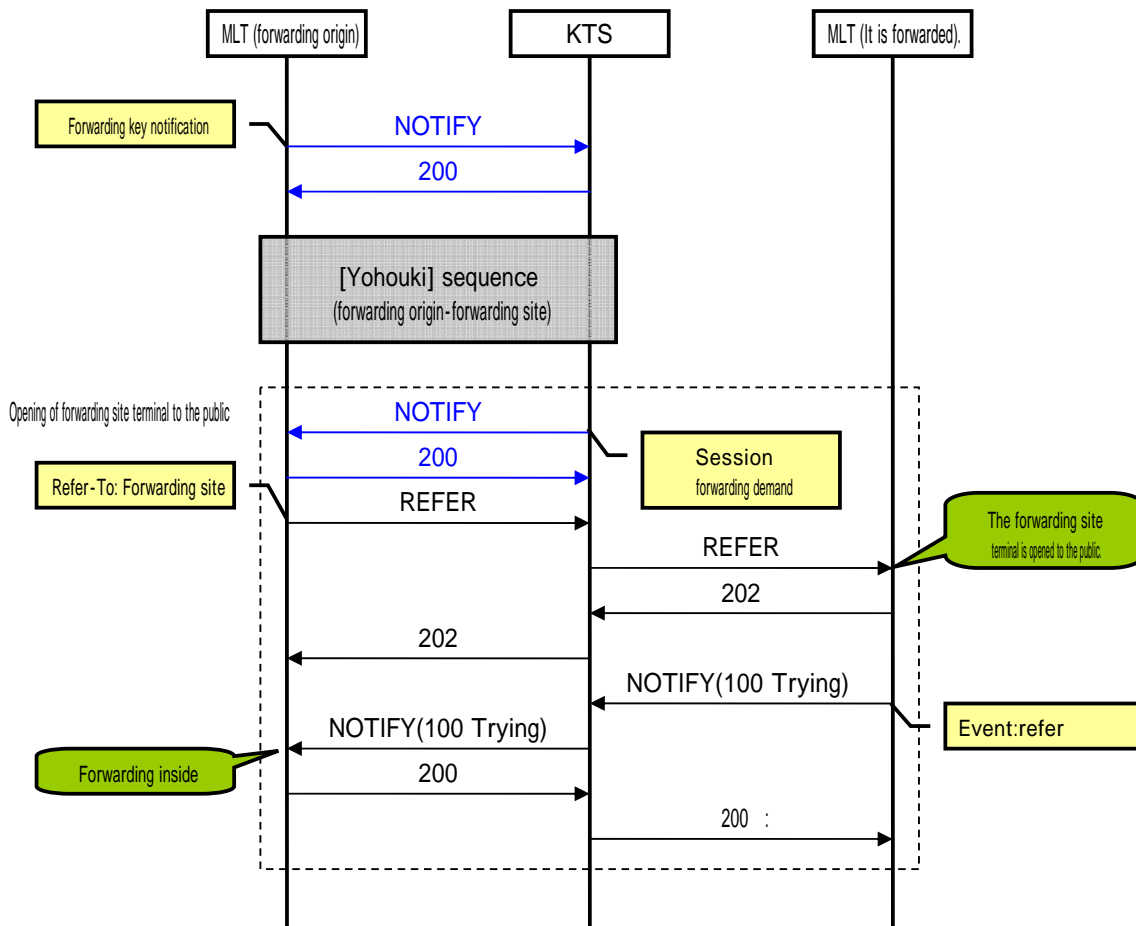


4.9.2. Forwarding when being calling it (Unattended Transfer)

A part of data transfer sequence conforms to "There is no secondary forwarding-call" defined by SIPING as pseudoPROXY operation when calling mesne in KTS-SIP.

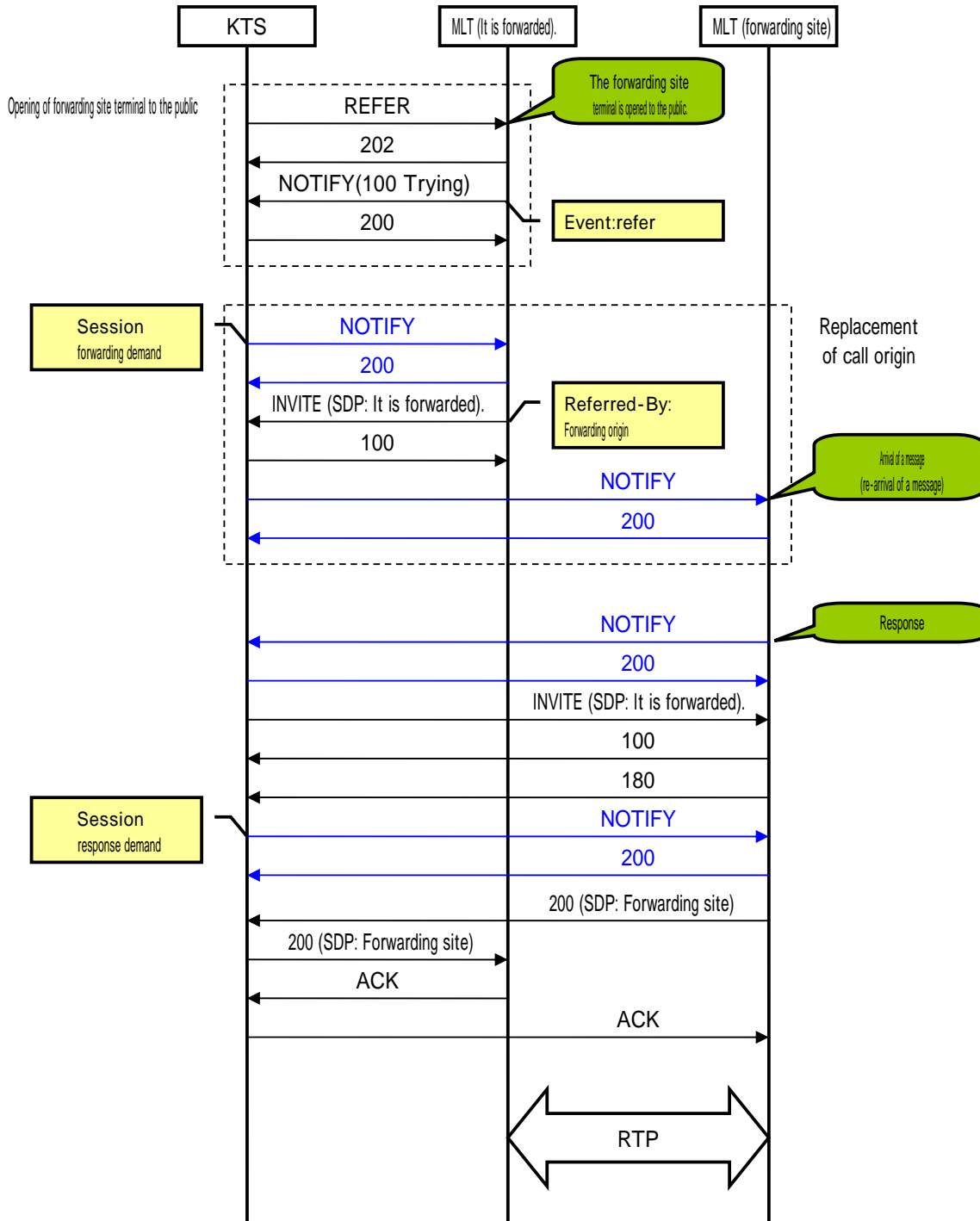
4.9.2.1. Opening of forwarding site to the public

A main device directs a forwarding former terminal the transmission of the REFER request by the session forwarding demand (forwarding instruction). When the REFER request is transmitted in the same dialog when dialog information is specified for the session forwarding demand, and dialog information is not specified, the terminal transmits the REFER request by a new dialog. A forwarding former terminal is passed to the terminal forwarded adding forwarding site URI to the Refer-To header of the REFER request. It is shown the terminal to be forwarded is to pass NOTIFY request (100 Trying) that automatically adds . refer" to the Event header to a forwarding former terminal after the REFER request is permitted by 202 responses, and to be trying forwarding.



4.9.2.2. Replacement of call origin

After opening the forwarding site to the public to the terminal to be forwarded, a main device directs the terminal forwarded by the session forwarding demand (substitution instruction) the transmission of the INVITE request. The terminal to be forwarded is transmitted adding URI information on the forwarding origin to the Referred-By header of the INVITE request. The session with the terminal that returns 200 responses because the forwarding site terminal responds as well as a usual arrival of a message response and is forwarded is established.

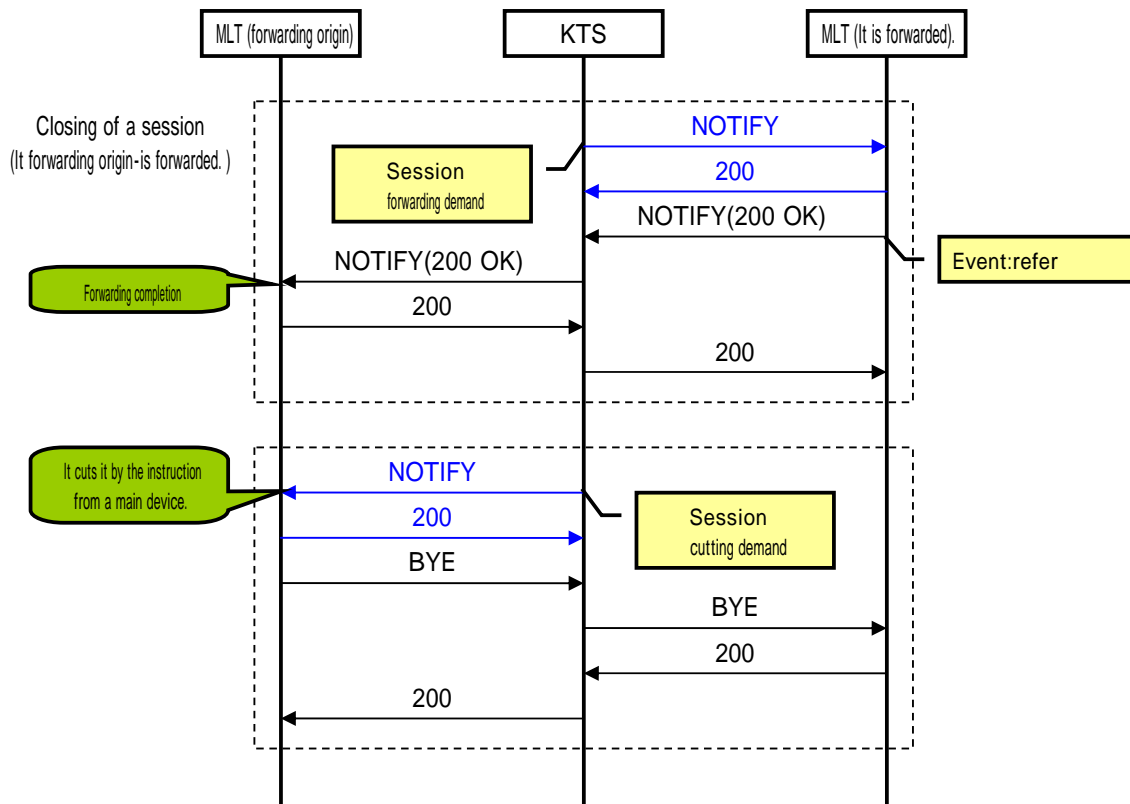


4.9.2.3. Liberating of the dialog in forwarding result notification, forwarding origin, and being forwarded

After the forwarding site responds, a main device directs the terminal forwarded by the session forwarding demand (result instruction) the transmission of the NOTIFY request. The terminal to be forwarded shows that NOTIFY request (200 OK) that adds . refer" to the Event header is passed to a forwarding former terminal, and forwarding was completed normally.

Follow the forwarding result of the description in the session forwarding demand (result instruction) by a main device about the forwarding result of the notification of the terminal to be forwarded.

After completing the forwarding result notification to a forwarding former terminal, a main device directs a forwarding former terminal the transmission of the BYE request by the session cutting demand. Forwarding site..response..unnecessary..become..forward d..dialog..liberate.

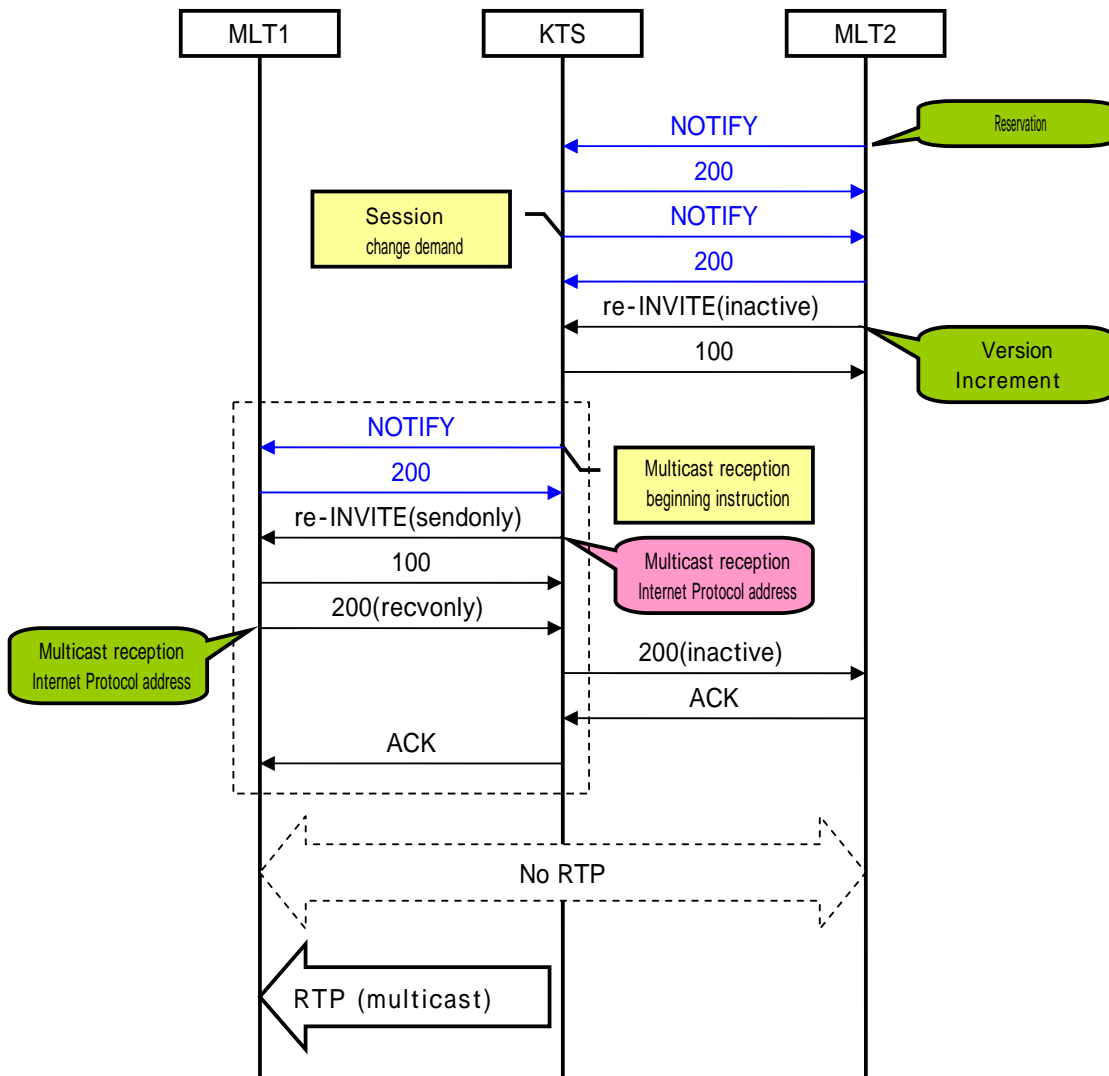


4.10. Multicast

4.10.1. Reservation sound reproduction (system sound source/external reservation sound source)

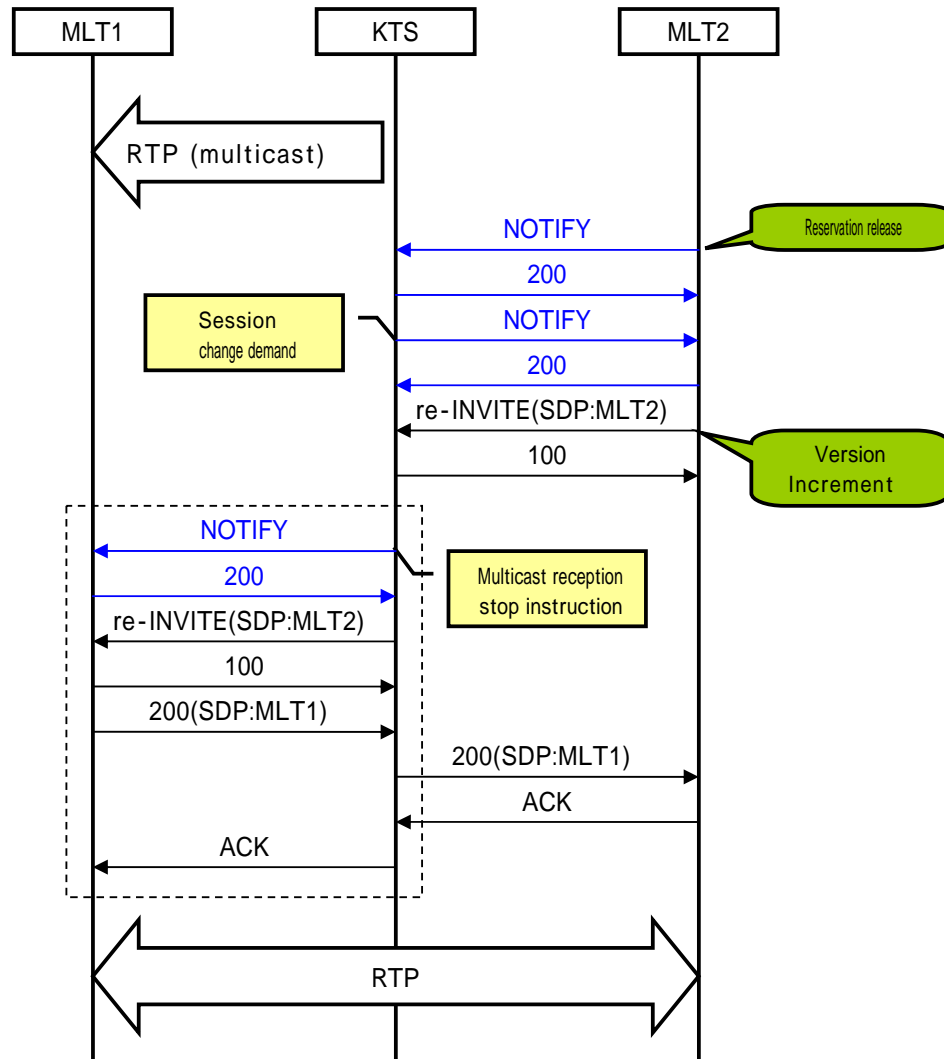
4.10.1.1. Multicast RTP reception beginning

When the terminal to be reserved is a setting that uses the system reservation sound when reserving it, a main device transmits multicast RTP reception beginning instruction to the terminal to be reserved. The terminal prepares the packet reception beginning directed multicast Internet Protocol address, and after completing the SDP exchange by the re-INVITE transaction, begins the reception of multicast RTP packet. A main device specifies not . inactive" but . sendonly" for a parameter of the re-INVITE request to the terminal to be reserved unlike the local reservation sound reproduction. In this case, the terminal must specify not . inactive" but . recvonly" for a parameter of 200 responses.



4.10.1.2. Multicast RTP reception stop

When the terminal to be reserved is a setting that uses the system reservation sound when the reservation is released, a main device transmits multicast RTP reception stop instruction to the terminal to be reserved. The terminal to be reserved may stop the packet reception of directed multicast Internet Protocol address according to this timing. After completing the SDP exchange by the re-INVITE transaction, the terminal to be reserved restarts the sending and receiving of the RTP packet by the reservation terminal and the unicast.

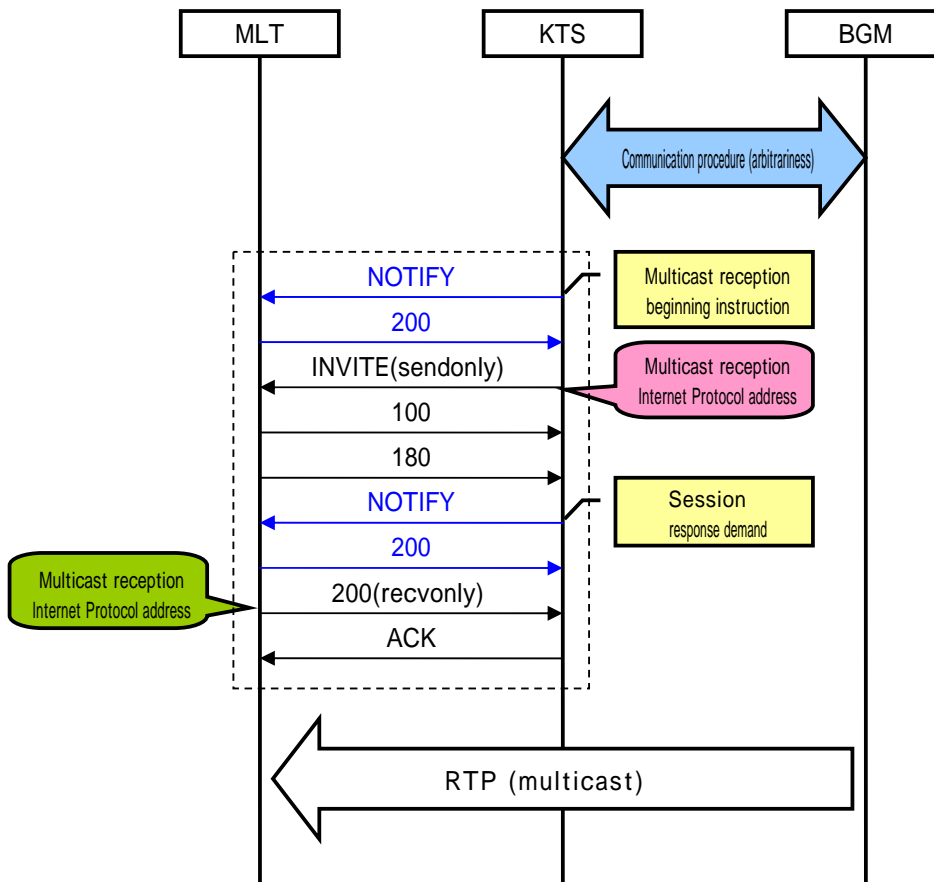


4.10.2. BGM

4.10.2.1. Multicast RTP reception beginning

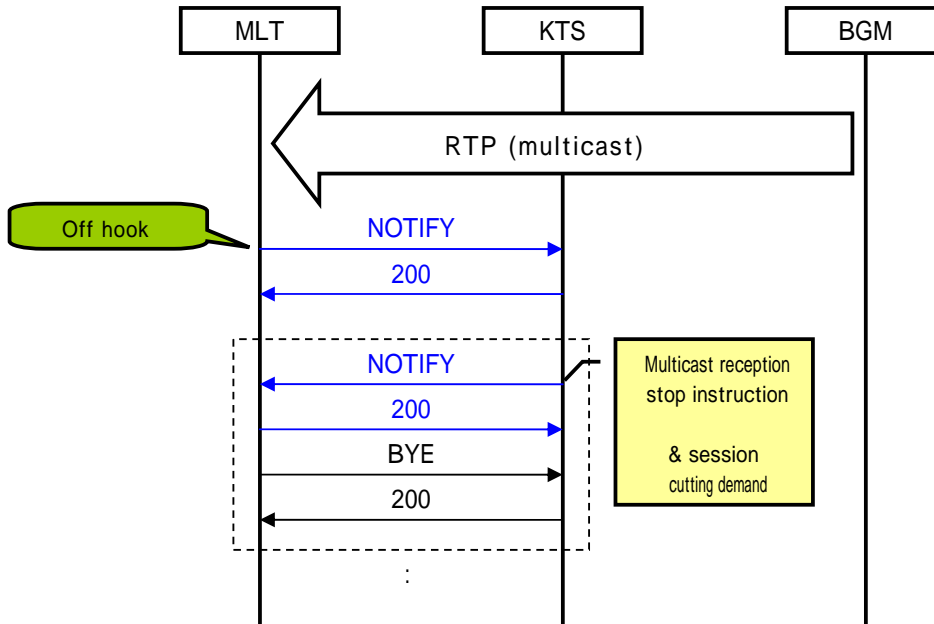
When the terminal that entered the state of the idol is a setting that uses BGM, a main device transmits multicast RTP reception beginning instruction to the terminal. The terminal prepares the packet reception beginning directed multicast Internet Protocol address, and after completing the SDP exchange by the INVITE transaction, begins the reception of multicast RTP packet. A main device specifies ". sendonly" for a parameter of the INVITE request to the terminal to be reserved. In this case, the terminal must specify ". recvonly" for a parameter of 200 responses. A

main device should be able to direct the terminal multicast Internet Protocol address to receive the multicast sent from the BGM server correctly though the communication procedure between a main device and the BGM server is not provided with this specifications.

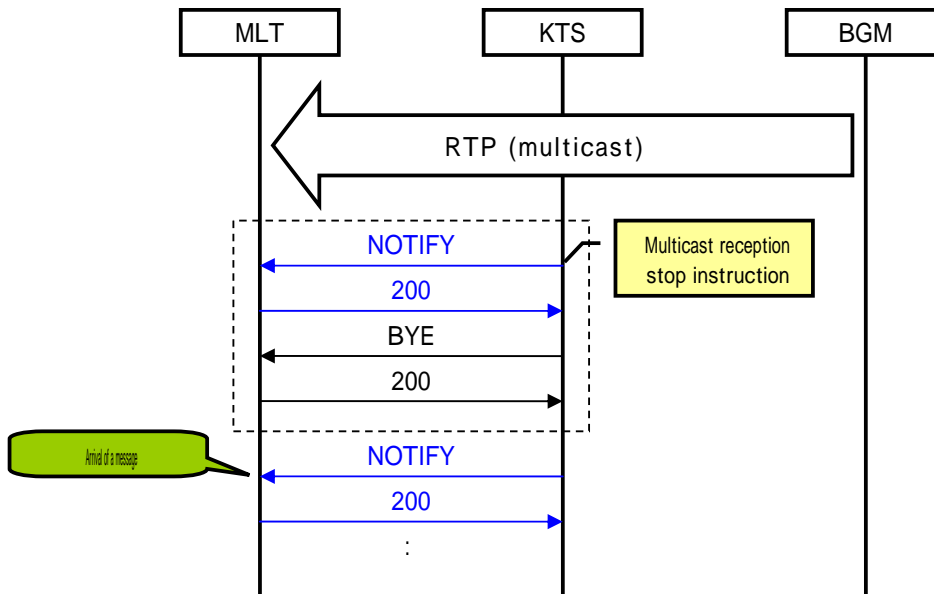


4.10.2.2. Multicast RTP reception stop

When the BGM reproduction is released by an active factor such as off hooks, a main device transmits multicast RTP reception stop instruction and the session cutting demand to the terminal. The terminal stops the packet reception of directed multicast Internet Protocol address, transmits the BYE request, and liberates the dialog of BGM.



When the BGM reproduction is released by a passive factor of arrival of a message etc. , a main device transmits multicast RTP reception stop instruction to the terminal. The terminal may stop the packet reception of directed multicast Internet Protocol address according to this timing. After transmitting the BYE request and liberating the dialog of BGM, a main device controls arrival of a message.

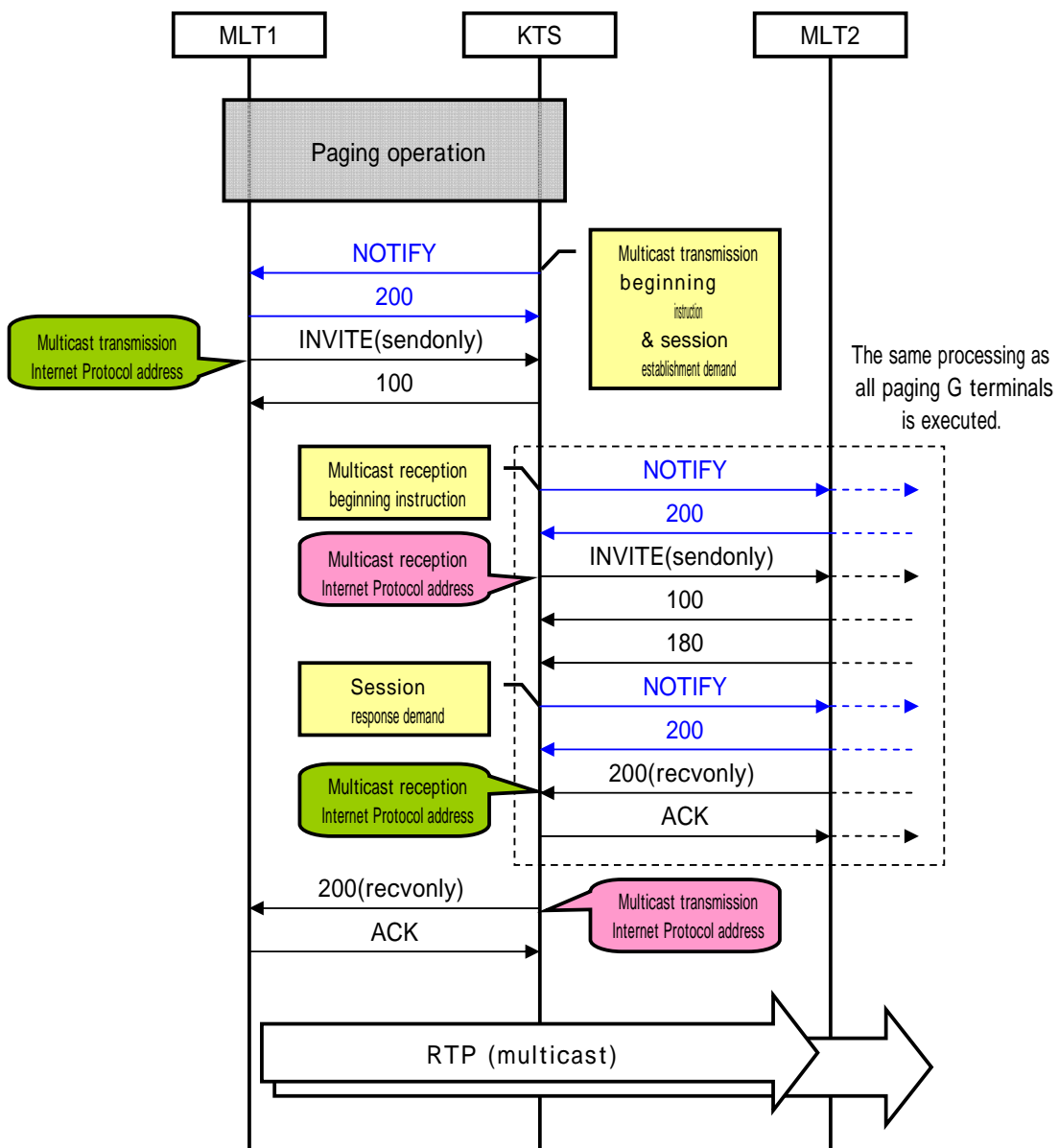


4.10.3. Paging

4.10.3.1. Multicast RTP reception beginning

When the terminal for KTS-SIP operates the paging, a main device transmits multicast RTP transmission beginning instruction and the session establishment demand to the paging terminal. The paging terminal prepares the packet transmission beginning directed multicast Internet Protocol address, and after completing the SDP exchange by the INVITE transaction, begins the transmission of multicast RTP packet. The multicast of a main device as well as BGM's reproducing for the terminal for all KTS-SIP that belongs to the paging group. The RTP reception processing is done.

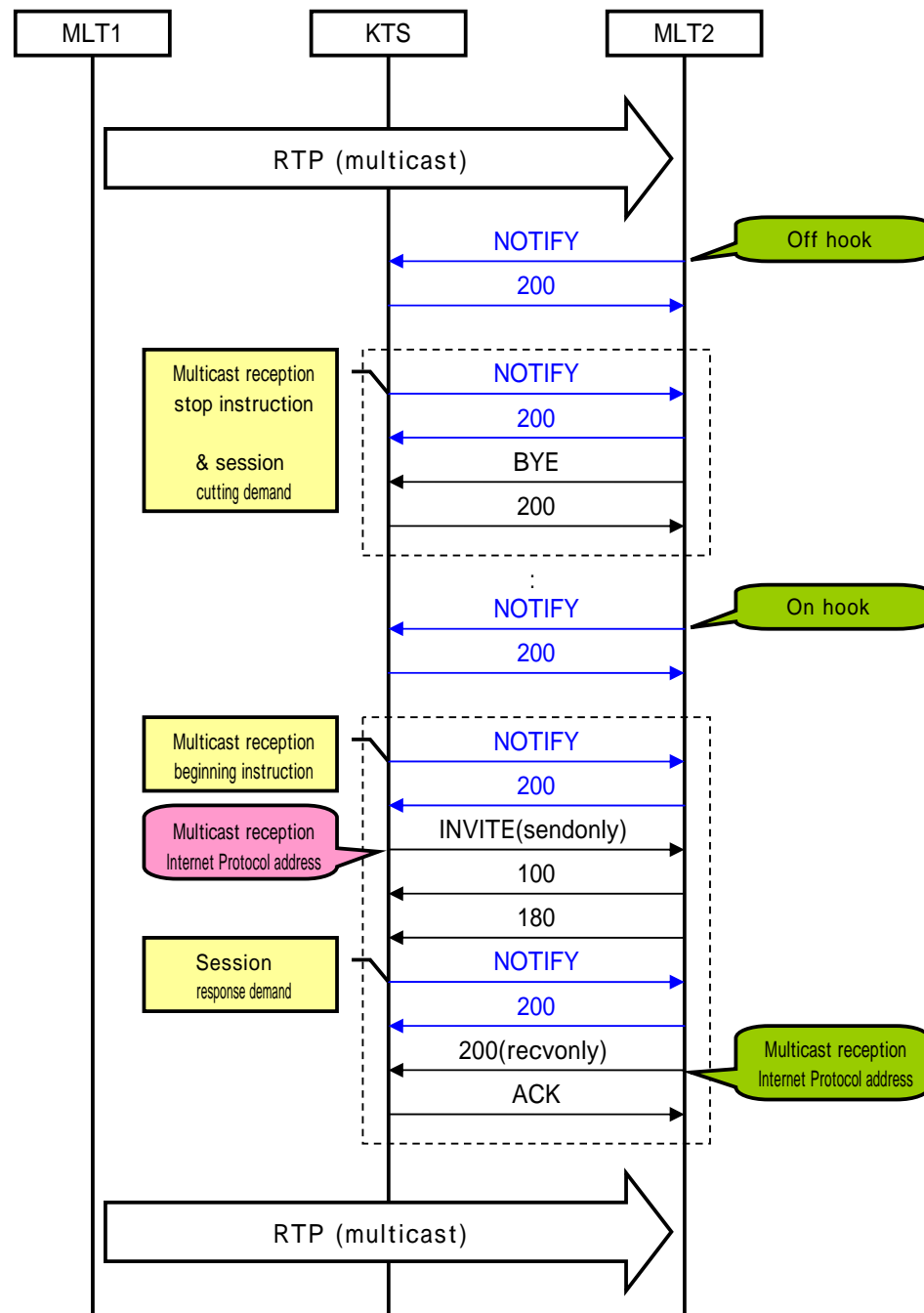
A main device must return 200 responses to the paging terminal for the head slice prevention of the paging after establishing the session with a full page [nguguru-pu] terminal.



4.10.3.2. Multicast RTP reception interruption

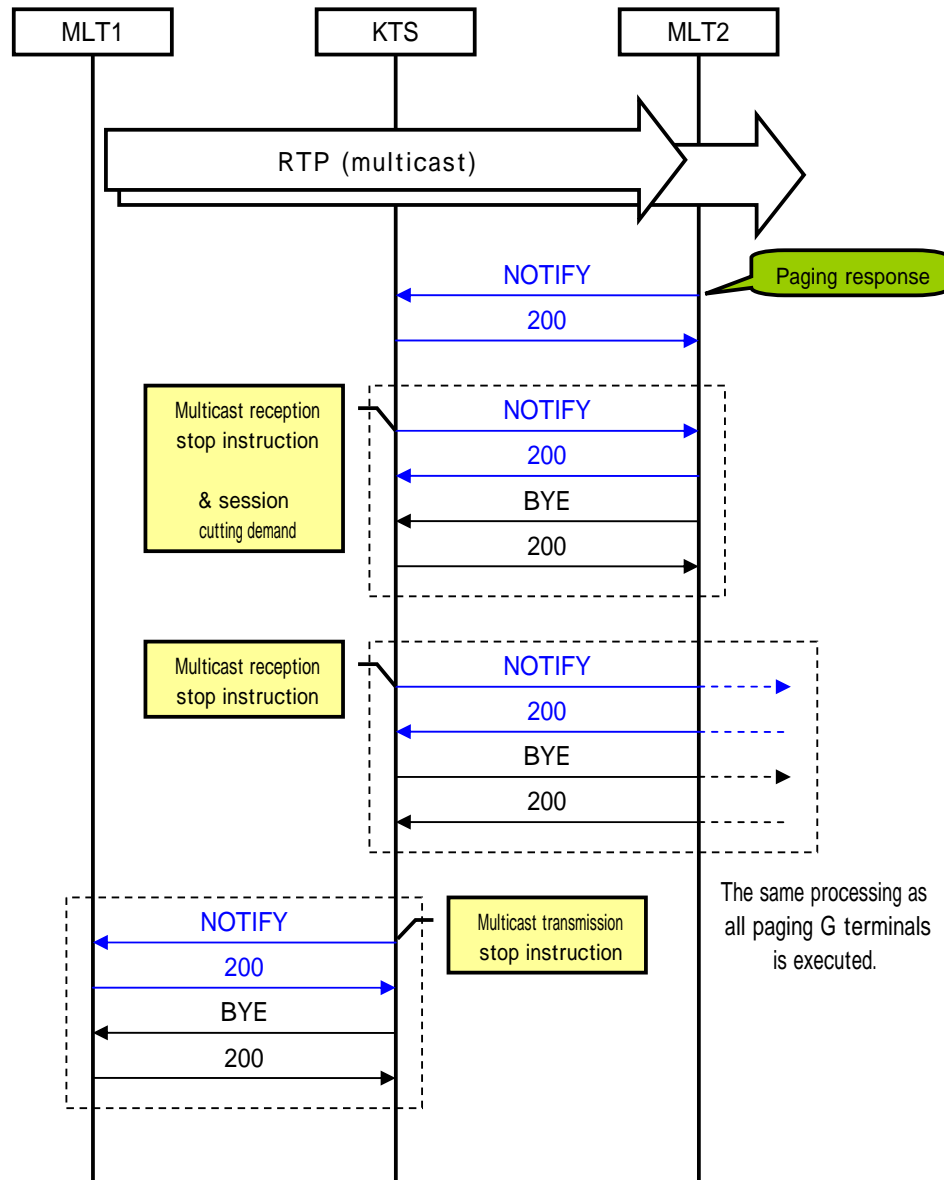
When the BGM reproduction is released by an active factor such as off hooks, a main device transmits multicast RTP reception stop instruction and the session cutting demand to the terminal. The terminal stops the packet reception of directed multicast Internet Protocol address, transmits the BYE request, and liberates the dialog of the paging.

The session of the paging establishes it, and when the paging terminal to have stopped multicast RTP reception returns to the idol while continuing, a main device does multicast RTP reception beginning processing and establishes the session of the paging again.



4.10.3.3. Multicast RTP sending and receiving stop

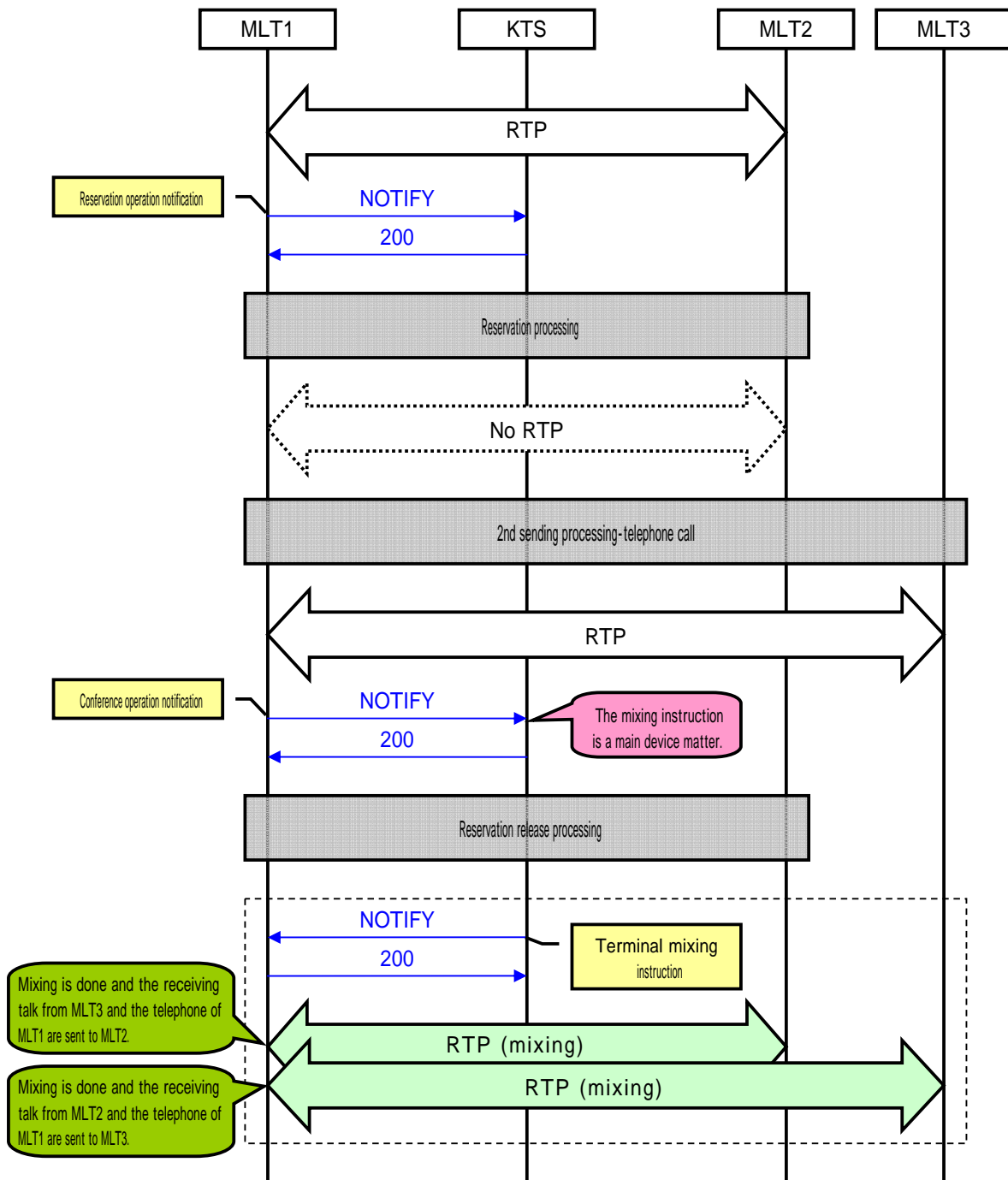
When the paging is released by the paging response operation, a main device transmits multicast RTP reception stop instruction and the session cutting demand to the paging response terminal. The terminal stops the packet reception of directed multicast Internet Protocol address, transmits the BYE request, and liberates the dialog of the paging. Moreover, a main device liberates all dialogs and sessions concerning the paging by transmitting the BYE request after the RTP reception stop instruction is transmitted to all multicast RTP transmission stop instruction, the paging terminals for the paging terminal.



4.11. Trilateral meeting (mixing in local terminal)

1st originating call is a pending state, and to generate the trilateral meeting, a main device can direct the terminal mixing with 2nd originating call talking over the telephone. After releasing the reservation of 1st originating call, a main device transmits the terminal mixing instruction to the terminal.

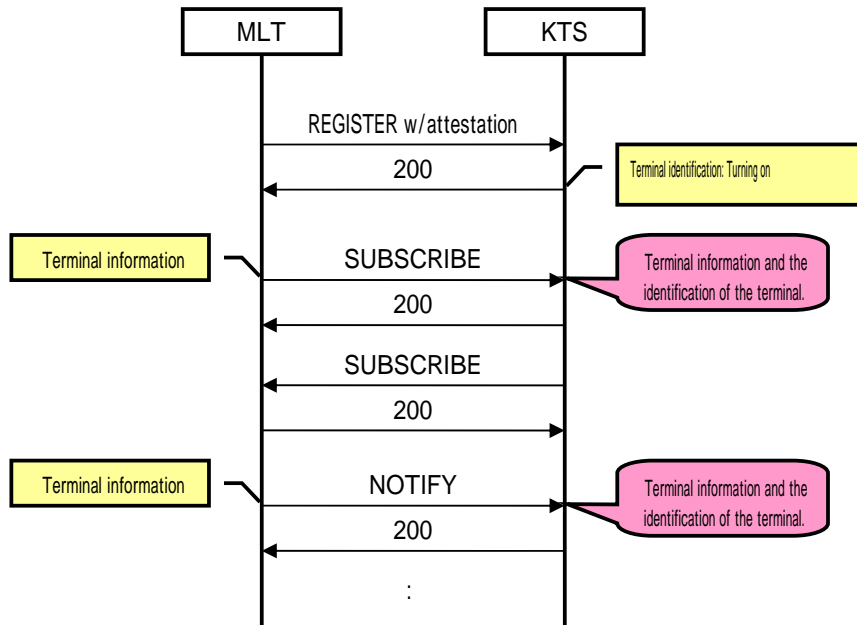
Mounting the trilateral meeting that uses the terminal mixing function is assumed to be a main device matter.



4.12. Encryption and terminal identification

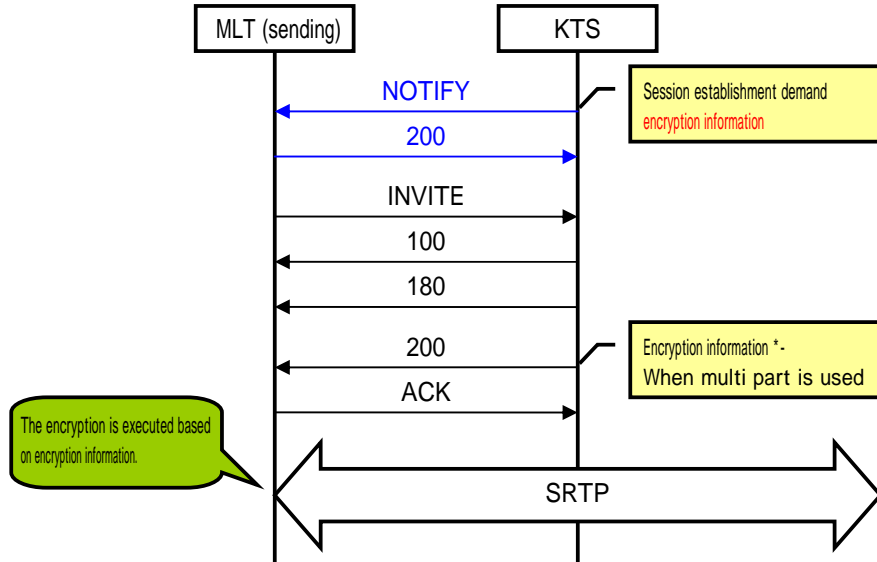
4.12.1. Terminal well informed man wisdom

200 when the terminal is registered When making a response OK, the terminal that terminal identification instruction (Ind-TermIdentify) and is notified the terminal identification adds terminal information (Info-TermType) for the identification of the terminal to the following messages.

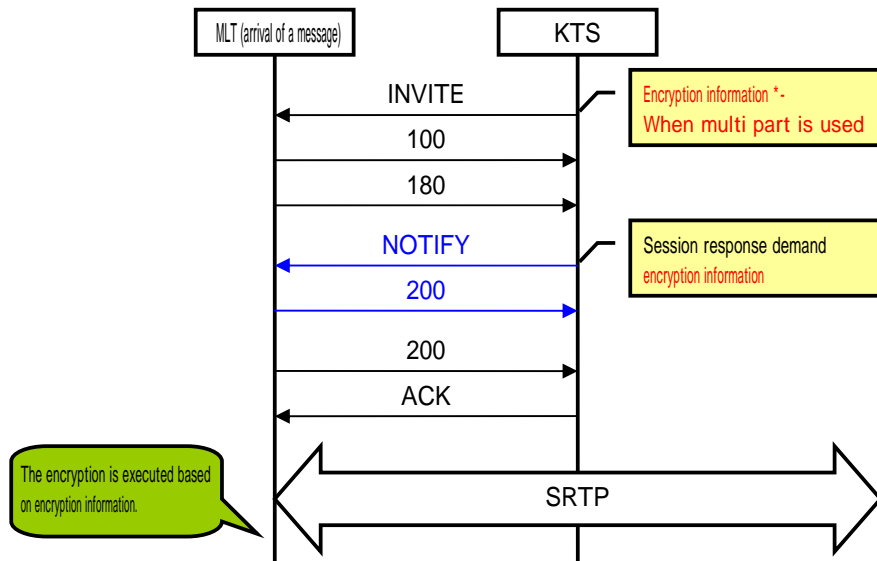


4.12.2. Notification of SRTP encryption information

Encrypted communication (SRTP) is done by notifying encryption information on each terminal (encryption method and key) from a main device. In NEC enhancing SIP, the multi part is used and 200 KTS-SIP enables the notification by the NOTIFY request in consideration of the case where the multi part is not used though encryption information was notified by the OK response.

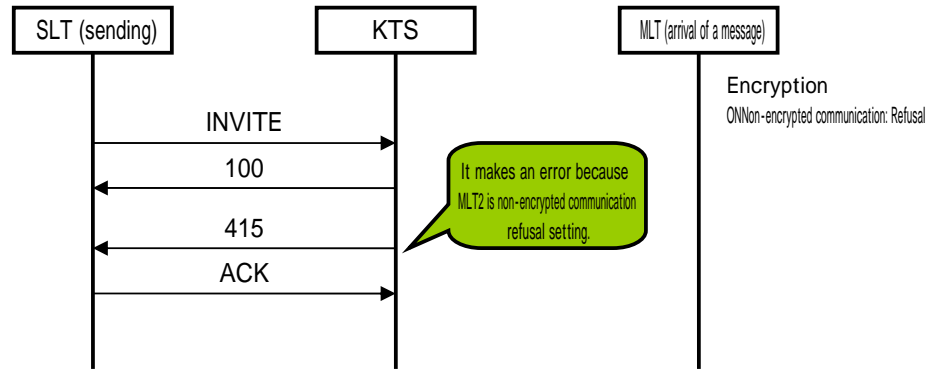


Encryption information on the arrival of a message terminal is notified by the INVITE request or the NOTIFY request.



4.12.3. Access control of non-encrypted communication

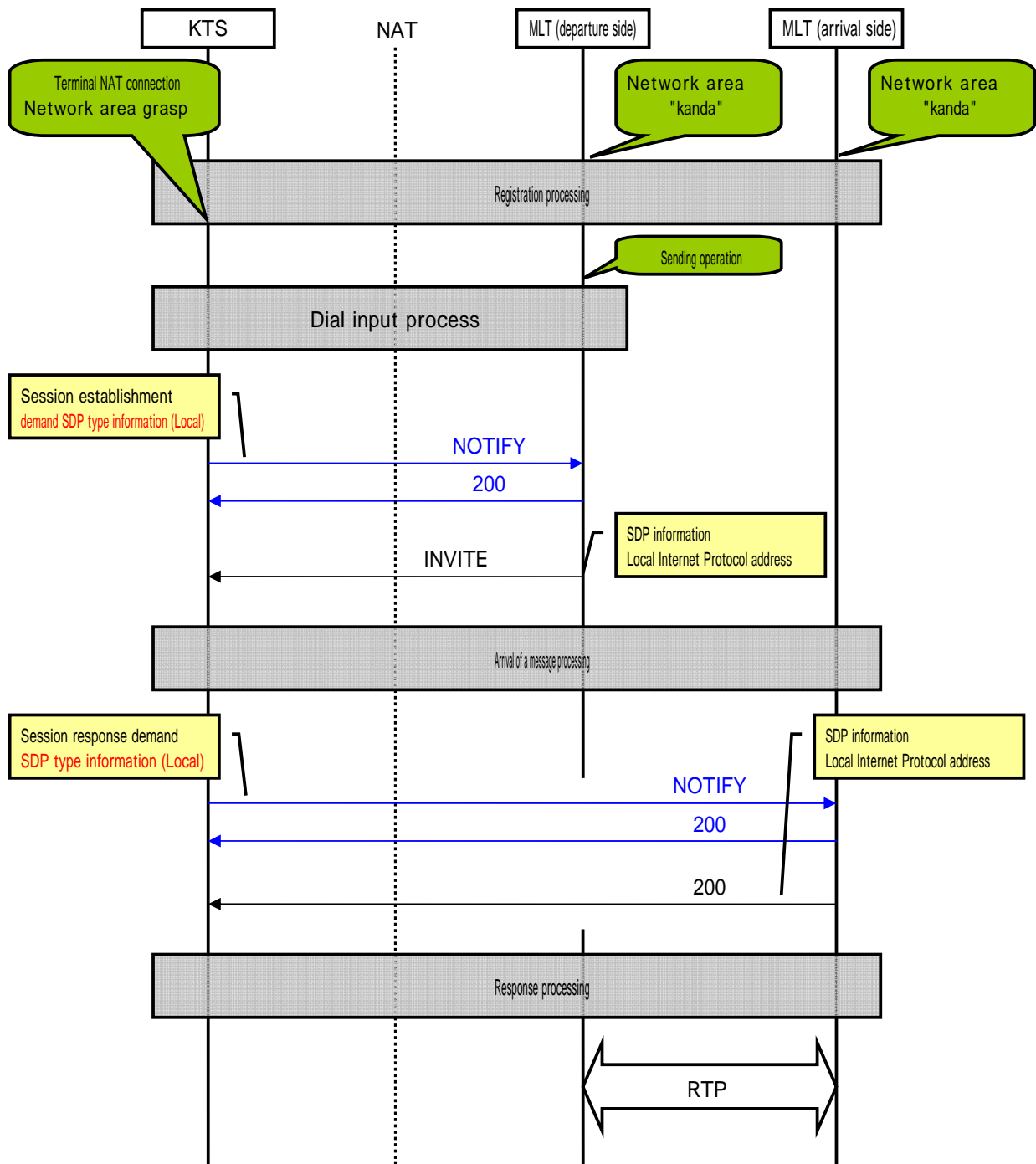
Arrival of a message is refused on the main device side when there is arrival of a message from the terminal of the encryption non-correspondence for the terminal that system data and is non-encrypted communication "Refusal".



4.13. Same NAT connection subordinate RTP Peer to Peer

The terminal can be understood to belong to network area name "kanda" by notifying a main device adding network area (NAT connection subordinate) parameter to REGISTER (attestation) in the connection by way of NAT.

It notifies adding SDP type information "Local" to the session establishment demand for the departure side terminal and the session response demand for the arrival side terminal when the departure side terminal and the arrival side terminal belong to the same NAT connection subordinate. Because the departure side terminal and the arrival of a message terminal add local IP information to SDP, RTP Peer to Peer between terminals can be done respectively.

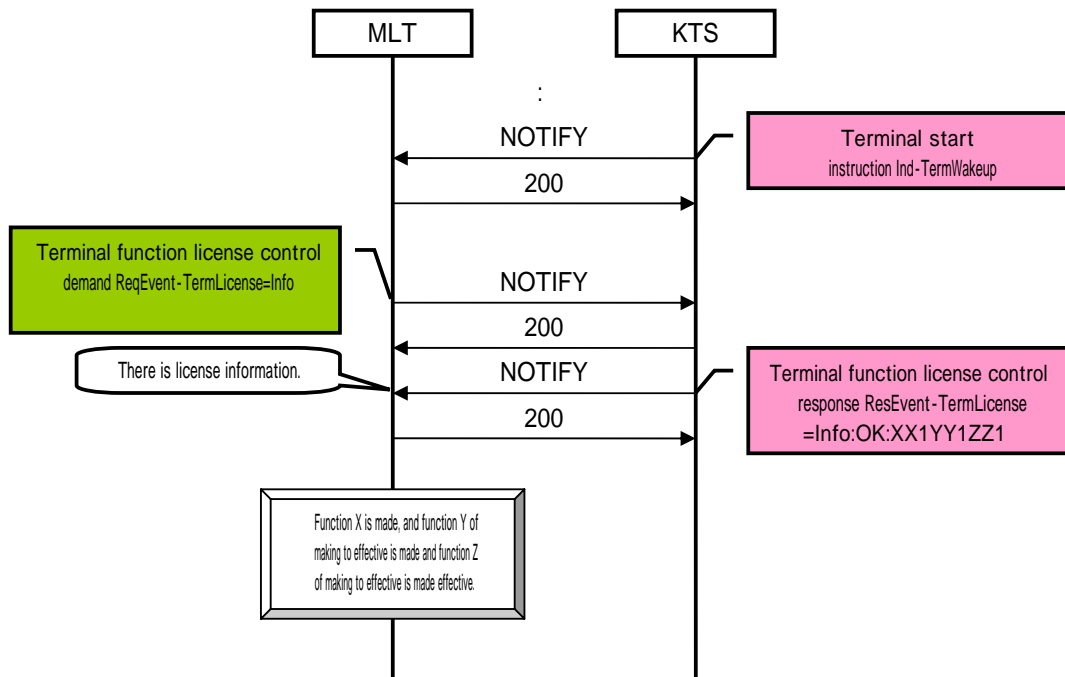


4.14. Terminal function license

4.14.1. Semi-Floating License

4.14.1.1. Reference to terminal function license

After receiving terminal start instruction (Ind-TermWakeup) parameter, the terminal demands "Reference (INFO)" without fail by terminal license control demand (ReqEvent-TermLicense) parameter. It notifies as it is by not checking the content of the license data when a main device has the link information in the terminal function license management data, and using terminal function license control response (ResEvent-TermLicense) parameter. When the notified license data is analyzed, and the license of an effective function is allocated, the terminal begins the operation of the function.

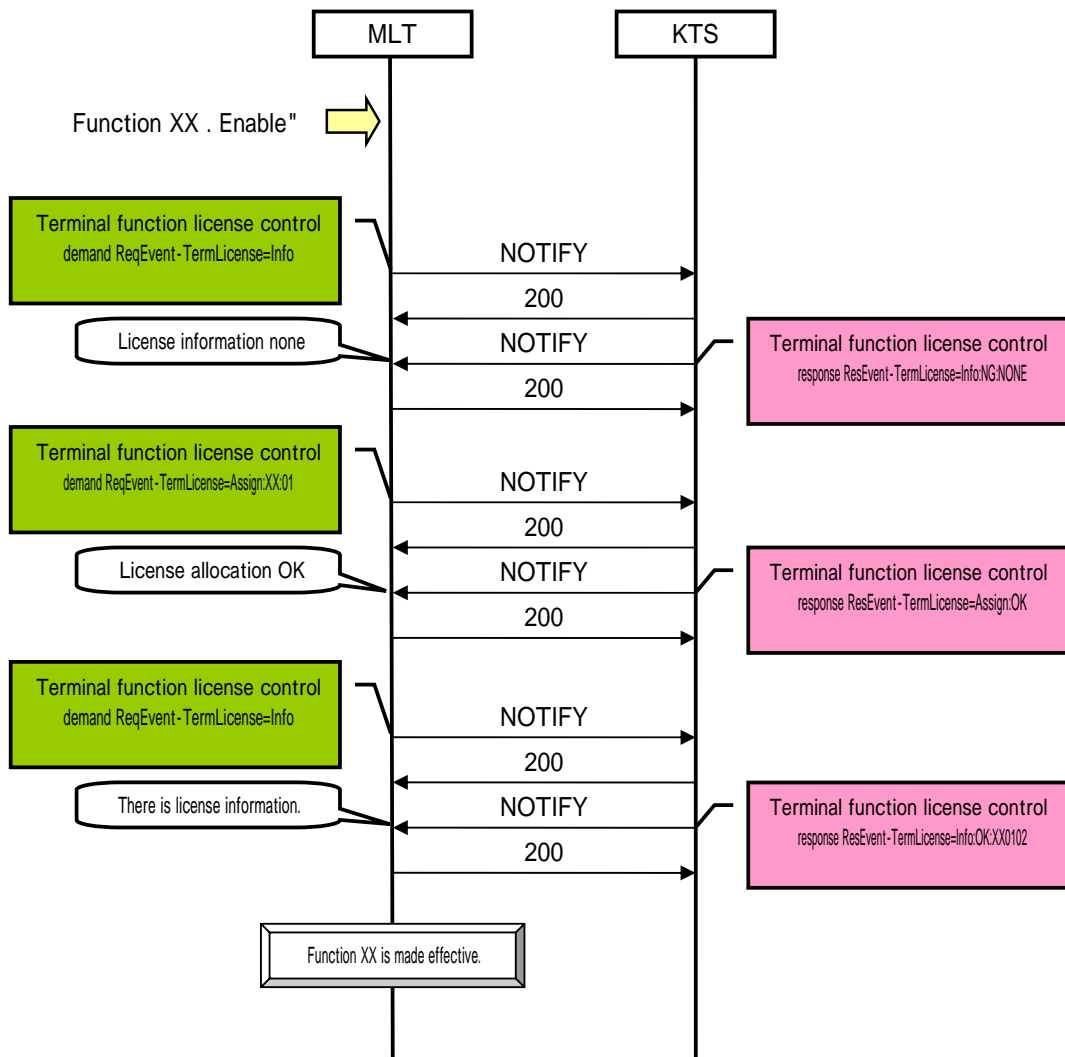


4.14.1.2. Allocation of terminal function license

First of all, when the function to need the license is changed to ". Enable" by hand power, the terminal demands "Reference (INFO)" by terminal license control demand (ReqEvent-TermLicense) parameter. ". NG:NONE" is notified by using terminal function license control response (ResEvent-TermLicense) parameter because a main device doesn't have the license data linked with administrative information.

After receiving ". NG:NONE" to the reference demand, the terminal demands "Allocation (ASSIGN)" by terminal license control demand (ReqEvent-TermLicense) parameter. A main device notifies ". OK" by using terminal function license control response (ResEvent-TermLicense) parameter if the terminal function license can be allocated.

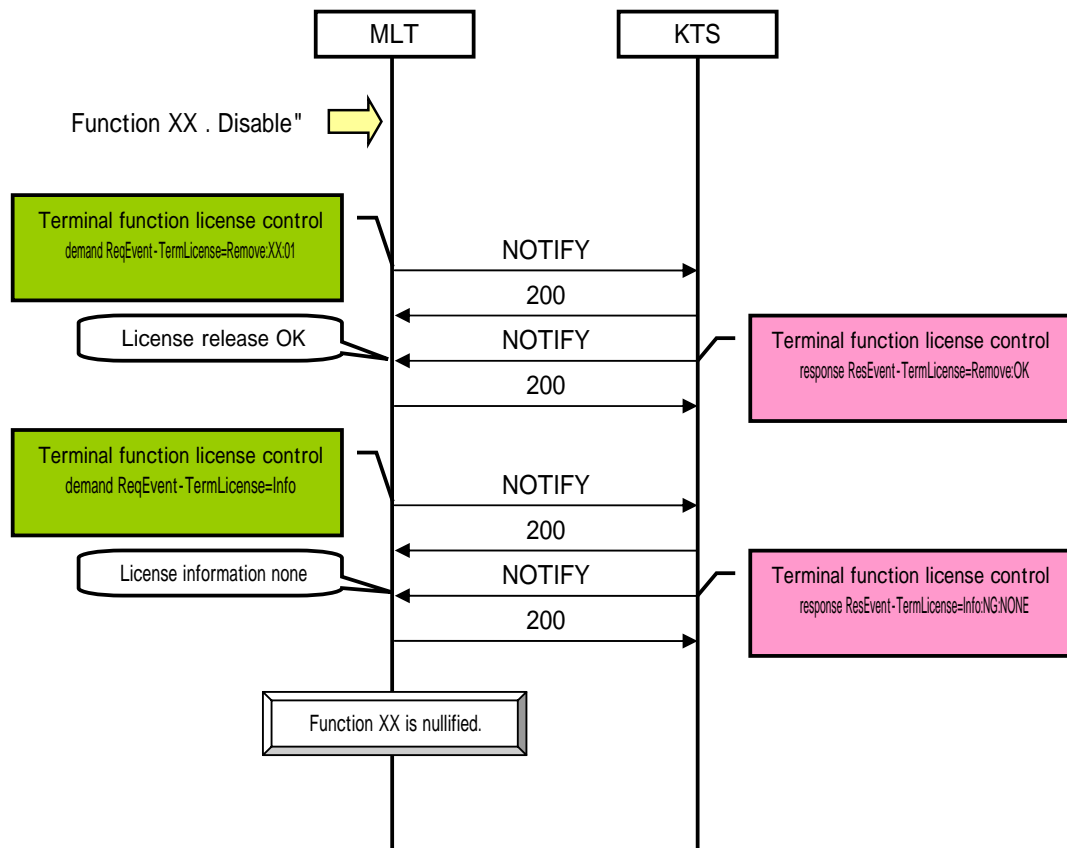
After receiving ". OK" to the allocation demand, the terminal executes the reference to the terminal function license again. The operation of the function begins after confirming the license data notified from a main device is analyzed, and the license of an effective function is allocated.



4.14.1.3. Release of terminal function license

First of all, when the function to need the license is changed to . Disable" by hand power, the terminal demands "Release (REMOVE)" for necessary a few minutes of the license by terminal license control demand (ReqEvent-TermLicense) parameter. A main device notifies . OK" by using terminal function license control response (ResEvent-TermLicense) parameter if the terminal function license can be released for demanded a few minutes.

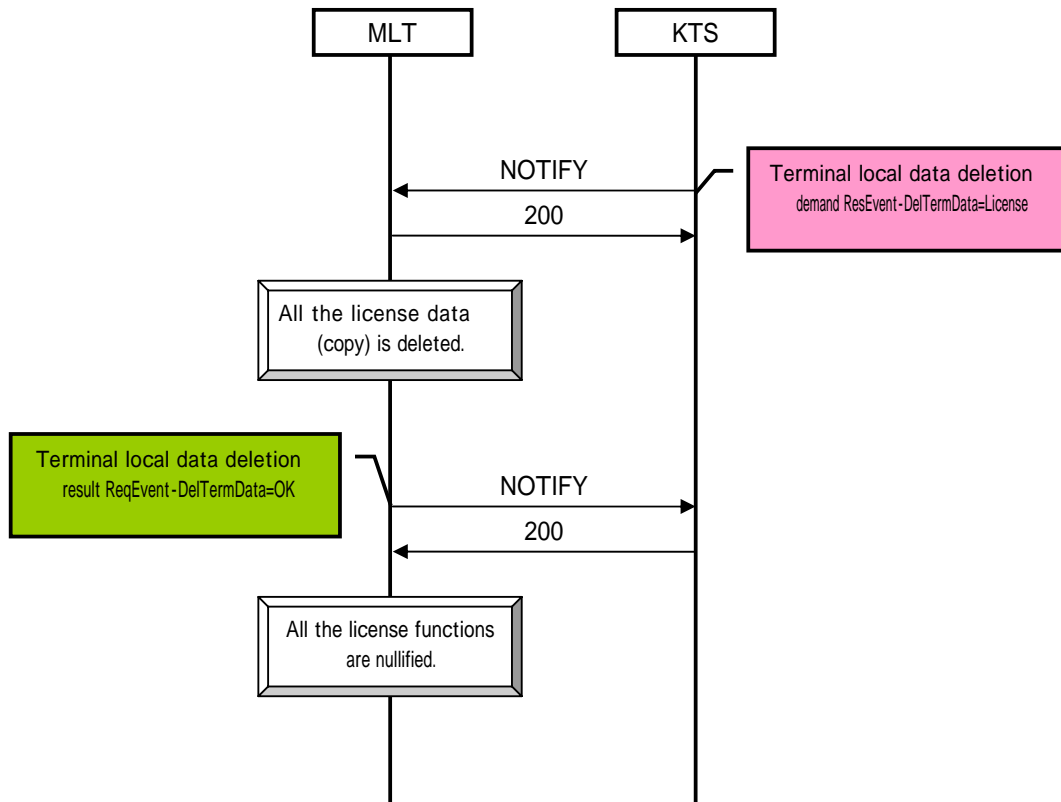
After receiving . OK" to the release demand, the terminal executes the reference to the terminal function license again. After it is confirmed to analyze the license data notified from a main device, and not to be allocated for a few minutes of the license when the license of the function to be invalidated is necessary, the operation of the function is stopped.



4.14.1.4. Forcibly free of terminal function license

All the function licenses (copy) to allocate in the terminal by the instruction from a main device can be compulsorily liberated. A main device demands the deletion of the license specifying . License" for "Deletion data type" of terminal local data deletion demand (ReqEvent-DelTermData) parameter. The terminal notifies . OK" by deleting the function license (copy) to be local and to maintain, assuming all the license functions to be invalid, and using terminal local data deletion result notification (ResEvent-DelTermData) parameter.

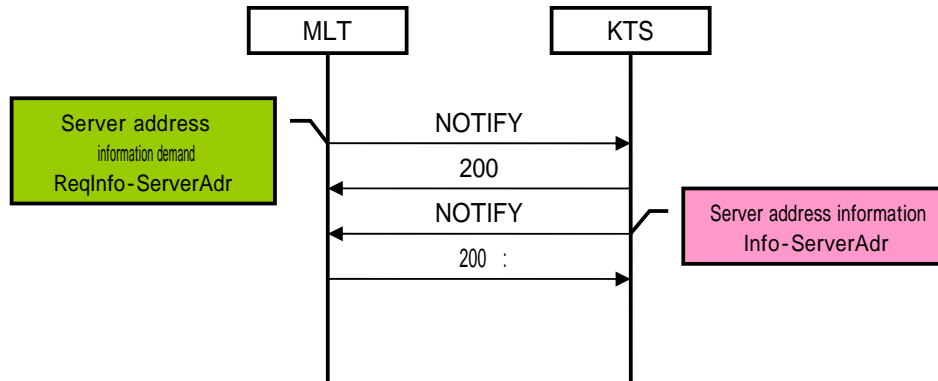
Do not execute the re-acquisition of the terminal license about the terminal as long as reset or the license re-allocation operation by the manual operation is not executed after liberating the compulsion of the terminal function license.



4.15. Server access

4.15.1. Acquisition of various server information

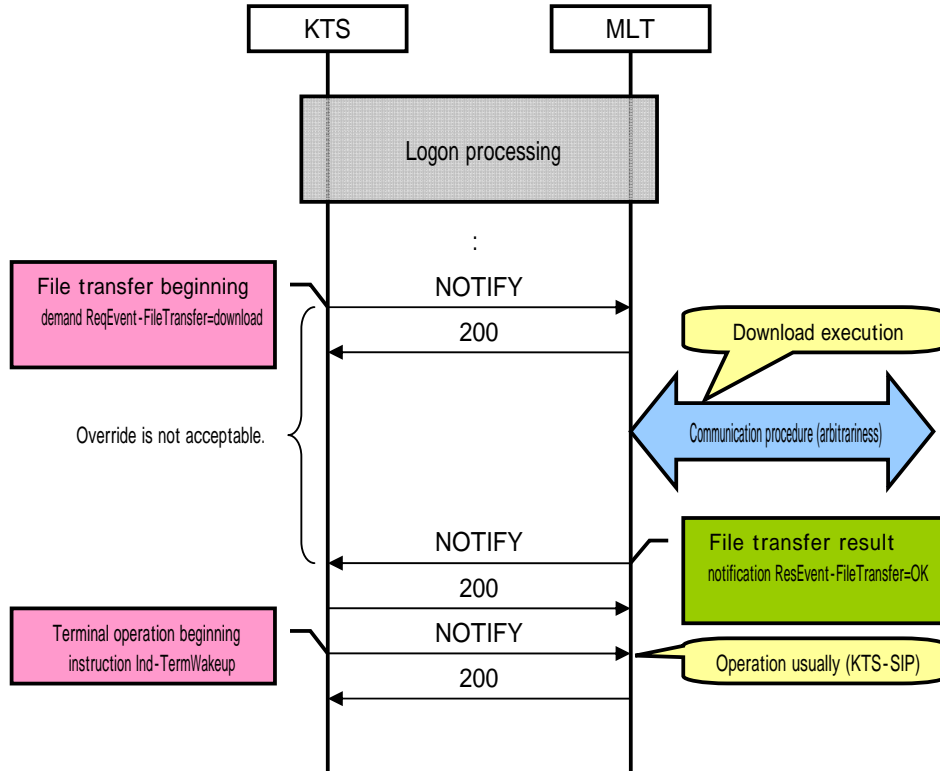
Address information on various servers (DNS) that a main device recognizes is notified to the server well informed man wisdom demand by the terminal.



4.16. File transfer (download/up-loading)

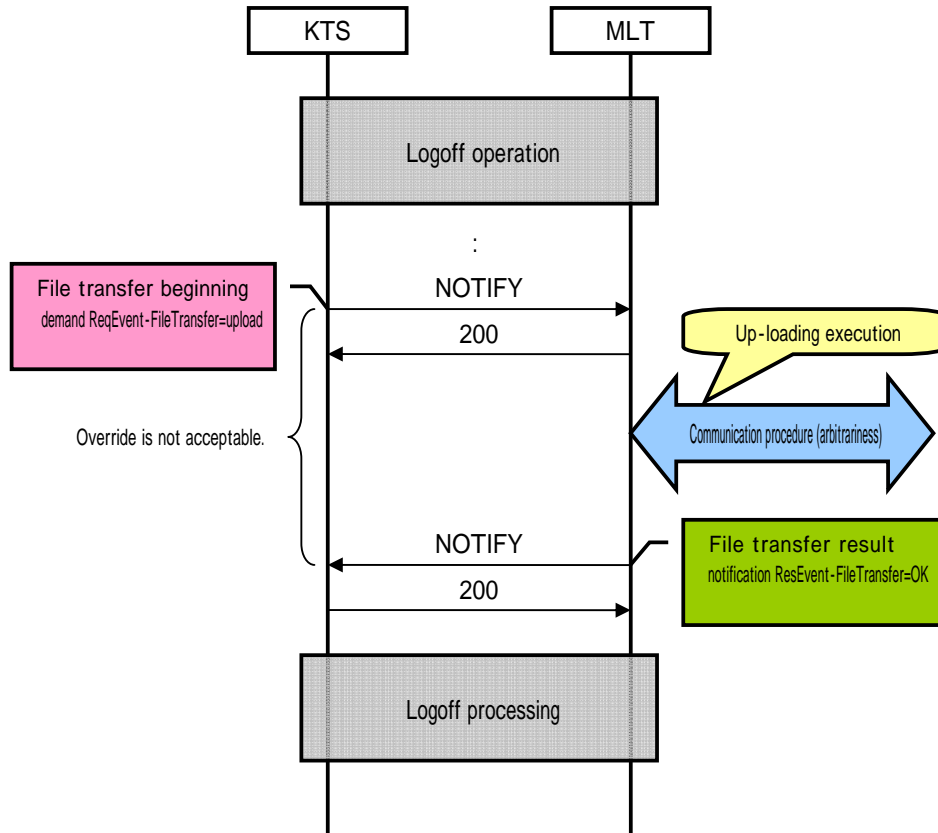
4.16.1. Automatic download when logging it on

After completing the logon processing, a main device directs the terminal the starting download of local data (telephone book and arrival and departure Makoto history, etc.) when the address of the file server is registered in a main device. The terminal must transmit the download completion notification to a main device after downloading all necessary data though the communication protocol between for KTS-SIP the terminal and the file server is assumed to be arbitrary.



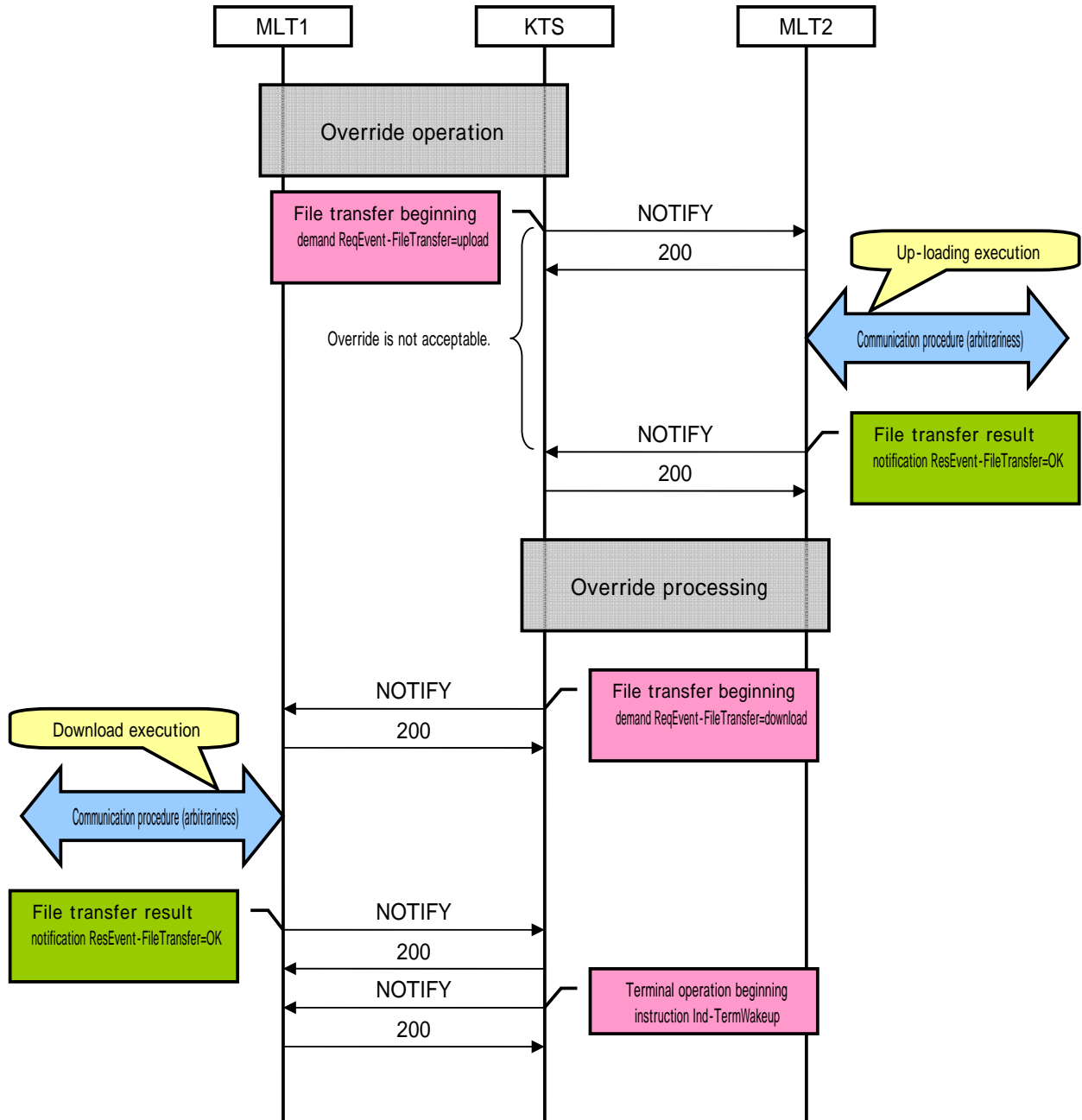
4.16.2. Automatic up-loading at logoff

When the address of the file server is registered in a main device, a main device makes the logoff operation a trigger and directs the terminal the up-loading beginning local data (telephone book and arrival and departure Makoto history, etc.). The terminal must transmit the up-loading completion notification to a main device after up-loading all necessary data though the communication protocol between for KTS-SIP the terminal and the file server is assumed to be arbitrary.



4.16.3. Automatic file transfer at override

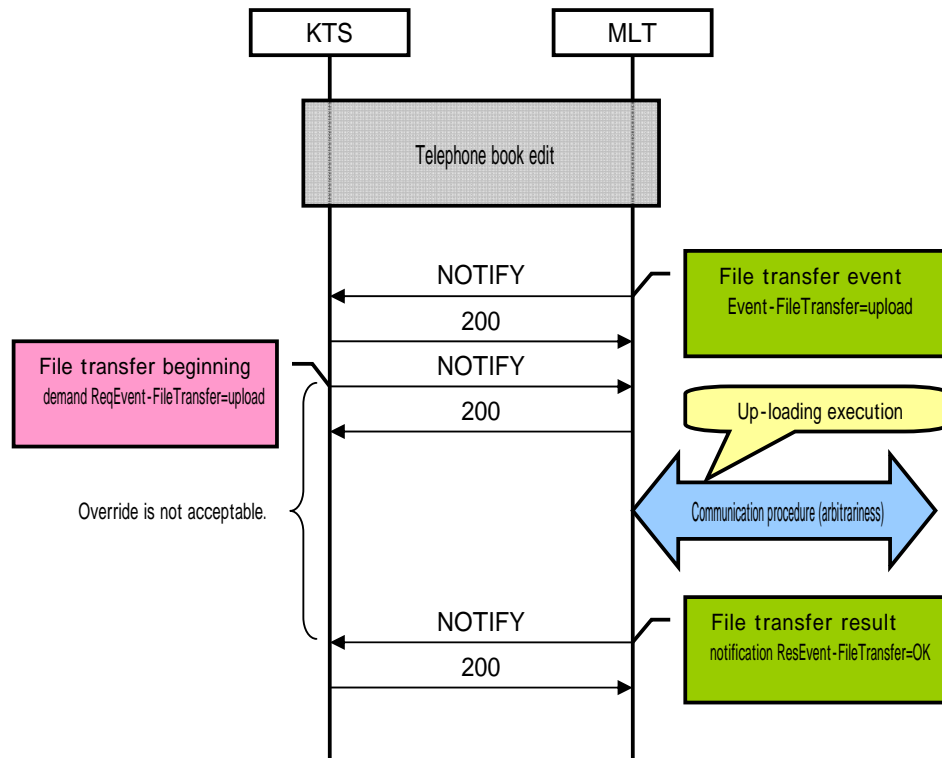
When the address of the file server is registered in a main device, a main device makes the override operation a trigger and directs the override terminal the up-loading beginning local data (telephone book and arrival and departure Makoto history, etc.). After completing up-loading, a main device executes the override processing, and, this time, directs the override execution terminal the starting download of local data.



4.16.4. Manual file transfer by terminal local control

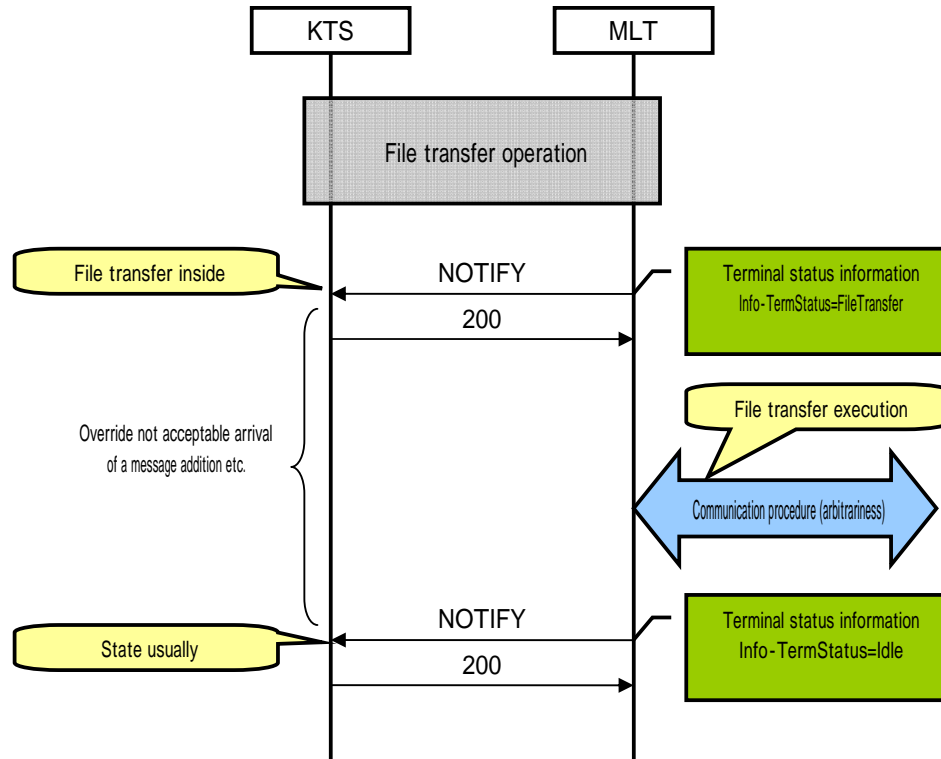
4.16.4.1. When you use server information managed on the main device side

When the terminal originally executes up-loading or download, the terminal transmits the up-loading beginning demand or the starting download demand to a main device. When the address of the file server is registered in a main device, local data of the demand by the terminal as the trigger against the terminal Up-loading or the starting download of (telephone book and arrival and departure Makoto history, etc.) is directed.



4.16.4.2. When you use server information managed on the terminal side

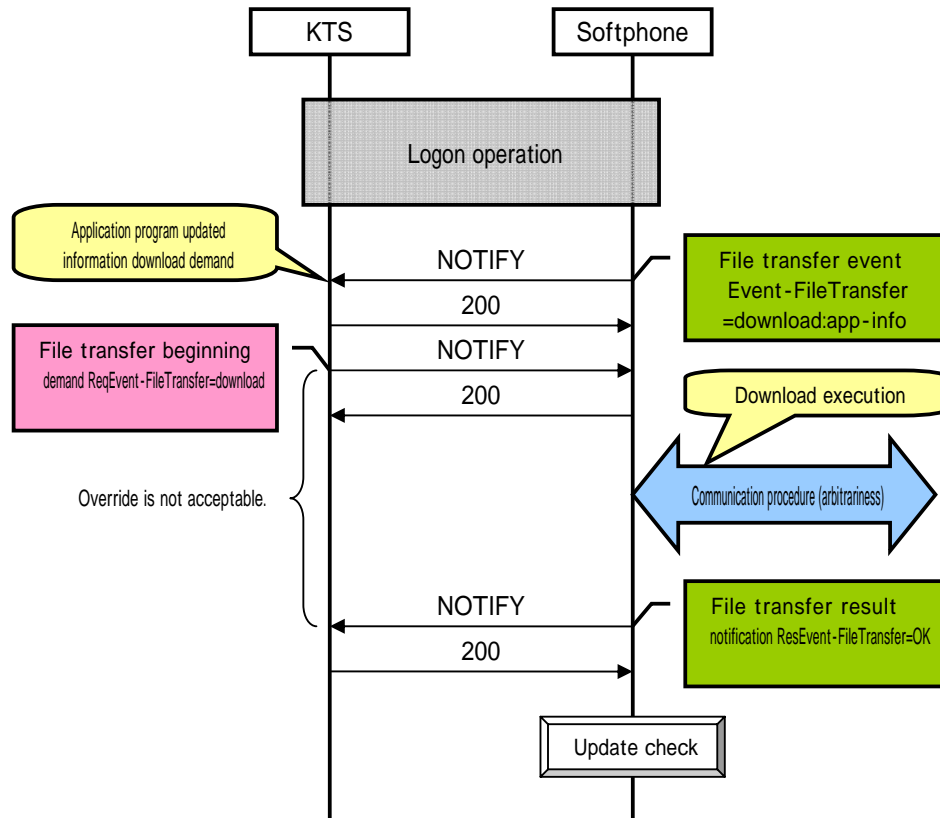
The terminal notifies a main device the file transfer inside by terminal status information (Info-TermStatus) parameter when up-loading or download is executed as the terminal is original based on the server address managed ..a local terminal...



4.16.5. Program update of softphone

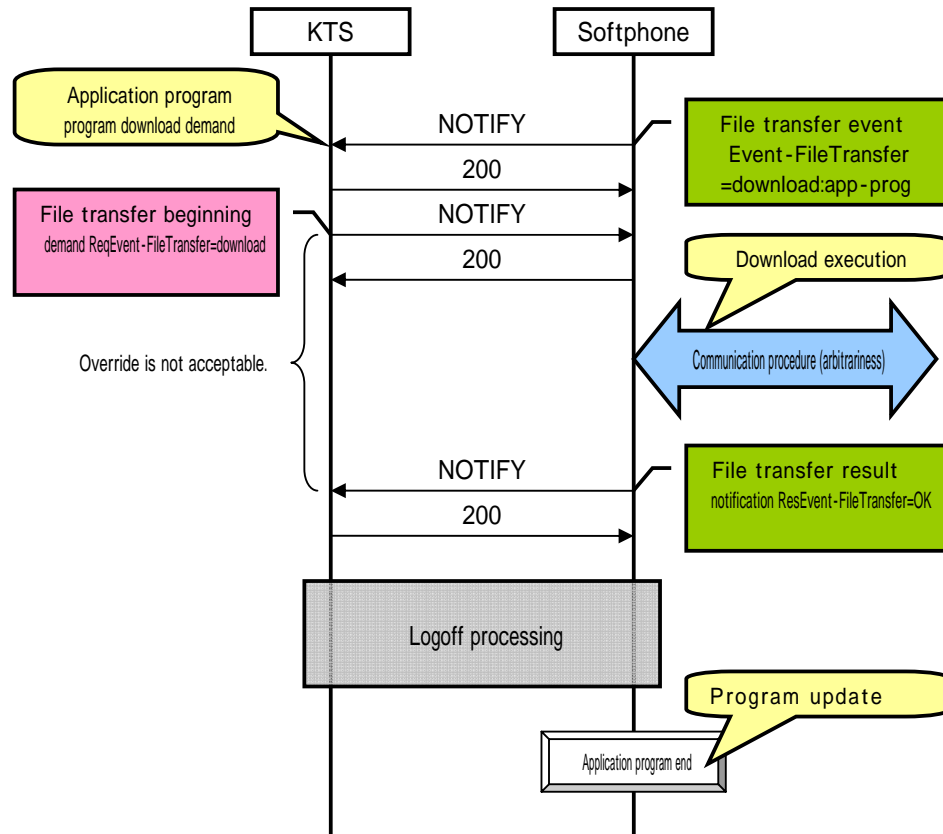
4.16.5.1. Download of application program updated information

First of all, when the softphone executes the program update, the softphone transmits the starting download demand of the application program updated information to a main device. A main device makes the demand by the softphone a trigger when the address of the file server is registered and directs the starting download of the application program updated information. The softphone executes the download of the application program program continuously if updated information is checked after download is completed, and the update is necessary.



4.16.5.2. Download of application program program

When the application program updated information is checked and the update is necessary, the softphone transmits the starting download demand of the application program program to a main device. A main device makes the demand by the softphone a trigger when the address of the file server is registered and directs the starting download of the application program program. The softphone ends the application program after download is completed and updates the program.



4.17. (Peer To Peer) for the application between terminals

KTS(Cygnus) notifies the terminal that demands information terminal information on Internet Protocol address information etc. on the terminal logged on by the personal ID and the personal ID to achieve IM, the WhiteBoard sharing, the MS-Office application sharing, and the Video telephone call by PtoP between terminals.

[Yojou] of KTS(Cygnus) is on purpose assumed to be a thing that can be done by non-synchronization about the PtoP session between terminals, and KTS(Cygnus) notifies Internet Protocol address information on the terminal by which the other party user is logging on the terminal.

Moreover, to achieve the PtoP application cooperation with the intended party, the means to notify the terminal intended party's information is installed.

Because the personal ID is logon ID to log on KTS, "Nickname" that becomes unique in the system that separately corresponds to the personal ID by the one to one is used. To use nickname as information that specifies other users, other users' personal IDs should be made invisibility for the user.

In this case, when information on the other party terminal is acquired, the terminal acquires "Nickname" of not "Personal ID" but the other party terminal and acquires terminal information that corresponds more than a main device as key information. (Consider to put the application side on UI though the personal ID is included in notification information from this main device, not to display the acquired personal ID, and to display nickname.)

It is individual because the personal ID is not used in operation by the plug and play, and it is operated only by the extension number The acquisition of terminal information as key information cannot do ID and nickname.

In this case, the terminal acquires the extension number of the other party terminal and terminal information that corresponds more than a main device as key information is acquired. A

main device is the individual for terminal information [mon] suiting that assumes the personal ID and nickname to be key information Terminal information logged on by ID (Or, personal ID corresponding to nickname) is answered as a list. (Become a list with two or more terminal information when logging on and doing according to a different terminal type simultaneously.)A

main device answers terminal information [mon] suiting that assumes the extension number to be key information terminal information on the terminal of the extension number regardless of the presence of logon. (Terminal information is answered even in case of the legacy terminal etc. to which the terminal corresponding to the extension number is not provided by this specifications. In this case, unknown and Internet Protocol address become none as for the terminal type.)

4.17.1. Acquisition of terminal information on non-telephone call terminal (Internet Protocol address)

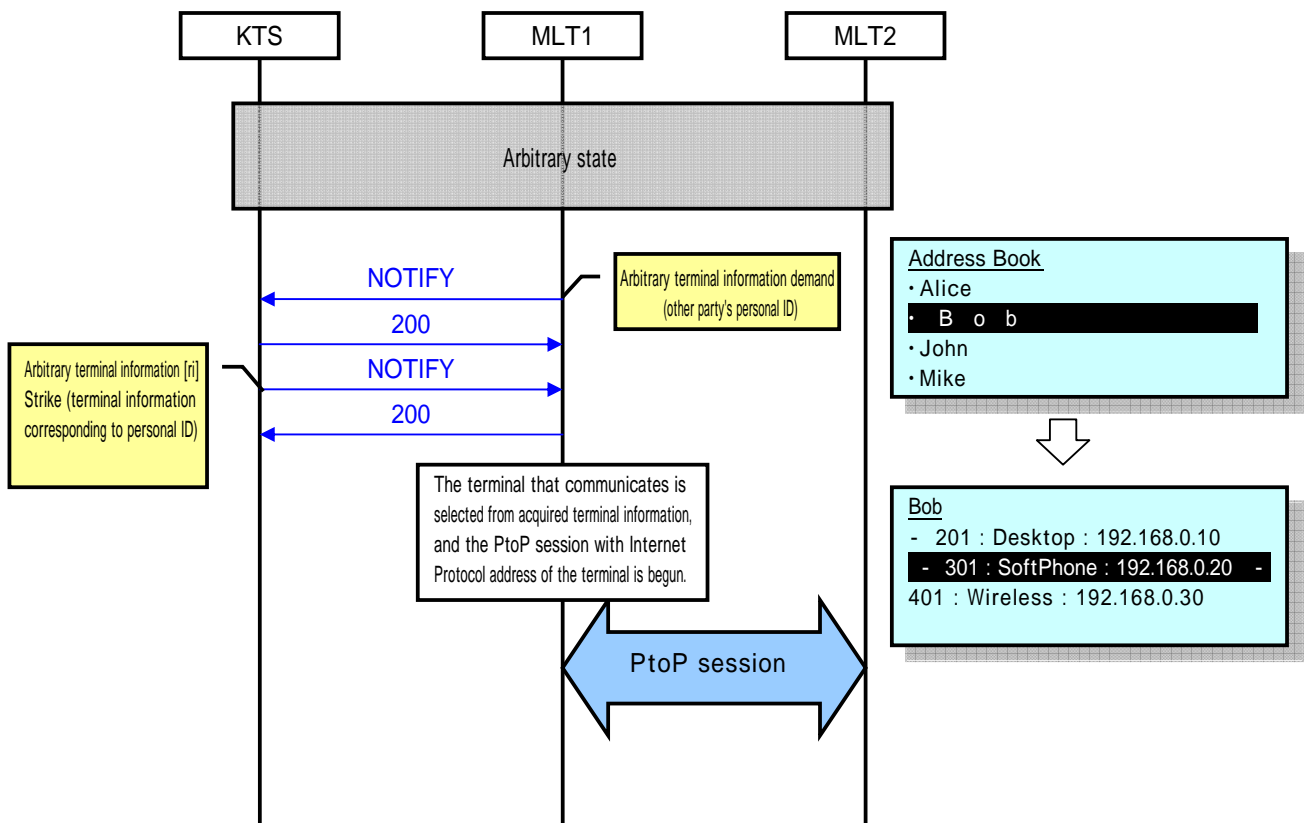
Sequence to begin MLT2 and PtoP session by MLT1 when MLT1 use user A knows personal ID of use user B of MLT2

MLT1 demands the use terminal information list of user B from KTS by the arbitrary terminal information demand (personal ID of user B).

When the arbitrary terminal information demand is received, KTS sends back the list of terminal information logged on by the personal ID of user B by the arbitrary terminal information list notification.

MLT1 acquires Internet Protocol address of the use terminal of user B from the list of information on the arbitrary terminal information list. Moreover, the terminal for the PtoP session beginning is displayed and notified for user A.

When user A selects MLT2 from the terminal for the PtoP session beginning, MLT1 begins the PtoP session for Internet Protocol address of MLT2.



- Consider to use not the personal ID in display and notification UI to the user but nickname the application like the above-mentioned sequence because the personal ID is not ID opened to the public.

4.17.2. Acquisition of terminal information on other party of telephone call terminal (Internet Protocol address)

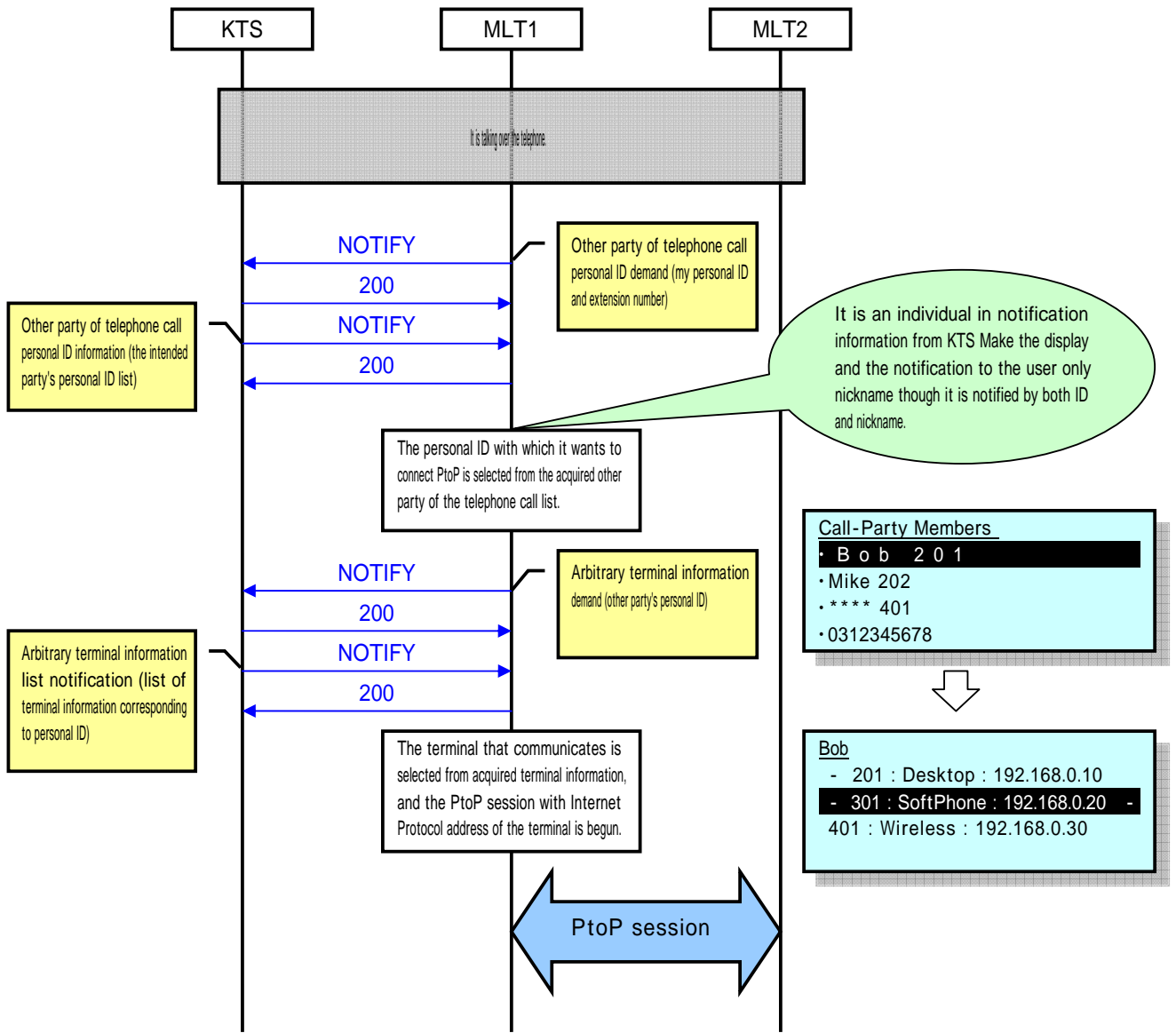
Sequence to begin MLT2 and PtoP session by MLT1 when MLT1 use user A is talking over the telephone extension to MLT2

MLT1 demands intended party's personal ID information from KTS by the other party of the telephone call personal ID demand (my personal ID and extension number).

When the other party of the telephone call personal ID demand is received, KTS sends back the list of other party information talked over the telephone to MLT1 according to other party of the telephone call personal ID information.

MLT1 acquires intended party's information from the list of information on other party of the telephone call personal ID information. In addition, it has intended party's personal ID information and terminal information each intended party is demanded by the arbitrary terminal information demand.

The following become similar to the sequence of "Acquisition of terminal information on non-telephone call terminal (Internet Protocol address)".



4.17.3. Terminal information (Internet Protocol address) acquisition from nickname

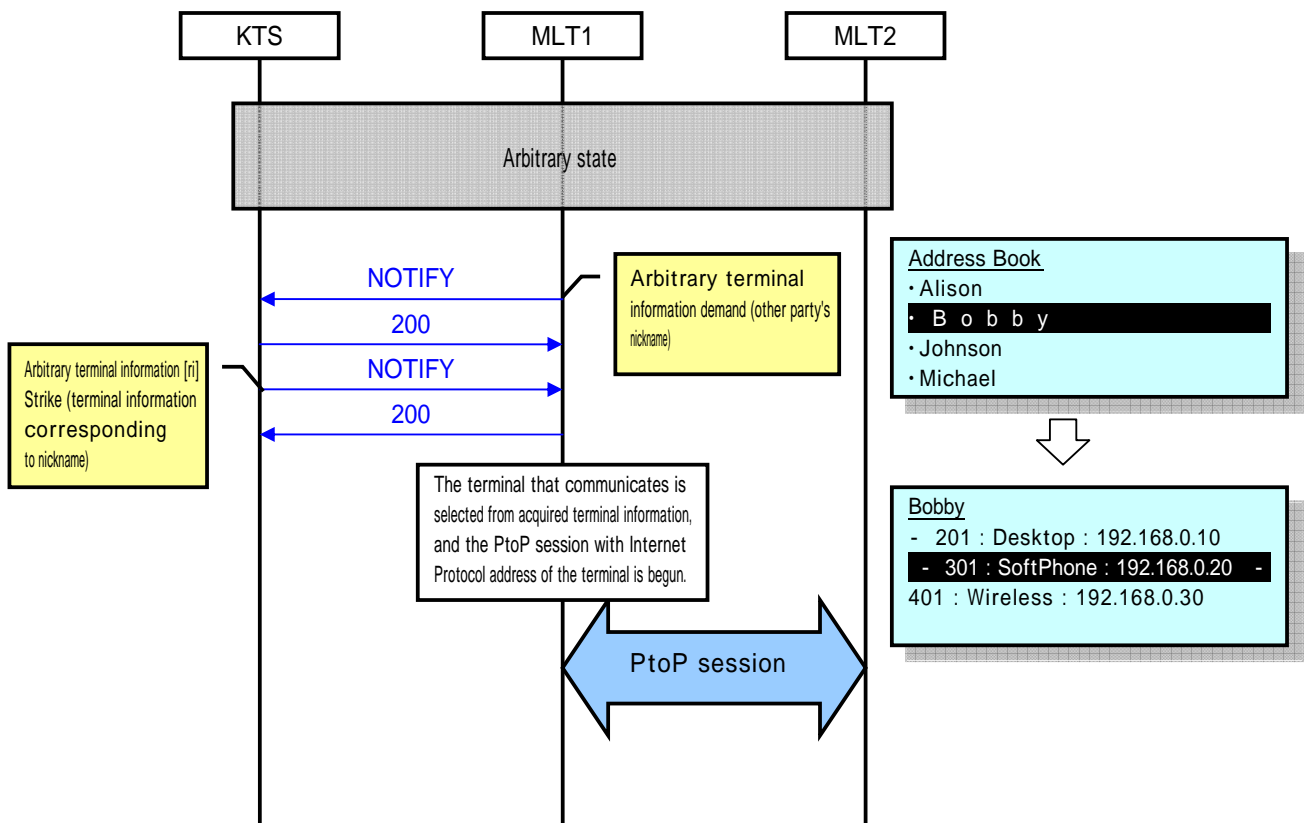
Sequence that MLT1 use user A begins MLT2 and PtoP session by MLT1 when user B knows nickname use of MLT2 (operation by nickname use and existing)

MLT1 demands the use terminal information list of user B from KTS by the arbitrary terminal information demand (nickname of user B).

When the arbitrary terminal information demand is received, KTS sends back the list of terminal information logged on by the personal ID corresponding to the nickname of user B by the arbitrary terminal information list notification.

MLT1 acquires Internet Protocol address of the use terminal of user B from the list of information on the arbitrary terminal information list. Moreover, the terminal for the PtoP session beginning is displayed and notified for user A.

When user A selects MLT2 from the terminal for the PtoP session beginning, MLT1 begins the PtoP session for Internet Protocol address of MLT2.



4.17.4. Terminal information (Internet Protocol address) acquisition from extension number

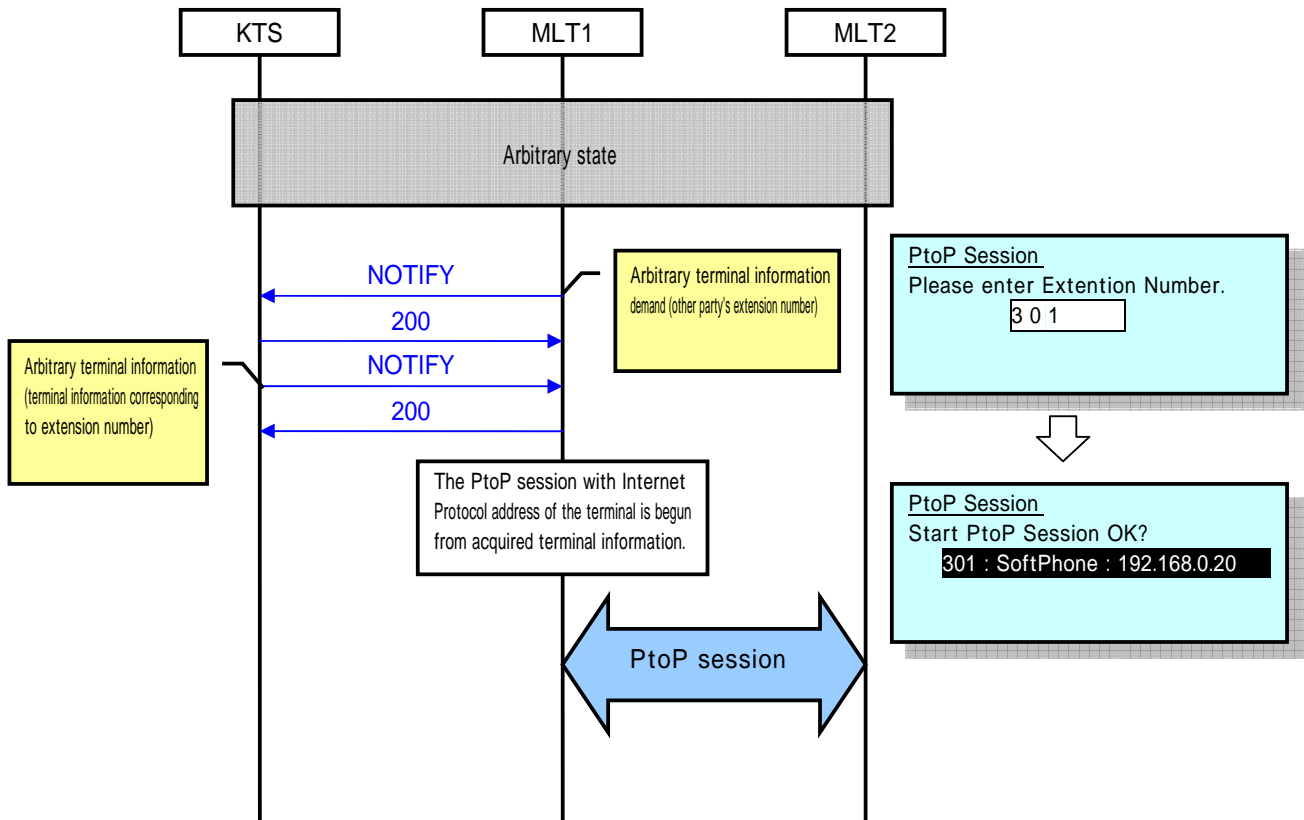
Sequence to begin MLT2 and PtoP session by MLT1 when MLT1 use user A knows extension number of MLT2

MLT1 demands terminal information on MLT2 from KTS by the arbitrary terminal information demand (extension number of MLT2).

When the arbitrary terminal information demand is received, KTS sends back terminal information on MLT2 by arbitrary terminal well informed man wisdom.

MLT1 acquires Internet Protocol address of MLT2 from information on arbitrary terminal well informed man wisdom.

MLT1 begins the PtoP session for Internet Protocol address of MLT2.



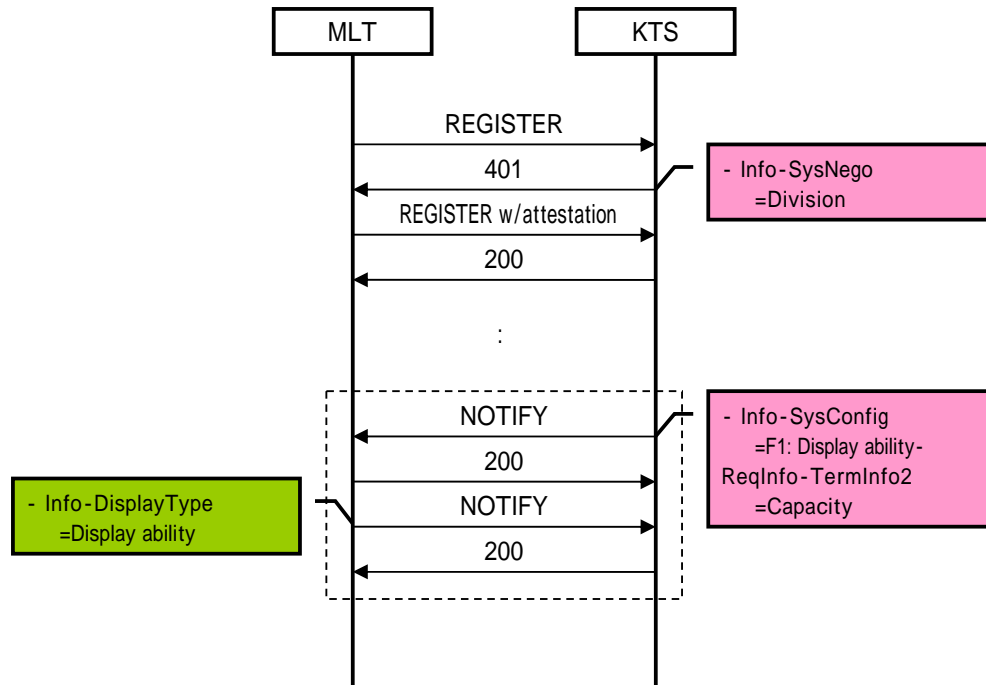
4.18. Desktop terminal originality function

4.18.1. Display enhancing

4.18.1.1. Exchange of display ability information

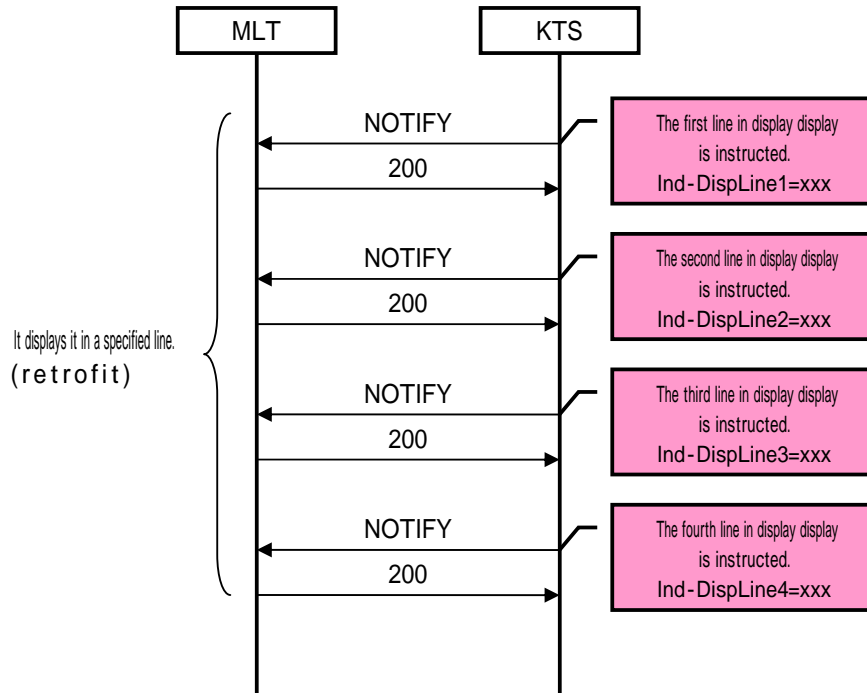
The display ability that can correspond to system basic set up information (Info-SysConfig) parameter is specified so that a main device may exchange the terminal for the display ability, . Capacity" is specified for terminal well informed man wisdom demand 2(ReqInfo-TermlInfo2) parameter, and the display ability on the terminal side is demanded. The terminal checks the display ability specified from a main device, adjusts line number and the character the number of /character-code that can be displayed while operating it, and transmits terminal display type (Info-DisplayType) parameter to a main device.

The terminal must give priority to the display ability specified from a main device, and note that the display ability of default is transmitted to a main device when a main device doesn't specify the display ability.



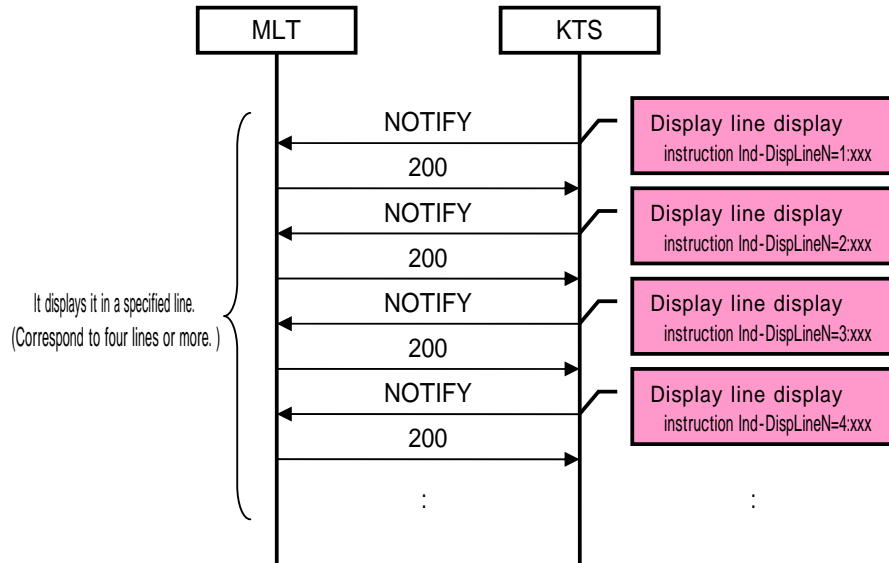
4.18.1.2. Line display instruction (old method)

When the LCD display is directed from a main device to the terminal, parameter and the third line in display display instruction (Ind-DispLine3) parameter of parameter and the second line in display display instruction (Ind-DispLine2) of the first line in display display instruction (Ind-DispLine1) is transmitted according to the line to be displayed (method in the past). It is enabled the transmission of the fourth line in display display instruction (Ind-DispLine4) parameter in addition to this.



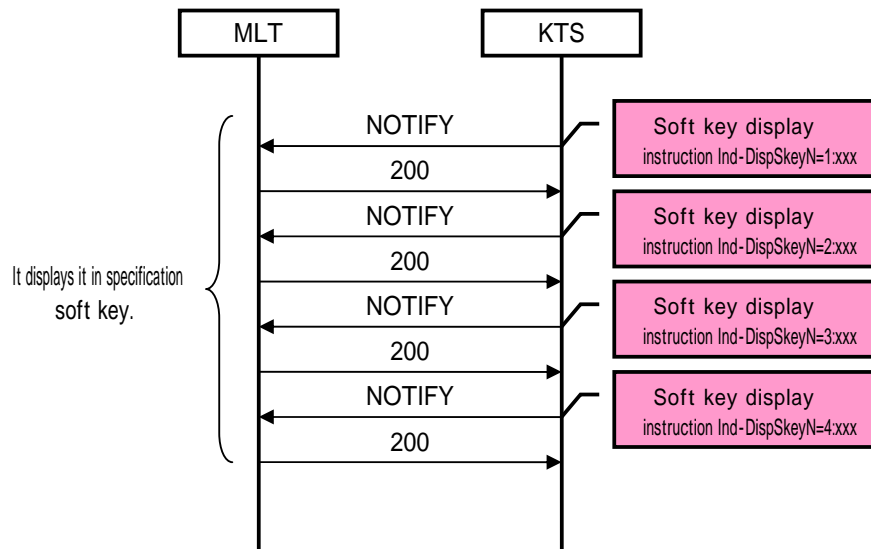
4.18.1.3. Line display instruction (new)

Device..terminal..display..direct..display..line..display..display..instruction..parameter..transmit.



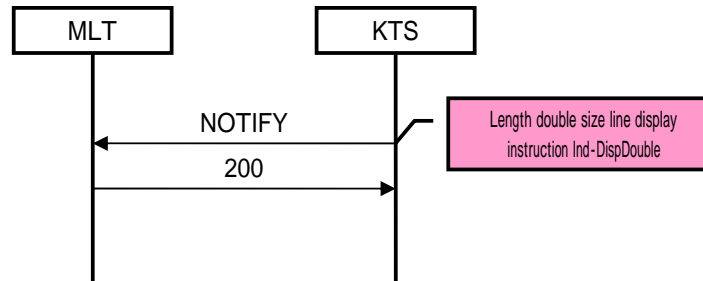
4.18.1.4. Soft key display instruction

The third line in display display instruction (Ind-DispLine3) parameter is transmitted so far when the soft key display is directed from a main device to the terminal (method in the past). On the other hand, when a soft key is controlled specifying it, soft key n display instruction (Ind-DispSkeyN) parameter is transmitted.



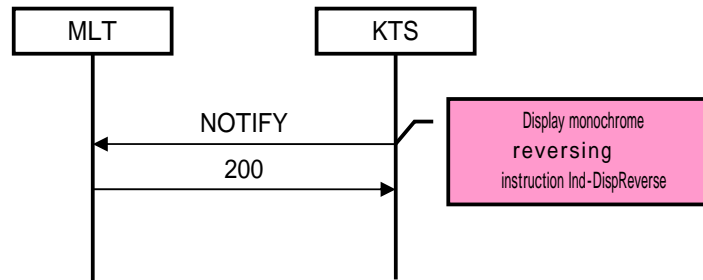
4.18.1.5. Length double size line display

The terminal begins and ends the length double size display of a specified line for length double size line display instruction (Ind-DispDouble) parameter from a main device. Manage the length double size display on the main device side because it doesn't have the interface that notifies the execution result and the display concerning the length double size line from the terminal.



4.18.1.6. Monochrome reversing display

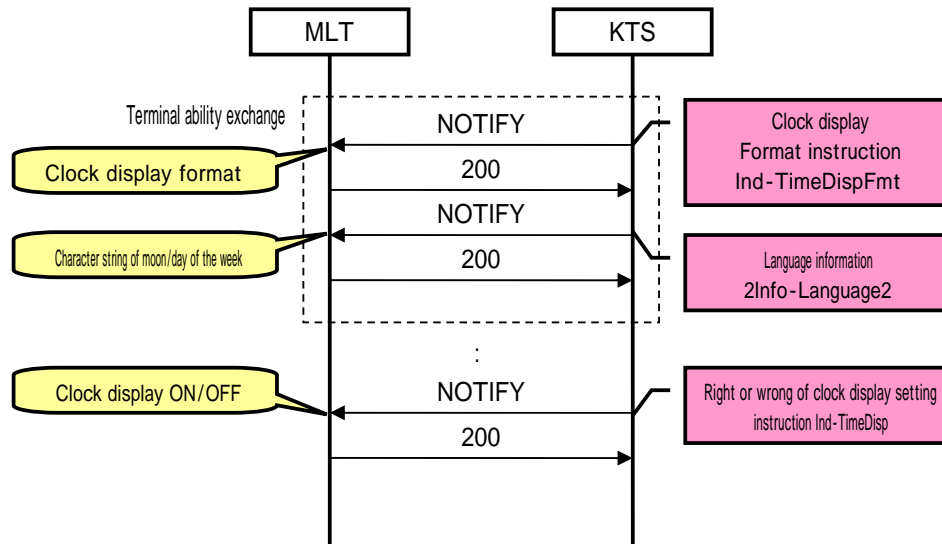
The terminal switches the monochrome reversing display on the display to display monochrome reversing instruction (Ind-DispReverse) parameter from a main device. Manage a monochrome reversing on the main device side because it doesn't have the interface that notifies the execution result and the display concerning a monochrome reversing from the terminal.



4.18.1.7. Custom clock display

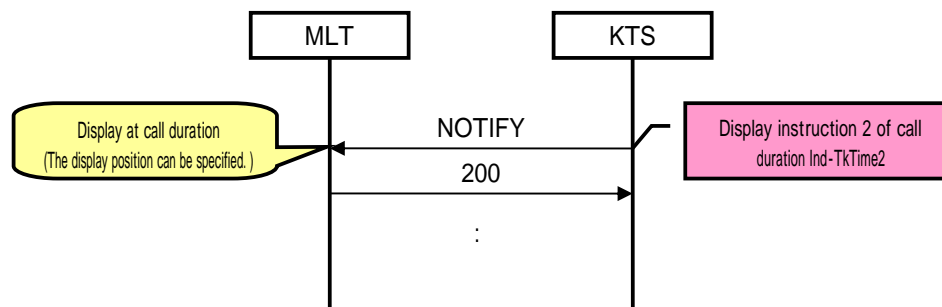
The terminal displays the clock to clock display format instruction (Ind-TimeDispFmt) parameter from a main device by the specified custom format. Moreover, it replaces with the character string for which the display of "Moon" and "Day of the week" parts of the custom format is specified when language information 2(Info-Language2) parameter is transmitted and it displays it.

Direct ON/OFF by right or wrong of the clock display setting instruction (Ind-TimeDisp) parameter when you switch display/non-display of clock information.



4.18.1.8. Display at call duration

When display instruction 2(Ind-Tktime2) parameter of call duration from a main device is received, the terminal executes the display processing at call duration according to the specified control lead.

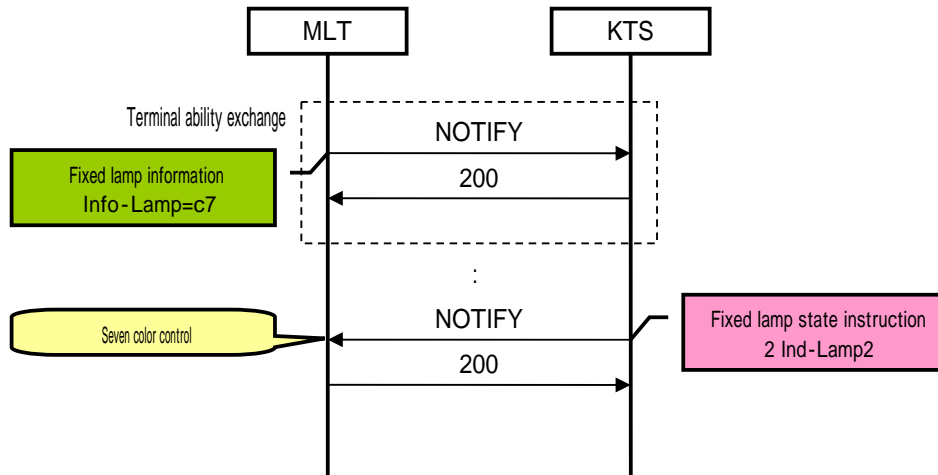


4.18.2. LED enhancing

The terminal transmits terminal fixation lamp information (Info-Lamp) parameter to terminal well informed man wisdom demand (ReqInfo-TermlInfo2) parameter from a main device. At this time, if the terminal corresponds to seven color control, a main device can select the control to a fixed lamp.

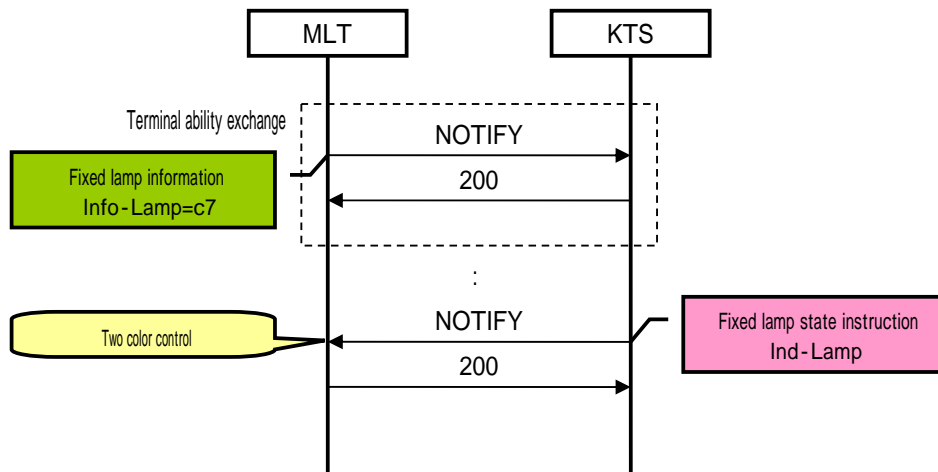
4.18.2.1. When you use a fixed lamp by seven color control

When a main device controls a fixed lamp of the terminal by seven colors, fixed lamp state instruction 2(Ind-Lamp2) parameter is used. Note that the method of specifying the color and the blinking cycle has changed though it is also possible to control by two colors by using this parameter.



4.18.2.2. When you use a fixed lamp by two color control (conventional)

When a main device controls a fixed lamp of the terminal by two colors, fixed lamp state instruction (Ind-Lamp) parameter is used.



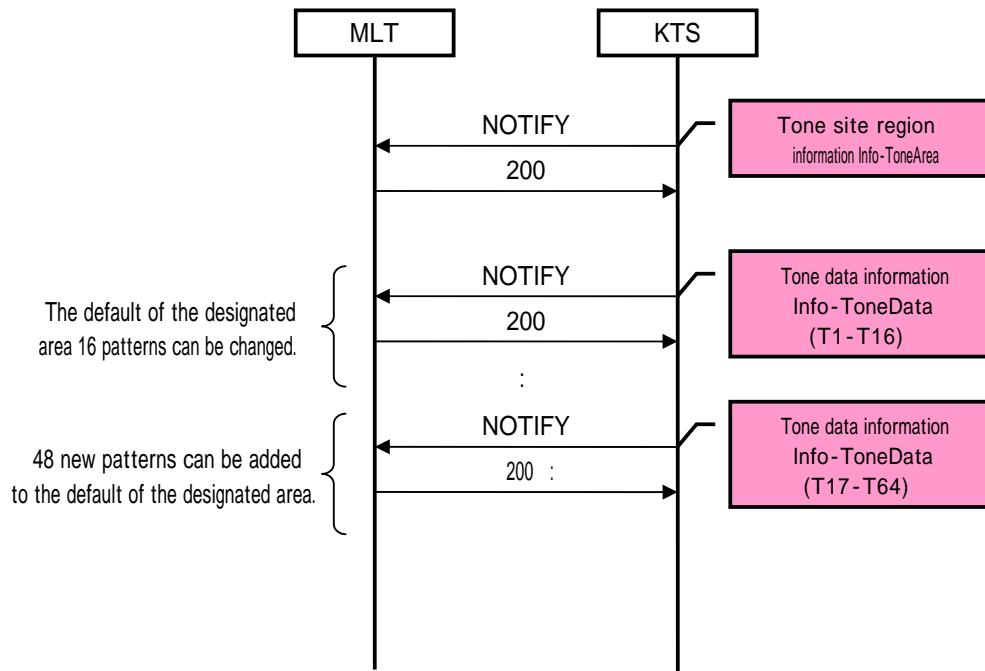
4.18.3. Tone enhancing

4.18.3.1. Download of call progress tone information

A main device can add the change and the addition by using tone data information (Info-ToneData) parameter for the default tone data of the region specified by tone site region information (Info-ToneArea) parameter. When the change and T17-T64 of the default pattern are specified when T1-T16 is specified for a tone number by tone data information (Info-ToneData) parameter, it becomes an addition of a new pattern. The tone pattern downloaded by tone data information (Info-ToneData) parameter can be used by the following instruction parameters. •

- Tone instruction (Ind-Tone)
- Short tone instruction (Ind-ShortTone)

It is also possible to use and to direct an existing tone type (DT etc.) about the tone pattern of changed tone number T1-T16 instead of the tone number.



Assume the transmission timing to be arbitrary, and note becoming effective from the following rumbling instruction when the tone pattern is changed while the call progress tone is rumbling.

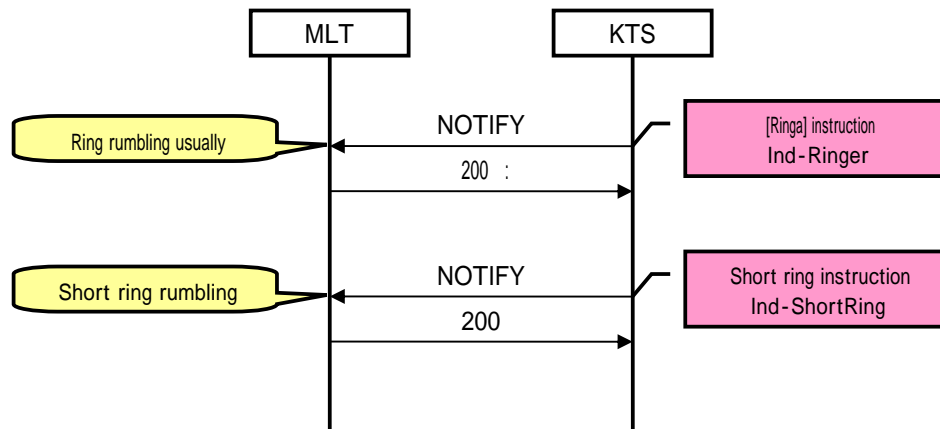
4.18.3.2. Short ring instruction

When the tone of a not generable one shot in short tone instruction (Ind-ShortTone) parameter is generated, short ring instruction (Ind-ShortRing) parameter is transmitted.

- When the short ring rumbling is priority

It is not possible to usually listen to the ring rumbling until complete be the short ring rumbling when interrupt by be the short ring instruction while be rumbling the ring usually. Moreover, the ring rumbling must rumble from a head the cycle specified again usually after completing the short ring rumbling.

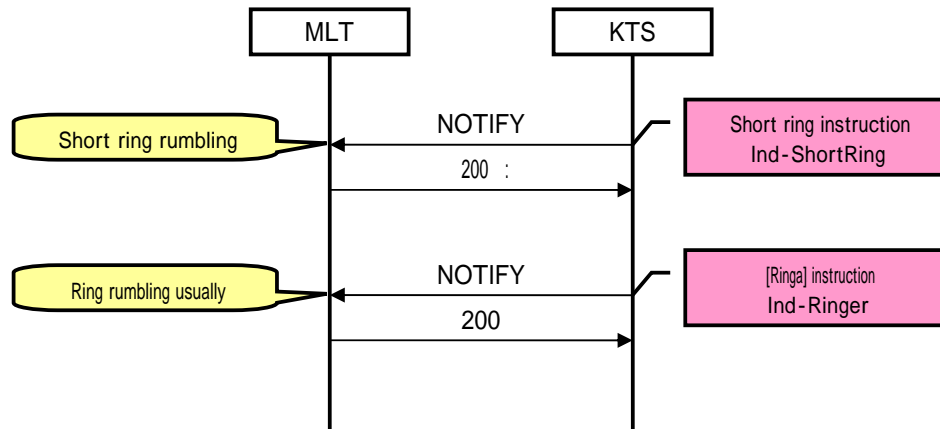
It doesn't rumble again when the ring rumbling usually stops before completing the short ring rumbling.



- When the ring rumbling is priority usually

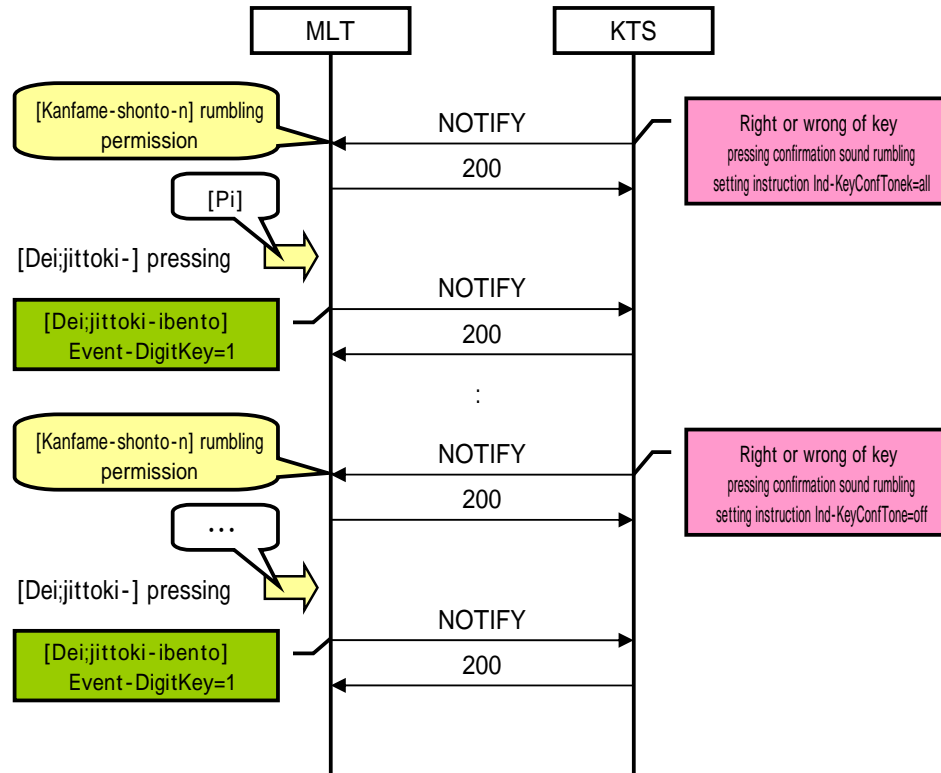
It is not possible to listen to be the short ring rumbling until usually complete the ring rumbling when usually interrupt by the ring instruction while be rumbling be a short ring. Moreover, the short ring rumbling must rumble from a head the cycle specified again usually after usually completing the ring rumbling.

It doesn't rumble again when the short ring rumbling stops before completing the ring rumbling usually.



4.18.3.3. [Kanfame-shonto-n] rumbling setting

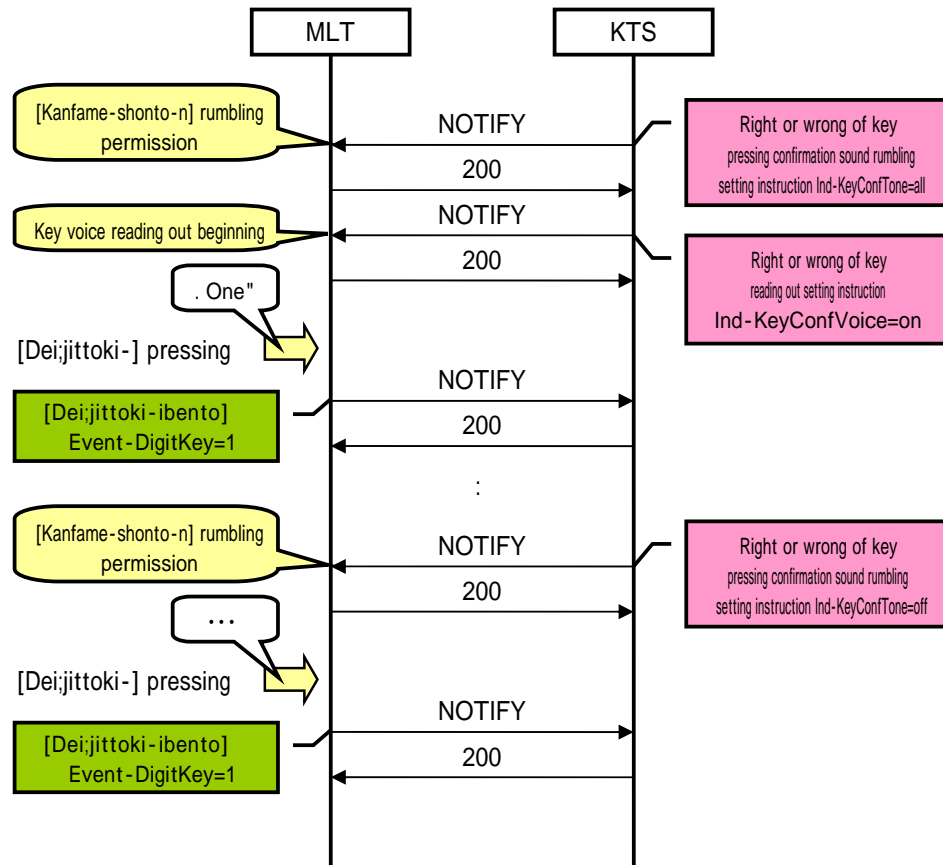
When . all" or "Digitkey" is specified for "Rumbling control" by right or wrong of the key pressing confirmation sound rumbling setting instruction (Ind-KeyConfTone) parameter from a main device, invalidating about the terminal is rumbling of [kanfame-shonto-n] when the rumbling of [kanfame-shonto-n] is assumed to be effective, and . off" is specified for "Rumbling control".



4.18.3.4. Key voice reading out

The key voice reading out function of the terminal synchronizes with right or wrong of rumbling of [kanfame-shonto-n]. When . on" is specified by the parameter of right or wrong of the key reading out setting instruction (Ind-KeyConfVoice) at it is time when for which . all" or . digitkey" is specified from a main device by right or wrong of the key pressing confirmation sound rumbling setting instruction (Ind-KeyConfTone) parameter, effective of the terminal is reproduction of the voice file instead of [ki-kanfame-shonto-n] of [dei;jittoki-].

When . off" is directed by the right or wrong of key pressing confirmation sound rumbling setting instruction parameter, the reproduction of the voice file becomes invalid because the rumbling of [kanfame-shonto-n] becomes invalid, too.



4.18.4. Arrival and departure Makoto history

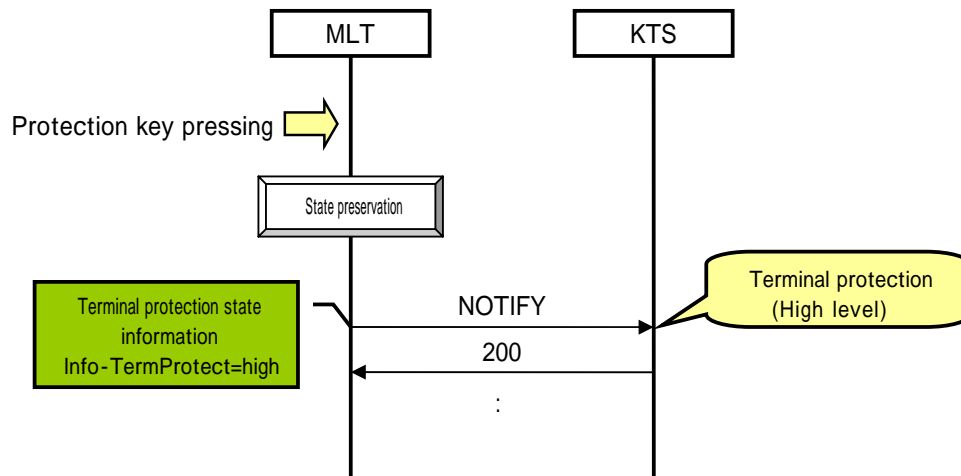
4.18.4.1. The use of the arrival and departure Makoto history of the terminal is restricted.

Arrival and departure Makoto history information on each terminal can be managed for KTS as a main apparatus function. Therefore, no adjustment might be generated in the vita information when the arrival and departure Makoto history function of a main device and the terminal is used at the same time, and the user operation be complicated. Invaliding about the terminal must be an arrival and departure Makoto history function of the terminal side when terminal arrival and departure Makoto history restriction instruction (Ind-TermHistoryLock) parameter is received from a main device. Moreover, it is necessary not to transmit Caller ID information (Info-DialNo) parameter and information (Info-DirectIn) of arrival of a message parameters from a main device while restricting it.

4.18.5. Terminal protection

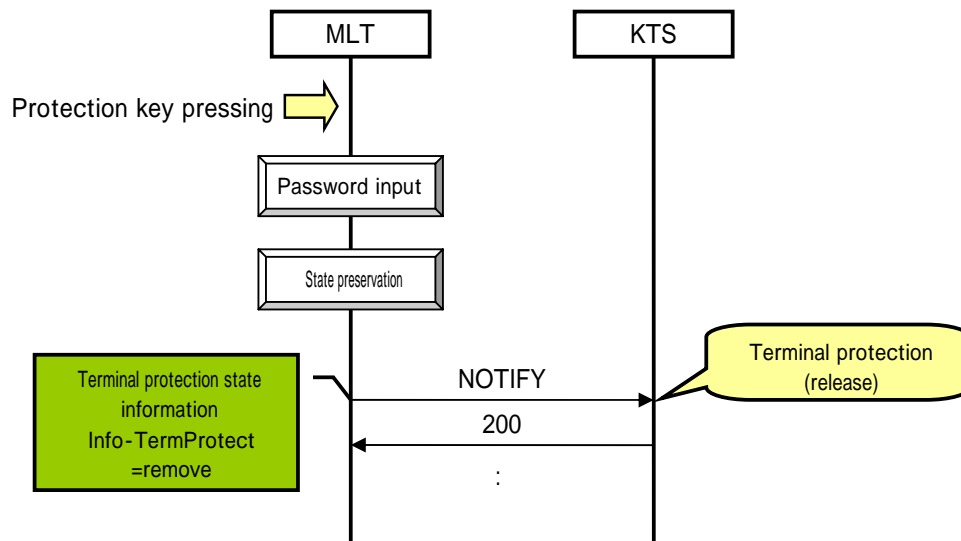
4.18.5.1. Terminal protection beginning by user operation

When the terminal protection key is pressed in the state of the idol, the terminal transmits the protection level local set to a main device by terminal protection state information (Info-TermProtect) parameter. Moreover, the terminal preserves the running state in an internal nonvolatile memory at the same time.



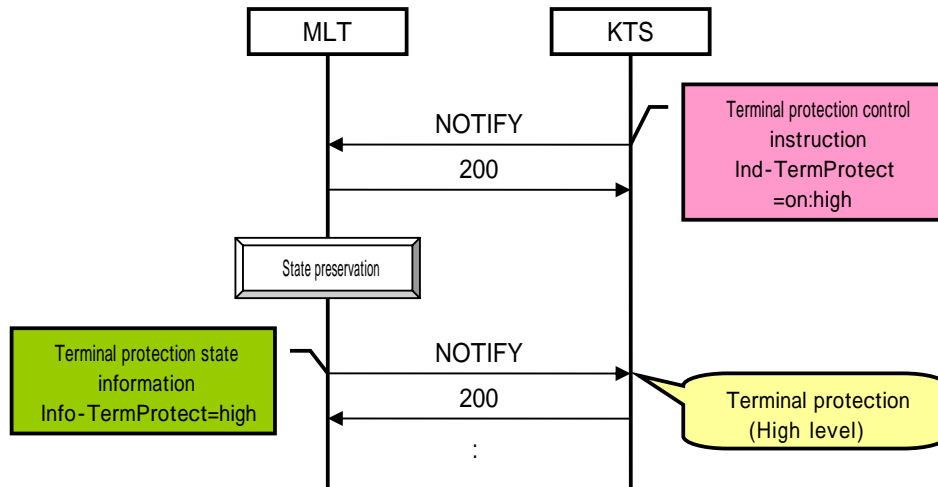
4.18.5.2. Terminal protection release by user operation

When the terminal protection key is pressed in the terminal protection running state, the terminal displays the release password input screen. After the password attestation is completed, the protection release is transmitted to a main device by terminal protection state information (Info-TermProtect) parameter. Moreover, the terminal preserves the running state in an internal nonvolatile memory at the same time.



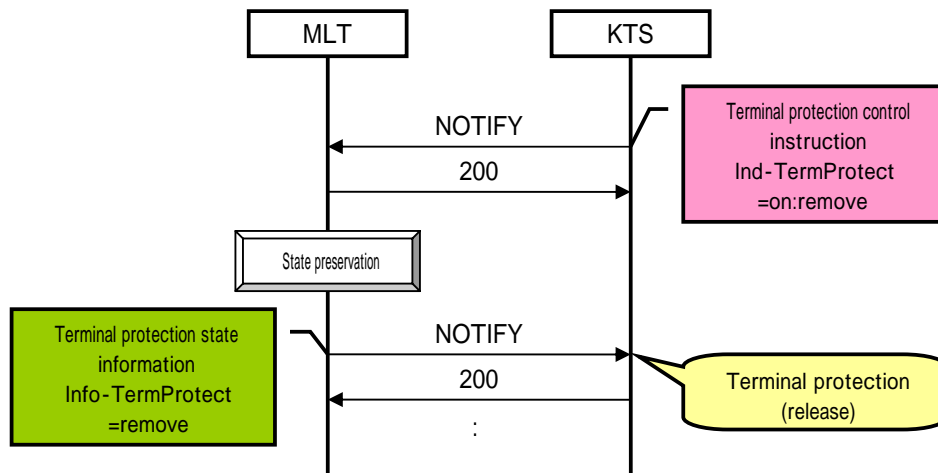
4.18.5.3. Terminal protection beginning instruction with main device

When terminal protection control instruction (Ind-TermProtect) parameter is received from a main device in the state, the terminal executes the terminal protection according to the instruction of a main device while executing the state of the idol or the terminal protection (re-execution). The terminal transmits the protection level set by the main device instruction to a main device by terminal protection state information (Info-TermProtect) parameter. Moreover, the terminal preserves the running state in an internal nonvolatile memory at the same time.



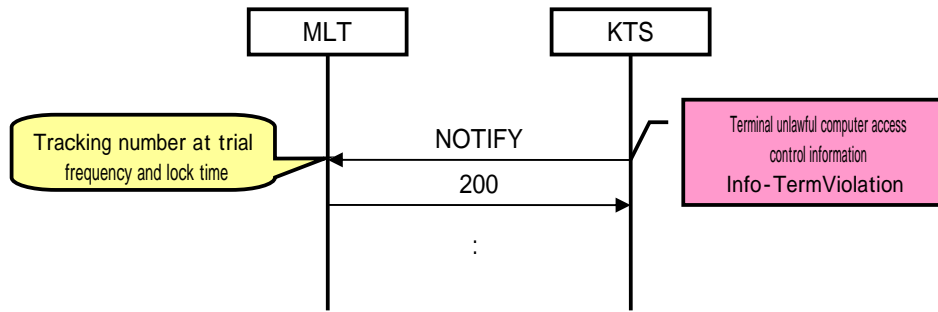
4.18.5.4. Terminal protection compulsion release instruction with main device

In the terminal protection running state, when the protection release is directed from a main device by terminal protection control instruction (Ind-TermProtect) parameter, the terminal compelling releases the state of protection regardless of the one by the user operation or the one with the system control the protection under execution. Moreover, the terminal transmits release by the main device instruction to a main device by terminal protection state information (Info-TermProtect) parameter. Moreover, the terminal preserves the running state in an internal nonvolatile memory at the same time.



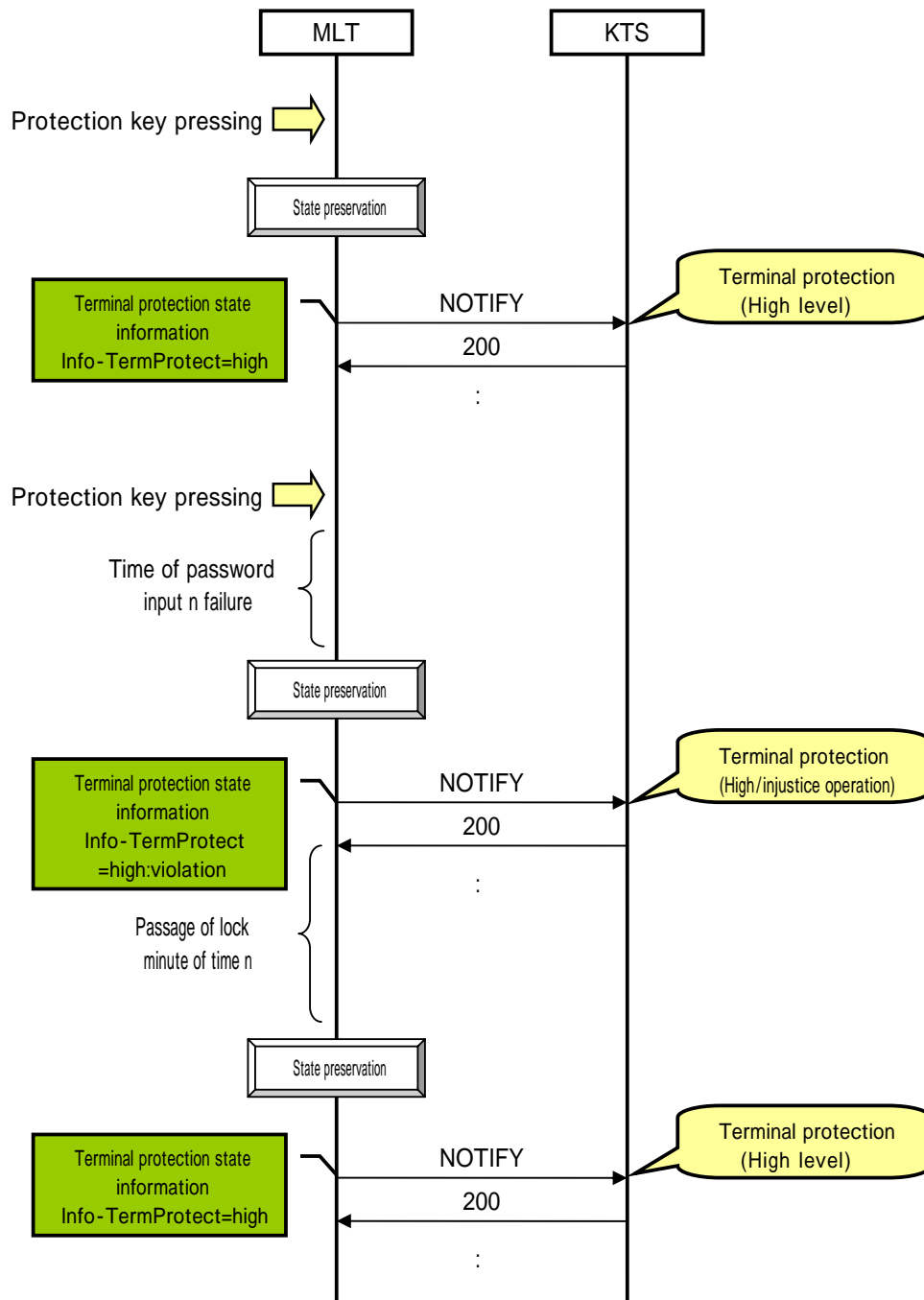
4.18.5.5. Terminal unlawful computer access control information from main device

When the terminal protection release fails, the condition considered to be unlawful computer access can be specified from a main device. When the set trial frequency limitation is exceeded and the input failure is done, the terminal locks unlawful computer access and the considering password input. At this time, the terminal transmits present level information and . Violation" to a main device by terminal protection state information (Info-TermProtect) parameter. After the password lock time set after the lock begins passes, the terminal transmits only present level information again by the terminal protection state information parameter, and releases the password lock.



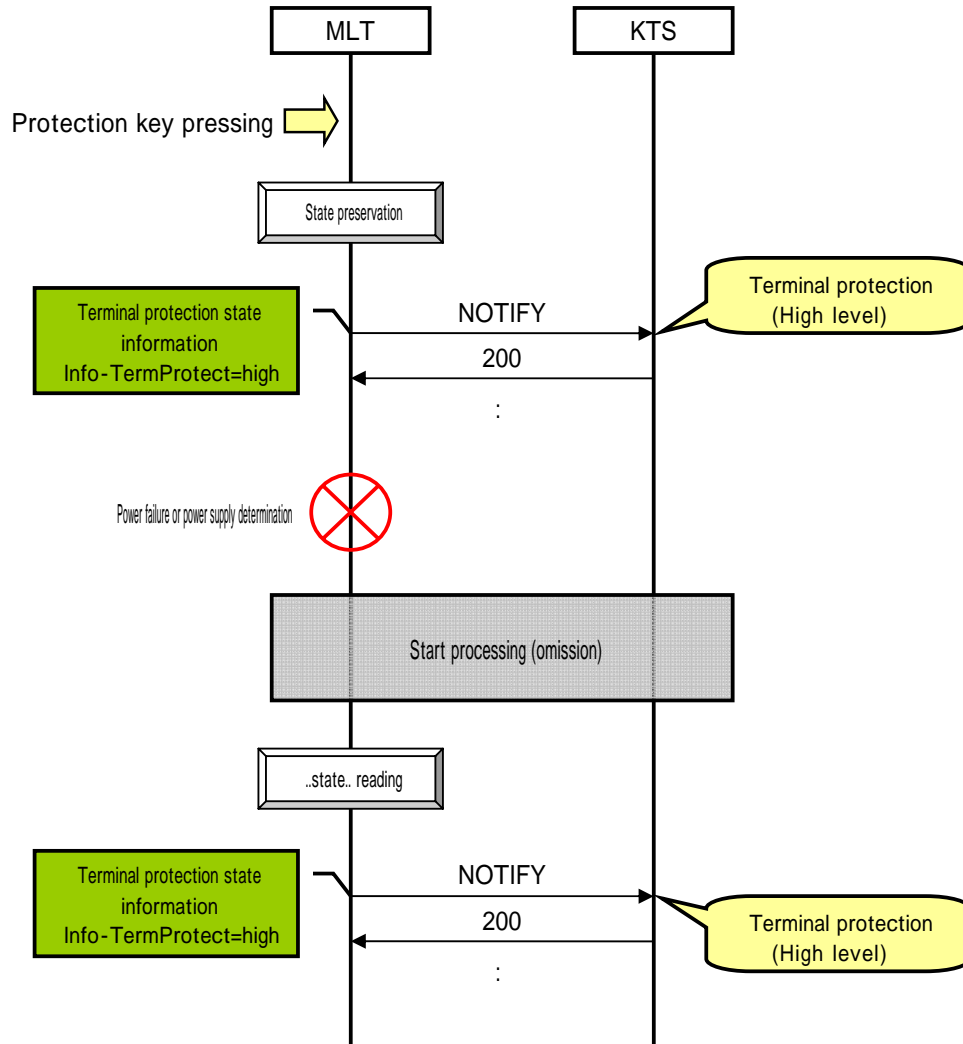
4.18.5.6. Password input restriction by illegal operation

When the set trial frequency limitation is exceeded when the terminal protection is released and the input failure is done, the terminal locks unlawful computer access and the considering password input. At this time, the terminal transmits present level information and . Violation" to a main device by terminal protection state information (Info-TermProtect) parameter. After the password lock time set after the lock begins passes, the terminal transmits only present level information again by the terminal protection state information parameter, and releases the password lock.



4.18.5.7. State of terminal protection when power supply is cut

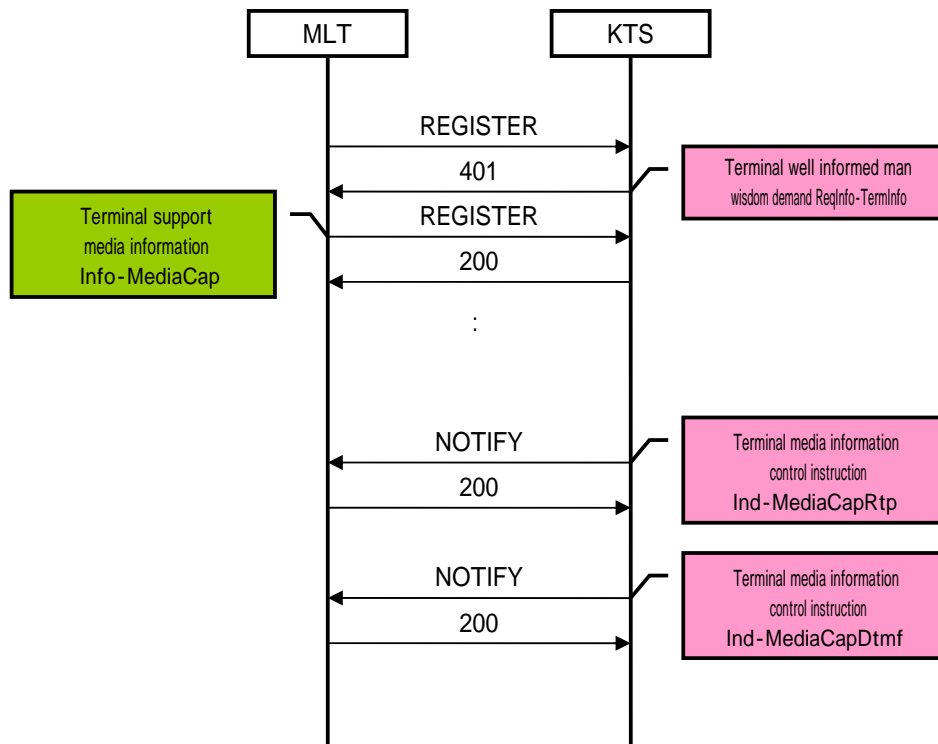
Even if the power failure or the power supply pulling out opening is done while executing the terminal protection and the terminal reactivates, it is necessary to maintain the state of the terminal protection from the viewpoint of the data protection. When reactivating, the terminal restores the state of the terminal protection referring to an internal memory because the state of the terminal protection is maintained in the nonvolatile memory in the terminal.



4.18.6. Terminal support media information

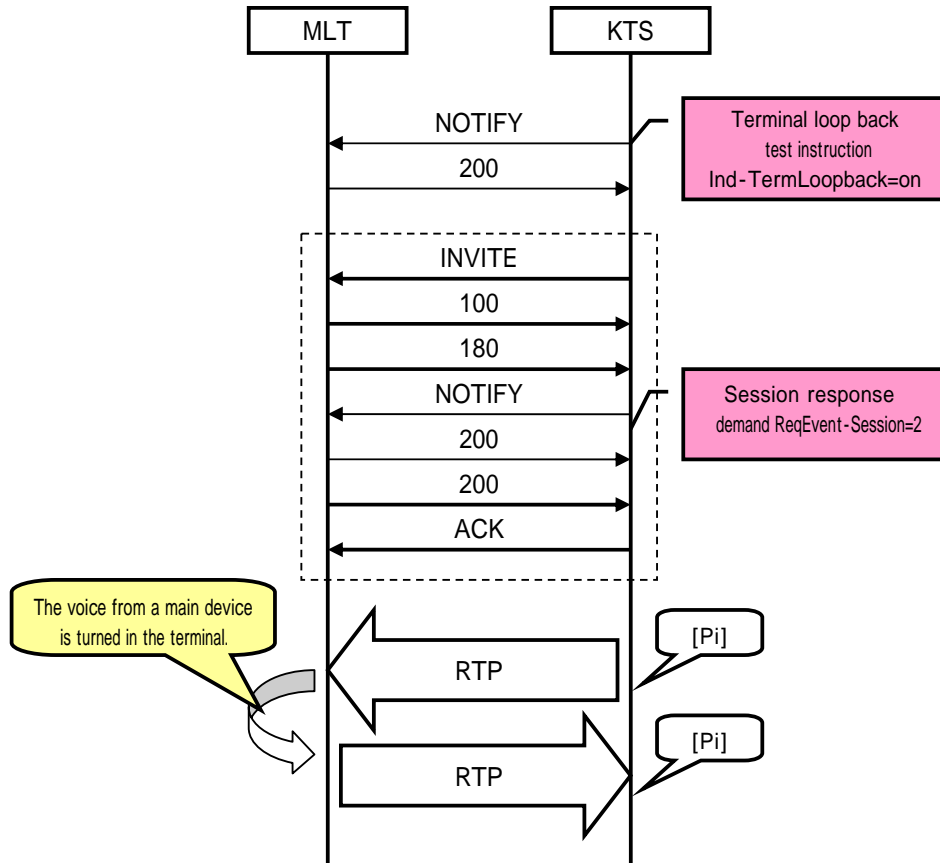
The terminal notifies terminal well informed man wisdom demand 2(ReqInfo-TermlInfo2) parameter a supported payload type and minimum value and the maximum value of the size of the payload by terminal support media information (Info-MediaCap) parameter at terminal information demand (ReqInfo-TermlInfo) parameter and exchange of the information division from a main device at the information batch exchange. A

main device can direct the payload type and the size of the payload of the established session by terminal media information control instruction (Ind-MediaCapRtp) parameter based on ability information received from the KTS-SIP terminal when there is an obstacle in the ability exchange between terminals when it accommodates a general-purpose standard SIP terminal. Moreover, to specify the payload type of DTMF, it instructs it the terminal media information control 2 The change can be directed by the (Ind-MediaCapDtmf) parameter.



4.18.7. Terminal loop back test

When terminal loop back test instruction (Ind-TermLoopback) parameter from a main device is received, the terminal turns the voice passing established after that internally, and sends the receiving talk from a main device as it is as a telephone.

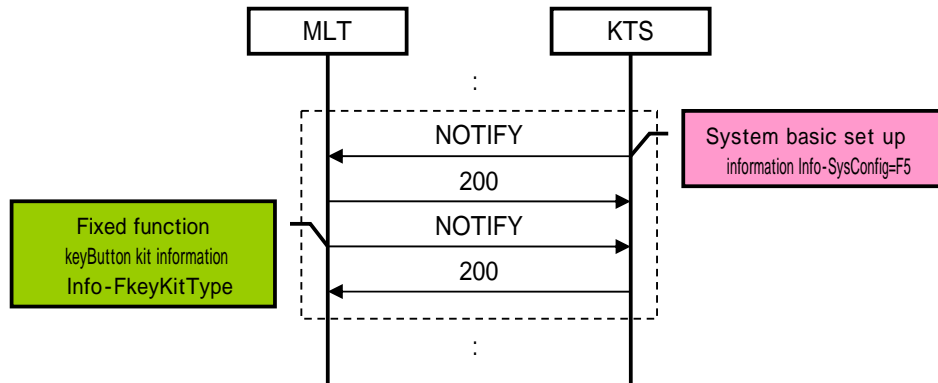


4.18.8. Key enhancing

4.18.8.1. Fixed function key button kit

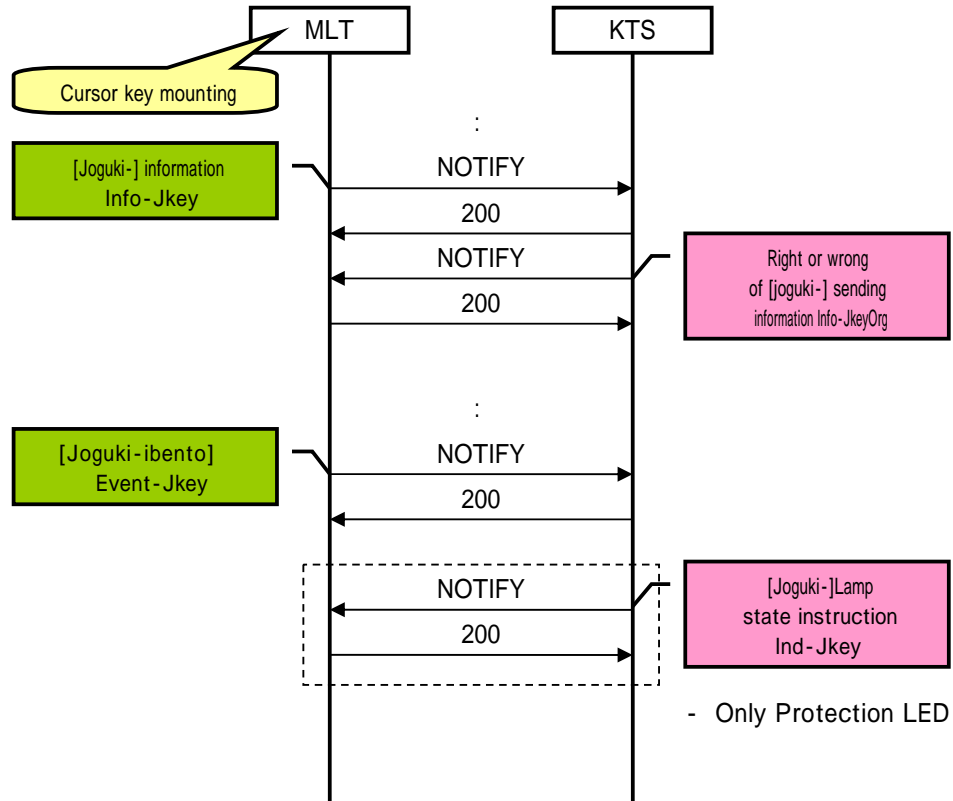
A main device can judge the button kit type mounted on the terminal by receiving fixed function key button kit information (Info-FkeyKitType) parameter from the terminal to terminal well informed man wisdom demand 2(ReqInfo-TermInfo2) parameter.

On the other hand, it is also possible that a main device directs the control specifying the button kit type of the terminal. The button kit of the terminal is specified by using F5 of system basic set up information (Info-SysConfig) parameter (terminal button kit setting) for the terminal when the button kit that a main device is mounted on the terminal is assumed and the surface of the board is controlled.



4.18.8.2. [Joguki-] (cursor key/others) control

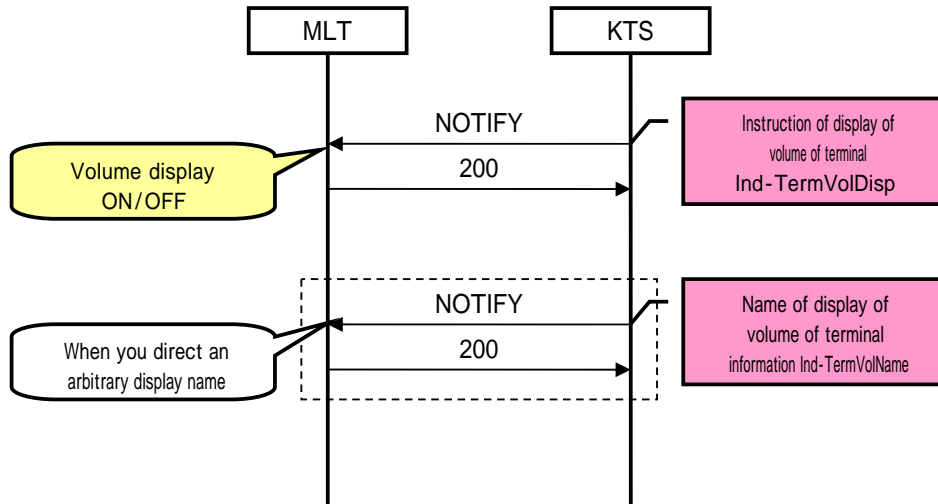
The interface that controls a new, additional key such as the cursor keys in addition to an existing fixed function key control is added.



4.18.9. Control of volume of terminal

4.18.9.1. Volume state display

A main device directs effective/invalidity of the display of the volume name of the terminal according to instruction (Ind-TermVolDisp) of the display of the volume of the terminal parameter. When the volume display is effectively done, a main device can direct an arbitrary display name of each volume according to name of the display of the volume of the terminal information (Info-TermVolName) parameter.



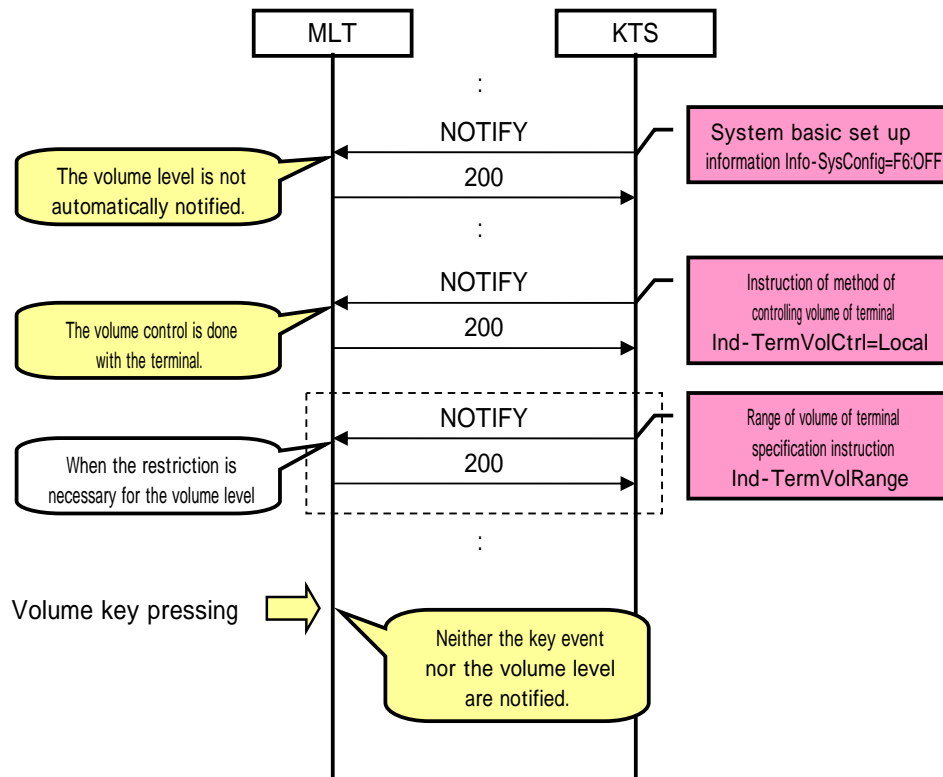
4.18.9.2. Volume state management

- State of volume of terminal management without automatic notification

When it completely entrusts the volume management to the terminal, it becomes the following sequences. A main device is directed to assume volume automatic operation notification setting (F6) of system basic set up information (Info-SysConfig) parameter to be . OFF", and to do the volume state management by "Terminal" according to instruction (Ind-TermVolCtrl) of the method of controlling the volume of the terminal parameter.

The terminal doesn't notify a main device the parameter in this state even if the volume key is pressed.

When the volume state is managed with the terminal, a main device can specify parameters range of the volume of the terminal specification instruction (Ind-TermVolRange) according to the restriction of each country.

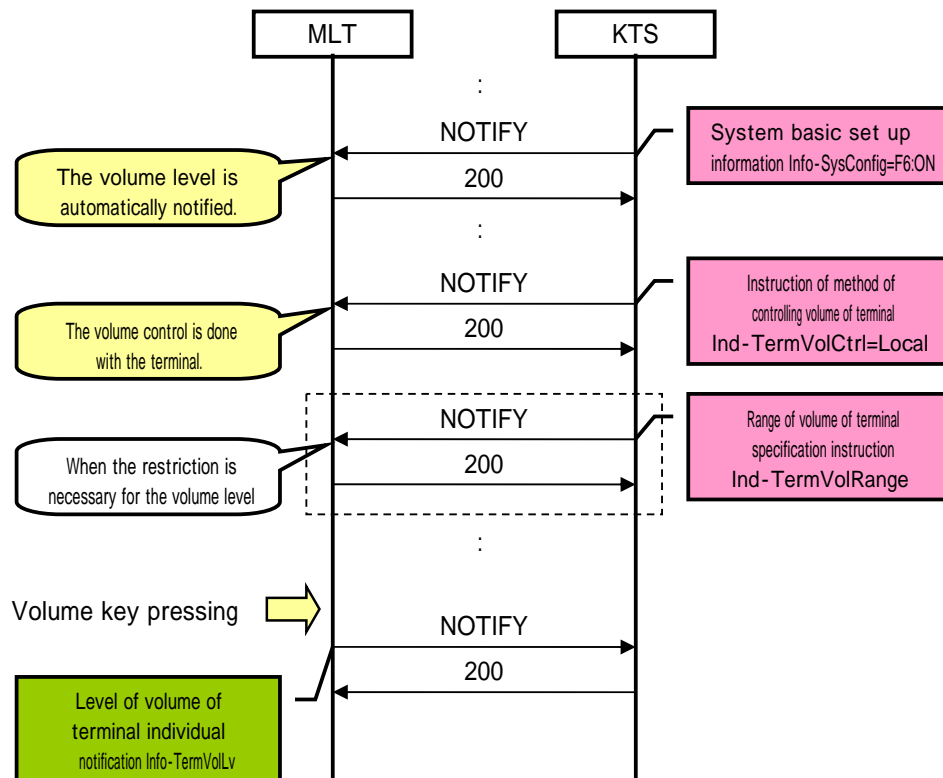


- State of volume of terminal management with automatic notification

To understand the volume level in every case, a main device becomes the following sequences though entrusts the volume management to the terminal. A main device is directed to assume volume automatic operation notification setting (F6) of system basic set up information (Info-SysConfig) parameter to be . ON", and to do the volume state management by "Terminal" according to instruction (Ind-TermVolCtrl) of the method of controlling the volume of the terminal parameter.

The terminal notifies a main device level of the volume of the terminal individual notification (Info-TermVolLv) parameter in this state when the volume key is pressed.

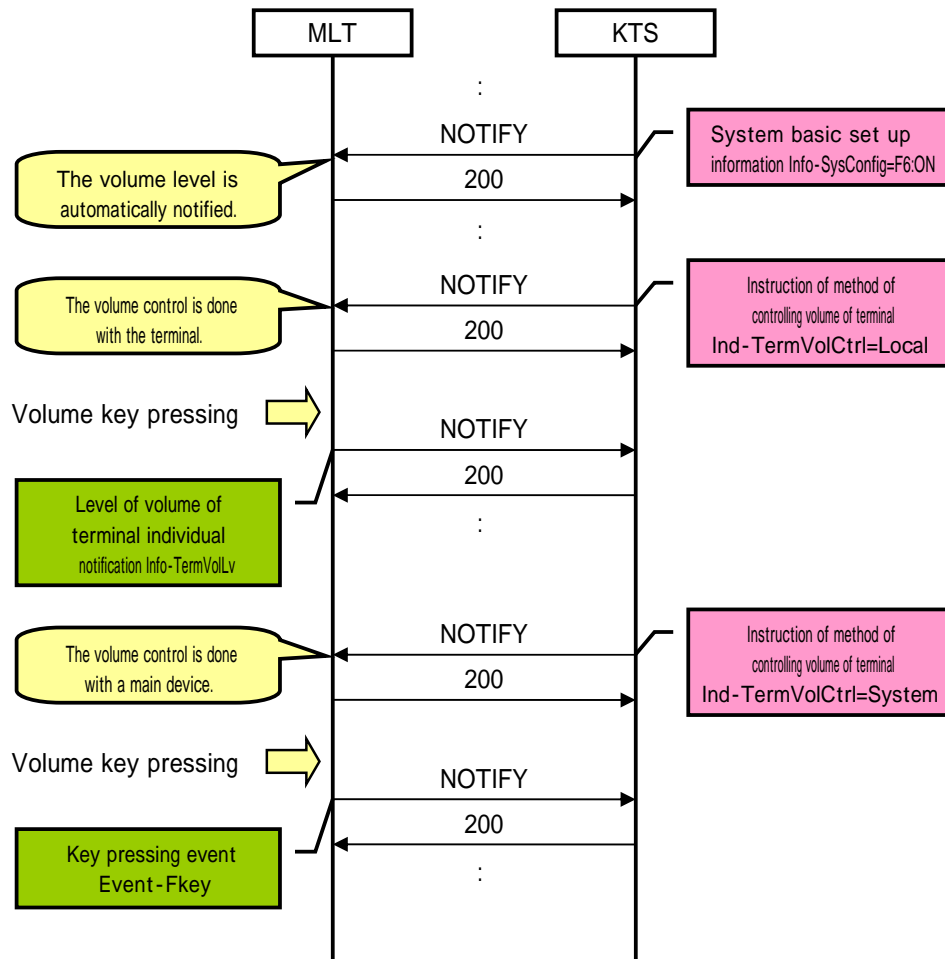
When the volume state is managed with the terminal, a main device can specify parameters range of the volume of the terminal specification instruction (Ind-TermVolRange) according to the restriction of each country.



- Temporary release of state of volume of terminal management

To interrupt the control of the volume of the terminal temporarily and to use the volume key for another application control, it entrusts the volume management to the terminal, and it becomes the following sequences. It is directed that the volume state management is temporarily done by "Main device" though a main device is directed to do the volume state management by "Terminal" according to instruction (Ind-TermVolCtrl) of the method of controlling the volume of the terminal parameter.

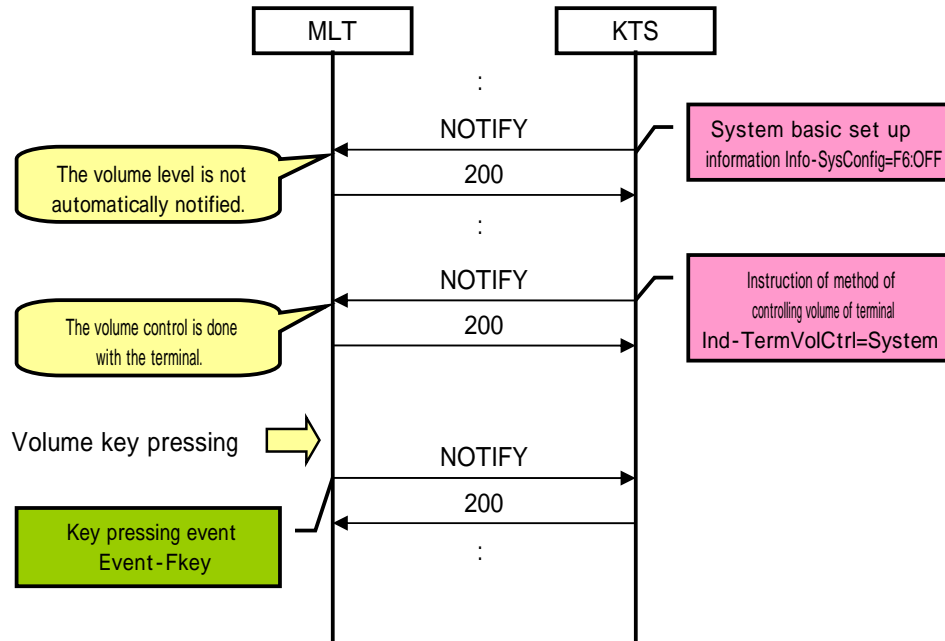
The terminal notifies a main device volume key pressing event (Event-Fkey) parameter or event (Event-Fkey2) of the cursor key pressing parameter in this state when the volume key is pressed.



- State of volume of main device management

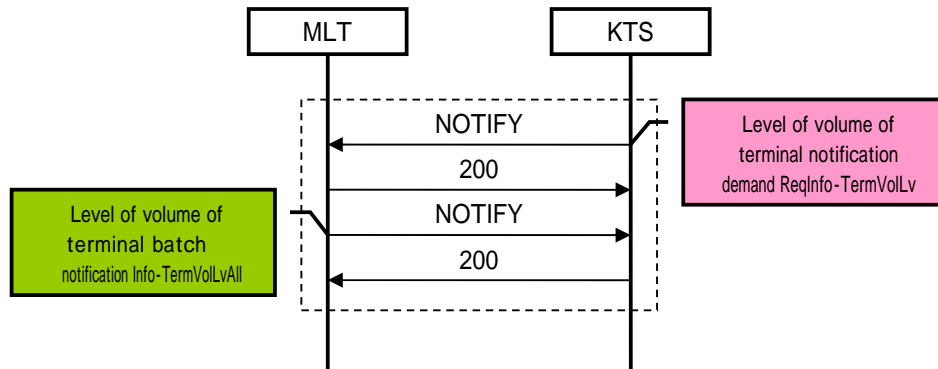
When the volume is managed with a main device, it becomes the following sequences. A main device is directed to assume volume automatic operation notification setting (F6) of system basic set up information (Info-SysConfig) parameter to be . OFF", and to do the volume state management by "Main device" according to instruction (Ind-TermVolCtrl) of the method of controlling the volume of the terminal parameter.

The terminal notifies a main device volume key pressing event (Event-Fkey) parameter or event (Event-Fkey2) of the cursor key pressing parameter in this state when the volume key is pressed.



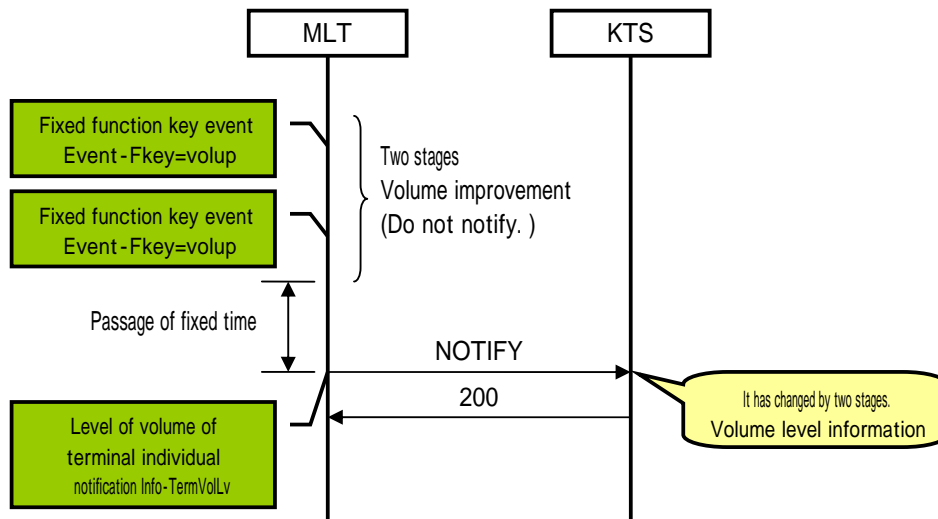
4.18.9.3. Volume level batch notification from terminal

When the volume state is managed on the terminal side, a main device can demand present volume state information according to level of the volume of the terminal notification demand (ReqInfo-TermVolLv) parameter. The terminal is notified to the level of the volume of the terminal notification demand parameter from a main device bringing managed volume level information together by level of the volume of the terminal batch notification (Info-TermVolLvAll) parameter.



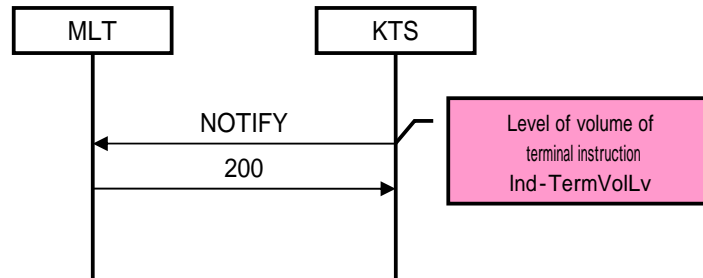
4.18.9.4. Volume level individual notification from terminal

Level information changed by the local volume operation of the terminal is individually notified by level of the volume of the terminal individual notification (Info-TermVolLv) parameter. Moreover, it is preferable to notify when it doesn't notify at the time of the key pressing so that the volume change notification by the key operation may decrease the network load, and the fixed time has passed since the key was pressed.



4.18.9.5. Volume level batch notification from main device

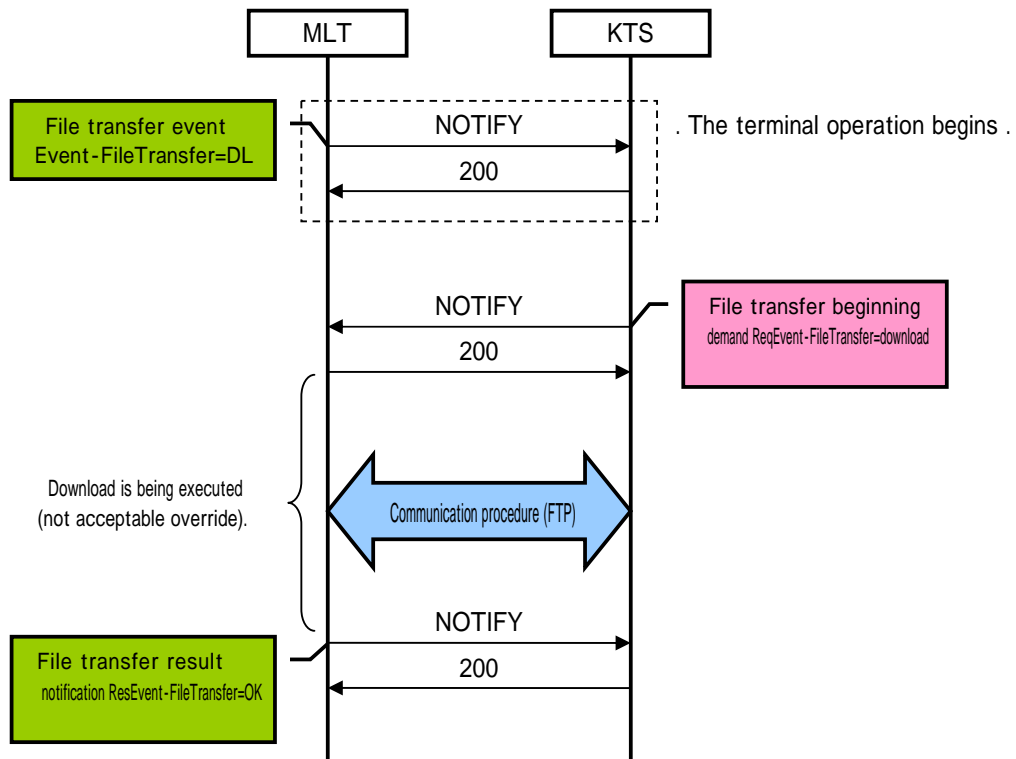
It is possible to return it to volume information that the user was using by directing volume information when the terminal starts even if the terminal is reset by maintenance etc. when a main device can maintain volume information on each terminal. Volume level information on the terminal is specified from a main device by level of the volume of the terminal instruction (Ind-TermVolLv) parameter.



4.18.10. Terminal menu

4.18.10.1. Menu download (FTP)

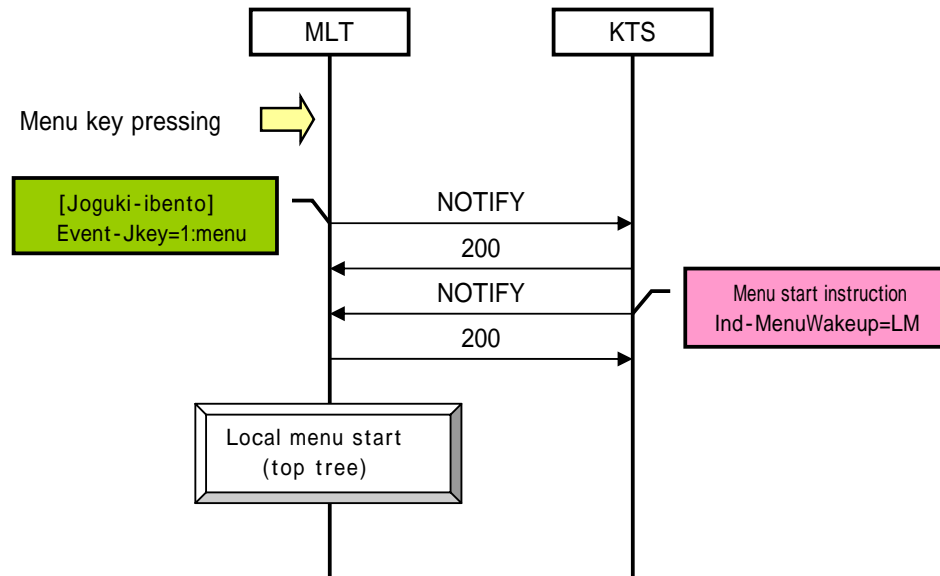
When the menu data is downloaded the FTP server or by way of with built-in main device the external FTP server, download is executed based on address information on the FTP server basically set to a main device. The file transfer event when the menu download is executed by the terminal operation. The (Event-FileTransfer) parameter is transmitted, it is waited that file transfer beginning demand (ReqEvent-FileTransfer) parameter from a main device is transmitted, and download begins. Transmit the file transfer beginning demand parameter directly to the terminal when download of the main device initiation begins.



4.18.10.2. Local menu start

[Joguki-ibento] from the terminal when the menu key is pressed while have registered in a main device A main device directs the (Event-Jkey) parameter the start of a local menu (top tree) according to menu start instruction (Ind-MenuWakeup) parameter.

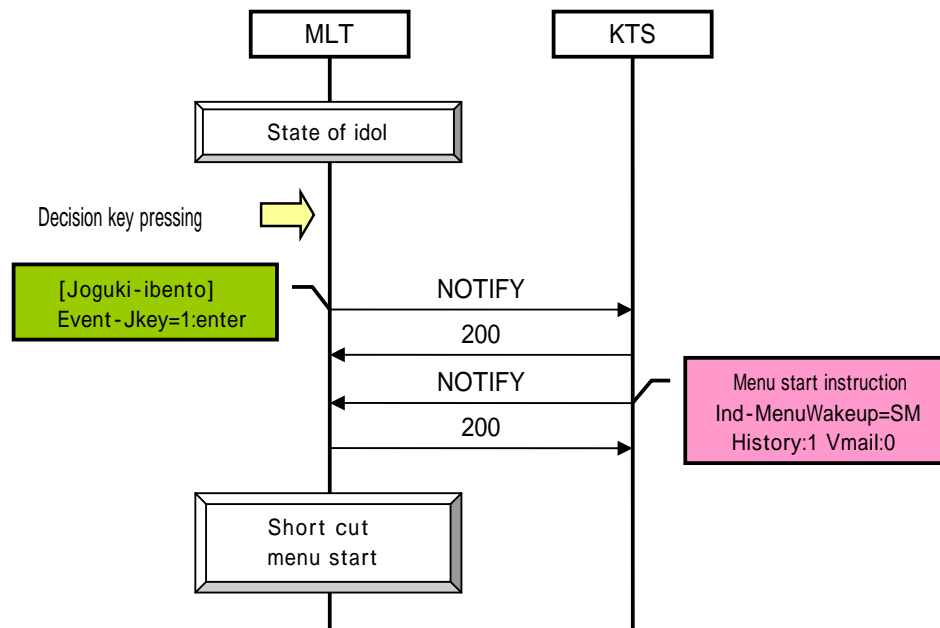
Do not consider that the start is refused when the menu start instruction parameter is not received from a main device and do not start a local menu. However, you may originally judge by the terminal when the menu key is pressed to a main device in the state of unregistration and start a local menu.



4.18.10.3. Short cut menu start

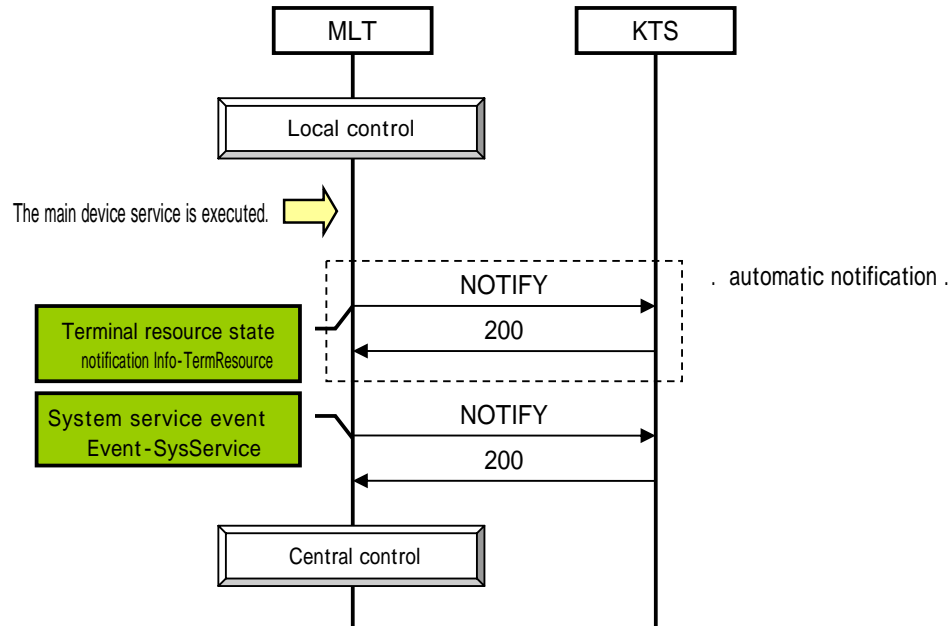
[Joguki-ibento] from the terminal when the terminal presses the decision key in idol's state
A main device directs the start of the short cut menu according to menu start instruction (Ind-MenuWakeup) parameter, and notifies the number of various information displayed in the short cut menu for the (Event-Jkey) parameter.

Do not start the considering short cut menu when the start is refused when the menu start instruction parameter is not received from a main device. Moreover, do not start the short cut menu when you press the decision key to a main device in the state of unregistration.



4.18.10.4. Transition from local control to central control

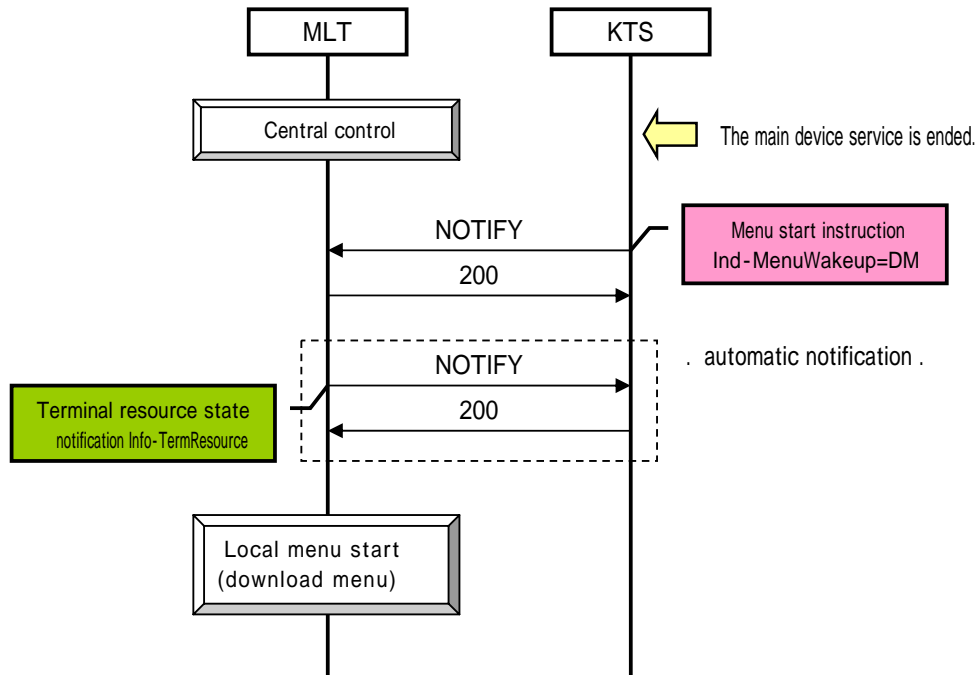
System service event (Event-SysService) parameter is transmitted when the main device service specified in "Telephone call function" menu downloaded when a central telephone book of a main device and the main device service of the central arrival and departure Makoto history etc. are executed from the menu is executed and a local control is switched to a central control.



4.18.10.5. Transition from central control to local control

A central control is switched to a local control by using the same menu start instruction (Ind-MenuWakeup) parameter as the start when the main device service is ended and it returns to a local menu of the terminal.

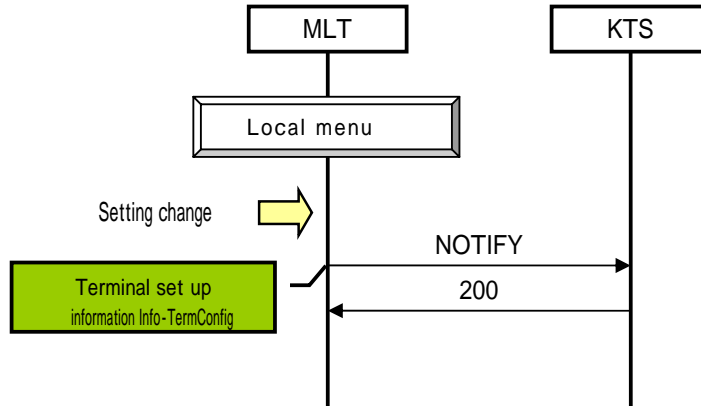
Consider the state of the terminal notified by terminal status information (Info-TermStatus) parameter and information (Info-TermResource) of the terminal resource state parameters when you control the menu by menu start instruction (Ind-MenuWakeup) parameter.



4.18.10.6. Set up information notification from terminal

The terminal must notify a main device the setting by terminal set up information (Info-TermConfig) parameter when you change the following settings in "Terminal setting" of a local menu. •

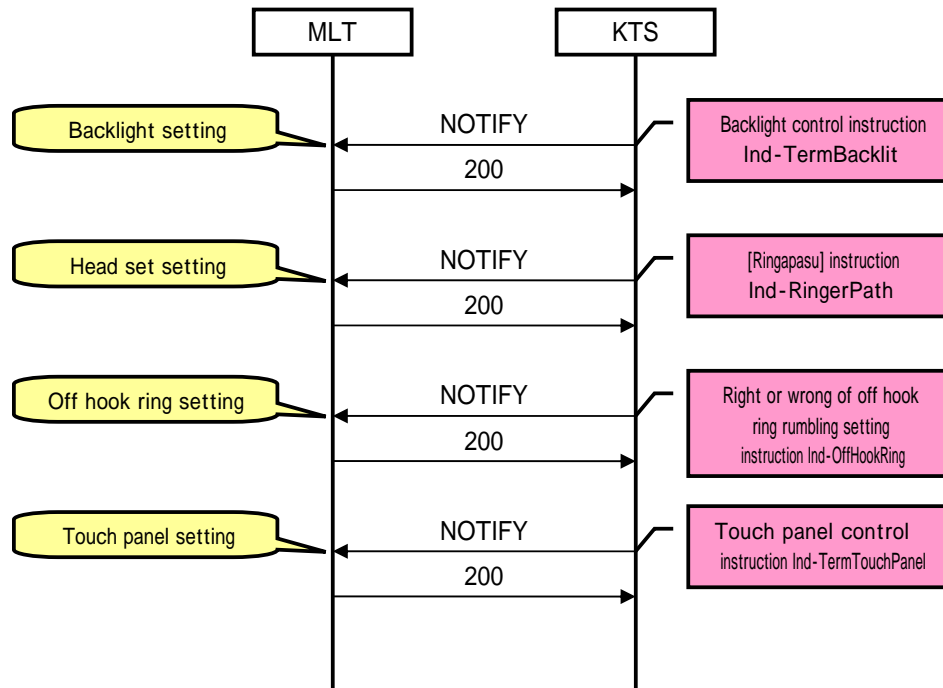
- Backlight setting
- Head set setting
- Off hook ring setting
- Touch panel setting



4.18.10.7. Set up information instruction from main device

The setting notified when "Terminal setting" of a local menu is changed can be changed from a main device according to the following parameters.

- Backlight setting
- Head set setting
- Off hook ring setting
- Touch panel setting

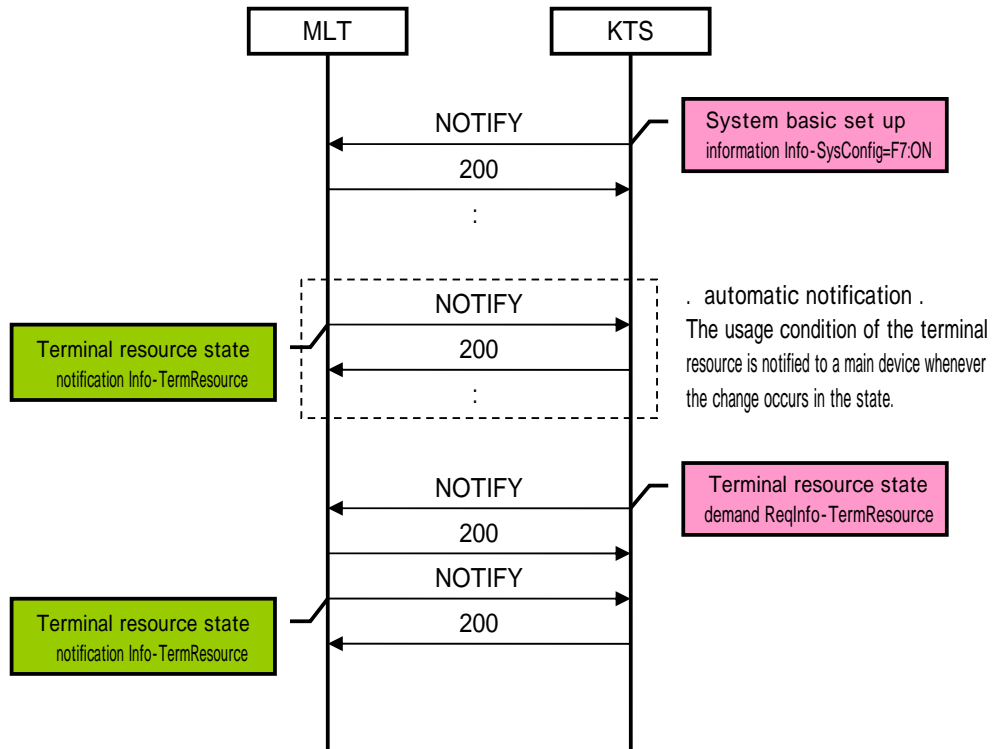


4.18.11. Terminal resource control

4.18.11.1. Initialization (automatic notification in state of resource)

The terminal notifies a main device the state by terminal resource state notification (Info-TermResource) parameter every time the change occurs in the use situation of the resource when terminal resource automatic operation notification setting (F7) is specified for "ON" by system basic set up information (Info-SysConfig) parameter when starting.

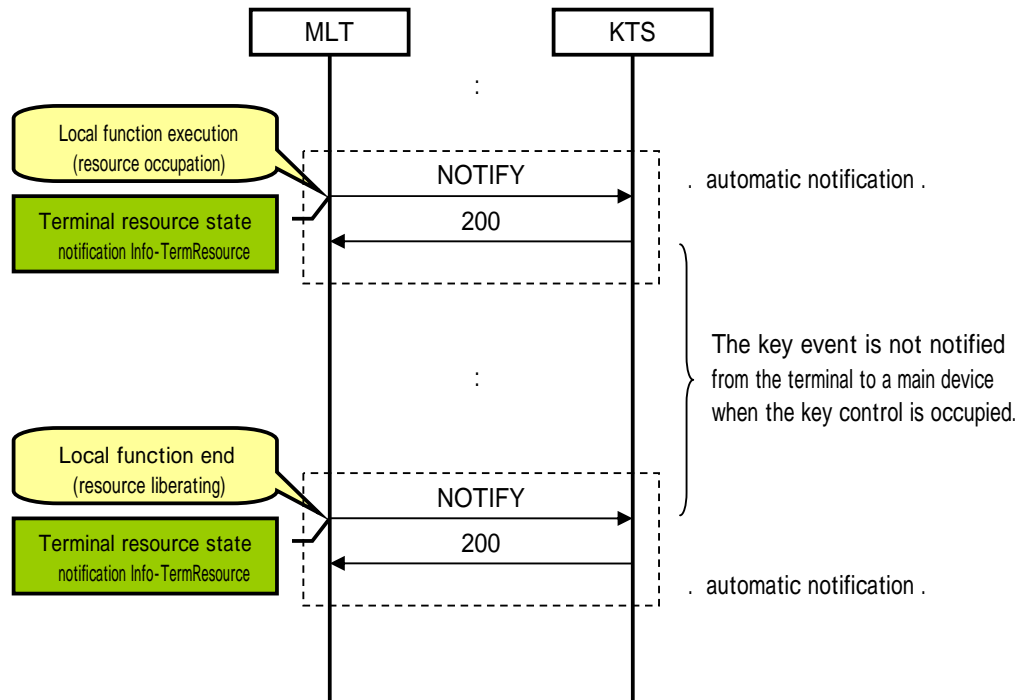
Moreover, it is also possible to confirm a present resource usage condition of the terminal from a main device by using terminal resource state demand (ReqInfo-TermResource) parameter regardless of ON/OFF of terminal resource automatic operation notification setting (F7).



4.18.11.2. Acquisition of terminal resource control right with terminal

The resource control right of the terminal has by a main device, and when the terminal acquires the resource control right for the control of a local function, becomes the following sequences in the state usually. When the terminal occupies the key control, the key event from the terminal is not notified, and when the LCD/LED control is occupied, the control lead is not executed from a main device. However, do not annul the instruction received from a main device, always maintain latest information with the terminal, and execute it when you liberate the resource. A

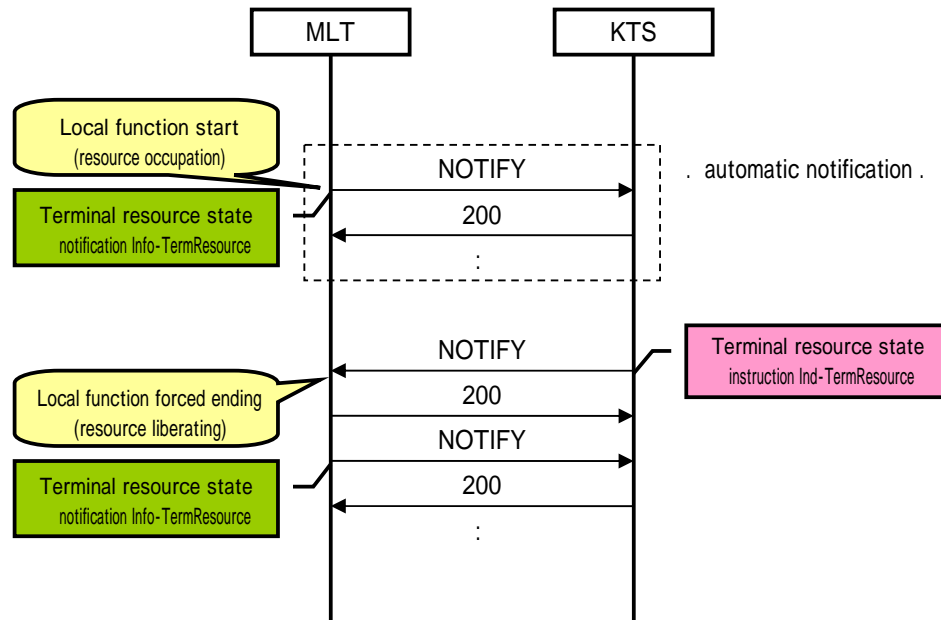
main device must note that the resource use for the terminal cannot be in real time understood when the terminal resource automatic operation notification setting (F7 of Info-SysConfig) is "OFF".



4.18.11.3. Acquisition of terminal resource control right with main device (for emergency)

When the resource control right is returned to a main device with the terminal or the option has the resource control right of the terminal, terminal resource liberating instruction (Ind-TermResource) parameter is transmitted from a main device. According to instruction of terminal or option of annulment of information on controlled resource of main device when this instruction is received

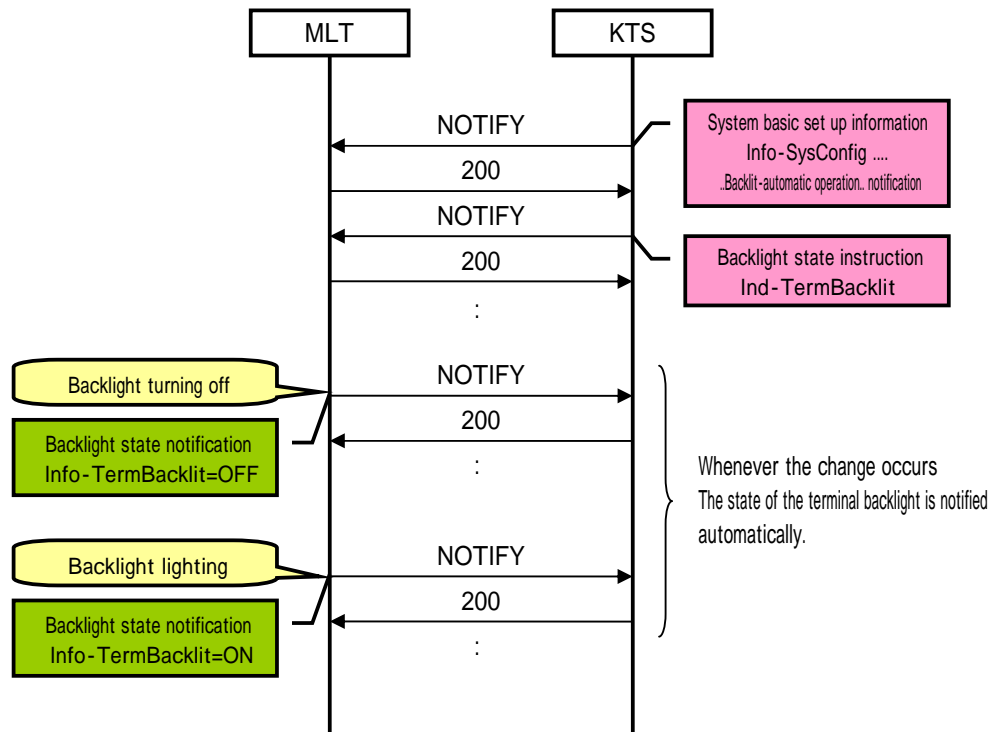
When usually operating it based on being directed from a main device only in the emergency, it is necessary not to direct the terminal resource liberating instruction parameter.



4.18.12. Power saving control

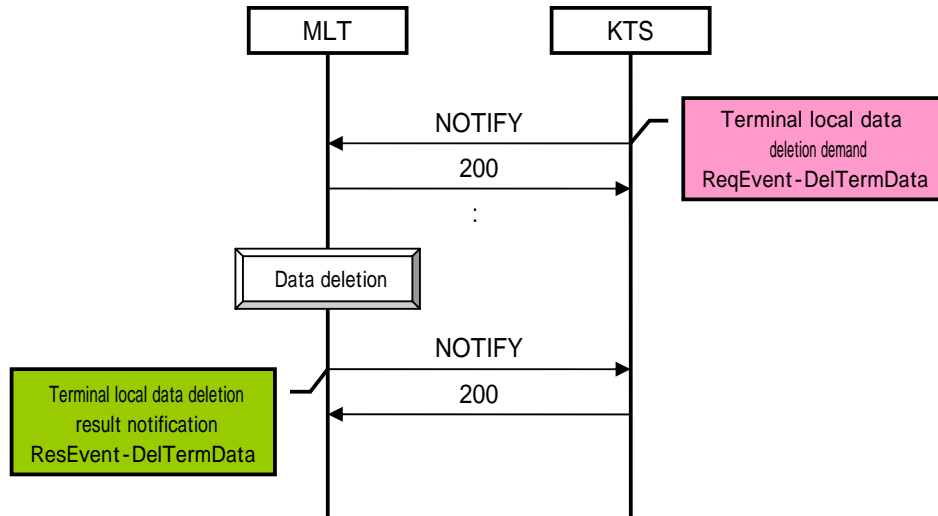
4.18.12.1. Backlight operation instruction

When initializing it, "Automatic notification" in the state of the backlight is made effective according to system basic set up information (Info-SysConfig) parameter when a main device observes the state of the backlight of the terminal, and it controls if necessary. The control lead is notified from an operation setting and a main device of the backlight by terminal backing Ryde state instruction (Ind-TermBacklit) parameter. The terminal transmits terminal backlight state notification (Info-TermBacklit) parameter to a main device when the backlight is controlled according to the setting directed by this parameter, and there is a change in the state.



4.18.13. Terminal local data clearness

When terminal local data deletion demand (ReqEvent-DelTermData) parameter is received from a main device, the terminal executes the deletion processing of the specified local data. The result of the deletion processing is notified to a main device by terminal local data deletion result notification (ResEvent-DelTermData) parameter.

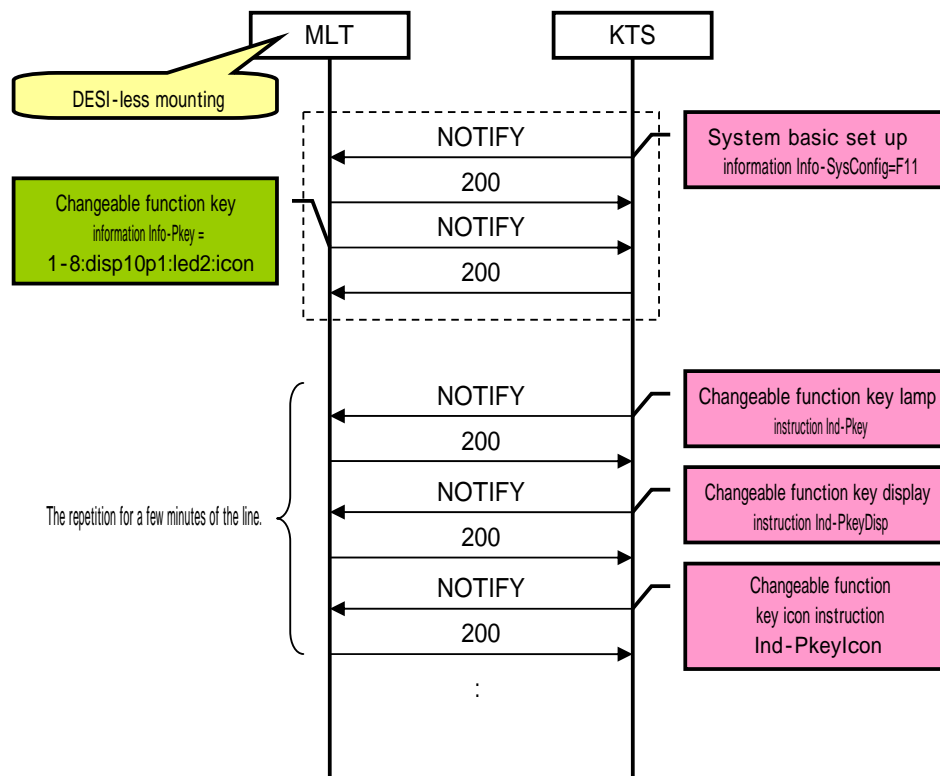


4.18.14. DESI-less

4.18.14.1. Notification of line key information

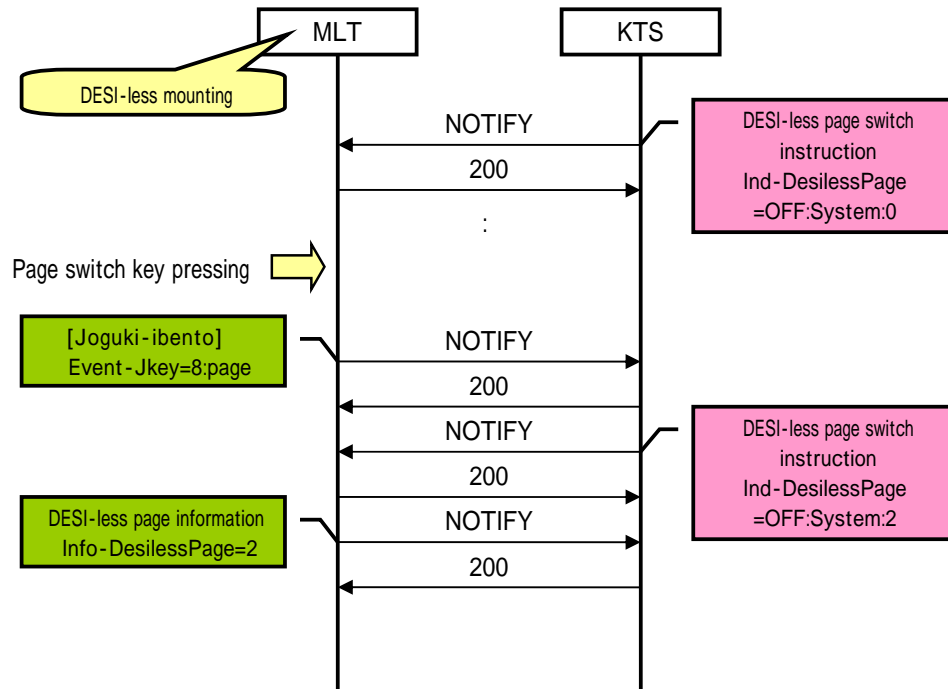
A desktop terminal that mounts DESI-less notifies a main device line key information on DESI-less by using changeable function key information parameter (Info-Pkey) as well as usual line key information. At this time, the text display function "DispXXpY (In XX, total characters on screen and Y are page numbers)", the LED display function "Led1/led2", and icon display function . Icon" are matched as DESI-less ability and it notifies. A

main device notifies display information necessary for the terminal by the batch for a few minutes of the line by using changeable function key display instruction (Ind-PkeyDisp) parameter and instruction (Ind-PkeyIcon) of the changeable function key icon parameters in addition to changeable function key lamp instruction (Ind-Pkey) parameter.



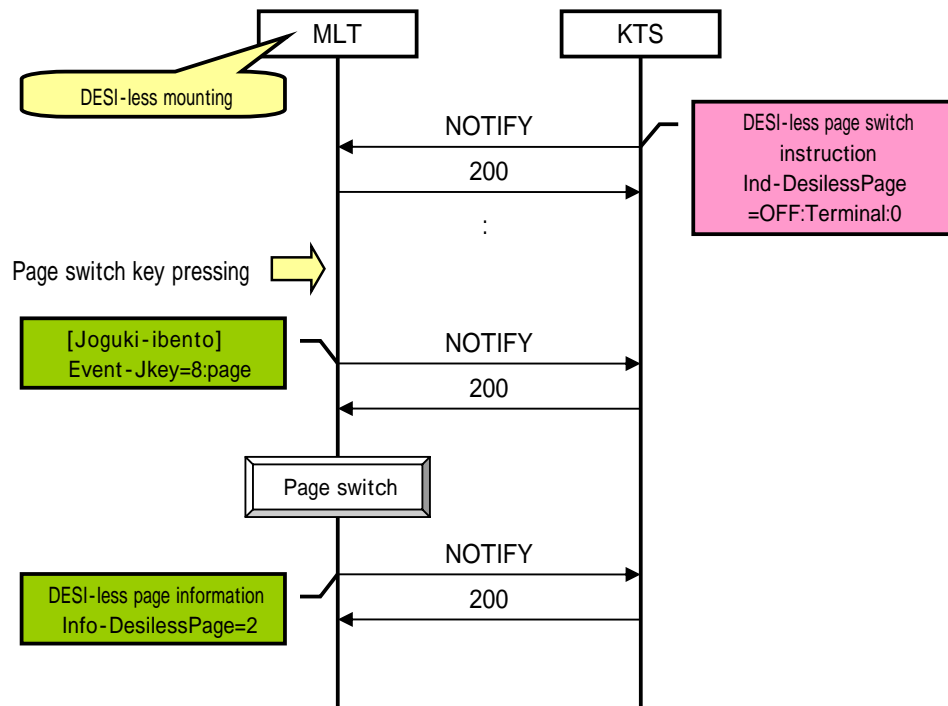
4.18.14.2. Page switch (main device control)

When ". System" is specified and transmitted to "Page switch control" of DESI-less page switch instruction (Ind-DesilessPage) parameter from a main device, the terminal leaves page switch control of DESI-less to a main device. A main device is transmitted to the terminal specifying the page switched to "Page number" of DESI-less page switch instruction (Ind-DesilessPage) parameter when pressing page switch key is confirmed by [joguki-ibento] (Event-Jkey) parameter from the terminal. The terminal notifies a main device the page information after it executes it on the other hand by DESI-less page information (Info-DesilessPage) parameter.



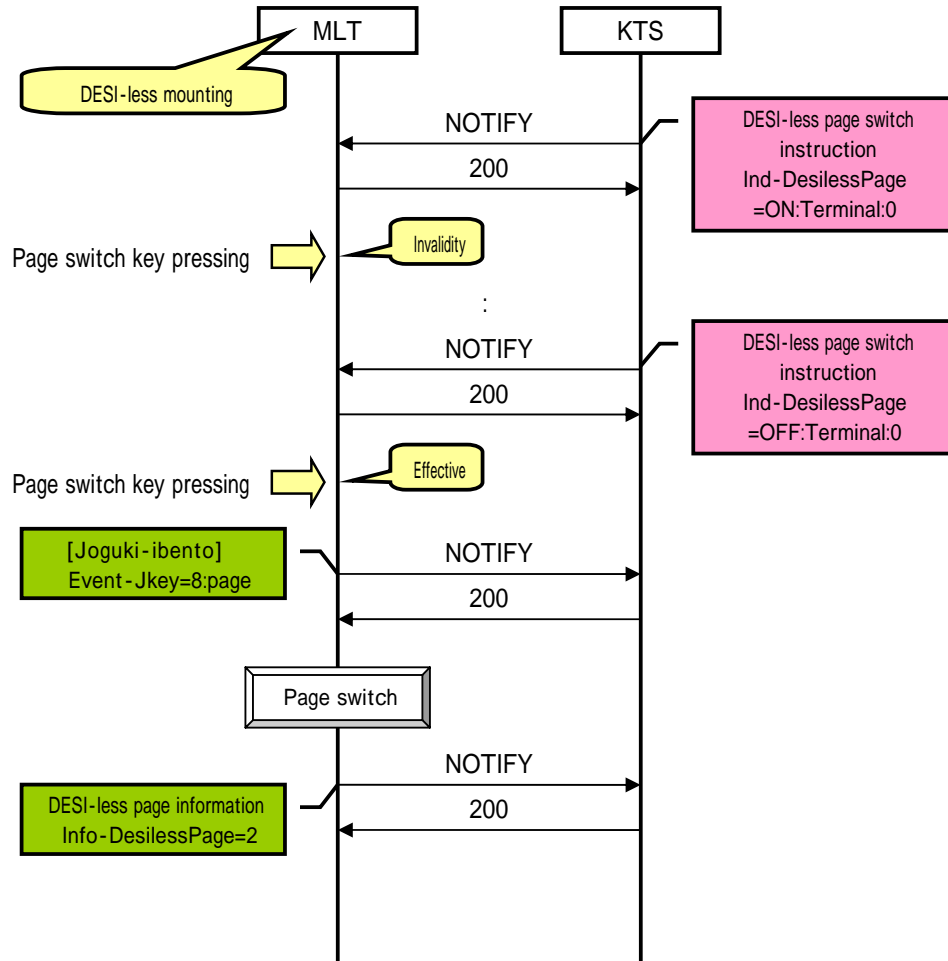
4.18.14.3. Page switch (terminal control)

When . Terminal" is specified and transmitted to "Page switch control" of DESI-less page switch instruction (Ind-DesilessPage) parameter from a main device, the terminal executes page switch control of DESI-less with the terminal. When page switch key is pressed, the terminal is [joguki-ibento] in a main device Pressing page switch key is notified by the (Event-Jkey) parameter, page switch of DESI-less is executed, and the page information after it executes it by DESI-less page information (Info-DesilessPage) parameter is notified to a main device.



4.18.14.4. Page switch restriction

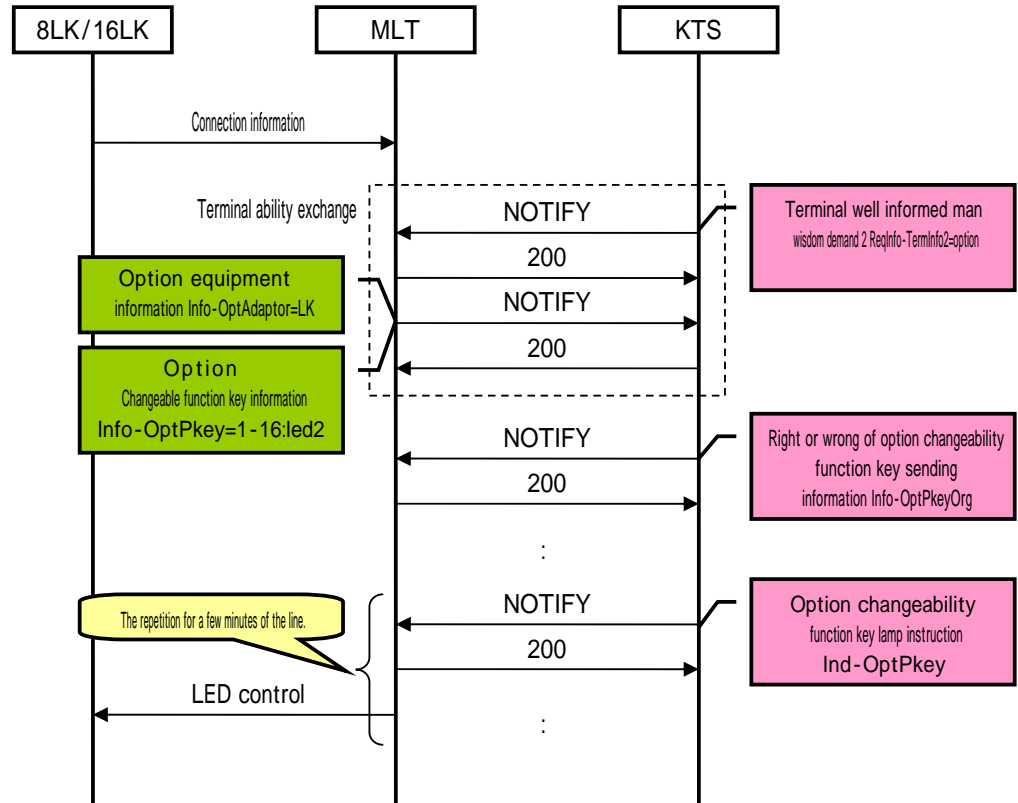
When . ON" is specified and transmitted to "Page switch restriction" of DESI-less page switch instruction (Ind-DesilessPage) parameter from a main device, the terminal doesn't execute page switch control of DESI-less with the terminal. The terminal doesn't notify a main device press of page switch key by [joguki-ibento] (Event-Jkey) parameter when page switch key is pressed, and not execute page switch of DESI-less.



4.18.15. Line key option (8LK/16LK)

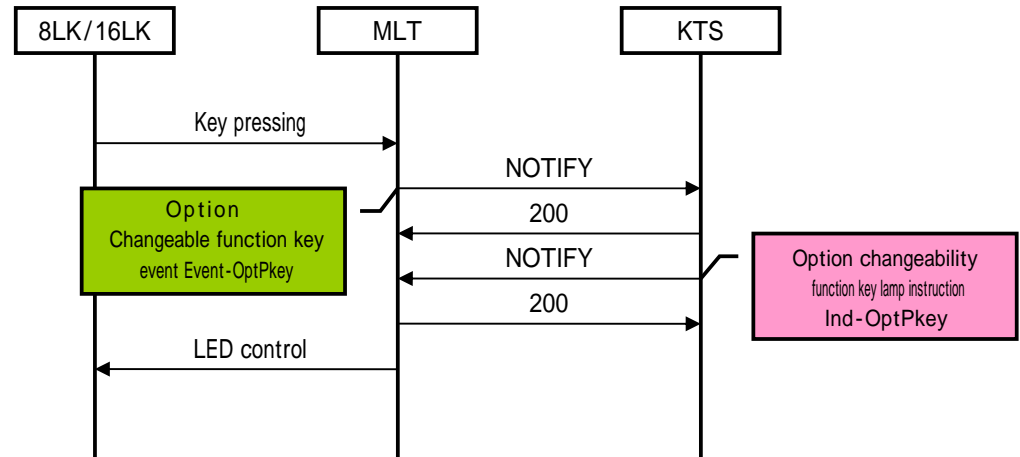
4.18.15.1. Notification of line key information

When starting, a main device demands the connection information of the option equipment from the terminal by specifying "Option" for terminal well informed man wisdom demand 2(ReqInfo-TermInfo2) parameter. A desktop terminal transmits option equipment information (Info-OptAdapter) parameter to a main device based on the connection information from the option equipment. Moreover, the mounted number of changeable function keys is notified for the line key option by option changeability function key information (Info-OptPkey) parameter.



4.18.15.2. Notification of line key event

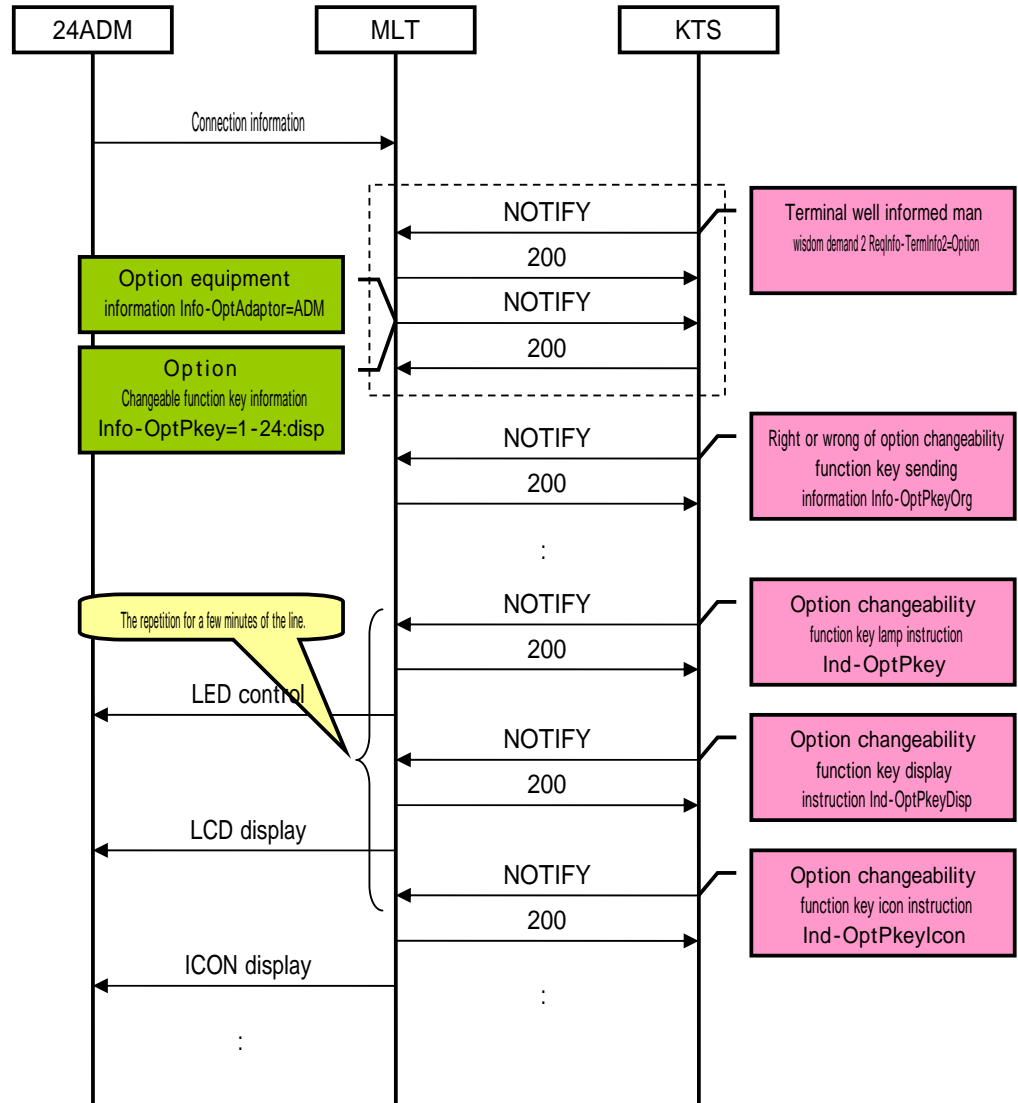
When the key to the line key option is pressed, a desktop terminal transmits option changeability function key event (Event-OptPkey) parameter to a main device based on key event information from the option equipment. A main device transmits the line key option equipment and to control the lamp, option changeability function key lamp instruction (Ind-OptPkey) parameter is transmitted.



4.18.16. Add-on module option (24ADM)

4.18.16.1. Notification of line key information

When starting, a main device demands the connection information of the option equipment from the terminal by specifying "Option" for terminal well informed man wisdom demand 2(ReqInfo-TermInfo2) parameter. A desktop terminal transmits option equipment information (Info-OptAdaptor) parameter to a main device based on the connection information from the option equipment. Moreover, the mounted number of changeable function keys is notified for the add-on module option by option changeability function key information (Info-OptPkey) parameter.



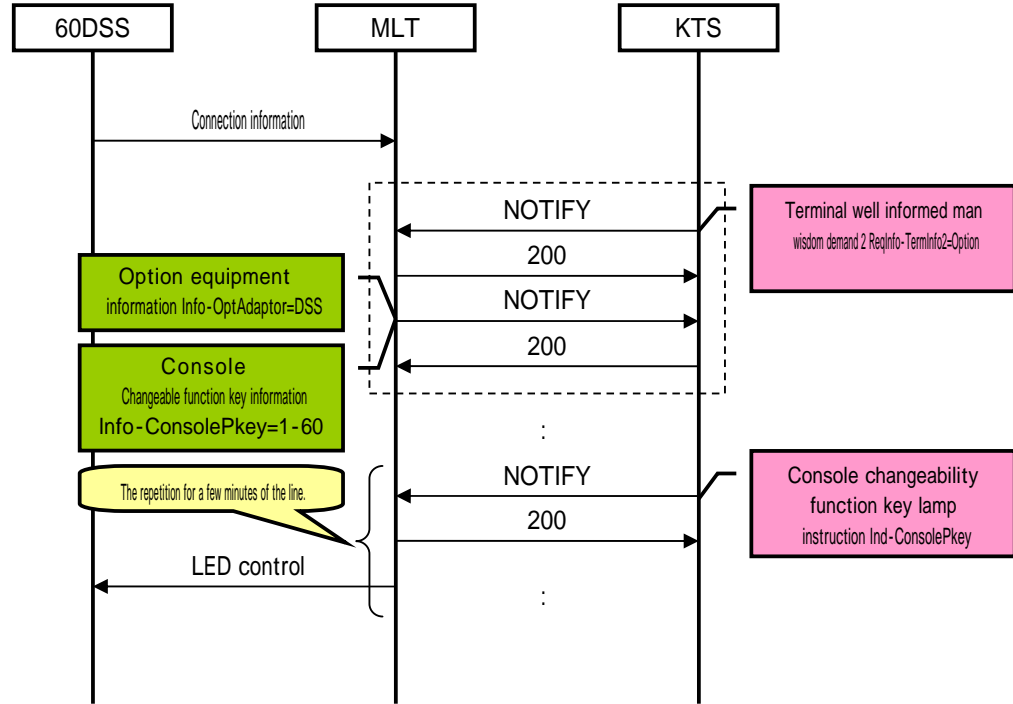
4.18.16.2. Notification of line key event

As well as 8/16LK option.

4.18.17. DSS console option (60DSS)

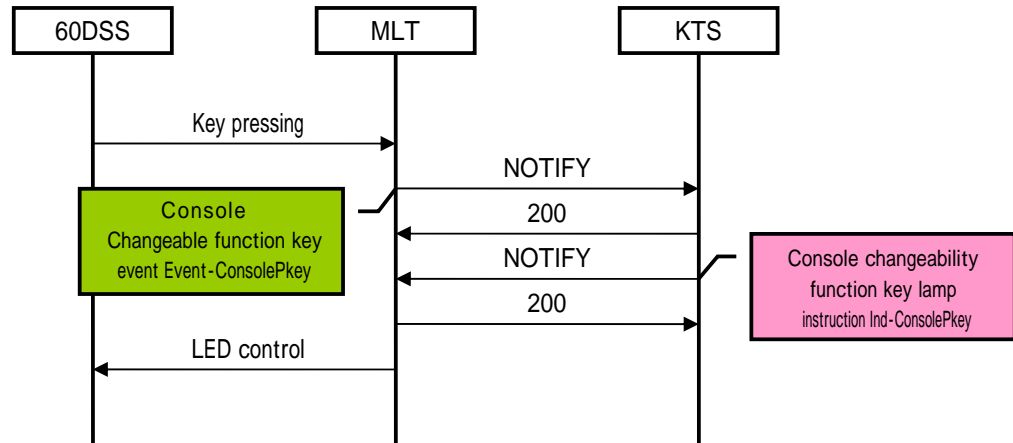
4.18.17.1. Notification of line key information

When starting, a main device demands the connection information of the option equipment from the terminal by specifying "Option" for terminal well informed man wisdom demand 2(ReqInfo-TermInfo2) parameter. A desktop terminal transmits option equipment information (Info-OptAdaptor) parameter to a main device based on the connection information from the option equipment. Moreover, the mounted number of changeable function keys is notified for the DSS console option by console changeability function key information (Info-ConsolePkey) parameter.



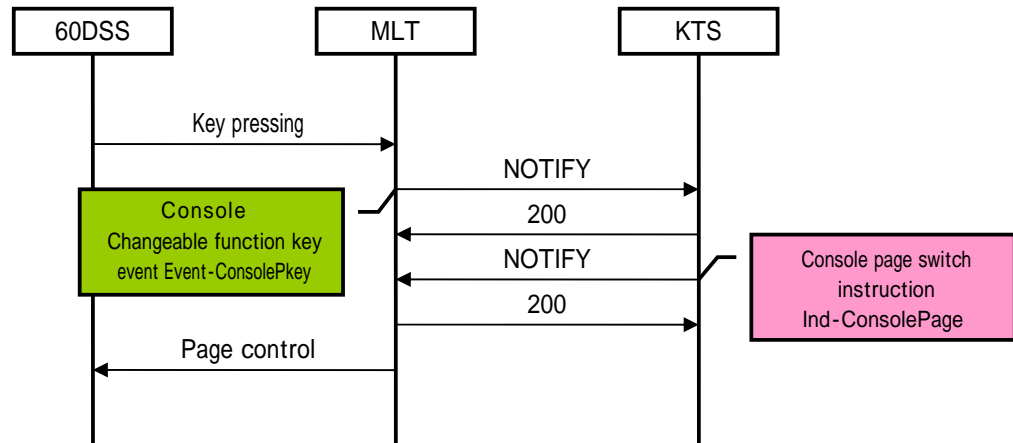
4.18.17.2. Notification of line key event

When the key to the DSS console option is pressed, a desktop terminal transmits console changeability function key event (Event-ConsolePkey) parameter to a main device based on key event information from the option equipment. A main device transmits the line key option equipment and to control the lamp, option changeability function key lamp instruction (Ind-ConsolePkey) parameter is transmitted.



4.18.17.3. Respect switch of DSS console

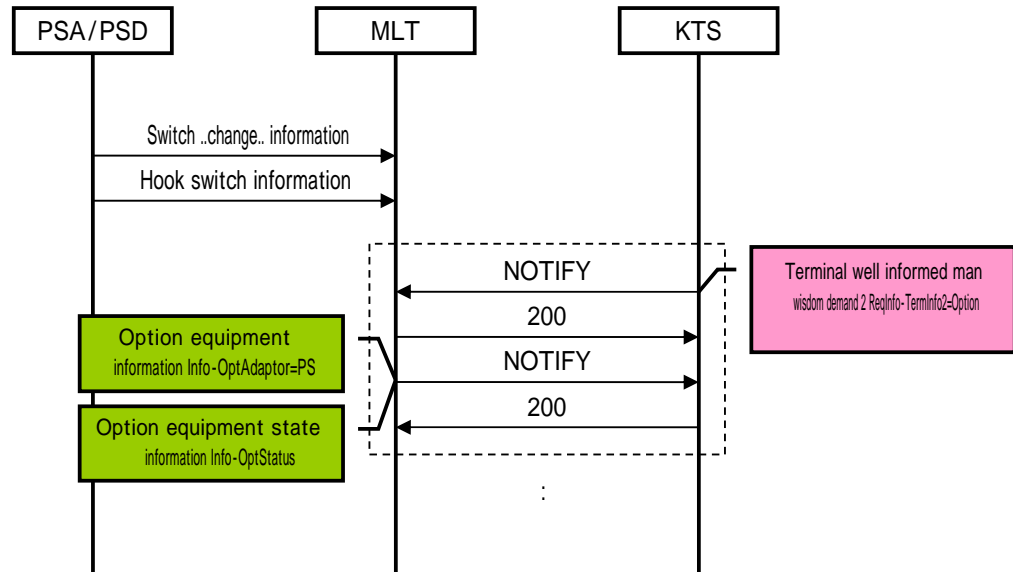
When the respect switch button is allocated in the line key to the DSS option, a main device transmits console page switch instruction (Ind-ConsolePage) parameter to console changeability function key event (Event-ConsolePkey) parameter.



4.18.18. Power failure adaptor option (PSA/PSD)

4.18.18.1. Initialization

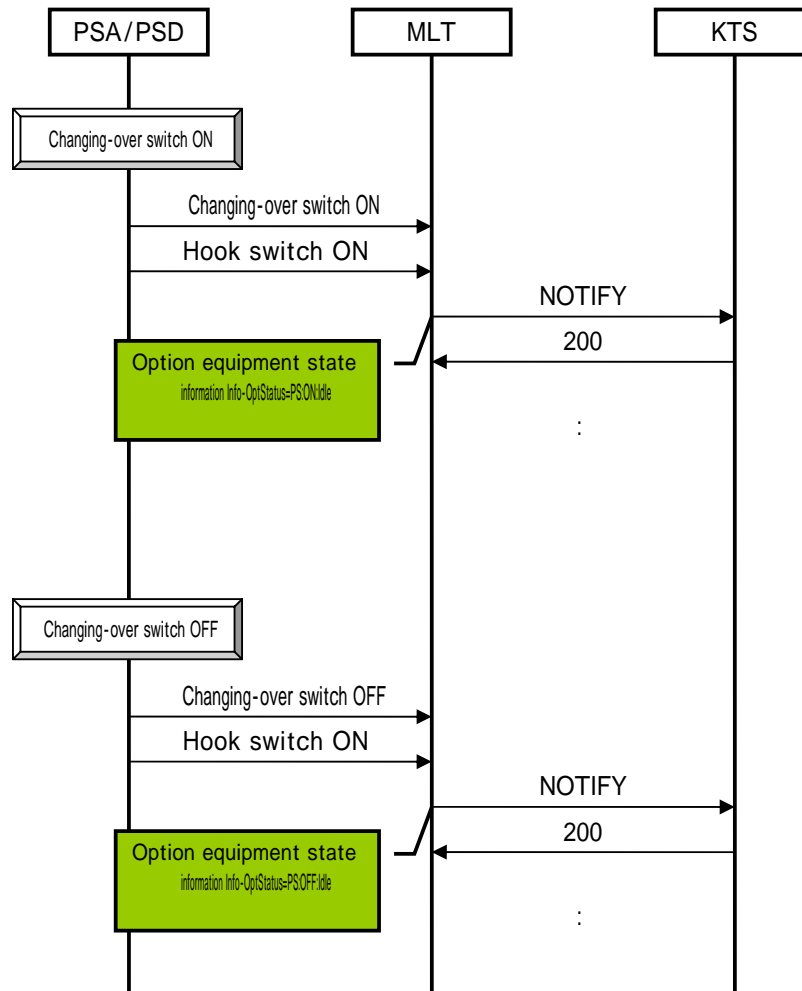
When starting, a desktop terminal transmits various information received from the option equipment to the information exchange instruction concerning the option equipment by terminal well informed man wisdom demand 2(ReqInfo-TermlInfo2) parameter from a main device by option equipment information (Info-OptAdaptor) parameter and information (Info-OptStatus) of the option equipment state parameters.



4.18.18.2. Power failure mode switch in state of energizing

When the switch is switched to turning on (power failure mode) while energized, a desktop terminal transmits the state by option equipment state information (Info-OptStatus) parameter. Moreover, when the switch is switched to turning off (ordinary mode) while energized, the state is transmitted similarly by option equipment state information (Info-OptStatus) parameter.

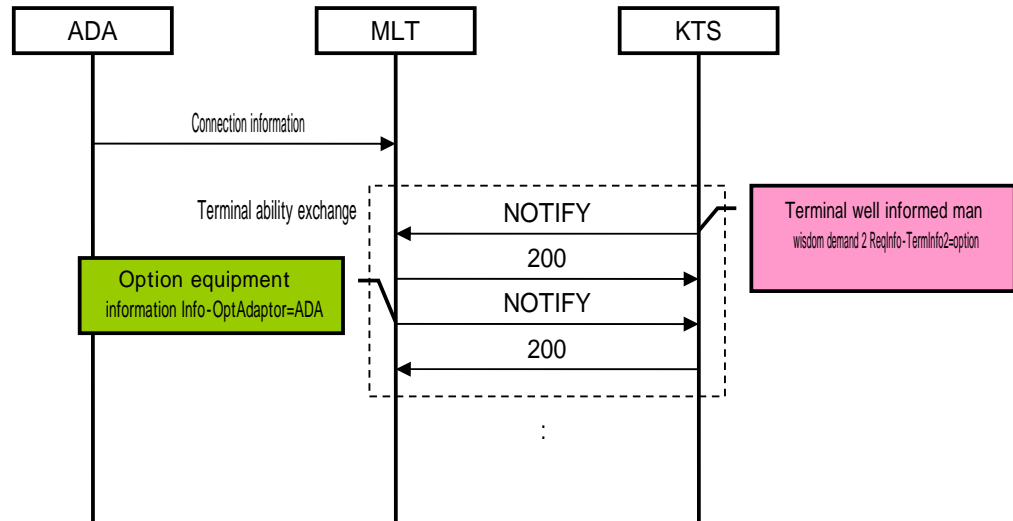
Do not control a desktop telephone though the message generated in the power failure mode is received and the response is returned.



4.18.19. Telephone call recording adaptor option (ADA)

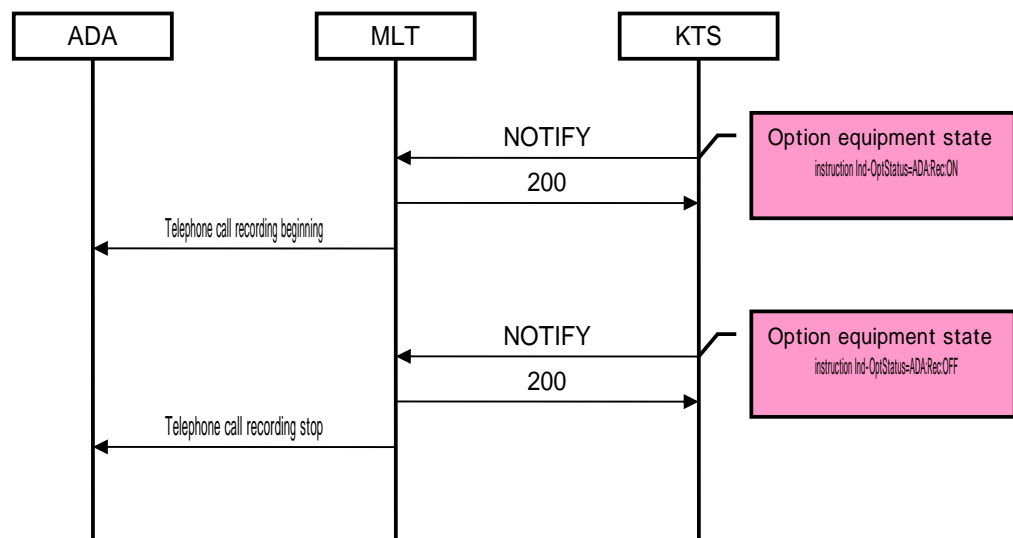
4.18.19.1. Initialization

When starting, a main device demands the connection information of the option equipment from the terminal by specifying "Option" for terminal well informed man wisdom demand 2 (ReqInfo-TermInfo2) parameter. A desktop terminal transmits option equipment information (Info-OptAdaptor) parameter to a main device based on the connection information from the option equipment.



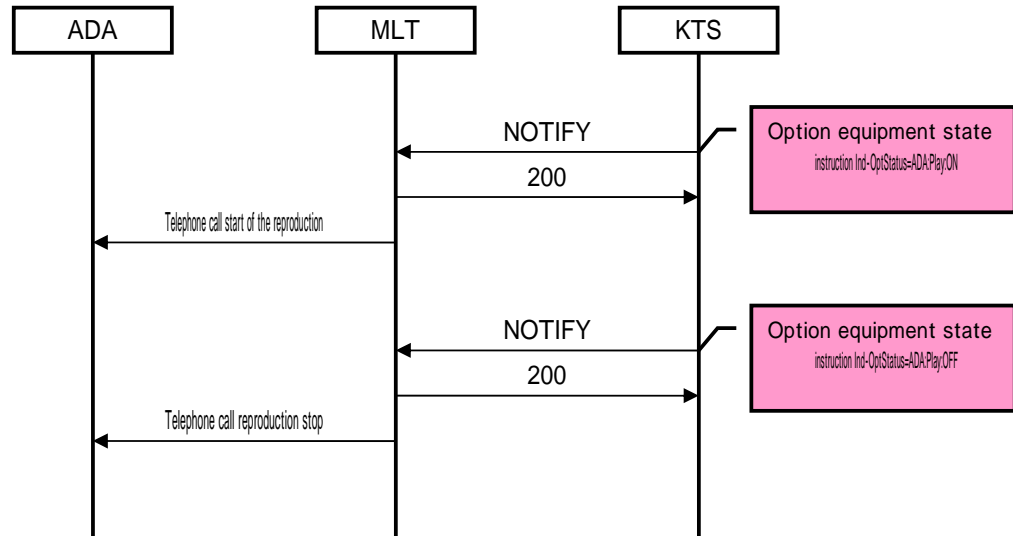
4.18.19.2. Telephone call recording instruction

When the telephone call recording by the main device instruction is begun and stopped, option equipment state instruction (Ind-OptStatus) parameter is transmitted.



4.18.19.3. Telephone call reproduction instruction

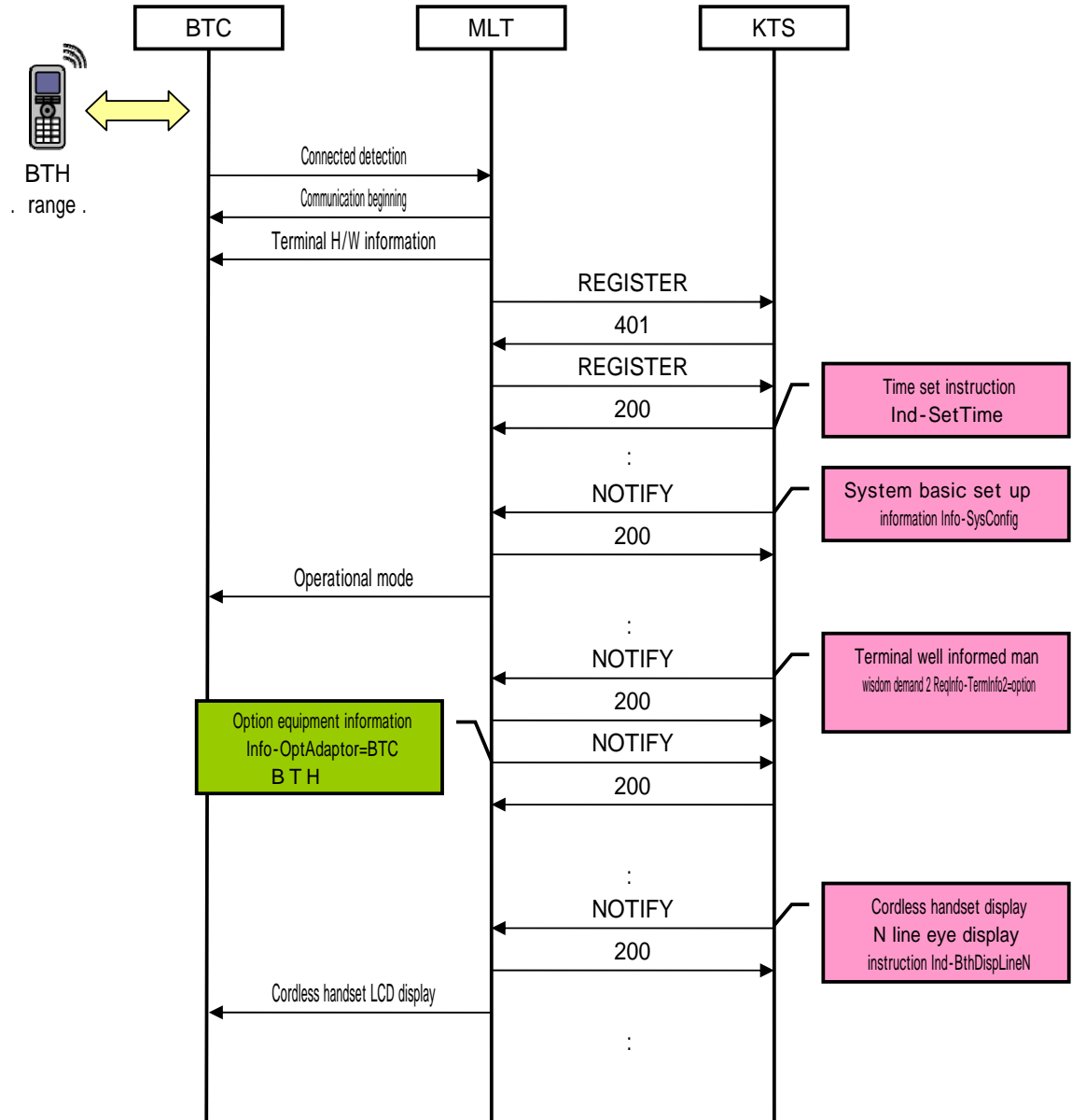
When the telephone call reproduction by the main device instruction is begun and stopped, option equipment state instruction (Ind-OptStatus) parameter is transmitted.



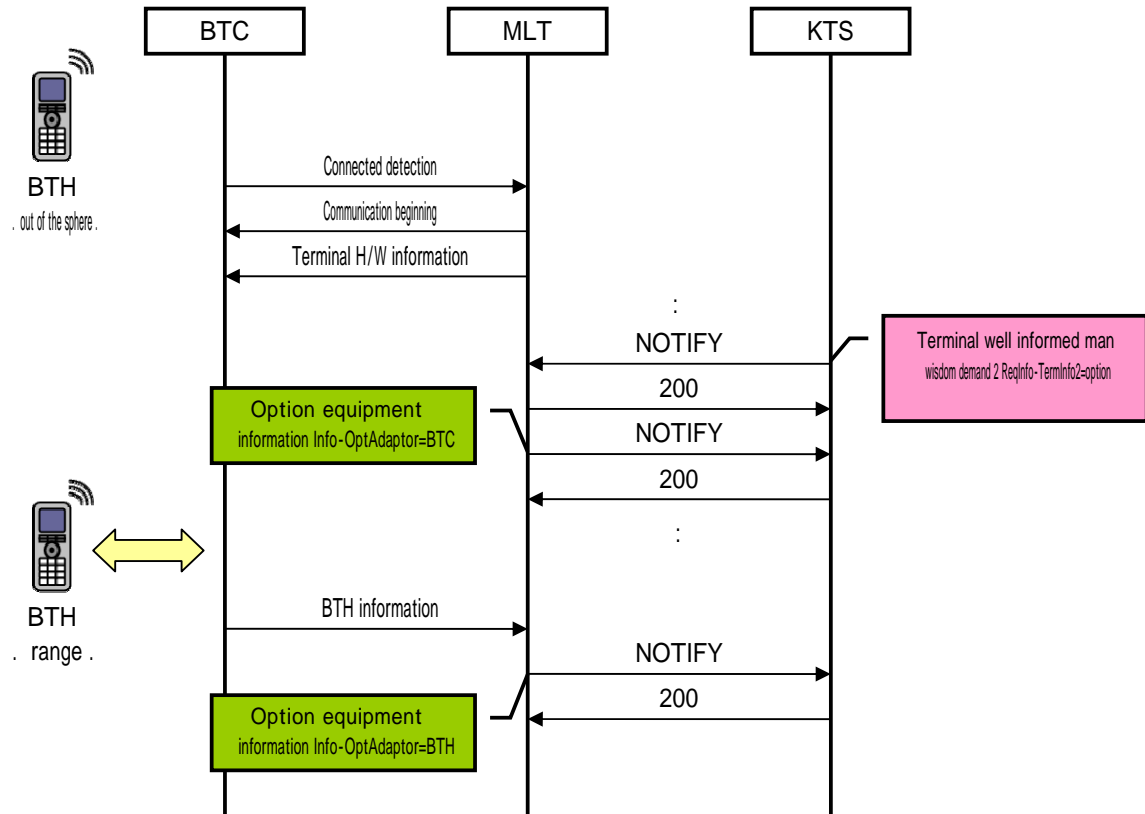
4.18.20. Bluetooth option (BCH/BHA)

4.18.20.1. Initialization

When starting, a main device demands the connection information of the option equipment from the terminal by specifying "Option" for terminal well informed man wisdom demand 2(ReqInfo-TermInfo2) parameter. A desktop terminal transmits option equipment information (Info-OptAdaptor) parameter to a main device based on the connection information from the option equipment. When Bluetooth Cradle (BTC) can be communicated with Bluetooth hand set (BTH) when starting, each information of BTC and BTH is transmitted together.

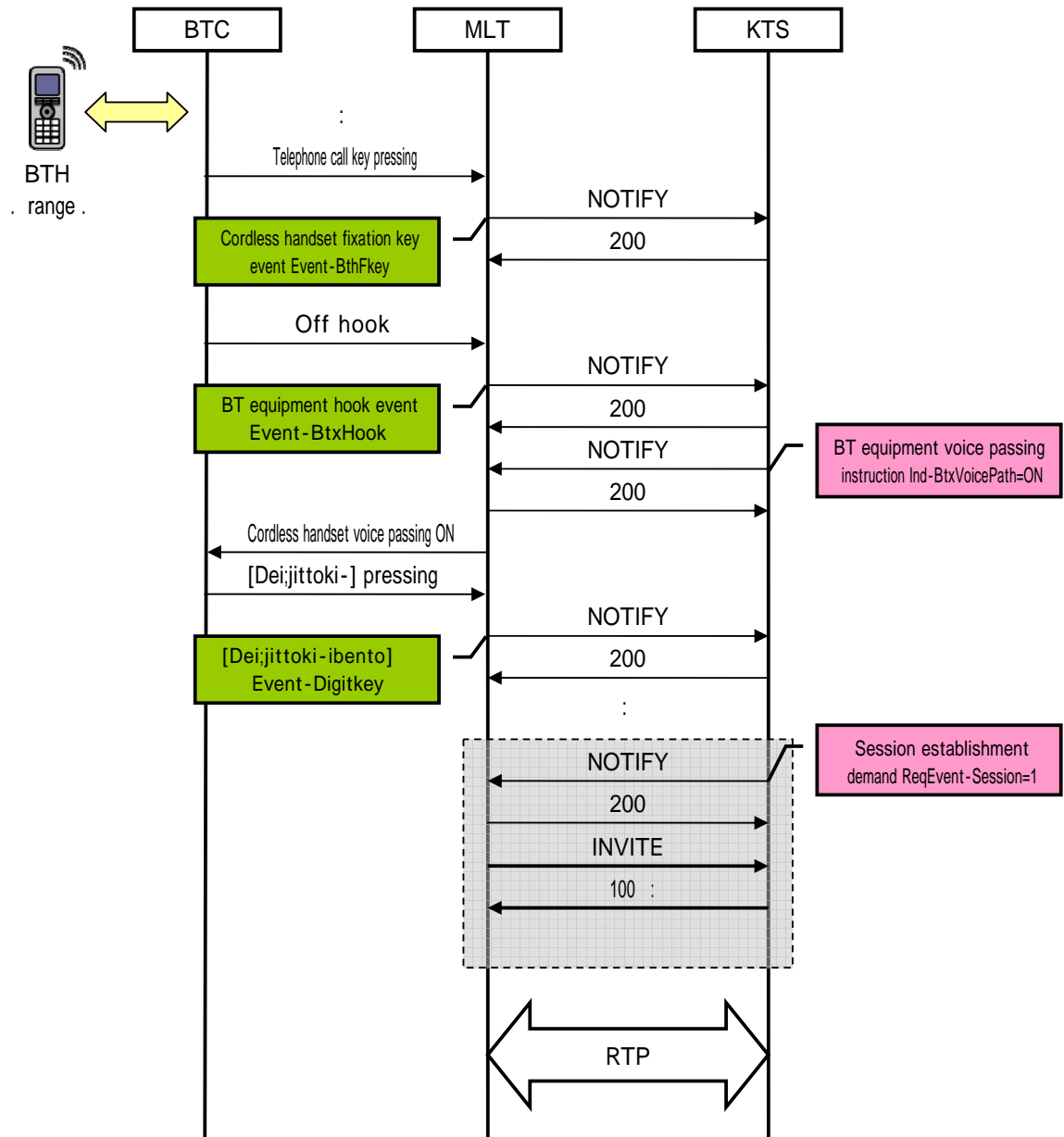


Information on BTH is not transmitted when Bluetooth Cradle (BTC) cannot be communicated with Bluetooth hand set (BTH) when starting for this and only information on BTC is transmitted. When the communication of BTC and BTH becomes possible, information on BTH is transmitted back only once.



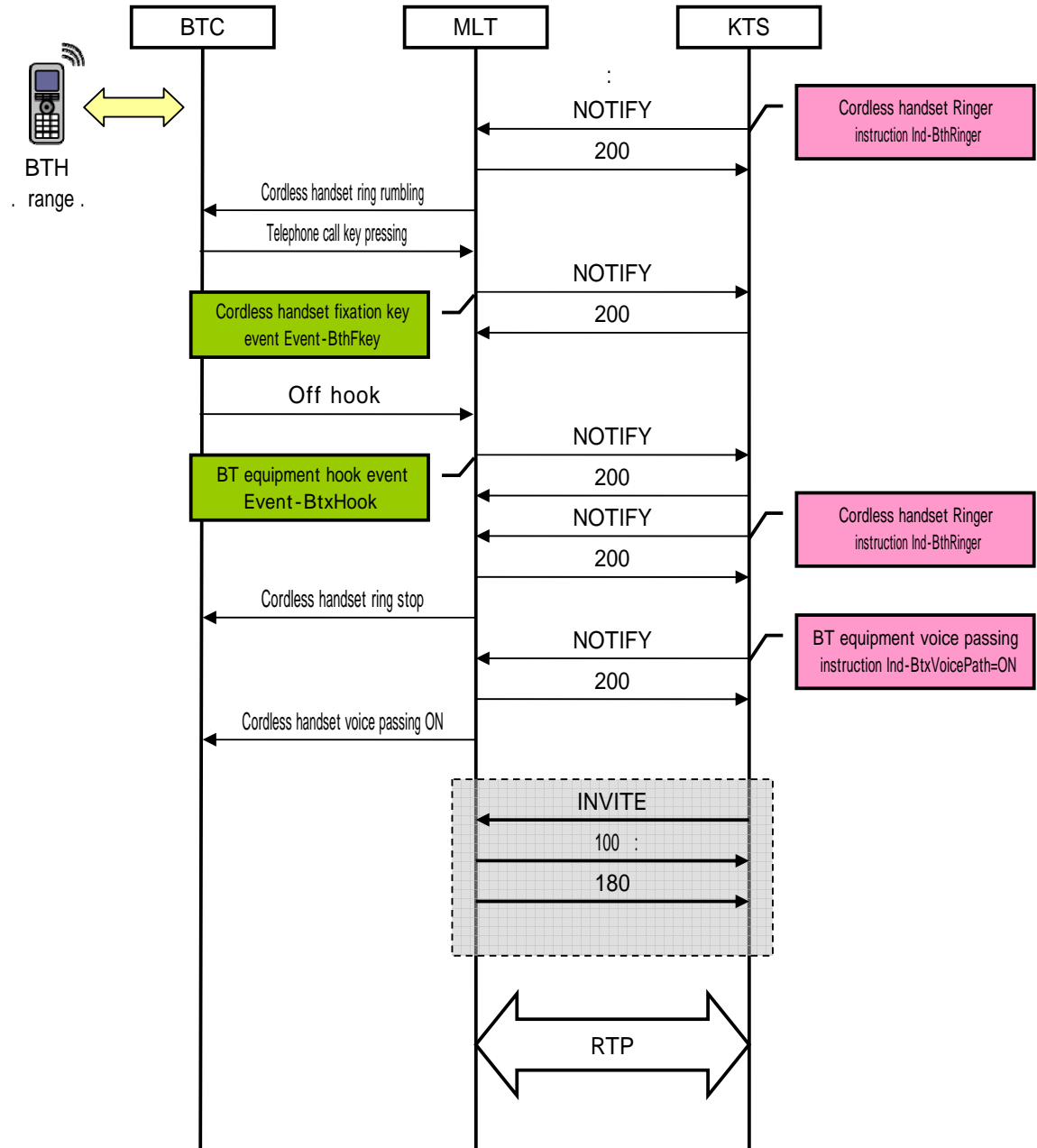
4.18.20.2. Sending telephone call

It sends by Bluetooth hand set (BTH), and the sequence until the telephone call begins by the other party response is as follows.



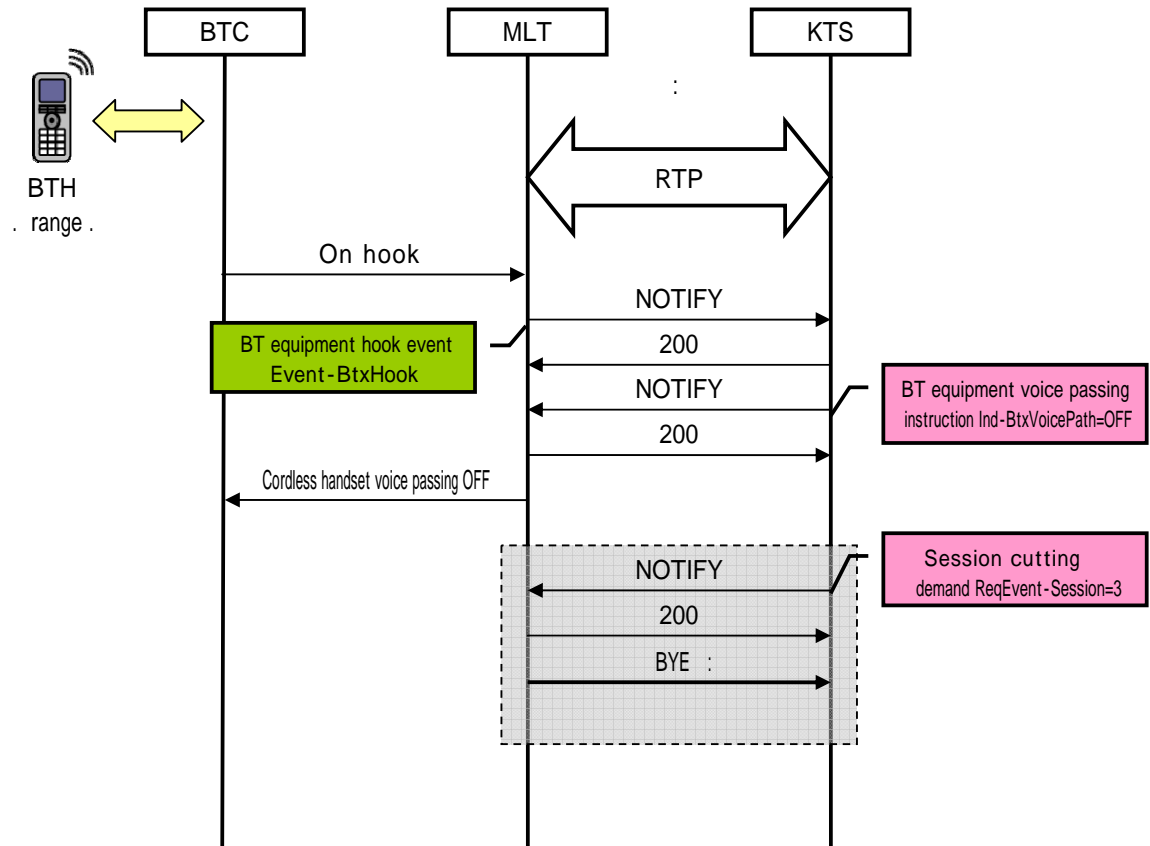
4.18.20.3. Arrival of a message telephone call

It responds to arrival of a message by Bluetooth hand set (BTH), and the sequence until the telephone call begins is as follows.



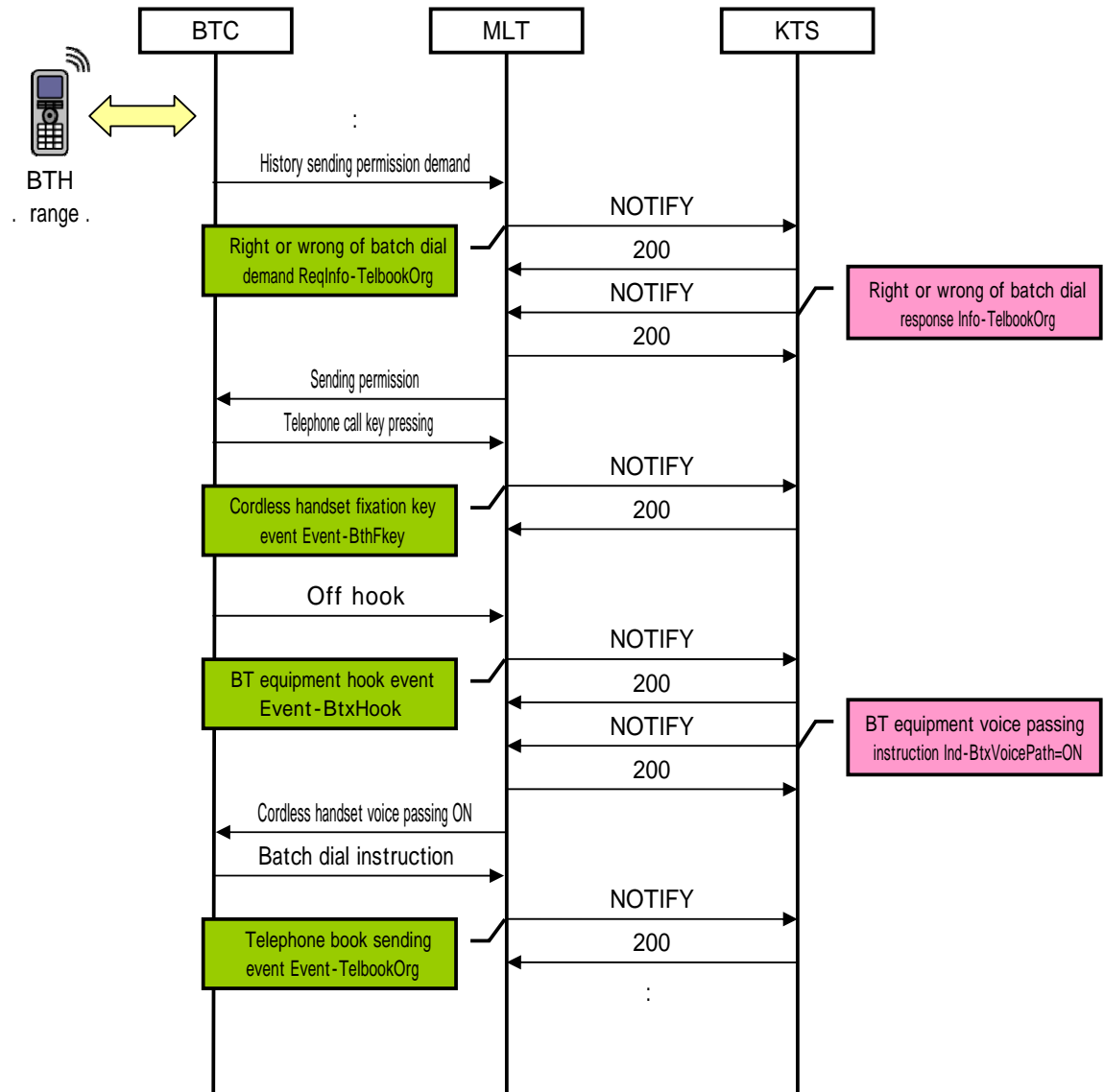
4.18.20.4. Telephone call cutting

The sequence when cutting it while talking over the telephone by Bluetooth hand set (BTH) is as follows.



4.18.20.5. History sending

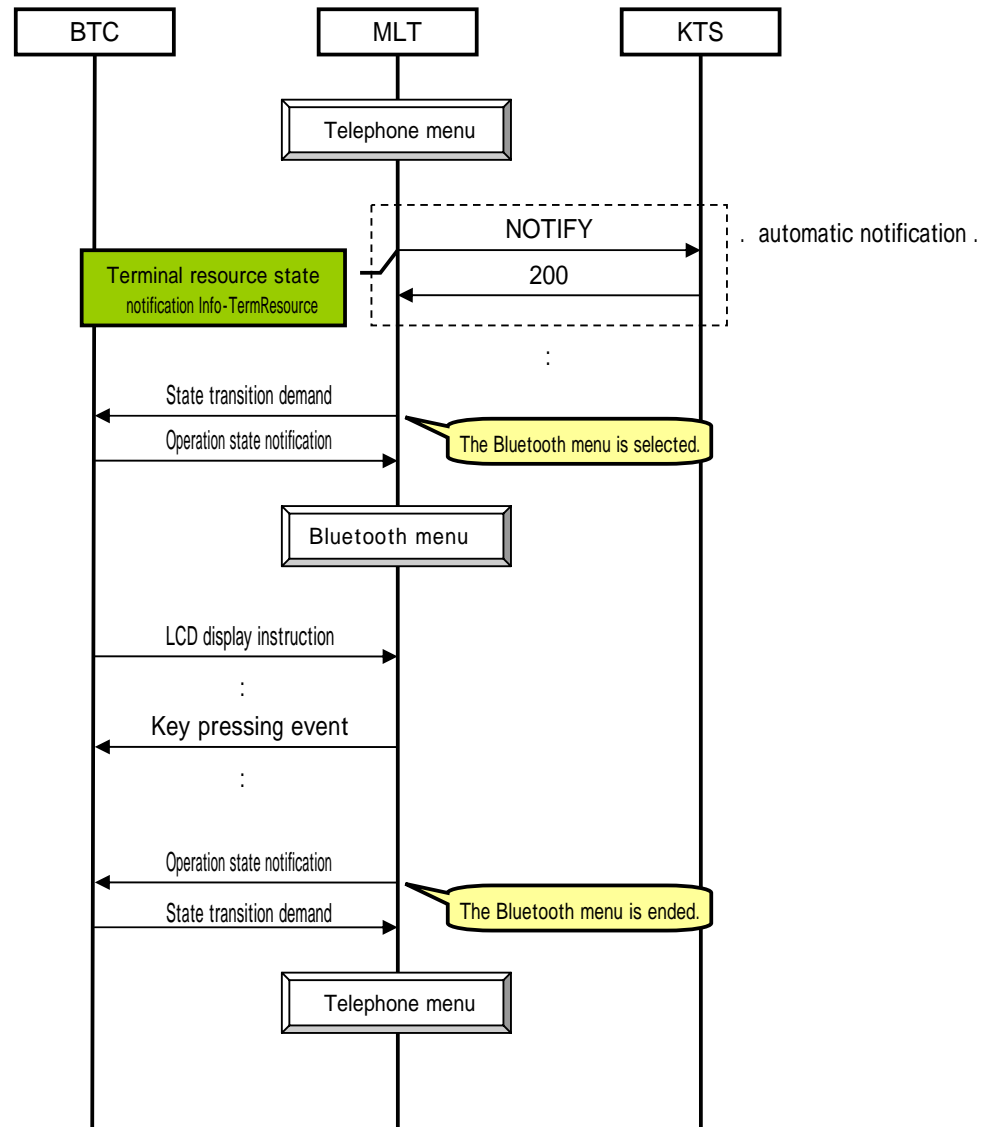
The sequence when the history is sent by Bluetooth hand set (BTH) is as follows.



4.18.20.6. Set menu display (acquisition of terminal resource)

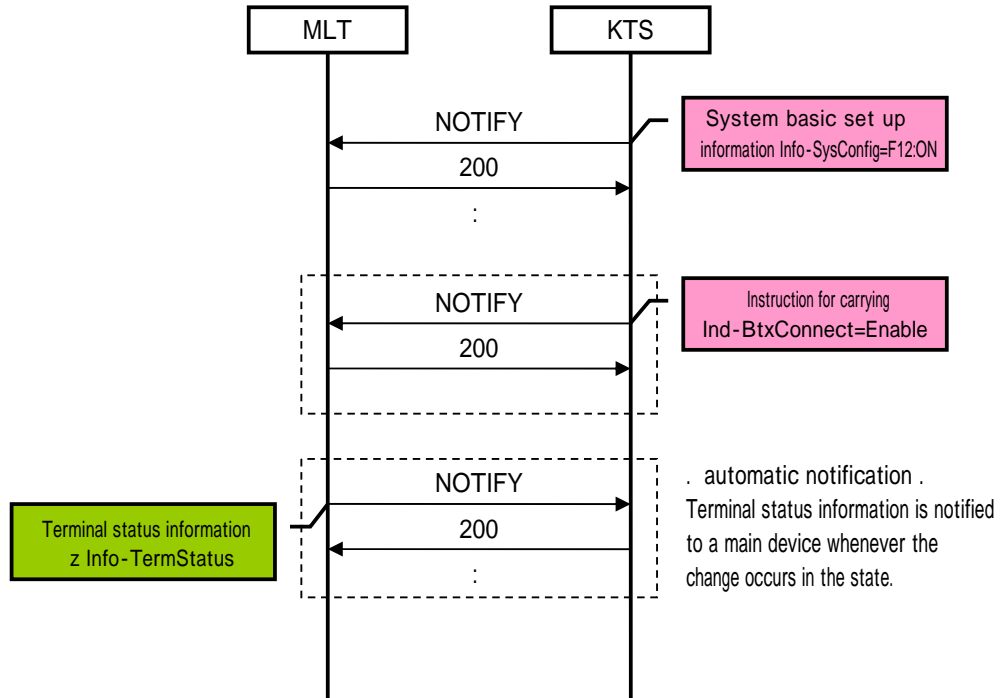
The sequence when the menu for Bluetooth is selected from a set screen of the main body of a desktop telephone is as follows. Because use rights of the resource had already been acquired when the main body of the telephone entered a local menu, use rights of the resource need not be acquired for the Bluetooth option. A

main device must note that the resource use for the terminal cannot be in real time understood when the terminal resource automatic operation notification setting (F7 of Info-SysConfig) is "OFF".



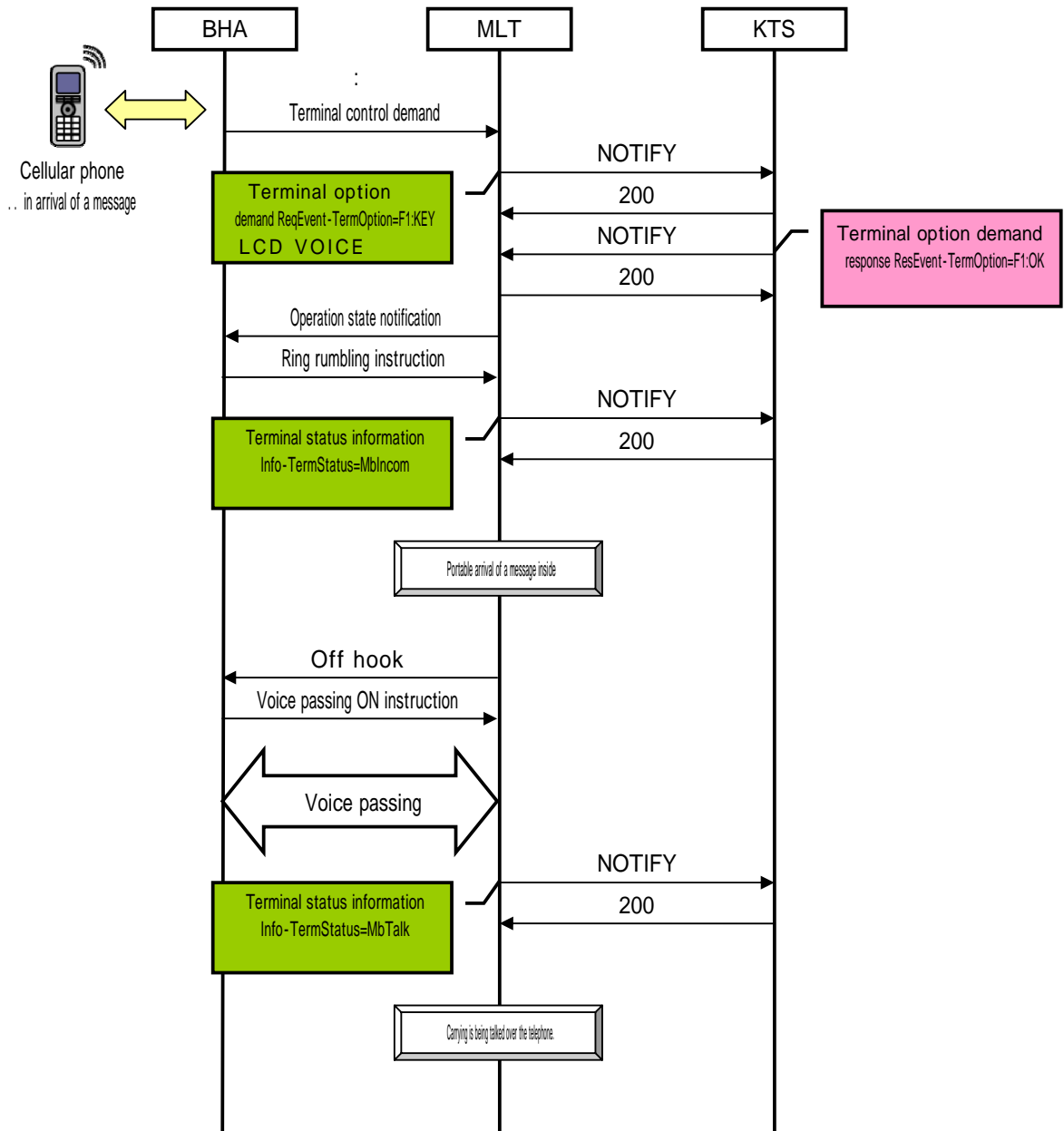
4.18.20.7. Initialization of portable coordinated function

The terminal notifies a main device the state by terminal status information (Info-TermStatus) parameter every time the change occurs in the connection with the running state of a local function or the cellular phone when terminal status automatic operation notification setting (F12) is specified for "ON" by system basic set up information (Info-SysConfig) parameter when starting. However, do not notify terminal status information on the cellular phone to assume a portable coordinated function to be invalid when instruction (Ind-BtxConnect) parameter for carrying is not directed from a main device or it is directed by "Disable".



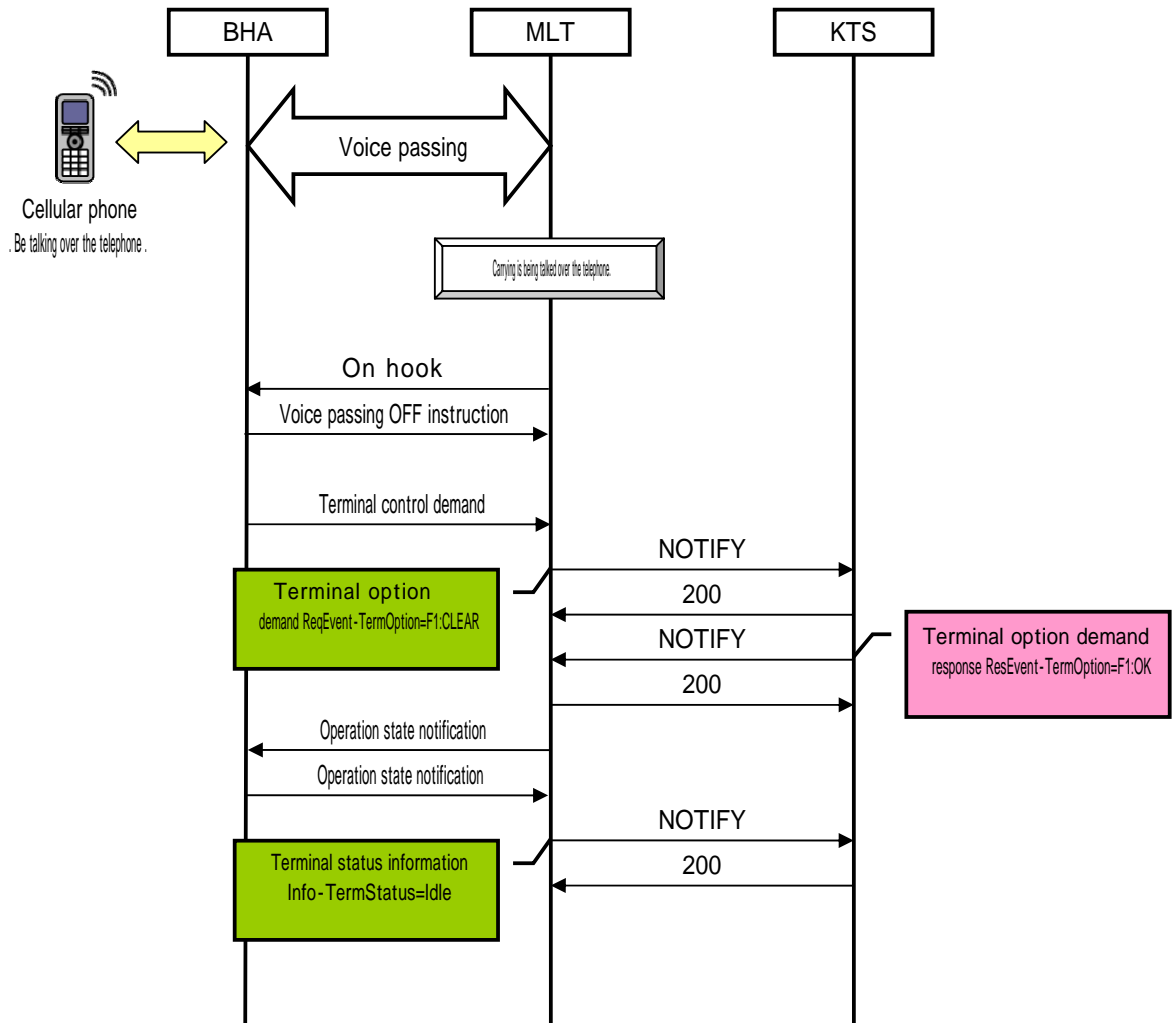
4.18.20.8. Arrival of a message telephone call from cellular phone

The arrival of a message to the cellular phone responds over a desktop telephone, and the sequence until the telephone call begins is as follows.



4.18.20.9. Telephone call cutting from cellular phone

The sequence until the telephone call for the arrival of a message to the cellular phone to respond over a desktop telephone is cut is as follows.



5. Enhancing header definition of KTS enhancing SIP

5.1. User-Agent header

Terminal ID is notified by using the User-Agent header.

. addition message .

It adds to the REGISTER request.

. format .

User-Agent: NEC-terminal type-series number-product model-Port
license main point no (NECSIPEXT2MLUA_v1_***)

Name	Definition value	Explanation
Terminal type	DPT	Desktop phone (Desktop Phone Terminal)
	DPE	Desktop phone (Desktop Phone Economy)
	DPV	Desktop phone (Desktop Phone Value)
	DPD	Desktop phone (Desktop Phone Desileless)
	DPS	Desktop phone (Desktop Phone Sophisticated)
	SPT	Softphone (Soft Phone Terminal)
	WPT	Wireless phone (Wireless Phone Terminal)
	CTI	CTI application
	AGW	Application gateway server
	UMS	Unified Messaging System
Series number	001. 999	Each terminal type is defined respectively.
Product model	A	For A channel
	B	For B channel
Port license main point no	XX	The terminal port license is consumed.
	YY	The terminal port license is not consumed.
	ZZ	It changes from "Do not consume it" to "Consume it".
Protocol type	NECSIPEXT2MLUA_v1	Indispensable parameter to show NEC enhancing SIP conforming
Product type	_ ***	Indispensable parameter to terminals other than made by NEC

. usage example .

- (1) When you notify the terminal to consume the port license with Economy for KTS-SIP for A channel by an initial REGISTER request

User-Agent: NEC-DPE-001-A-XX(NECSIPEXT2MLUA_v1)

- (2) When you notify the terminal not to consume the port license with the softphone for KTS-SIP for A channel by an initial REGISTER request

User-Agent: NEC-SPT-001-A-YY(NECSIPEXT2MLUA_v1)

- (3) When notifying for the softphone for KTS-SIP for A channel to finish the probation and to consume the port license by update REGISTER request

User-Agent: NEC-SPT-001-A-ZZ(NECSIPEXT2MLUA_v1)

- (4) When you notify that the terminal is NEC-SIP correspondence (***** an arbitrary character

string)User-Agent: ***** (NECSIPEXT2MLUA_v1)

. condition etc. .

- (1) As for "Terminal type", figure character string of treble fixation and "Product model" assume alphabet character string of one digit fixation and "Port license main point no" to be an alphabet character string of two digit fixation to alphanumeric character character string of treble fixation and "Series number".
- (2) "XX" of "Port license main point no" and "YY" are assumed to be effective only by an initial REGISTER request. Moreover, "ZZ" is assumed to be effective only by update REGISTER request.
- (3) It is possible to connect it with a main device without consuming the port license by occasion of a middle probation when "YY" is specified for "Port license main point no". However, mount the mechanism that it is not likely to be connected illegally on the terminal side so that the shift to the state to consume the port license may become a terminal matter.
- (4) "Port license main point no" can be changed to "XX (Consume it)" by specifying "ZZ (Change to consumption)" by update REGISTER request after "YY (Do not consume it)" is specified by an initial REGISTER request. However, the CALL-ID value of the update REGISTER request should be the same as the CALL-ID value of an initial REGISTER request.
- (5) "Port license main point no" cannot be changed from "XX (Consume it)" to "YY (Do not consume it)".

5.1.1. Series number definition for desktop terminal

Name	Definition value	Explanation
Series number	001	IPterm95 (temporary)
	002. 999	Undefined

5.1.2. Series number definition for softphone

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

5.1.3. Series number definition for wireless terminal

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

5.1.4. Series number definition for CTI application

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

5.1.5. Series number definition for application gateway server

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

5.1.6. Series number definition for unified messaging system

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

6. Enhancing body definition of KTS enhancing SIP

6.1. Contents type (application/X-NECSIPEXT2MLv1)

6.1.1. Well informed man wisdom demand parameter (ReqInfo-xxxx: Main device . terminal)

Table X-1 shows well informed man wisdom demand parameter that a main device for KTS-SIP adds. Well informed man wisdom demand parameter that the terminal for the current state and KTS-SIP adds is not defined. Details are described only about the parameter that is corrected in this paragraph or newly added.

Well informed man wisdom demand parameter list that main device for table X-1 KTS-SIP adds

Name	Parameter name	Remarks
Terminal well informed man wisdom demand	ReqInfo-TermInfo	Definition addition of item that does notification demand
Override information demand	ReqInfo-Override	
Trouble log information demand	ReqInfo-FaultLog	
Option function state information demand	ReqInfo-OptFunc	
Terminal well informed man wisdom demand 2	ReqInfo-TermInfo2	New
Terminal set up information demand	ReqInfo-TermConfig	New
Level of volume of terminal notification demand	ReqInfo-TermVolLv	New
Terminal resource state demand	ReqInfo-TermResource	New
Option equipment state demand	ReqInfo-OptStatus	New

6.1.1.1. Terminal well informed man wisdom demand (ReqInfo-TermlInfo)

Parameter to demand notification of at least necessary for start terminal information from main device to terminal.

. addition message .

It adds to 401 responses to an initial REGISTER request.

. format .

ReqInfo-TermlInfo

. usage example .

(1) ReqInfo-TermlInfo when notification of

terminal information is demanded

. condition etc. .

- (1) Use ReqInfo-Override when you demand the Info-Override parameter.
- (2) Use ReqInfo-FaultLog when you demand the Info-FaultLog parameter.
- (3) Use ReqInfo-OptFunc when you demand the Info-OptFunc parameter.

The parameter list that the terminal notifies by demanding this parameter is as follows.

Parameter name	Maximum size	NEC-SIP	KTS-SIP	Explanation
Info-TermType		-	-	
Info-TermID		-	-	
Info-DisplayType		-	-	It moves to the NOTIFY transaction.
Info-Pkey		-	-	It moves to the NOTIFY transaction.
Info-Fkey		-	-	It moves to the NOTIFY transaction.
Info-Skey		-	-	It moves to the NOTIFY transaction.
Info-Lamp		-	-	It moves to the NOTIFY transaction.
Info-HardwareName		-	.	
Info-HardwareVer		-	.	
Info-FirmwareName		-	.	
Info-FirmwareVer		-	.	
Info-AccessMode		-	-	
Info-Feature		-	-	It moves to the NOTIFY transaction.
Info-FuncCap		-	-	It moves to the NOTIFY transaction.
Info-RstReply		-	-	
Info-Hardware		.	-	
Info-Firmware		.	-	
Info-IncomNo		.	-	Extension number specification
Info-MediaCap		.	-	Terminal media (codec) information
Info-FixedPort		.	-	Only when you make the PtoP function effective
Info-NetArea		.	-	Only when you make the NAT function effective
Info-PrivateIP		.	-	Only when you make the PtoP function effective
Info-GlobalIP		.	-	Only when you make the NAT function effective
Addition parameter total size				About the XXX byte is preferable.

- . : used It doesn't use it -: here of no use.

- The maximum size is assumed to be a size including two line feed code bytes (0x0d,0x0a) of each line.
- To notify with the unit, the above-mentioned doesn't contain Info-Override.
- All parameters related to the encryption are notified by an initial REGISTER request.

The parameter list that a main device adds to 200 responses to the REGISTER request with the attestation is as follows.

Parameter name	Maximum size	NEC-SIP	KTS-SIP	Explanation
Info-NewURI		-	-	
Info-ServerURI		-	-	
Info-ToneArea		-	-	It moves to the NOTIFY transaction.
Info-Language		-	-	It moves to the NOTIFY transaction.
Info-Language2		-	-	It moves to the NOTIFY transaction.
Ind-SignalTos		-	-	
Ind-SetTime		-	-	
Ind-ExprSUBSCRIBE		-	-	
Ind-OptFunc		-	-	It moves to the NOTIFY transaction.
Ind-AddTermType		.	-	
Ind-Pad		-	-	
Ind-Jitter		-	-	
Ind-EchoCanceller		-	-	
Ind-MediaTos		-	-	
Ind-DefaultGain		-	-	
Addition parameter total size				About the XXX byte is preferable.

- :. : used It doesn't use it -: here of no use.

- The maximum size is assumed to be a size including two line feed code bytes (0x0d,0x0a) of each line.

6.1.1.2. Terminal well informed man wisdom demand 2 (ReqInfo-TermInfo2)

Parameter to demand notification of terminal information on the remainder necessary for start from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-TermInfo2 (demand type * . . . of demand type of =*)

Name	Definition value	Explanation
Demand type	capacity	Information on ability of terminal
	status	Information on state of terminal
	option	Information on option equipment

. usage example .

(1) ReqInfo-TermInfo2 when all terminal information on the remainder

necessary for start is demanded

(2) ReqInfo-TermInfo2=capacity when all information

on terminal ability is demanded

(3) ReqInfo-TermInfo2=status when all information

on state of terminal is demanded

(4) ReqInfo-TermInfo2=option when all information on option equipment

connected with terminal is demanded

. condition etc. .

(1)

The parameter list that the terminal notifies by demanding this parameter is as follows.

Parameter name	Maximum size	NEC-SIP	KTS-SIP	Explanation
Info-DisplayType		-	-	Information on ability of terminal - Division when size is large
Info-Pkey		-	-	
Info-FkeyKitType		.	-	
Info-Fkey		-	-	
Info-Jkey		.	-	
Info-Skey		-	-	
Info-Lamp		-	-	
Info-Feature		-	-	
Info-FuncCap		-	-	
Info-FuncCap2		.	-	
Info-TermStatus		.	-	Information on state of terminal
Info-DesilessPage		.	-	
Info-TermProtect		.	-	
Info-OptAdapter		.	-	Information on option equipment - Bottom option information is added.
Info-OptPkey		.	-	
Info-ConsolePkey		.	-	
Info-OptStatus		.	-	
Addition parameter total size				About the XXX byte is preferable.

- . : used It doesn't use it -: here of no use.

- The maximum size is assumed to be a size including two line feed code bytes (0x0d,0x0a) of each line.
- Information on the option equipment is applied only to a desktop terminal. Moreover, the terminal that can connect the option equipment is limited to Sophisticated/Value/Value-DESless.

The notification and the parameter list that doesn't become it is as follows if directing and crying against the terminal by the time a main device transmits terminal operation beginning instruction (Ind-TermWakeup).

Parameter name	Maximum size	NEC-SIP	KTS-SIP	Explanation
Info-SysConfig		.	-	Information on system construction
Info-Language		-	-	Instruction/information on display
Info-Language2		-	-	
Info-TermVolName		.	-	
Ind-TimeDispFmt		.	-	
Info-SysFeature		.	-	
Info-TermKeyAssign		.	-	Instruction/information on key
Info-PkeyOrg		.	-	
Info-FkeyOrg		.	-	
Info-JkeyOrg		.	-	
Info-HandsetOrg		.	-	
Ind-KeyupInfo		.	-	Instruction/information on tone
Info-ToneArea		-	-	
Info-ToneData		.	-	
Ind-KeyConfTone		.	-	
Ind-KeyConfVoice		.	-	Instruction/information on ring
Ind-RingerPath		.	-	
Ind-OffhookRing		.	-	Instruction/information on state of terminal
Info-TermViolation		.	-	
Ind-CountryRule		.	-	
Ind-MenuTimeout		.	-	
Ind-DesilessPage		.	-	Instruction/information on option equipment
Ind-OptFunc		-	-	
Info-OptPkeyOrg		.	-	
Info-BthFkeyOrg		.	-	
Addition parameter total size				About the XXX byte is preferable.

- . : used It doesn't use it -: here of no use.

- The maximum size is assumed to be a size including two line feed code bytes (0x0d,0x0a) of each line.
- Consider the size included in one message though division and the order of the transmitted enhancement parameter depend on a main device.

6.1.1.3. Terminal set up information demand (ReqInfo-TermConfig)

Parameter to demand notification of functional information set with terminal from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-TermConfig ((= function number) (function number of *))

Name	Definition value	Explanation
Function number	F1	Backlight setting
	F2	Head set setting
	F3	Off hook ring setting
	F4	Touch panel setting
	F5. F255	Undefined

. usage example .

(1) ReqInfo-TermConfig when all terminal set

up informations are demanded(2)

ReqInfo-TermConfig=F1 F2 when terminal set up information concerning

backlight and head set is demanded

. condition etc. .

(1)

6.1.1.4. Level of volume of terminal notification demand (ReqInfo-TermVolLv)

The batch and the parameter of maintained all volume level information to demand. a terminal, and a local terminal from a main device

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-TermVolLv

. usage example .

(1) ReqInfo-TermVolLv when local all volume level information is demanded

when terminal starts

. condition etc. .

(1) The response to this parameter is level of the volume of the terminal batch notification (Info-TermVolLvAll) parameter.

(2) Execute this parameter immediately before the terminal start or the terminal reset. There is a possibility that the delay of the key pressing response etc. is generated when using it while operating it usually.

6.1.1.5. Terminal resource state demand (ReqInfo-TermResource)

Parameter to inquire resource usage condition of terminal from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-TermResource

. usage example .

(1) ReqInfo-TermResource when terminal resource

usage condition is demanded

. condition etc. .

(1) The response to this parameter is terminal resource state notification (Info-TermResource) parameter.

6.1.1.6. Option equipment state demand (ReqInfo-OptStatus)

The parameter from a main device to the terminal that inquires the state of the option equipment connected with the terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-OptStatus = equipment type

Name	Definition value	Explanation
Equipment type	psx	Power failure adaptor (PSA/PSD)

. usage example .

(1) ReqInfo-OptStatus=psx when state of option equipment

PSA or PSD is confirmed

. condition etc. .

(1)

6.1.2. Well informed man wisdom demand parameter (ReqInfo-xxxx: Terminal . main device)

Table X-2 shows well informed man wisdom demand parameter that the terminal for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Well informed man wisdom demand parameter list that terminal for table X-2 KTS-SIP adds

Name	Parameter name	Remarks
Batch dial sending permission demand	ReqInfo-TelbookOrg	New
Server address information demand	ReqInfo-ServerAdr	New
Arbitrary terminal information demand	ReqInfo-OtherTerm	New
Other party of telephone call personal ID demand	ReqInfo-PartyPID	New

6.1.2.1. Batch dial sending permission demand (ReqInfo-TelbookOrg)

The parameter from the terminal to a main device that inquires the sending permission to prevent the arrival and departure Makoto collision before the batch dial sending from a telephone book and an arrival and departure new history is executed.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-TelbookOrg

. usage example .

(1) ReqInfo-TelbookOrg when sending of telephone number selected

from telephone book begins

. condition etc. .

(1) Inquire whether it is possible to send it surely by this parameter before telephone book sending event (Event-TelbookOrg) parameter is transmitted to a main device.

6.1.2.2. Server address information demand (ReqInfo-ServerAdr)

Parameter to demand well informed man wisdom concerning server from terminal to main device. It uses it not to use the DHCP server, and to demand information on each server when operating it by fixation IP.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-SeverAdr = server type

Name	Definition value	Explanation
Server type	dns	Internet Protocol address/port number of DNS server
	roaming	Internet Protocol address/port number of data roaming server
	ps	Internet Protocol address/port number of presence server
	xml	Internet Protocol address/port number of XML server
	ldap	Internet Protocol address/port number of LDAP server
	ftp	Internet Protocol address/port number of FTP server
	tftp	Internet Protocol address/port number of TFTP server

. usage example .

(1) ReqInfo-ServerAdr=DNS when Internet Protocol address and port number

of DNS server are demanded

(2) ReqInfo-ServerAdr=Roaming when Internet Protocol address and port number of

data roaming server are demanded

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the server information demand event is generated.

6.1.2.3. Arbitrary terminal information demand (ReqInfo-OtherTerm)

Parameter to notify main device from terminal arbitrary personal ID or nickname or generation of demand of terminal information on extension number.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-OterTerm = demand type: Demand information

Name	Definition value	Explanation
Demand type	PN	Personal ID
	NN	Nickname
	EN	Extension number
Demand information	Alphanumeric character	Alphanumeric character of personal ID in case of PN (24 characters or less) Nickname's alphanumeric character in case of NN
	0,1,2,3,4,5,6,7,8,9,*,# (Up to eight characters.)	Extension number in case of EN

. usage example .

(1) ReqInfo-OtherTerm=PN:1234 when terminal information

on personal ID "1234" is demanded

. condition etc. .

- (1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the arbitrary terminal information demand event is generated.
- (2) As for a main device, when the demand type is PN, and NN, arbitrary terminal information list (Info-OtherTermList) is sent back to the demand terminal, and when the demand type is EN, a main device sends back arbitrary terminal information (Info-OtherTerm) to the demand terminal.

6.1.2.4. Other party of telephone call personal ID demand (ReqInfo-PartyPID)

Parameter to notify main device from terminal generation of personal ID acquisition demand of intended party.

. addition message .

It adds to the NOTIFY request.

. format .

ReqInfo-PartyPID = personal ID: Extension number

Name	Definition value	Explanation
Personal ID	Alphanumeric character (24 characters or less)	Personal ID logging it on now
	none	When there is no personal ID
Extension number	0 1 2 3 4 5 6 7 8 9 * #	Extension number using it now (Up to eight digits).

. usage example .

(1) ReqInfo-PartyPID=1234:21 when personal ID of intended party of personal ID "1234" and

extension number "21" is demanded

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the personal ID demand event is generated of the intended party.

(2) None is specified when there is no personal ID (The operation mode plays plug &).

6.1.3. Well informed man wisdom parameter (Info-xxxx: Main device . terminal)

Table X-1 shows well informed man wisdom parameter that a main device for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Well informed man wisdom parameter list that main device for table X-1 KTS-SIP adds

Name	Parameter name	Remarks
Terminal URI information	Info-NewURI	
Tone site region information	Info-ToneArea	
Language information	Info-Language	
DTMF signaling information	Info-DTMF	
Server URI information	Info-ServerURI	
Caller ID information	Info-DialNo	
Arrival of a message information	Info-DirectIn	
Other party number information	Info-CurrentNo	
Language information 2	Info-Language2	It adds it in the 4.0th edition.
Sending history information 2	Info-DialNo2	Inside and outside line well informed man wisdom addition
Message history information 2	Info-DirectIn2	Inside and outside line well informed man wisdom addition
Other party number information 2	Info-CurrentNo2	Inside and outside line well informed man wisdom addition
System type information	Info-SysType	New
System negotiation information	Info-SysNego	New
System operation mode information	Info-SysMode	New
System basic set up information	Info-SysConfig	New
Terminal key assign information	Info-TermKeyAssign	New
Right or wrong of changeable function key sending information	Info-PkeyOrg	New
Right or wrong of fixed function key sending information	Info-FkeyOrg	New
Right or wrong of [joguki-] sending information	Info-JkeyOrg	New
Right or wrong of hand set sending information	Info-HandsetOrg	New
[Jou] [yojoutai] reports at the edge end	Info-CallStatus	New
Arbitrary terminal information list	Info-OtherTermList	New
Arbitrary terminal information	Info-OtherTerm	New
Other party of telephone call personal ID information	Info-PartyPID	New
Download tone information	Info-ToneData	New
Server address information	Info-ServerAdr	New
Name of display of volume of terminal information	Info-TermVolName	New
Right or wrong of batch dial sending information	Info-TelbookOrg	New
Terminal unlawful computer access control information	Info-TermViolation	New
System function information	Info-SysFeature	New
Right or wrong of option changeability function key sending information	Info-OptPkeyOrg	New
Right or wrong of cordless handset fixation function key sending information	Info-BthFkeyOrg	New (Bluetooth)
Terminal presence information	Info-Presence	New (presence)
Substatus list information	Info-SubstatusList	New (presence)
System data change information	Info-ChangeSD	New (presence)

6.1.3.1. Tone site region information (Info-ToneArea)

Parameter to notify regional information for tone rumbling from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Regional Info-ToneArea = number

Name	Definition value	Explanation
Regional number	1	Japan
	2	North America
	3	Australia
	4	Others
	5	Hong Kong
	6	Malaysia
	7	Singapore/Philippines/Vietnam
	8	UK
	9	Mexico
	10	Taiwan
	11	New Zealand
	12	South Korea
	13	Brazil
	14	China
	15	Thailand (standard)
	16	Thailand (EGAT)
	17	Sri Lanka
	18. 199	Reserve
Regional number (for Europe)	200	Germany
	201	Italy
	202	The Netherlands
	203	[Kataran]
	204	Denmark
	205	Sweden
	206	Poland
	207	Czech Republic
	208	Norway
	209	France
	210	Portugal
	211	Spain
	212	Austria
	213	Belgium
	214	UK
	215	Greece
	216	Switzerland
	217	South Africa
	218	Brazil
	219. 255	Reserve

. usage example .

- (1) When a main device specifies the tone for Japan

Info-ToneArea=1

- (2) When a main device specifies the tone for Germany for Europe

Info-ToneArea=200

. condition etc. .

- (1) The terminal must use a regional tone of default when a regional number of the uncorrespondence is specified from a main device.
- (2) As for a regional number, when "Main equipment type" of the Info-SysType parameter is "KTS", only "1(Japan)", "2(North America)", "3(Australia)", and "8(UK)" are directed. Follow information downloaded by the Info-ToneData parameter about the tone pattern.

6.1.3.2. Language information (Info-Language)

Parameter to notify language used for display display from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-Language = language number

Name	Definition value	Explanation
Language number	0	English
	1	Portuguese
	2	Spanish
	3	French (Canada)
	16. 254	Reserve
	255	Japanese
Language number (for Europe)	4	German
	5	Italian
	6	Dutch language
	7	Norwegian language
	8	Danish language
	9	S w e d i s h
	10	G r e e k
	11	English
	12	Portuguese
	13	Spanish
	14	French
	15	Russian

. usage example .

(1) When a main device specifies a Japanese display for calendar/volume name

Info-Language=255

(2) When a main device specifies a German display for Europe for calendar/volume name

Info-Language=4

. condition etc. .

(1) Apply the language specified by this parameter to the calendar display and the volume name display of the terminal.

(2) The terminal must use and display "1 and (English)" as a default language number when the language number of the uncorrespondence is specified from a main device.

6.1.3.3. Sending history information 2 (Info-DialNo2)

Parameter to notify number in which it dials it when terminal sends it from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Inside and outside line type line number) Info-DialNo2 = * no: Caller ID information

(* name: Number of name bytes: Name)(*
read: Number of reading Japanese syllabary bytes: Reading Japanese syllabary)

Name		Definition value	Explanation
Inside and outside line type		internal	Extension
		external	Outside line
		direct	Lease line
		unknown	The distinction is uncertain.
Line number		1-512	Trunk number in outside line (It is possible to omit it).
Caller ID information no		1. 9,0,*,#	
		P	Pose
		R	Hook
		@	It is considered since @ the DTMF sending.
Name name	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).
Reading Japanese syllabary read	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).

. usage example .

(1) When you notify the terminal to have dialed it to extension 1234

Info-DialNo2=internal no:1234

(2) When you notify to have dialed it to 0123456789 by the terminal's using line number 100

Info-DialNo2=external:100 no:0123456789

(3) When you notify the terminal to have dialed it to "Taro Suzuki ([suzukitarou])" of extension 5678

Info-DialNo2=internal no:5678 name:8: Taro Suzuki read:7: [Suzukitarou]

. condition etc. .

- (1) A main device notifies only the terminal to specify "Org_history" for "Functional information" by terminal application function information (Info-Feature) parameter this parameter when "Main equipment type" of Info-SysType at the Info-SysType parameter unreception is " PBX".
- (2) Specify it when you can judge the number that corresponds to the trunk number for a main device when "Inside and outside line type" is "External". The omission, except for "External" when it is not possible to judge is enabled.
- (3) The digit key that will be pressed by time when the telephone call ended after the terminal sends it to "Caller ID information" of this parameter is notified.
- (4) The number of maximum digits of "Caller ID information" is assumed to be 32 digits and 24 digits when "Main equipment type" of the Info-SysType parameter is "PBX" for "KTS".
- (5) The character-code of "Name" and "Reading Japanese syllabary" is assumed the one according to "F1 (display ability setting)" of the Info-SysConfig parameter, and assumed to be each 24 bytes or less.
- (6) Only either "Name" or "Reading Japanese syllabary" might be notified.

6.1.3.4. Message history information 2 (Info-DirectIn2)

The arrival of a message [shita] parameter in the terminal from a main device to call and to notify [no] information.

. addition message .

It adds to the NOTIFY request.

. format .

There is incoming number information.

Arrival of a message information of inside and outside line type line number)* Info-DirectIn2 = * no: Incoming number
information (* name: Number of name bytes: Name) (* read:
Number of reading Japanese syllabary bytes: Reading Japanese syllabary)

Name		Definition value	Explanation
Inside and outside line type		internal	Extension
		external	Outside line
		direct	Lease line
		unknown	The distinction is uncertain.
Line number		1-512	Trunk number in outside line (It is possible to omit it).
Arrival of a message information		ans	Response
		noans	Unresponse
Incoming number information no		1. 9,0,*,#	
Name name	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).
Reading Japanese syllabary read	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).

Incoming number information none

Arrival of a message information of inside and outside line type line number)* Info-DirectIn2 = * reason: Non-notification reason

Name		Definition value	Explanation
Non-notification reason		1	Non-notification
		2	Public telephone
		3	Display out of the sphere

. usage example .

(1) Info-DirectIn2=external:1 ans no:65330 when what of terminal responded to arrival of a

message to outside line 1 from number 65330 is notified

(2) When number 4000 and the name notify that "Japan [dentarou]" and the reading Japanese syllabary were the unresponses to the arrival of a message to outside line 1 from "[Nichidentarou]", the terminal .:

Info-DirectIn2=external:1 noans no:4000 name:10: Japan [dentarou] read:9: [Nichidentarou]

(3) Info-DirectIn2=external:1 ans reason:1 when terminal notifies arrival of a message [shita] caller ID

non-notification to call and to have responded to outside line 1 [ni]

. condition etc. .

(1) A main device notifies only the terminal to specify "Did_history" for "Functional information" by terminal application function information (Info-Feature) parameter this parameter when "Main equipment type" of Info-SysType at the Info-SysType parameter unreception is " PBX".

(2) Specify it when you can judge the number that corresponds to the trunk number for a main device when "Inside and outside line type" is "External". The omission, except for "External" when it is not possible to judge is enabled.

(3) The number of maximum digits of "Incoming number information" is assumed to be 32 digits and 24 digits when "Main equipment type" of the Info-SysType parameter is "PBX" for "KTS".

(4) The character-code of "Name" and "Reading Japanese syllabary" is assumed the one according to "F1 (display ability setting)" of the Info-SysConfig parameter, and assumed to be each 24 bytes or less.

(5) Only either "Name" or "Reading Japanese syllabary" might be notified.

(6) Disregard it with the terminal even if "Incoming number information", "Name", and "Reading Japanese syllabary" have been added when there is "Non-notification reason".

6.1.3.5. Other party number information 2 (Info-CurrentNo2)

Parameter to notify terminal from main device caller's number information when in arrival of a message or talking over the telephone.

. addition message .

It adds to the NOTIFY request.

. format .

There is other party number information.

Inside and outside line type line number) Info-CurrentNo2 = * no: Other party number information

(* name: Number of name bytes: Name) (* read: Number
of reading Japanese syllabary bytes: Reading Japanese syllabary)

Name		Definition value	Explanation
Inside and outside line type		internal	Extension
		external	Outside line
		direct	Lease line
		unknown	The distinction is uncertain.
Line number		1-512	Trunk number in outside line (It is possible to omit it).
Other party number information no		1. 9,0,*,#	
Name name	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).
Reading Japanese syllabary read	Number of bytes	1. 24	24 bytes or less
	Textual information	sjis	Shift-JIS (The single byte mixing is effective).

Other party number information none

Inside and outside line type line number) Info-CurrentNo2 = * reason: Non-notification reason

Name		Definition value	Explanation
Non-notification reason		1	Non-notification
		2	Public telephone
		3	Display out of the sphere

. usage example .

- (1) When you notify that in arrival of a message or the other party number under the telephone call is 09012345678 to the outside line of line number 1

Info-CurrentNo2=external:1 no:09012345678

- (2) When extension 4000 and the name notify that "Japan [dentarou]" and the reading Japanese syllabary are "[Nichidentarou]", in arrival of a message or the other party number under the telephone call .:

Info-CurrentNo2=internal no:4000 name:10: Japan [dentarou] read:9: [Nichidentarou]

- (3) When you notify that the other party number during the [aruha] telephone call is non-notification in arrival of a message

Info-CurrentNo2=external:1 reason:1

. condition etc. .

- (1) A main device notifies only the terminal to specify " Current_party_no" for "Functional information" by terminal application function information (Info-Feature) parameter this parameter when "Main equipment type" of Info-SysType at the Info-SysType parameter unreception is " PBX".
- (2) When the other party number is uncertain in non-notification arrival of a message etc. when "Main equipment type" of Info-SysType at the Info-SysType parameter unreception is " PBX", this message is not transmitted. However, a main device must transmit this parameter for "KTS" "Main equipment type" to notify the terminal inside and outside line information even when the other party number is uncertain.
- (3) It is notified when there is an other party number even when the intended party is changed.
- (4) Specify it when you can judge the number that corresponds to the trunk number for a main device when "Inside and outside line type" is "External". The omission, except for "External" when it is not possible to judge is enabled.
- (5) The number of maximum digits of "Other party number information" is assumed to be 32 digits and 24 digits when "Main equipment type" of the Info-SysType parameter is "PBX" for "KTS".
- (6) The character-code of "Name" and "Reading Japanese syllabary" is assumed the one according to "F1 (display ability setting)" of the Info-SysConfig parameter, and assumed to be each 24 bytes or less.
- (7) Only either "Name" or "Reading Japanese syllabary" might be notified.
- (8) Disregard it with the terminal even if "Other party number information", "Name", and "Reading Japanese syllabary" have been added when there is "Non-notification reason".
- (9) When "Main equipment type" of the Info-SysType parameter is "KTS", the example of the notification timing by this parameter is shown below. -
 - When extension arrival of a message is received
 - When outside line arrival of a message is received
 - When extension arrival of a message responds
 - When outside line arrival of a message responds
 - When forwarding is received while talking over the telephone extension
 - When forwarding is received while talking over the telephone the outside wear
 - When you restart the telephone call by the re-reservation response/reservation response
 - CID confirmation operation by special show

6.1.3.6. System type information (Info-SysType)

Parameter to notify terminal from main device "Main device ID".

. addition message .

After an initial REGISTER request is received from the terminal, it adds to 401 responses transmitted from a main device.

. format .

Info-SysType: Main NEC-equipment type-series number-product model (*/* version number)

Name	Definition value	Explanation
Main equipment type	KTS	It operates in the KTS-SIP mode.
	IPS	It operates in the KTS-SIP mode.
	PBX	It operates in the NEC-SIP mode.
Series number	001. 999	
Product model	A	For A channel
	B	For B channel
Version number	Arbitrary character string (eight characters or less)	Option (It is possible to omit it).

. usage example .

(1) When you notify that a main device is Aspire (KTS/series number 001) for A channel

Info-SysType: NEC-KTS-001-A

(2) When a main device notifies that Aspire (KTS/series number 001) for A channel,
and the software version is 1.00

Info-SysType: NEC-KTS-001-A / 1.00

. condition etc. .

(1) The addition of the version number is assumed to be an option. However, note that danger that a main device becomes weaker for the attack to software to which it is known that revealing a concrete software version of a main device contains the security hole is conceived.

- Series number definition for KTS

Name	Definition value	Explanation
Series number	001	Cygnus
	002. 999	Undefined

- Series number definition for IPS

Name	Definition value	Explanation
Series number	001	Cygnus
	002. 999	Undefined

- Series number definition for PBX

Name	Definition value	Explanation
Series number	001	
	002. 999	Undefined

6.1.3.7. System negotiation information (Info-SysNego)

Parameter to notify terminal from main device functional information on system.

. addition message .

After an initial REGISTER request is received from the terminal, it adds to 401 responses transmitted from a main device.

. format .

Info-SysNego = system function number: System function information
(system function number of *: System function information)

Name	Definition value	Explanation
System function number	F1	Method of exchanging information
	F2. F255	Undefined
System function information	It is different in each function number.	

- Information exchange function (F1)

Parameter to direct terminal from main device information exchange mode.

. format .

F1: Information exchange mode

System function number	System function information	Explanation
Information exchange mode	package	Batch information exchange
	division	Division information exchange

. usage example .

(1) Info-SysNego=F1:package when information between main device and terminal exchange is

completed in REGISTER transaction(2)

When completing it by dividing information between a main device and the terminal the exchange into the REGISTER transaction and the NOTIFY transaction

Info-SysNego=F1:division

. condition etc. .

- (1) Because the procedure of the information exchange is simplified to the method of exchanging information when . package" is selected, the terminal can be started early. However, note that there is danger that the fragmentation is generated according to the network environment because volume of data a message grows and the communication between a terminal and main device is not completed normally.
- (2) Because information is exchanged when . division" is selected for the method of exchanging information by an appropriate message size, the fragmentation generated by the network environment can be evaded. However, note that some time is needed by the time the terminal starts so that the procedure of the information exchange may become long.

6.1.3.8. System operation mode information (Info-SysMode)

Parameter to notify terminal from main device operation mode information.

. addition message .

After an initial REGISTER request is received from the terminal, it adds to 401 responses transmitted from a main device.

. format .

Info-SysMode = operation mode

Name	Definition value	Explanation
Operation mode	pnP	Plug and play
	auto	Automatic logon
	manual	Manual log on

. usage example .

(1) Info-SysMode=auto when main device is operating it

in automatic log on mode

. condition etc. .

- (1) The terminal must work in the retrofit mode (NEC-SIP mode) disregarding this parameter when you do not receive main device ID by system type information (Info-SysType) parameter.
- (2) The terminal must work in the plug of default and the play mode when this parameter has not been added though main device ID was received by system type information (Info-SysType) parameter.

6.1.3.9. System basic set up information (Info-SysConfig)

Parameter to notify terminal from main device set up information on necessary main device side when terminal starts.

. addition message .

After an initial REGISTER request is received from the terminal, it adds to 401 responses transmitted from a main device at the batch information exchange.

After the SUBSCRIBE transaction is completed, it adds to the NOTIFY request transmitted from a main device at the division information exchange.

. basic format .

Info-SysConfig = system setting number: System set up information *
system setting number: System set up information * . . .

Name	Definition value	Explanation
System setting number	F1	Display ability setting
	F2	Article 508 Mode setting
	F3	Terminal operation mode setting
	F4	Reserve
	F5	Terminal button kit setting
	F6	Volume automatic operation notification setting
	F7	Resource state automatic operation notification setting
	F8	Backlight state automatic operation notification setting
	F9	Right or wrong of local telephone book use setting
	F10	Right or wrong of local arrival and departure Makoto history use setting
	F11	DESI-less respect switch control point setting
	F12	Terminal status automatic operation notification setting
	F13, F255	Undefined
System set up information	It is different in each set number.	

- Display ability setting (F1)

Parameter to notify terminal display ability that can be controlled with main device. Omit this parameter according to display type information (Info-DisplayType) parameter of the terminal.

. format .

F1: Line digit specification x specification: Display code specification

System demand number	System demand information	Explanation
Digit specification	16/20/24/28	16 character or 20 character or 24 character or 28 character
Line specification	2, 4	2-4 digits
Display code specification	nec-code	Japanese syllabary alphanumeric display mode
	nec-code-rus	Russia Turkish alphanumeric display mode
	ascii	ASCII code
	sjis	Chinese character display mode
	unicode	Unicode display mode

- Article 508 Mode setting (F2)

Parameter to direct terminal from main device Article 508 mode operation. However, the default operation of the terminal before this parameter is received induces, depends previously, and is different. Article 508 The terminal corresponding to the mode must mount the following specifications.

- (1) The terminal must ..confirmation sound.. rumble when keys other than speaker/volume key are pressed to confirm the key pressing according to hearing when this parameter is "On". Moreover, the terminal should be able to be enhanced up to +4 stages (Improve by +8dB in 2dB step) by comparing the maximum receiving talk volume of the hand set and the head set with the ordinary mode.
- (2) Article 508 Maintain the level when you operate the mode while lowered to the maximum value of the ordinary mode when the receiving talk volume level of the hand set or the head set at [owahana] is an extended range of Article 508 mode because it prevents the excessive receiving talk when it will talk over the telephone next time. However, maintain it as it is if the receiving talk volume level at [owahana] is a range of the ordinary mode.
- (3) When this parameter is "On", it is necessary to be able to release it from a main device according to the Ind-CountryRule parameter.

. format .

F2: Article 508 mode

Name	Definition value	Explanation
Article 508 Mode	on	Article 508 Mode
	off	The ordinary mode

- Terminal operation mode setting (F3)

Parameter to direct operational mode of terminal (retrofit operation) from main device. This parameter is transmitted only for "PBX" "Main equipment type" of the Info-SysType parameter.

. format .

F3: Terminal operation mode

Name	Definition value	Explanation
Terminal operation mode	d85	SV-7000 mode
	d95	SV-NEXT mode (default)

- Terminal button kit setting (F5)

Parameter to decide kind of terminal button kit with main device by priority.

. format .

F5: Terminal button kit

Name	Definition value	Explanation
Terminal button kit	0	There is no button kit specification (default).
	1	New UI (Japan)
	2	New UI (Oversea/Philips)
	3	New UI (US/Europe KTS)
	4	Vertical Market (Call Center)
	5	Vertical Market (Hotel 1)
	6	Vertical Market (Hotel 2)
	7	Vertical Market (Retirement House)
	8	Vertical Market (with 8 line key)
	9	Retro fit (Japan)
	10	Retro fit (Oversea/Philips)
	11	Retro fit (US/Europe KTS)
	12. 15	Reserve

- Volume automatic operation notification setting (F6)

Parameter to automatic operation notify main device volume level controlled with terminal.

. format .

F6: Volume automatic operation notification

Name	Definition value	Explanation
Volume automatic operation notification	on	It notifies automatically.
	off	It doesn't notify automatically (default).

- Resource state automatic operation notification setting (F7)

Parameter to automatic operation notify main device whenever resource use for terminal changes.

. format .

F7: Resource state automatic operation notification

Name	Definition value	Explanation
Resource state automatic operation notification	on	It notifies automatically.
	off	It doesn't notify automatically (default).

- Backlight state automatic operation notification setting (F8)

Parameter to automatic operation notify main device whenever state of backlight of terminal changes.

. format .

F8: Backlight state automatic operation notification

Name	Definition value	Explanation
Backlight state automatic operation notification	on	Automatic notification
	off	It doesn't notify automatically (default).

- Right or wrong of local telephone book use setting (F9)

Parameter to notify setting whether to use local telephone book on terminal side when telephone book start operation is executed with terminal or to use central telephone book on main device side.

. format .

F9: Right or wrong of local telephone book use

Name	Definition value	Explanation
Right or wrong of local telephone book use	on	A local telephone book is used (default).
	off	A central telephone book is used.

- Right or wrong of local arrival and departure Makoto history use setting (F10)

Parameter to notify setting whether to use local arrival and departure Makoto history on terminal side when arrival and departure Makoto history start operation is executed with terminal or to use central arrival and departure Makoto history on main device side.

. format .

F10: Right or wrong of local arrival and departure Makoto history use

Name	Definition value	Explanation
Local arrival and departure Makoto history Right or wrong of use	on	The local arrival and departure Makoto history is used (default).
	off	The central arrival and departure Makoto history is used.

- DESI-less respect switch control point setting (F11)

Parameter to direct control techniques of respect switch in part DESI-less of terminal.

. format .

F11: DESI-less respect switch control

Name	Definition value	Explanation
DESI-less respect switch control	0	It depends on the respect switch recognition of the terminal (default).
	1	1 Fixation on side (respect switch none)
	2. 4	2-4 switch

- Terminal status automatic operation notification setting (F12)

Parameter to automatic operation notify main device when there is change in state of terminal by terminal local function and portable cooperation.

. format .

F12: Terminal status automatic operation notification

Name	Definition value	Explanation
Terminal status automatic operation notification	on	Automatic notification
	off	It doesn't notify automatically (default).

. usage example .

(1) Info-SysConfig=F1:28x3:nec-code (28 digit three line display/NEC alphanumeric

Japanese syllabary original code) when notifying as main device brings individual setting together in one parameter F2:off (Do not correspond to Article 508) F3:d95 (latest operation mode) F5:0 (There is no key kit specification) F6:on (volume automatic operation notification) F7:on (resource use state automatic operation notification) F8:, On (backlight state automatic operation notification) F9:off (A local telephone book is not used) F10:off (The local arrival and departure Makoto history is not used) F11:4 (Four DESI-less is used by the switch) F12:off (terminal status automatic operation notification) F13:off (Presence is not used) F14:off (The instant message is not used) .

(2) Info-SysConfig=F1:28x3:nec-code F2:off Info-SysConfig=F3 when

main device notifies individual setting separately for two or more parameters:, d95 Info-SysConfig=F5:0 F6:on F7:on F8:on F9:off F10:off Info-SysConfig=F11:4

. condition etc. .

- (1) Each item is enabled to be omitted. However, note operation by the default configuration of the terminal about the item not specified when you can operate the function on the terminal side.
- (2) Terminal operation mode . F3" is assumed to be a parameter only for PBX. Disregard the terminal even if it is specified when connecting it with KTS.

6.1.3.10. Terminal key assign information (Info-TermKeyAssign)

Parameter to notify terminal from main device map information on function set as feature button of terminal.

. addition message .

It adds to the NOTIFY request.

. format .

(addition data) (addition data) Info-TermKeyAssign = function button number: Function
number: * function button number: Function number: *
function button number: Function number: (addition data) . . .

Name	Definition value	Explanation
Function button number	1. 48	Key * reference 1 of terminal
Function number		Functional information * reference 1
Addition data		Functional information * reference 1

. usage example .

(1) At Info-TermKeyAssign = 01:01:002 when outside line 2, outside line 3, and outside line 1 are sequentially allocated from one in the feature button of the terminal At 02:01:003 03:01:001.

. condition etc. .

6.1.3.11. Right or wrong of changeable function key sending information (Info-PkeyOrg)

Parameter to notify terminal from main device right or wrong of sending information on changeable function key.

. addition message .

It adds to the NOTIFY request.

. format .

Info-PkeyOrg = changeable key number (- changeable key number): Right or wrong * . . . of sending
changeable key number (- changeable key number): Right or wrong of sending

Name	Definition value	Explanation
Changeable key number	1. 40	
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-PkeyOrg=1-24:ok when key that can send changeable function key

number 1-24 is notified

(2) Changeable function key number 1-12 can be sent, and when you notify the key that cannot send
changeable function key number 13-24

Info-PkeyOrg=1-12:ok 13-24:ng

. condition etc. .

(1) When this parameter is received

6.1.3.12. Right or wrong of fixed function key sending information (Info-FkeyOrg)

Parameter to notify terminal from main device right or wrong of sending information on fixed function key.

. addition message .

It adds to the NOTIFY request.

. format .

Info-FkeyOrg = fixed key number (- fixed key number): Right or wrong * . . . of sending
fixed key number (- fixed key number): Right or wrong of sending

Name	Definition value	Explanation
Fixed key number	1. 16	
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-FkeyOrg=1-16:ok when key that can send fixed function key

number 1-16 is notified

(2) When you notify the key that cannot send fixed function key number 9-16 that fixed function key number 1-8 can be sent

Info-FkeyOrg=1-8:ok 9-16:ng

. condition etc. .

(1) Process the terminal as operation that can send the speaker key pressing when this parameter is not notified.

6.1.3.13. Right or wrong of [joguki-] sending information (Info-JkeyOrg)

Parameter to notify terminal from main device right or wrong of sending information on [joguki-].

. addition message .

It adds to the NOTIFY request.

. format .

Info-JkeyOrg = [jogu] fixation key number (- [jogu] key number): Right or wrong * . . . of sending
[jogu] fixation key number (- [jogu] key number): Right or wrong of sending

Name	Definition value	Explanation
[Jogu] key number	1. 16	
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-JkeyOrg=1-16:ok when key that can send [jogu] key

number 1-16 is notified

(2) When you notify the key that cannot send [jogu] key number 9-16 to which [jogu] key
number 1-8 can be sent

Info-JkeyOrg=1-8:ok 9-16:ng

. condition etc. .

(1) When this parameter is received

6.1.3.14. Right or wrong of hand set sending information (Info-HandsetOrg)

Parameter to notify terminal from main device right or wrong of sending information on hand setoff hook.

. addition message .

It adds to the NOTIFY request.

. format .

Info-HandsetOrg = right or wrong of sending

Name	Definition value	Explanation
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-HandsetOrg=ok when operation to which hand setoff hook can

be sent is notified

(2) Info-HandsetOrg=ng when operation not acceptable for hand setoff

hook to send is notified

. condition etc. .

(1) Process the terminal as operation that can send an off hook of the hand set when this parameter is not notified.

6.1.3.15. [Jou] [yojoutai] reports at the edge end (Info-CallStatus)

Parameter to notify terminal from main device terminal state information that main device side manages.

. addition message .

It adds to the NOTIFY request.

. format .

Info-CallStatus = [yojoutai] at the edge end

Name	Definition value	Explanation
[Yojoutai] at the edge end	idle	Becoming empty
	ring	Arrival of a message
	talk	Telephone call
	call	In the call out

. usage example .

(1) Info-CallStatus=ring when main device notifies terminal

state of arrival of a message

. condition etc. .

(1) This parameter is assumed to be an enhancement function. Moreover, the terminal must not design according to this parameter so that there is right or wrong of correspondence by a main device.

6.1.3.16. Arbitrary terminal information list (Info-OtherTermList)

Parameter to notify list of terminal information logged on from main device to terminal in arbitrary personal ID (Or, nickname). Terminal information on the other party of Internet Protocol address information etc. is notified to do the PtoP applications such as videoconferencing and the application sharing.

. addition message .

It adds to the NOTIFY request.

. format .

Transmission

beginningInfo-OtherTermList=head:

Personal ID: Nickname: Individual number: Number of terminals when being logging it on

The list is being transmitted.

Info-OtherTermList=detail:

Extension number: Individual number existence: Terminal type: Network area information

P-IP: Address type: Internet Protocol address

G-IP: Address type: Internet Protocol address)

(type: Number Type: Number :. . .)

Transmission

endInfo-OtherTermList=end

Name		Definition value	Explanation
Data type		head	Header information. The following data is contained. Personal ID Nickname Individual number Number of terminals when being logging it on
		detail	Detailed terminal information. [Roguo] including the following data When the number of terminals is 0 in [n], it is omitted. Extension number Individual number existence Terminal type Network area information Local IP information Global IP information for NAT Fixed port information
		end	It is shown to have notified all terminal information.
Personal ID		32 alphanumeric character digits or less	ID information that specifies individual
Nickname		..alphanumeric character (.. when not existing None is set.)	Alias that specifies individual
Individual number		1-9, 0, *, and #(Up to eight digits). None is [**] when not existing. Sadamu [sareru] (Phase 1 Not Support)	Personal representative number
Number of terminals when being logging it on		0.	Number of terminals logging it on now The following Extension..number..terminal..type..address..kind. Internet Protocol address:: Squirrel of individual number existence The number of [to] is shown.
Extension number		1. 9,0,*,#	Up to eight digits
Individual number existence		on	An individual number is a string.
		off	An individual number is not a string.
Terminal type		Terminal information (Info-TermType)Reference	The type of the terminal is shown.
Network area information		Network area information (Info-NetArea)Reference	Network area that terminal connects Information
Local IP information	Address type	IP4	Local IP information on terminal (Info-PrivateIP)Reference
		IP6	
	Internet Protocol address	XXX.XXX.XXX.XXX	
		[XXXX:XXXX:XXXX:XXXX:XXXX]	
Gros for NAT British anti-lewisite IP Information	Address type	IP4	Global IP information for NAT of terminal (Info-GlobalNatIP)Reference
		IP6	
	Internet Protocol address	XXX.XXX.XXX.XXX	
		[XXXX:XXXX:XXXX:XXXX:XXXX]	
Fixed port information	Type	VideoSignal-G	..port (.. divide by the router for the video Cigna ring. Global port where [ri] is applied)
		VideoSignal-P	Port for video Cigna ring (local)
	Number	1. 65535	Port number

- G-IP without global IP information for NAT: the address type: Internet Protocol address is not notified. -

Fixed port information makes the colon a separator and notifies two or more port information. Moreover, without any fixed port information, the type: number: type: Number :. . . is not notified.

. usage example .

- (1) When personal ID "1234" logs on a desktop terminal (extension number 20) and the softphone (extension number 21)(The network area: "kanda")

```
Info-OtherTermList=head:1234:none:none:2
Info-OtherTermList=detail:
  20:on:terminal:kanda:P-IP:IP4:192.168.0.10
Info-OtherTermList=detail:
  21:off:softphone:kanda:P-IP:IP4:192.168.0.11:VideoSignal-P:6000
Info-OtherTermList=end
```

- (2) Personal ID "1234" logs on the softphone (extension number 21)(The network area: "kanda"), and it sets it for the NAT connection (It is IP global set and it is, and there is fixed port information for NAT).

```
Info-OtherTermList=head:1234:none:none:1
Info-OtherTermList=detail:
  21:off:softphone:kanda:
    P-IP:IP4:192.168.0.11:G-IP:IP4:10.0.0.10:
    VideoSignal-P:6070:VideoSignal-G:5070
Info-OtherTermList=end
```

- (3) Info-OtherTermList=head:1234:none:none:0 Info-OtherTermList=end

when there is no terminal that
personal ID "1234" logs on

. condition etc. .

- (1) This parameter is used to notify terminal information on the personal ID (Or, nickname) demanded by arbitrary terminal information demand event (ReqInfo-OtherTerm) from the terminal.
- (2) Consider not to display the personal ID and to display nickname if nickname doesn't exist when other party terminal information is displayed and it notifies for the user based on this information.

6.1.3.17. Arbitrary terminal information (Info-OtherTerm)

Parameter to notify terminal from main device terminal information on arbitrary extension number.

Both "Terminal that does REGISTER by terminal type CTI" and "Terminal that the terminal of terminal type CTI controls" information is listing notified when information on the extension number of "Terminal that does REGISTER by terminal type CTI" or "Terminal that the terminal of terminal type CTI controls" is demanded.

. addition message .

It adds to the NOTIFY request.

. format .

The transmission

beginning Info-OtherTerm=head: number of lists

The list is being

transmitted Info-OtherTerm = extension number: the terminal type: Network area information.

P-IP: Address type: Internet Protocol address

(G-IP: Address type: Internet Protocol address)

(type: Number: Type: Number :. . .)

...

Transmission

endInfo-OtherTerm=end -

Info-OtherTerm = extension number in case of terminal to which terminal concerned is not provided by this interface

specifications such as legacy terminals: Unknown

Name		Definition value	Explanation
Extension number		1. 9,0,*,#	Up to eight digits
Terminal type			Refer to terminal information (Info-TermType).
		unknown	Excluding the above-mentioned (legacy terminal etc.)
Network area information		Network area information (Info-NetArea)Reference	Network collar that terminal connects [A] information
Local IP information	Address type	IP4	Local IP information on terminal (Info-PrivateIP)Reference
		IP6	
	Internet Protocol address	XXX.XXX.XXX.XXX	
		[XXXX:XXXX:XXXX:XXXX:XXXX]	
Gros for NAT British anti-lewisite IP Information	Address type	IP4	Global IP information for NAT of terminal (Info-GlobalNatIP)Reference
		IP6	
	Internet Protocol address	XXX.XXX.XXX.XXX	
		[XXXX:XXXX:XXXX:XXXX:XXXX]	
Fixed port information	Type	VideoSignal-G	..port (.. in the router for the video Cigna ring Allocated global port)
		VideoSignal-P	..port (.. [ro-ka] for video Cigna ring [Ru])
	Number	1. 65535	Port number

- G-IP without global IP information for NAT: the address type: Internet Protocol address is not notified. -

Fixed port information makes the colon a separator and notifies two or more port information. Moreover, without any fixed port information, the type: number: type: Number :. . . is not notified.

. usage example .

- (1) Extension number "20" : for a desktop terminal and "192.168.0.10" (The network area: "CygnusDefaultNetworkArea") Internet Protocol address.

```
Info-OtherTerm=head:1
Info-OtherTerm=20:terminal:CygnusDefaultNetworkArea:P-IP:IP4:192.168.0.10
Info-OtherTerm=end
```

- (2) Extension..number..softphone..Internet Protocol address..network..area..log in..connection..for..setting..for..global..setting..provide..fixation..po rt..information..provide.

```
Info-OtherTerm=head:1
Info-OtherTerm=20:softphone:kanda:P-IP:IP4:192.168.0.11:G-IP:IP4:10.0.0.10:
VideoSignal-P:6070:VideoSignal-G:5070
Info-OtherTerm=end
```

- (3) Info-OtherTerm=head:1 Info-OtherTerm=22:unknown

```
Info-OtherTerm=end
when extension number
"22" is legacy terminal(4)
```

Extension number "20" controls the legacy terminal (extension number "30") in CTI with the CTI terminal, and IP. Network ..(.. area when address is " 192.168.0.10 ": 「CygnusDefaultNetworkArea」)

```
Info-OtherTerm=head:2
Info-OtherTerm=30:unknown
Info-OtherTerm=20:CTI:CygnusDefaultNetworkArea:P-IP:IP4:192.168.0.10
Info-OtherTerm=end
```

. condition etc. .

- (1) This parameter is used to notify terminal information on the extension number demanded by arbitrary terminal information demand event (ReqInfo-OtherTerm) from the terminal.

6.1.3.18. Other party of telephone call personal ID information (Info-PartyPID)

Parameter to notify terminal from main device intended party's personal ID.

. addition message .

It adds to the NOTIFY request.

. format .

The transmission

beginning Info-PartyPID=head: number of other parties of

the telephone call The list is

being transmitted Info-PartyPID=detail:P1: the other party type: personal ID: nickname * no: other party number Name: the
number of name information bytes: name: read: number of
reading Japanese syllabary bytes: reading Japanese syllabary.)

Info-PartyPID=detail:P2: Other party type: Personal ID: Nickname * no: Other party number Name: Number of
name information bytes: Name: Read: Number of reading
Japanese syllabary bytes: Reading Japanese syllabary)

...

Info-PartyPID=detail:P32: Other party type: Personal ID: Nickname * no: Other party number Name: Number of
name information bytes: Name: Read: Number of reading
Japanese syllabary bytes: Reading Japanese syllabary)

Transmission

endInfo-PartyPID=end

Name	Definition value	Explanation
Data type	head	Header information. The following data is contained. Number of other parties of telephone call
	detail	Other party of detailed telephone call information. Omission when not talking over the telephone [Reru]. Number of other parties of telephone call Index Other party type Personal ID Nickname Other party number Number of name information bytes Name Number of reading Japanese syllabary bytes Reading Japanese syllabary
	end	It is shown to have notified all other party of the telephone call information.
Number of other parties of telephone call	0. 32	Number of other party user present terminal's talking over the telephone Hereafter, the other party type: personal ID: nickname: ..list.. number of wire gauge titles
Index	P1 . P32	Index of other party information
Other party type	Terminal information (Info - TermType)Reference	For the extension terminal provided for by this specifications
	Unknown	Extension terminal not provided for by this specifications such as legacy terminals It is time when .drinking.
	Line	For the outside line
Personal ID	32 alphanumeric character digits or less	ID information that specifies individual
	None	The legacy, the outside line, and the personal ID unset it.
Nickname	Alphanumeric character	Intended party's nickname
	None	The legacy, the outside line, and nickname unset it.
Other party number	1. 9,0,*,#	Intended party's extension number in case of extension terminal (Up to eight digits).
		Other party departure number in case of outside line (Up to 24 digits).
	None	Other party number unacquisition non-notification reason that not is in case in outside line It is time when .drinking.
Number of name information bytes	1. 12	12 bytes or less
Name	sjis(Shift - JIS)	The single byte mixing is effective.
Number of reading Japanese syllabary bytes	1. 12	12 bytes or less
Reading Japanese syllabary	sjis(Shift - JIS)	The single byte mixing is effective.

- The other party is Info-PartyPID=head when there is no other

party number notification in the outside line: the number of
other parties of the telephone call Info-PartyPID=detail:P1:line:none:none*reason: Non-notification reason.

...

Info-PartyPID=end

Name	Definition value	Explanation
Non-notification reason	1	Non-notification
	2	Public telephone
	3	Display out of the sphere

. usage example .

- (1) Desktop terminal and telephone call of extension number "20" without personal ID "1234" and nickname
It does. Situation

Info-PartyPID=head:1
Info-PartyPID=detail:P1:terminal:1234:none no:20
Info-PartyPID=end

- (2) It talks over the telephone to the outside line (The other party departure number is . 0312345678"). Situation

Info-PartyPID=head:1
Info-PartyPID=detail:P1:line:none:none no:0312345678
Info-PartyPID=end

- (3) The other party departure number is . 0312345678" and the departure name "Japan [dentarou]", and the reading ..outside line (.. Japanese syllabaries.
It talks over the telephone , saying that "[Nichidentarou]" It is). Situation

Info-PartyPID=head:1
Info-PartyPID=detail:
P1:line:none:none no:0312345678:name:10: Japan [dentarou]: Read:9: [Nichidentarou]
Info-PartyPID=end(4)

- It talks over the telephone to the outside line (other party number non-notification). Situation

Info-PartyPID=head:1
Info-PartyPID=detail:1 P1:line:none:none reason:1
Info-PartyPID=end

- (5) Desktop terminal and individual of extension number "20" who doesn't have personal ID "1234" and nickname
There are neither ID "2345" nor nickname, and the conference telephone call is done as the softphone of extension number "21".
It is. Situation

Info-PartyPID=head:2
Info-PartyPID=detail:P1:terminal:1234:none no:20
Info-PartyPID=detailP2:softphone:2345:none no:21
Info-PartyPID=end

- (6) It doesn't talk over the telephone. Situation

Info-PartyPID=head:0
Info-PartyPID=end

. condition etc. .

- (1) This parameter is used to notify personal ID/nickname/extension number of the intended party demanded by other party of the telephone call personal ID demand (ReqInfo-PartyPID) by the terminal (other party departure number in case of the outside line).
- (2) All the personal IDs of other terminals that participate in the conference telephone call are notified when the notification point end is talking over the telephone the conference. (Exclude it at the notification point end.)
- (3) When the intended party doesn't have the personal ID (The operation mode the plug is & play, legacy terminal, and outside line), none is specified for the personal ID.
- (4) When the intended party doesn't have nickname (The operation mode the plug is & play, legacy terminal, and outside line), none is specified for nickname.
- (5) None is specified for an other party number when there is no other party departure number when the intended party is an outside line.
Correspondence..line..audio teleconference..outside line..other
party..departure..number..acquisition.
- (6) Do not display the personal ID and consider it as you display nickname if nickname doesn't exist when other party of the telephone call information is displayed and it notifies for the user based on this information.
- (7) It is not an intended party of the CTI terminal, and personal ID/nickname/extension number of the intended party in the CTI controlling terminal that the CTI terminal controls (other party departure number in case of the outside line) is notified when the terminal type is demanded by the terminal of "CTI "by other party of the telephone call personal ID demand (ReqInfo-PartyPID).

6.1.3.19. Download tone information (Info-ToneData)

Parameter to notify terminal from main device information on download tone.

. addition message .

It adds to the NOTIFY request.

. format .

Tone number Info-ToneData =

*F1: Frequency 1: Level 1 * (F2: Frequency 2: Level 2 *) (f3:

Frequency 3: Level 3 *) (F4: Frequency 4: Level 4 *) (m1: Modulation

frequency 1*) (M2: Modulation frequency 2*) p1:

Pulse frequency: State of pulse: Pulse width: Loop count: The following state * . . .

p16: Pulse frequency: State of pulse: Pulse width: Loop count: The following state

Name	Definition value	Explanation
Tone number	T1. T64	The tone data up to 64 can be notified.
Frequency	0. 3999	Unit of Hz and 4 or less (modulating frequency and exclusion)
Level	-72. 0	Unit of dB
Modulating frequency	1. 3999	Unit of Hz and 2 or less (frequency and exclusion)
Pulse frequency	f1+f2+f3+f4	Frequency synthesis (It is possible to synthesize it up to four).
	f1*m1 or f2*m2	Frequency modulation (When modulating, f3/f4 cannot be used).
State of pulse	on	Pulse ON
	off	Pulse OFF
Pulse width	1. 65535	Unit of ms
Loop count	0. 65535	
The following state	0. 16	Next, status number of generated pulse (Maintain it the state by 0).

. usage example .

(1) When you register the tone definition of download tone T1 in the terminal

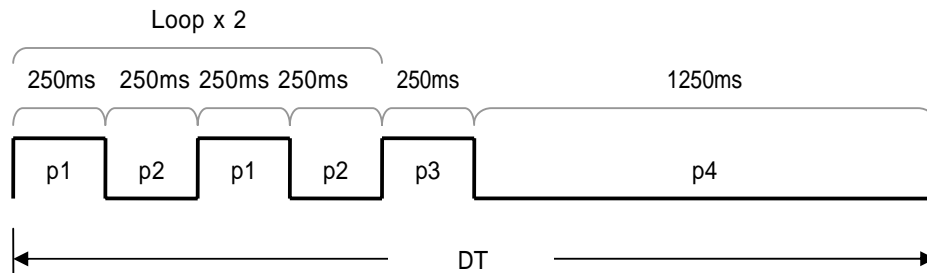
- Frequency: 425Hz-

3dB of extension level :-

Pulse shape: 250msON-250msOFF-250msON-250msOFF-250msON-1.

25sOFF Info-ToneData=T1 f1:425:-3

p1:f1:on:250:0:2 p2:f1:off:250:1:1 p3:f1:on:250:0:4 p4:f1:off:1250:0:1



(2) When you register the tone definition of download tone T2 in the terminal

- Frequency: 425Hz-

3dB of extension level :-

Pulse shape: 250msON-250msOFF-

Frequency: 600Hz-

3dB of extension level :-

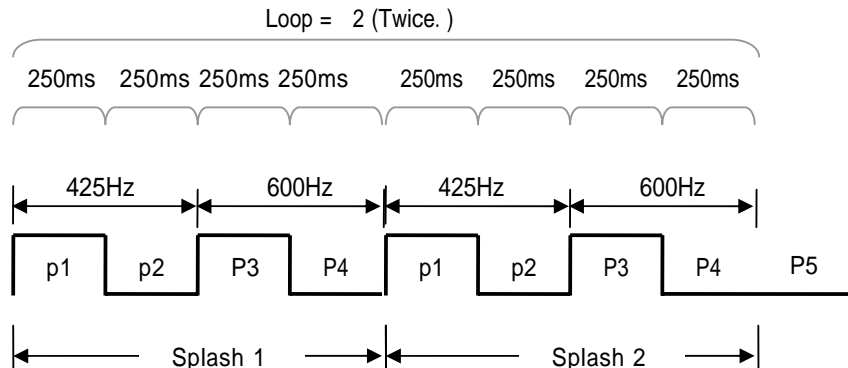
The pulse shape: 250msON-250msOFF

rumbles two times and is stopped.

Info-ToneData=T2 f1:425:-3 f2:600:-3

p1:f1:on:250:0:2 p2:f1:off:250:0:3

p3:f2:on:250:0:4 p4:f2:off:250:1:1 p5:f2:off:0:0



. condition etc. .

- (1) Do not transmit a main device to other terminals because this parameter is a parameter structure to have specialized in H/W of a desktop telephone made of the NEC Inn frontier basically. However, if it can be recognized that the control of the download tone is a possible terminal in this parameter, you may transmit.
- (2) The tone data of tone number T1-T16 notified by this parameter overwrites the default tone data of "Regional number" specified by tone site region information (Info-ToneArea) parameter. Do not specify T1-T16 by this parameter when you use the default tone.
- (3) The frequency can be specified by combining the values up to four. "Frequency (f). " and "Modulating frequency (m)" ..however.. It assumes it until four or less for together.
- (4) The pulse state block to specify the pulse shape is assumed to be 16(p1-p16) or less.
- (5) Reproduce the synthesized tone when "Frequency (f)" is two or more specified by . +". Moreover, reproduce the modulating tone when "Frequency (f)" and "Modulating frequency (m)" are specified by . *".
- (6) When the tone data of "The tone none" is made, the terminal allows "0" to be specified for "Frequency (f)". However, note that this frequency . 0" annuls the data of the tone number on the terminal side when it is assumed the one that it is possible to specify it only for "OFF" the state of the pulse, and is specified for "ON" the state of the pulse.

6.1.3.20. Server address information (Info-ServerAdr)

Parameter to notify terminal from main device Internet Protocol address and port number of demanded server.

. addition message .

It adds to the NOTIFY request.

. format .

Server type Info-ServerAdr =

*Address type: Internet Protocol address: Port number *

address type: Internet Protocol address: Port number * . . .

Name	Definition value	Explanation
Server type	dns	DNS server
	roaming	Data roaming server
	ps	Presence server
	xml	XML server
	ldap	LDAP server
	ftp	FTP server
	tftp	TFTP server
Address type	ip4	IPv4
	ip6	IPv6
Internet Protocol address	XXX.XXX.XXX.XXX	For the IPv4 address
	[XXXX:XXXX:XXXX:XXXX:XXXX]	[De] is bundled for the IPv6 address.
Port number	1. 65535	Port number

. usage example .

- (1) When only primary DNS server (IPv4 address "10.10.10.10" and port number "53") is set

Info-ServerAdr=DNS IP4:10.10.10.10:53

- (2) When primary DNS server (IPv4 address "10.10.10.10" and port number "53") and secondary DNS servers (IPv4 address "10.10.10.11" and port number "53") are set

Info-ServerAdr=DNS IP4:10.10.10.10:53 IP4:10.10.10.11:54

- (3) When only primary DNS server (IPv6 address "3ffe:ffff:ffff::1" and port number "53") is set

Info-ServerAdr=DNS IP6:[3ffe:ffff:ffff::1]:53

- (4) When the data roaming server (IPv4 address "20.20.20.20" and port number "54") is set

Info-ServerAdr=Roming IP4:20.20.20.20:54

. condition etc. .

- (1) This parameter is used to notify server information demanded by server address information demand (ReqInfo-ServerAdr) parameter from the terminal.
- (2) A main device must specify two address information on primary DNS server and secondary DNS server when you specify . dns" for "Server type". Specify only one address information when specifying it for "Server type" excluding . dns".
- (3) Address..type..Internet Protocol address..specify..address information..without fail..bundle.
- (4) Judge that the terminal is not set when Internet Protocol address of the server is . 0.0.0.0".
- (5) No one to secure the presence of the setting of the system data of a main device this parameter, and the setting of the server actually.
- (6) A main device must notify the terminal this parameter when the system data concerning the roaming server is changed.

6.1.3.21. Name of display of volume of terminal information (Info-TermVolName)

Parameter that notifies volume name displayed when local volume of terminal is changed from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermVolName = volume number: Volume display name *
 volume number: Volume display name * . . .

Name	Definition value	Explanation
Volume number	V1	Handset
	V2	Speaker
	V3	Speaker Ring
	V4	Off-Hook Speaker Ring
	V5	LCD Contrast
	V6	BGM
	V7	Headset Ring
	V8	Off-Hook Headset Ring
Volume display name	Arbitrary character string	Up to the maximum normal-width ten characters

. usage example .

(1) Info-TermVolName=V7:Headset when title display when volume of head set ring

is changed is made . Headset"

. condition etc. .

(1) The volume display name notified by this parameter is assumed to be a character-code fixed when starting.

6.1.3.22. Right or wrong of batch dial sending information (Info-TelbookOrg)

Parameter that notifies terminal from main device right or wrong of batch dial sending.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TelbookOrg = right or wrong of sending

Name	Definition value	Explanation
Right or wrong of sending	ok	Batch dial sending permission
	ng	Batch dial sending prohibition

. usage example .

(1) Info-TelbookOrg=ok when batch

dial can be sent

(2) Info-TelbookOrg=ng when batch dial sending is impossible because arrival

of a message was generated

. condition etc. .

(1) A main device transmits this parameter as a response of batch dial sending permission demand (ReqInfo-TelbookOrg) parameter.

(2) The terminal must stop the operation of the batch dial sending when the batch dial sending is prohibited by this parameter.

6.1.3.23. Terminal unlawful computer access control information (Info-TermViolation)

Parameter that notifies terminal from main device information on unlawful computer access control executing terminal protection.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermViolation = ..retrying.. frequency: Lock time tracking number)

Name	Definition value	Explanation
[Pasuwa-doritorai] frequency	1-255	Frequency limitation when password is input again
	0	There is no limitation.
Password lock time	1-120	Lock time when ..retrying.. failing (amount)
	0	Unrestricted lock
Tracking number	1. 9,0,*,#	Manager's telephone number (It is possible to omit it).

. usage example .

(1) When it is considered the terminal unlawful computer access three times of the password input due to the failure, and locks the password input for ten minutes (Inquiries in the emergency are assumed to be extension 1000)

Info-TermViolation=3:10:1000

. condition etc. .

(1) When this parameter is received

6.1.3.24. System function information (Info-SysFeature)

Parameter to notify terminal from main device application function that main device mounts.

. addition message .

It adds to the NOTIFY request.

. format .

Info-SysFeature = functional information (* functional information)

Name	Definition value	Explanation
Functional information	roaming	Roaming function
	presence	Presence function
	im	Instant message function

. usage example .

(1) Info-SysFeature=presence im in case of main device that mounts presence

function and instant message function

. condition etc. .

(1) When this parameter is not notified or a main device doesn't support the function that the terminal mounts, the terminal may invalidate the menu display and the application function.

6.1.3.25. Right or wrong of option changeability function key sending information (Info-OptPkeyOrg)

Parameter to notify terminal from main device right or wrong of sending information on option changeability function key.

. addition message .

It adds to the NOTIFY request.

. format .

Info-OptPkeyOrg = changeable key number (- changeable key number): Right or wrong * . . . of sending
changeable key number (- changeable key number): Right or wrong of sending

Name	Definition value	Explanation
Changeable key number	1. 40	
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-OptPkeyOrg=1-24:ok when key that can send option changeability function

key number 1-24 is notified

(2) When you notify the key that cannot send option changeability function key number 13-24 that
option changeability function key number 1-12 can be sent

Info-OptPkeyOrg=1-12:ok 13-24:ng

. condition etc. .

(1) When this parameter is received

6.1.3.26. Right or wrong of cordless handset fixation function key sending information (Info-BthFkeyOrg)

Parameter to notify terminal from main device right or wrong of sending information on cordless handset fixation function key.

. addition message .

It adds to the NOTIFY request.

. format .

Info-BthFkeyOrg = fixed key number (- fixed key number): Right or wrong * . . . of sending
fixed key number (- fixed key number): Right or wrong of sending

Name	Definition value	Explanation
Fixed key number	1. 16	
Right or wrong of sending	ok	It is possible to send it.
	ng	It is not possible to send it.

. usage example .

(1) Info-BthFkeyOrg=1-16:ok when key that can send fixed function key

number 1-16 is notified

(2) When you notify the key that cannot send fixed function key number 9-16 that fixed function key number 1-8 can be sent

Info-BthFkeyOrg=1-8:ok 9-16:ng

. condition etc. .

(1)

6.1.3.27. Terminal presence information (Info-Presence)

Parameter that notifies presence information on terminal that changes status from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Transmission

beginningInfo-Presence=head:

The number of transmission presence information

The list is being transmitted.

Info-Presence=detail:

Personal ID </ NN><ID > ID of < NN > nickname </ ><

PN > comment </ terminal </ SS><CM > </ MS><SS > Sub-Status CM of

extension number </ of individual number </ TT><MS > Main-Status EN><TT > PN><EN > >

Transmission

endInfo-Presence=end

Name	Definition value	Explanation
Nickname (NN)	Alphanumeric character	Alias that specifies individual
	None	None is set when not existing.
Personal ID number (ID)	Alphanumeric character	ID information that specifies individual
	None	None is set when not existing.
Individual number (PN)	1. 9,0,*,#	Personal representative number (Up to eight digits).
	None	None is set when not existing.
Extension number (EN)	1. 9,0,*,#	Up to eight digits
Terminal type (TT)	Refer to terminal information (Info-TermType).	The type of the terminal is shown.
Main-Status(MS)	Chapter 6 Reference	
Sub-Status(SS)	Character string (Britain and number, Japanese syllabary, and Chinese character)	It displays it in an arbitrary character string and each terminal. There is a possibility to be omitted.
Comment (CM)	Normal-width 20 characters	

. usage example .

- (1) Current presence is nickname "Alice", terminal "Multi-functioning telephone", is "offline", "Out", presence information and nickname "Ken", terminal "Softphone", and current presence : for "[Seki] of the living" in "Online".

Info-Presence=head:2

Info-Presence=detail:<NN>Alice</NN><ID>1234</ID>
 <EN>100</EN><TT>terminal</TT>
 <MS>offline</MS><SS>away<SS>

Info-Presence=detail:<NN>Ken</NN><ID>5678</ID>
 <EN>200</EN><TT>softphone</TT>
 <MS>Online</MS><SS>-<SS>

Info-Presence=end

. condition etc. .

- (1) This parameter is sent only to the terminal where the subscription demand is done (It is registered in Buddy List).
- (2) Buddy List doesn't exist for AGW. Presence information is transmitted for all terminals to which status is changed.
- (3) There is a possibility that each parameter is omitted.

6.1.3.28. Substatus list information (Info-SubstatusList)

Parameter that sends Sub-status List from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-SubstatusList=<1>[Sub-Status]</1><2>[Sub-Status]</2>... -

<1></1> shows the status number.

Name	Definition value	Explanation
Sub-Status	Arbitrary character string	Character string for each terminal display (Britain and number, Japanese syllabary, and Chinese character)

. usage example .

(1) When a main device notifies the terminal the substatus

list Info-SubstatusList=<1>Away</1><2>meeting</2> > . . .

. condition etc. .

(1) The status number is set in front of Sub-Status. Send the substatus change demand to a main device by using this status number when the substatus is changed about the client. This substatus number is collated with the system data in a main device, it converts into the character string of the substatus, and it displays it.

6.1.3.29. System data change information (Info-ChangeSD)

The system data related to presence is notified to have been changed from a main device to the terminal. It doesn't notify when the data related to the status change is changed. The status change is done by Info-Presence. (Only AGW :.)

. addition message .

It adds to the NOTIFY request.

. format .

Info-ChangeSD

. usage example .

(1) Info-ChangeSD when main device notifies change to be in AGW in
the system data

. condition etc. .

(1)

6.1.4. Well informed man wisdom parameter (Info-xxxx: Terminal . main device)

Table X-2 shows well informed man wisdom parameter to which a main device for table X-1 and KTS-SIP adds well informed man wisdom parameter that the terminal for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Well informed man wisdom parameter list that terminal for table X-1 KTS-SIP adds (1/2)

Name	Parameter name	Remarks
Hardware name information	Info-HardwareName	
Hardware version number information	Info-HardwareVer	
Firmware name information	Info-FirmwareName	
Firmware version number information	Info-FirmwareVer	
Terminal information	Info-TermType	Definition addition of terminal type
Display type information	Info-DisplayType	Definition addition of new LCD
Changeable function key information	Info-Pkey	Definition change in number of maximum keys
Fixed function key information	Info-Fkey	Definition addition of new fixed key
Soft key information	Info-Skey	
Fixed lamp information	Info-Lamp	LED display color addition
Application function information	Info-Feature	Addition of name modification and new feature
Terminal identification information	Info-TermID	
Access mode information	Info-AccessMode	
Override information	Info-Override	
Function ability information	Info-FuncCap	
Telephone call log information	Info-CallLog	
Trouble log information	Info-FaultLog	
Option function state information	Info-OptFunc	
Restart reply information	Info-RstReply	It adds it in the 4.0th edition.
Terminal hardware information	Info-Hardware	New
Terminal firmware information	Info-Firmware	New
Extension number specification information	Info-IncomNo	New
Fixed function key kit information	Info-FkeyKitType	New
[Joguki-] information	Info-Jkey	New
Function ability information 2	Info-FuncCap2	New
Terminal status information	Info-TermStatus	New
Terminal support media ability information	Info-MediaCap	New
Terminal set up information	Info-TermConfig	New
Short ring end notification	Info-ShortRingEnd	New
Terminal resource state information	Info-TermResource	New
Terminal backlight level information	Info-TermBacklit	New
Level of volume of terminal individual notification	Info-TermVolLv	New
Level of volume of terminal batch notification	Info-TermVolLvAll	New
Fixed port information	Info-FixedPort	New
Network area information	Info-NetArea	New
Local IP information on terminal	Info-PrivateIP	New
Global IP information for NAT of terminal	Info-GlobalNatIP	New
DESI-less page information	Info-DesilessPage	New
Terminal protection state information	Info-TermProtect	New

Well informed man wisdom parameter list that terminal for table X-1 KTS-SIP adds (2/2)

Name	Parameter name	Remarks
Option equipment connection information	Info-OptAdaptor	New
Option equipment state information	Info-OptStatus	New
Option changeability function key information	Info-OptPkey	New
Console changeability function key information	Info-ConsolePkey	New
Terminal well informed man wisdom completion	Info-TermInfo2Fin	New
Number of extension for CTI control information	Info-CtiExt	New

6.1.4.1. Terminal information (Info-TermType)

Parameter to notify main device from terminal terminal information.

. addition message .

It adds to all messages that the terminal transmits except an initial REGISTER request.

. format .

Info-TermType = terminal type

Name	Definition value	Explanation
Terminal type	terminal	Desktop type
	softphone	Softphone type
	wireless	Wireless type
	cti	CTI application
	agw	Application gateway server
	ums	Unified Messaging System

. usage example .

(1) Info-TermType=terminal in case of terminal for

KTS-SIP of desktop type

(2) Info-TermType=softphone in case of terminal for

KTS-SIP of softphone type

. condition etc. .

- (1) The terminal must not add this parameter to the outbound message automatically when "Off" is specified from a main device for "Addition instruction" by terminal information addition demand (Ind-AddTermType) parameter. However, notify as a response when information is demanded by a main device by terminal well informed man wisdom demand (ReqInfo-TermInfo) parameter.
- (2) Transmit the terminal adding this parameter to the message by the multi part when the body is included in the message the message other than the enhancement parameter such as SDP the transmission from the terminal (INVITE request/200 responses etc.).

6.1.4.2. Display type information (Info-DisplayType)

Parameter to notify main device from terminal display (LCD) type. However, this parameter doesn't notify the maximum display ability of LCD mounted on the terminal.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-DisplayType = * of the number of lines of number x of characters that can be displayed that
can be displayed Correspondence character-code (LCD display color of *)

Name	Definition value	Explanation
Number of characters that can be displayed	16/20/24/28	16 character or 20 character or 24 character or 28 character
The number of lines that can be displayed	2, 4	From 3 to 4 lines
Correspondence character-code	nec-code	NEC original code (Dterm alphanumeric display mode)
	nec-code-rus	NEC original code (Dterm Russian display mode)
	ascii	American Standard Code for Information Interchange
	sjis	Shift-JIS (A typewriter font and a part of original code are contained).
	unicode	Unicode
LCD display color	color	Color
	gray	Gray scale
	mono	Black and white

. usage example .

- (1) Mount LCD of a possible black and white presentation, and for the terminal that can be displayed by NEC original code

Info-DisplayType=24x3 nec-code mono

- (2) LCD that can display 256 full dot colors is mounted, and it shifts within the range of the character 28 character four line For the terminal that can be displayed by JIS

Info-DisplayType=28x4 sjis color

. condition etc. .

- (1) The correspondence character-code that can be specified depends on the font mounted on the terminal side.
- (2) Judge the display none when total characters on screen and the display digit are "0x0".
- (3) Do not do the display instruction from a main device when this parameter is not notified from the terminal or the values other than the definition value are specified.
- (4) The display instruction from a main device is done by the code notified by this parameter.
- (5) Display an alternative character about the character that cannot be displayed on the terminal side.
- (6) The display is assumed to be a typewriter font (typewriter font).
- (7) The terminal that specifies the character-code for sjis(Shift-JIS) must meet the following requirements.
 - Correspond to the first level of Shift-JIS.
 - Assume the code to be a big endian form.
 - 1 Enable coexistence of the bytecode and two bytecodes.
 - 2 Assume the bytecode to be a treatment by two characters.
- (8) The terminal must not add "LCD display color" at the Info-SysType parameter unreception.

6.1.4.3. Changeable function key information (Info-Pkey)

Parameter to notify main device from terminal changeable function key information (surface of the board information).

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Pkey = changeable key number (- changeable key number): Optional function optional function)*
changeable key number (- changeable key number): Optional function optional function)* . . .

Name	Definition value	Explanation
Changeable key number	1. 40	
Optional function	dispXXpY	With LCD (DESI-less display ability) XX: Number of characters that can be displayed (1-11) Y: Respect switch page number (1-4)
	led1	With LED (black and white)
	led2	With LED (two colors)
	icon	The icon display function is provided.
	-	Addition function none

. usage example .

(1) Info-Pkey=1-32:led2 when 32 changeable function keys are mounted, and two colors

LED have adhered to the all

(2) 32 changeable function keys are mounted, two colors LED adhere to changeable function key number 1-16 sooner or later, and it when there is no optional function in changeable function key number 17-32

Info-Pkey=1-16:led2 17-32:-

(3) Mount eight changeable function keys with LCD, and the page to 32 changeable function key control virtual for the compatible terminal in the place where four is switched

Info-Pkey=1-8:disp11p1:icon 9-16:disp11p2:icon
17-24:disp11p3:icon 25-32:disp11p4:icon

. condition etc. .

- (1) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the key.
- (2) A main device can direct the changeable function key number with LCD the function name display. However, the display instruction from a main device is done by the character-code notified by display type information (Info-DisplayType).
- (3) Assume the part XX to be common in this parameter when the terminal specifies "DispXXpY" for "Optional function" by this parameter. A main device may judge the part XX specified in this parameter at the end to be a number of characters in which DESI-less can be displayed.
- (4) Arrange part Y in ascending order in this parameter when the terminal specifies "DispXXpY" for "Optional function" by this parameter. A main device may judge part Y specified in this parameter at the end to be the maximum value of DESI-less page switch ability.
- (5) The terminal must not specify the option definition part (format bundled by parentheses) at the Info-SysType parameter unreception. Moreover, do not add the definition values other than "Disp" and "-" to "Optional function".

6.1.4.4. Fixed function key information (Info-Fkey)

Parameter to notify main device from terminal fixed function key information (surface of the board information).

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Optional function) Info-Fkey = fixed function key number: Functional information

optional function)* fixed function key number: Functional information * . . .

Name	Definition value	Explanation
Fixed function key number	1. 16	
Functional information	transfer	Forwarding
	redial	Redial/shortening
	conf	Conference
	hold	Reservation
	hook	Hook
	recall	Recall
	feature	Special
	answer	Response
	speaker	Speaker
	org	Sending
	mic	Mike
	message	Message
	directory	Directory
	volup	Volume improvement
	voldown	Down of volume
	Ind	History
	flash	Flash
	dnd	Communication blocking
	call1	Appearance 1 (arrival and departure Makoto/response)
	call2	Appearance 2 (arrival and departure Makoto/response)
	dial	Preset/shortening
Optional function	led1	With LED (black and white)
	led2	With LED (two colors)

. usage example .

- (1) The redial key in fixed function key number 1, the reservation key in fixed function key number 2, and the response key to fixed function key number 3 for the terminal that mounts the speaker key on fixed function key number 4

Info-Fkey=1:redial 2:hold 3:answer 4:speaker

. condition etc. .

- (1) Might change processing to the fixed function key with a main device, it doesn't necessarily operate by the function to notify.
- (2) The combination of "Fixed function key number" and "Functional information" is different depending on inducing ahead and the model. The list of the combination is shown in appendix 7.4.

6.1.4.5. Fixed lamp information (Info-Lamp)

Parameter to notify main device from terminal fixed lamp information (lamp information without key).

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Lamp = fixed lamp number: Functional information display color)*
fixed lamp number: Functional information display color)* . . .

Name	Definition value	Explanation
Fixed lamp number	1. 8	
Functional information	call-indication	Arrival of a message notification
	message-waiting	Message waiting
Display color	c2	Two colors (red/green)
	c7	Seven colors (red/green/blue/yellow/purple/light blue/white)

. usage example .

(1) Info-Lamp=1:call-indication:c7 in case of terminal

that mounts seven color LED incoming light

. condition etc. .

(1) A main device controls the lamp only for a fixed lamp in this parameter with specification.

However, the ramp control depends on the service specification of a main device.

(2) Only one : the fixed lamp number in a desktop terminal.

6.1.4.6. Terminal application function information (Info-Feature)

Parameter to notify main device from terminal application function information that terminal mounts.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Feature = functional information (* functional information *...)

Name	Definition value	Explanation
Functional information	current_party_no	Other party of communication number display function
	org_history	Local dispatch history function
	did_history	Local message history function
	dir	Local telephone book function
	roaming	Roaming function
	presence	Presence function
	im	Instant message function
	xmlbrowser	XML browser function
	confvoice	Voice reading out function

. usage example .

(1) Info-Feature=org_history did_history in case of terminal that mounts

sending history function and message history function

. condition etc. .

(1) The terminal must not add the definition values other than "Current_party_no", " Org_history", and "Did_history" to "Functional information" at the Info-SysType parameter unreception.

6.1.4.7. Terminal hardware information (Info-Hardware)

Parameter to notify main device from terminal hardware information on terminal.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Hardware = hardware name: Number (A.B.C.D) of hardware versions

Name	Definition value	Explanation
Hardware name	Alphanumeric character	ASCII code within 64 characters or less of control code that do not contain it
Number of hardware versions	0. 99	Decimal mark

. usage example .

(1) When . NEC_SIPterm" and the version number are . 1.0.0.0", the hardware name of the terminal is Info-Hardware=NEC_SIPterm:1.0.0.0.

. condition etc. .

- (1) "Hardware name" is assumed to be ASCII code within 64 characters that do not contain the control code.
- (2) Write the description of "Number of hardware versions" by the decimal number from 0 to 99.
- (3) Use neither Info-HardwareName nor the Info-HardwareVer parameter when you use this parameter. However, the terminal must not use this parameter, and use Info-HardwareName and the Info-HardwareVer parameter at the Info-SysType parameter unreception.

6.1.4.8. Terminal firmware information (Info-Firmware)

Parameter to notify main device from terminal firmware information on terminal.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Firmware = firmware name: Number (A.B.C.D) of firmware versions

Name	Definition value	Explanation
Firmware name	Alphanumeric character	ASCII code within 64 characters or less of control code that do not contain it
Number of firmware versions	0. 99	Decimal mark

. usage example .

(1) The firmware name of the terminal : for . 1.0.0.0" . NEC_SIPterm_Program" and the version number.

Info-Firmware=NEC_SIPterm_Program:1.0.0.0

. condition etc. .

- (1) "Firmware name" is assumed to be ASCII code within 64 characters that do not contain the control code.
- (2) Write the description of "Number of firmware versions" by the decimal number from 0 to 99.
- (3) Use neither Info-FirmwareName nor the Info-FirmwareVer parameter when you use this parameter. However, the terminal must not use this parameter, and use Info-FirmwareName and the Info-FirmwareVer parameter at the Info-SysType parameter unreception.

6.1.4.9. Extension number specification information (Info-IncomNo)

Parameter to notify extension number to be specified from terminal for main device.

. addition message .

After 401 responses are received from a main device, it adds to the REGISTER request transmitted from the terminal as a response for the REGISTER request.

. format .

Info-IncomNo = extension number

Name	Definition value	Explanation
Extension number	1. 9,0,*,#	It follows the numbering plan of a main device.

. usage example .

(1) Info-IncomNo=2000 when operation mode wants to specify extension number . 2000" for terminal by "Plug and play"

. condition etc. .

- (1) It is assumed it is effective only for "Plug and play" the operation mode.
- (2) A main device must allocate the specified extension number when the extension number of this parameter doesn't overlap.

6.1.4.10. Fixed function key kit type information (Info-FkeyKitType)

Parameter to notify main device from terminal button kit type information on fixed function key.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-FkeyKitType = fixed function key button kit type

Name	Definition value	Explanation
Fixed function key Button kit type	1	New UI (Japan)
	2	New UI (Oversea/Philips)
	3	New UI (US/Europe KTS)
	4	Vertical Market (Call Center)
	5	Vertical Market (Hotel 1)
	6	Vertical Market (Hotel 2)
	7	Vertical Market (Retirement House)
	8	Vertical Market (with 8 line key)
	9	Retro fit (Japan)
	10	Retro fit (Oversea/Philips)
	11	Retro fit (US/Europe KTS)
	12. 15	Reserve

. usage example .

(1) Info-FkeyKitType=9 when fixed function key button kit for retrofit for Japan

is mounted on terminal

. condition etc. .

6.1.4.11. [Joguki-] information (Info-Jkey)

Parameter to notify main device from terminal [joguki-] information (surface of the board information).

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-Jkey = [jogu] key number: Functional information optional function)*
[jogu] key number: Functional information optional function)* . . .

Name	Definition value	Explanation
[Jogu] key number	1. 16	
Functional information	menu	M e n u
	curup	C u r s o r (o n)
	curdown	C u r s o r (u n d e r)
	curleft	C u r s o r (l e f t)
	curright	C u r s o r (r i g h t)
	enter	E x e c u t i o n
	clear	C l e a r n e s s
	page	D E S I - l e s s p a g e s w i t c h
	protect	P r o t e c t i o n
Optional function	led1	W i t h L E D (b l a c k a n d w h i t e)
	led2	W i t h L E D (t w o c o l o r s)

. usage example .

(1) It in menu key and [jogu] key number 2, and in cursor (on) key and [jogu] key number 3 and to cursor (under) key and [jogu] key number 4 for the terminal that mounts cursor (right) key on cursor (left) key and [jogu] key number 5 in [jogu] key number 1

Info-Jkey=1:menu 2:curup 3:curdown 4:curleft 5:curright

. condition etc. .

- (1) Might change processing to [joguki-] with a main device, it doesn't necessarily operate by the function to notify.
- (2) The combination of "[Jogu] key number" and "Functional information" is different depending on inducing ahead and the model. The list of the combination is shown in appendix 7.4.

6.1.4.12. Function ability information 2 (Info-FuncCap2)

Parameter to notify main device from terminal function ability information on terminal.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermlInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-FuncCap2 = function number: Function ability information *
function number: Function ability information * ...

Name	Definition value	Explanation
Function number	F1	Speaker function
	F2	Mike function
	F3	Head set function
	F4	Hands-free function
	Fx. F255	Undefined
Function set up information	It is different in each function number.	

. usage example .

(1) Info-FuncCap2=F1:1 F2:1 F3:1 F4:0 when speaker function, mike

function, and head set function are mounted

. condition etc. .

- (1) The function set up information is described in alphanumeric characters other than space, and the content is different in each function number.
- (2) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the function ability.

- Speaker function (F1)

Function number	Function set up information	Explanation
F1	0	Speaker none
	1	There is a speaker.

- Mike function (F2)

Function number	Function set up information	Explanation
F2	0	Mike none
	1	There is a mike.

- Head set function (F3)

Function number	Function set up information	Explanation
F3	0	There is no head set.
	1	There is a head set.

- Hands-free function (F4)

Function number	Function state information	Explanation
F4	0	Hands-free function uncorrespondence (It is possible to omit it).
	half	For hands-free function (half duplex)
	full	For hands-free function (full duplex)

6.1.4.13. Terminal status information (Info-TermStatus)

Parameter to notify main device from terminal status information that terminal manages.

. addition message .

After the ReqInfo-TermInfo2 parameter is received from a main device, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal. Moreover, it transmits adding from the terminal to the NOTIFY request when information on the terminal is changed.

. format .

Info-TermStatus = state of terminal main device control demand)

Name	Definition value	Explanation
State of terminal	idle	Excluding the following states
	filetransfer	File download/up-loading
	config	Terminal Config mode
	mbincom	Portable arrival of a message inside (Bluetooth)
	mbtalk	(Bluetooth) when carrying is being talked over the telephone
Main device control demand	busy	Communication blocking (busy tone)

. usage example .

(1) Info-TermStatus=filetransfer:busy

when terminal begins forwarding file

(2) Info-TermStatus=idle when terminal

ends forwarding file

. condition etc. .

- (1) A main device when . busy" is received must consider that the terminal is setting DND, and reproduce a busy tone by the main device control demand of this parameter for ..the terminal.. other party of arrival of a message [shita].
- (2) The softphone cannot stop responding when arrival of a message is in the file transfer.
- (3) The Bluetooth option equipment is connected with the terminal and "Mbincom" in the state of the terminal and "Mbtalk" are notified by instruction (Ind-BtxConnect) parameter for carrying only when a portable coordinated function is effective.

6.1.4.14. Terminal support media ability information (Info-MediaCap)

The parameter of media information supported from the terminal to a main device that notifies the notification.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-MediaCap=type: Payload type: The maximum minimum value-value

(* type: Payload type: The maximum minimum value-value)

Name	Definition value	Explanation (encoding method name/speed Hz of clock)
Payload type	0	PCMU/8000
	2	G.726-32/8000
	3	G.S.M/8000
	4	G.723/8000
	8	PCMA/8000
	9	G.722/8000
	12	QCELP/8000
	15	G.728/8000
	18	G.729/8000
	26	JPEG/90000
	31	H.261/90000
	34	H.263/90000
Size of payload (minimum value)	10. 100	Value 10ms of size of payload interval
Size of payload (maximum value)	10. 100	Value 10ms of size of payload interval

. usage example .

(1) Info-MediaCap=type:0:10-40 type:18:10-80 when it supports PCMU Payload 10ms-40ms,
and G729 Payload 10ms-80ms is supported

. condition etc. .

(1)

6.1.4.15. Terminal set up information (Info-TermConfig)

Parameter to notify main device from terminal set up information of terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermConfig = function number: Function set up information

(function number of *: Function set up information)

Name	Definition value	Explanation
Function number	F1	Backlight setting
	F2	Head set setting
	F3	Off hook ring setting
	F4	Touch panel setting
	F5. F255	Undefined
Function set up information	It is different in each function number.	

. usage example .

(1) Only the backlight setting is

Info-TermConfig=F1:1 F2:0 F3:0 F4:0 in case of turning on.

. condition etc. .

- (1) The function set up information is described in alphanumeric characters other than space, and the content is different in each function number.
- (2) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the function ability.
- (3) In this parameter, it transmits adding F4 from F1 without fail.

- Backlight setting (F1)

Function number	Function set up information	Explanation
F1	0	Backlight OFF
	1	Backlight ON

- Head set setting (F2)

Function number	Function set up information	Explanation
F2	0	Head set control OFF
	1	Head set control ON

- Off hook ring setting (F3)

Function number	Function set up information	Explanation
F3	0	Off hook ring rumbling OFF
	1	Off hook ring rumbling ON

- Touch panel setting (F4)

Function number	Function state information	Explanation
F4	0	Touch panel control OFF
	1	Touch panel control ON

6.1.4.16. Short ring end notification (Info-ShortRingEnd)

Parameter to notify custom ring rumbling to have ended from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Info-ShortRingEnd

. usage example .

(1) Info-ShortRingEnd when custom ring rumbling directed from

main device is completed

. condition etc. .

(1) This parameter is used to notify the custom ring that begins according to custom ring rumbling instruction (Ind-ShortRing) parameter from a main device to have ended.

6.1.4.17. Terminal resource state information (Info-TermResource)

Parameter to notify main device from terminal resource usage condition of terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermResource=LCD: * LED of state of control: * of state of control
VOICE: * KEY of state of control: State of control

Name	Definition value	Explanation
State of control	0	Device uncontrol
	1	The device is being controlled.

. usage example .

(1) Info-TermResource=LCD:1 LED:1 VOICE:0 KEY:1 when terminal

occupies LCD/LED/KEY control by local control

(2) Info-TermResource=LCD:0 LED:0 VOICE:0 KEY:0 when local control of

terminal ends and occupied resource is liberated

. condition etc. .

(1) This parameter is notified to a main device according to the change that uses the resource of the terminal when an automatic notification is specified by system basic set up information (Info-SysConfig) parameter. However, transmit this parameter to a main device regardless of the presence of an automatic notification when you receive terminal resource information demand (ReqInfo-TermResource) parameter.

6.1.4.18. Terminal backlight level information (Info-TermBacklit)

Parameter to notify main device from terminal backlight level information on terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermBacklit = state of LCD backlight: State of KEY backlight

Name	Definition value	Explanation
State of LCD backlight	on	State of lighting
	off	State of turning off
State of KEY backlight	on	State of lighting
	off	State of turning off

. usage example .

(1) Info-TermBacklit=on:on when terminal detects key pressing,

and backlight is lit

(2) Info-TermBacklit=off:off when backlight is turned off after time-out time

directed main device passes

. condition etc. .

(1) As for a desktop terminal, the LCD/KEY backlight operation cooperates. As for a wireless terminal, the backlight control of LCD and KEY is independent.

6.1.4.19. Level of volume of terminal individual notification (Info-TermVolLv)

Parameter to notify information individually when local volume level of terminal changed from terminal into main device.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermVolLv = volume number: Volume level

Volume number	Volume level	Initial value	Explanation
V1	-14. 22 [dB]	0[dB]	Handset (14dB is the maximum at Article OFF 508).
V2	-36. -6 [dB]	-12[dB]	Speaker
V3	-60. 0 [dB]	-20[dB]	Speaker Ring
V4	0. -24 [dB]	-20[dB]	Off-Hook Speaker Ring
V5	1. 8 5		LCD Contrast
V6	-36. -6 [dB]	-22[dB]	BGM
V7	0. -48 [dB]	-20[dB]	Headset Ring
V8	0. -24 [dB]	-20[dB]	Off-Hook Headset Ring

. usage example .

(1) Info-TermVolLv=V1:-14 when volume of hand set by terminal

operation is changed

. condition etc. .

- (1) V1, V2, V4, V6, and V8 must specify 2dB step, V3, and V7 in 4dB step.
- (2) The volume level of Off-Hook Speaker Ring(V4) is assumed to be relative value specification for the volume level of Speaker Ring(V3).
- (3) The volume level of Off-Hook Headset Ring(V8) is assumed to be relative value specification for the volume level of Headset Ring(V7).

6.1.4.20. Level of volume of terminal batch notification (Info-TermVolLvAll)

Parameter that notifies main device from terminal local volume level information on terminal by batch.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermVolLvAll = volume number: Volume level *
 volume number: Volume level * . . .

Volume number	Volume level	Initial value	Explanation
V1	-14. 22 [dB]	0[dB]	Handset (14dB is the maximum at Article OFF 508).
V2	-36. -6 [dB]	-12[dB]	Speaker
V3	-60. 0 [dB]	-20[dB]	Speaker Ring
V4	0. -24 [dB]	-20[dB]	Off-Hook Speaker Ring
V5	1. 8 5		LCD Contrast
V6	-36. -6 [dB]	-22[dB]	BGM
V7	0. -48 [dB]	-20[dB]	Headset Ring
V8	0. -24 [dB]	-20[dB]	Off-Hook Headset Ring

. usage example .

(1) Info-TermVolLvAll=V1:-14 V2:6 V3:0 V4:-10 V5:0 V6:6 V7:0 V8:0 when

local all volume level information that terminal maintains is notified

. condition etc. .

- (1) This parameter is a response parameter of level of the volume of the terminal notification demand (ReqInfo-TermVolLv) parameter.
- (2) V1, V2, V4, V6, and V8 must specify 2dB step, V3, and V7 in 4dB step.
- (3) The volume level of Off-Hook Speaker Ring(V4) is assumed to be relative value specification for the volume level of Speaker Ring(V3).
- (4) The volume level of Off-Hook Headset Ring(V8) is assumed to be relative value specification for the volume level of Headset Ring(V7).

6.1.4.21. Fixed port information (Info-FixedPort)

A fixed setting is a parameter from the terminal to a main device for various services to notify the done port number.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-FixedPort = port type: Port number *
port type: Port number * . . .

Name	Definition value	Explanation
Port type	VideoSignal-G	Port for video Cigna ring (global port allocated by router)
	VideoSignal-P	Port for video Cigna ring (local)
Port number	1. 65535	Port number

. usage example .

(1) When you notify the terminal to secure global port 5070 and local port 6070 for the video Cigna ring

Info-FixedPort= VideoSignal-G:5070 VideoSignal-P:6070

. condition etc. .

(

6.1.4.22. Network area information (Info-NetArea)

Parameter to notify main device from terminal area information on network to which terminal belongs.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-NetArea = network area name

Name	Definition value	Explanation
Network area name	32 alphanumeric character digits or less	Network area that terminal connects Information. Arbitrariness decided at system construction Character string of unique [de].

. usage example .

(1) When you notify the terminal to connect it from the Kanda network area

Info-NetArea=Kanda

. condition etc. .

- (1) The default value of the area name is assumed to be "CygnusDefaultNetworkArea".
- (2) When intended party's network area is different from my network area when PtoP is served, the terminal is accessed to other party's global IP and port.
- (3) When intended party's network area is the same as my network area when PtoP is served, the terminal is accessed to other party's local IP and port.
- (4) The network areas in the both ends end are compared with [yosei], and when it is the same, a main device directs global information when differing to use local information for SDP the terminal with ReqEvent-Session.

6.1.4.23. Local IP terminal information (Info-PrivateIP)

Parameter to notify main device from terminal local Internet Protocol address information on terminal.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-PrivateIP = address type: Internet Protocol address

Name	Definition value	Explanation
Address type	ip4	IPv4
	ip6	IPv6
Internet Protocol address	XXX.XXX.XXX.XXX	For the IPv4 address
	[XXXX:XXXX:XXXX:XXXX:XXXX]	[De] is bundled for the IPv6 address. ex)[3ffe:ffff:ffff::1]

. usage example .

(1) When you notify that local Internet Protocol address of the terminal is 111.222.111.222 of IPv4

Info-PrivateIP=ip4:111.222.111.222

. condition etc. .

(1)

6.1.4.24. Global IP terminal information (Info-GlobalIP)

Parameter to notify main device (Only when NAT is used, it is effective. If the terminal has global IP, it is unnecessary) from the terminal global Internet Protocol address information on the router that the terminal connects.

. addition message .

After terminal well informed man wisdom demand parameter (ReqInfo-TermInfo) that demands this parameter by a main device is received, it adds to the REGISTER request or the NOTIFY request transmitted from the terminal.

. format .

Info-GlobalIP = address type: Internet Protocol address

Name	Definition value	Explanation
Address type	ip4	IPv4
	ip6	IPv6
Internet Protocol address	XXX.XXX.XXX.XXX	For the IPv4 address
	[XXXX:XXXX:XXXX:XXXX:XXXX]	[De] is bundled for the IPv6 address. ex)[3ffe:ffff:ffff::1]

. usage example .

(1) When you notify that the global IP address of the terminal is 111.222.111.222 of IPv4

Info-GlobalIP=IP4:111.222.111.222

. condition etc. .

(1)

6.1.4.25. DESI-less page information (Info-DesilessPage)

Parameter to notify main device from terminal page number information on part DESI-less.

. addition message .

It adds to the NOTIFY request.

. format .

Info-DesilessPage = page number

Name	Definition value	Explanation
Page number	1. 4	

. usage example .

(1) Info-DesilessPage=4 when part DESI-less mounted on terminal changes

into the fourth page

. condition etc. .

(1)

6.1.4.26. Terminal protection state information (Info-TermProtect)

Parameter to notify main device from terminal state information on terminal protection.

. addition message .

It transmits adding from the terminal to the NOTIFY request when the protection key mounted on the terminal is pressed. Moreover, when the Ind-TermProtect parameter is received from a main device, it adds to the NOTIFY request similarly transmitted from the terminal.

. format .

Info-TermProtect = state of protection unlawful computer access)

Name	Definition value	Explanation
State of protection	R	Protection release
	L	Personal data lock
	M	Personal and common data lock
	H	Telephone function lock
State of unlawful computer access	V	The state that unlawful computer access is generated is shown.

. usage example .

(1) Info-TermProtect=H when user executes terminal

protection (High level)

(2) Info-TermProtect=R when user releases

terminal protection

(3) Info-TermProtect=H:V when unlawful computer access is generated while executing

terminal protection (High level)

. condition etc. .

(1) Transmit terminal status information (Info-TermStatus) parameter with this parameter when it is necessary to request the arrival of a message control executing the terminal protection from a main device.

(2) Give priority to the instruction from a main device when you receive terminal protection control instruction (Ind-TermProtect) parameter when the terminal protection is being executed.

(3)

6.1.4.27. Option equipment connection information (Info-OptAdaptor)

Parameter to notify main device from terminal state of option equipment connected with terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Info-OptAdaptor = equipment type: Connected state: Sales channel: Version information
(equipment type of *: Connected state: Sales channel: Version information)

Name	Definition value	Explanation
Equipment type	ada	Recording adaptor
	bth	Bluetooth hand set
	btc	Bluetooth Cradle
	bha	BlueTooth hub adaptor
	psx	Power failure adaptor (PSA/PSD)
	console	60DSS
	adm	24ADM
	lk	8/16LK
Connected state	on	Online (It connects and be operating).
	off	Off-line (It cuts and be stopping).
Sales channel	a	For A channel
	b	For B channel
Version information	X.X	

. usage example .

(1) Info-OptAdaptor=bha:on:a:1.0 console:on:a:1.0 when console is connected

with BHA adaptor and side I/F at bottom I/F(2)

Info-OptAdaptor=bha:off when BHA adaptor

at bottom I/F is detached

. condition etc. .

- (1) It transmits adding from the terminal to the NOTIFY request when the state of [**nu] [niyori] of the option equipment is changed.
- (2) To connect the ADA adaptor and the BTC/BHA adaptor with bottom I/F of the terminal main body, it is not specified at the same time. Moreover, to connect LK/ADM with same side I/F of the terminal main body, it is not specified at the same time. However, LK/ADM and CONSOLE are sides with a different the terminal main body It is possible to connect it at the same time because it connects it with I/F.
- (3) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the option adaptor.
- (4) The terminal must notify option changeability function key information (Info-OptPkey) parameter with this parameter when ADM or LK is connected.
- (5) The terminal must notify console changeability function key information (Info-ConsolePkey) parameter with this parameter when DSS is connected.
- (6) The F/W version of BTH of becoming of BTC and the communication possible when the F/W version cannot be notified when BTH starts in the state of out of the sphere or power supply OFF is notified.

6.1.4.28. Option equipment state information (Info-OptStatus)

Parameter to notify main device from terminal movement of option equipment connected with terminal.

. addition message .

It adds to the NOTIFY request.

. basic format .

Info-OptStatus = equipment type: State of operation

Name	Definition value	Explanation
Equipment type	psx	Power failure adaptor (PSA/PSD)
State of operation	-	It is different according to the option equipment.

- Power failure adaptor (PSA/PSD)

The telephone call is notified in a main device in the state and the power failure mode of the power failure mode of PSA/PSD switch and it is notified whether.

. format .

Info-OptStatus = equipment type: State of power failure switch: State of power failure telephone call

Name	Definition value	Explanation
Equipment type	psx	Power failure adaptor (PSA/PSD)
State of power failure switch	on	Power failure switch ON
	off	Power failure switch OFF
State of power failure telephone call	idle	Stand-by state
	call	State of telephone call

. usage example .

(1) Info-OptStatus=psx:on:call when power failure adaptor is

talking over the telephone in power failure mode

(2) Info-OptStatus=psx:off when power failure

adaptor is the ordinary mode

. condition etc. .

(1) Notify this parameter when a main device is restored from the power failure and the terminal starts. Moreover, execute the transmission of this parameter before notification (?) of the hook state.

6.1.4.29. Option changeability function key information (Info-OptPkey)

Parameter to notify main device from terminal changeable function key information on option equipment (8/16LK,24ADM) (surface of the board information).

. addition message .

After the ReqInfo-TermInfo parameter is received from a main device, it adds to the REGISTER request transmitted from the terminal. Moreover, it transmits adding from the terminal to the NOTIFY request when [***nu*] [*niyori*] information on the option equipment is changed.

. format .

Info-OptPkey = changeable key number (- changeable key number): Optional function optional function)*
changeable key number (- changeable key number): Optional function optional function)* . . .

Name	Definition value	Explanation
Changeable key number	1. 40	
Optional function	dispXXpY	With LCD (DESI-less display ability) XX: Number of characters that can be displayed (1-11) Y: Respect switch page number (one fixation)
	led1	With LED (black and white)
	led2	With LED (two colors)
	icon	The icon display function is provided.
	-	Addition function none

. usage example .

- (1) Eight changeable function keys are mounted, and Info-OptPkey=1-8:led2 in case of the terminal that has adhered to the all two colors LED.
- (2) 16 changeable function keys are mounted, and Info-OptPkey=1-16:led2 in case of the terminal that has adhered to the all two colors LED.
- (3) 24 changeable function keys are mounted, LCD and 2 colors LED adhere to the all, and it for the terminal that corresponds to the icon display to the part L CD in addition

Info-OptPkey=1-24:disp14p1:led2:icon

. condition etc. .

- (1) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the key.
- (2) A main device can direct the changeable function key number with LCD the function name display. However, the display instruction from a main device is done by the character-code notified by display type information (Info-DisplayType).
- (3) Assume the part XX to be common in this parameter when the terminal specifies "DispXXpY" for "Optional function" by this parameter. A main device may judge the part XX specified in this parameter at the end to be a number of characters in which DESI-less can be displayed.
- (4) Arrange part Y in ascending order in this parameter when the terminal specifies "DispXXpY" for "Optional function" by this parameter. A main device may judge part Y specified in this parameter at the end to be the maximum value of DESI-less page switch ability.
- (5) Do not use this parameter at the Info-SysType parameter unreception.

6.1.4.30. Console changeability function key information (Info-ConsolePkey)

Parameter to notify main device from terminal changeable function key information on console (surface of the board information).

. addition message .

After the ReqInfo-TermInfo parameter is received from a main device, it adds to the REGISTER request transmitted from the terminal. Moreover, it transmits adding from the terminal to the NOTIFY request when [****nu**] [niyori] information on the console is changed.

. format .

Changeable key number of number of maximum sides *(- changeable key number) optional function) Info-ConsolePkey =
 * Changeable key number (- changeable key number) optional function)* ...

Name	Definition value	Explanation
Number of maximum sides	1. 10	
Number of maximum, changeable function keys	1. 60	
Optional function	led1	With LED (black and white)
	led2	With LED (two colors)

. usage example .

(1) Mount 60 changeable function keys in all with LED, and for eight consoles that can be switched

Info-ConsolePkey=8 1-60:led2

. condition etc. .

- (1) When this parameter is not notified from the terminal or the values other than the definition value are specified, a main device doesn't process it concerning the key.
- (2) LCD is not required to adhere to the changeable function key to the console.
- (3) Do not use this parameter at the Info-SysType parameter unreception.

6.1.4.31. Terminal well informed man wisdom completion (Info-TermInfo2Fin)

Parameter to inform main device from terminal of notification completion of terminal information.

. addition message .

It adds to the NOTIFY request.

. format .

Info-TermInfo2Fin (completion type * . . . of complete *)

Name	Definition value	Explanation
Completion type	capacity	Information on ability of terminal
	status	Information on state of terminal
	option	Information on option equipment

. usage example .

(1) All terminal information necessary for the start is demanded, and when the transmission is completed,

Info-TermInfo2Fin in a main device.

(2) All information on the terminal ability is demanded, and when the transmission is completed,

Info-TermInfo2Fin=capacity in a main device.

(3) All information on the state of the terminal is demanded, and when the transmission is completed,

Info-TermInfo2Fin=status in a main device.

(4) All information on the option equipment connected with the terminal is demanded, and to a main device when you complete the transmission

Info-TermInfo2Fin=option

. condition etc. .

(1) Transmit this parameter after transmitting all Info-xxxx parameters that correspond to the demand type demanded by the ReqInfo-TermInfo2 parameter. It is judged that a main device makes this parameter a trigger and has been sent all information from the terminal.

(2) Transmit adding to the final line of the message body when this parameter is transmitted with the Info-xxxx parameter.

6.1.4.32. Number of extension for CTI control information (Info-CtiExt)

Parameter to notify extension number to be specified from terminal for main device.

. addition message .

It adds to all REGISTER requests transmitted from terminals of terminal type "CTI" except an initial REGISTER request.

. format .

Info-CtiExt = extension number

Name	Definition value	Explanation
Extension number	1. 9,0,*,#	It follows the numbering plan of a main device.

. usage example .

(1) The terminal of extension number 20 is Info-CtiExt=20 to notify CTI

to be controlled.

. condition etc. .

- (1) When the terminal type is only "CTI", it is assumed it is effective.
- (2) When a terminal terminal (PC usually) that notifies this parameter logoffs, this information is automatically deleted in a main device.
- (3) Even if "Terminal for the CTI control" logoffs, this information is not deleted in a main device.
- (4) When the extension number terminal specified by this parameter doesn't exist (It is logoffing and registration doesn't exist), the "403" error response is returned to the REGISTER request.
- (5) When the terminal of the extension number as which the terminal of other terminal types "CTI" is the same has already been controlled, the "403" error response is returned to the REGISTER request.

6.1.5. Event notification parameter (Event-xxxx: Terminal . main device)

Table X-1 shows the event notification parameter that the terminal for KTS-SIP adds. The event notification parameter that a main device for the current state and KTS-SIP adds is not defined. Details are described only about the parameter that is corrected in this paragraph or newly added.

Event notification parameter list that terminal for table X-1 KTS-SIP adds

Name	Parameter name	Remarks
Changeable function key event	Event-Pkey	Definition addition of pressing end
Fixed function key event	Event-Fkey	Definition addition of new fixed key
Soft key event	Event-Skey	Definition addition of pressing end
[Dei;jittoki-ibento]	Event-DigitKey	Definition addition of pressing end
Hand set event	Event-Handset	
Telephone book sending event	Event-TelbookOrg	Definition addition of [dei;jittoki-] information
[Joguki-ibento]	Event-Jkey	New
File transfer event	Event-FileTransfer	New
System service start event	Event-SysService	New
Option changeability function key event	Event-OptPkey	New
Console changeability function key event	Event-ConsolePkey	New
Cordless handset changeability function key event	Event-BthPkey	New (Bluetooth)
Cordless handset fixation function key event	Event-BthFkey	New (Bluetooth)
Bluetooth equipment hook event	Event-BtxHook	New (Bluetooth)

6.1.5.1. Changeable function key event (Event-Pkey)

Parameter to notify main device from terminal generation of changeable function key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-Pkey = changeable function key number state of changeable function key)

Name	Definition value	Explanation
Changeable function key number	1. 40	
State of changeable function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-Pkey=1:down when changeable function key 1 to

surface of the board is pressed

(2) Event-Pkey=1:up when changeable function key 1 to surface

of the board is separated

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the changeable function key event is generated.

(2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.2. Fixed function key event (Event-Fkey)

Parameter to notify main device from terminal generation of fixed function key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-Fkey = fixed function key number: Functional information state of fixed function key)

Name	Definition value	Explanation
Fixed function key number	1. 16	
Functional information	-	Refer to fixed function key information (Info-Fkey).
State of fixed function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-Fkey=4:speaker:down when speaker key

to surface of the board is pressed

. condition etc. .

- (1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the fixed function key event is generated.
- (2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.3. Soft key event (Event-Skey)

Parameter to notify main device from terminal generation of soft key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-Skey = soft key information state of soft key)

Name	Definition value	Explanation
Soft key information	-	Refer to soft key information (Info-Skey).
State of soft key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-Skey=1 when soft key 1 is pressed when there is no key pressing

state notification(2)

Event-Skey=exit:down when EXIT key is pressed when there is key

pressing state notification

(3) Event-Skey=exit:up when EXIT key is separated when there is key

pressing state notification

. condition etc. .

- (1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the soft key event is generated.
- (2) "State of a soft key" of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add "State of a soft key" when "Notification key type" when it is not directed is directed by "Off".

6.1.5.4. [Dei;jittoki-ibento] (Event-DigitKey)

Parameter to notify main device from terminal generation of [dei;jittoki-ibento].

. addition message .

It adds to the NOTIFY request.

. format .

Event-DigitKey = [dei;jittoki-] information state of [dei;jittoki-])

Name	Definition value	Explanation
[Dei;jittoki-] information	1. 9,0,*,#	
State of [dei;jittoki-]	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-DigitKey=1:down when [dei;jittoki-] 1 in

surface of the board is pressed

(2) Event-DigitKey=1:up when [dei;jittoki-] 1 in

surface of the board is separated

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when [dei;jittoki-ibento] is generated.

(2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.5. Telephone book sending event (Event-TelbookOrg)

Parameter to notify main device from terminal generation of batch dial sending event from telephone book or arrival and departure Makoto history.

. addition message .

It adds to the NOTIFY request.

. format .

Event-TelbookOrg=no: [Dei;jittoki-] information

Name	Definition value	Explanation
[Dei;jittoki-] information	1. 9,0,*,#	
	P	Pose
	R	Hook
	@	It is considered since @ the DTMF sending.

. usage example .

(1) Event-TelbookOrg=no:0123456789 when sending it from

telephone book to dial "0123456789"

(2) Event-TelbookOrg=no:0123456789@1234 when sending it from

sending history to dial "0123456789@1234"

. condition etc. .

- (1) The terminal should get the sending permission from a main device by batch dial sending permission demand (ReqInfo-TelbookOrg) parameter before transmitting this parameter when the telephone book sending or the history sending is executed.
- (2) Set "Current_party_no", "Org_history", and "Did_history" to "Functional information" of terminal application function information (Info-Feature) parameter and transmit the terminal that uses this parameter.
- (3) The number of digits for which [dei;jittoki-] information can be specified is assumed that 32 digits or less in "KTS", and main equipment types are 128 digits or less in "PBX".

6.1.5.6. [Joguki-ibento] (Event-Jkey)

Parameter to notify main device from terminal generation of [joguki-ibento].

. addition message .

It adds to the NOTIFY request.

. format .

Event-Jkey = [jogu] key number: Functional information state of [joguki-])

Name	Definition value	Explanation
[Jogu] key number	1. 16	
Functional information	-	Refer to [joguki-] information (Info-Jkey).
State of [joguki-]	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-Jkey=10:menu when menu key is pressed when there is no key

pressing state notification(2)

Event-Jkey=10:menu:down when menu key is pressed when there is key

pressing state notification

(3) Event-Jkey=10:menu:up when menu key is separated when there is key

pressing state notification

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when [joguki-ibento] is generated.

(2) "State of [joguki-]" of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add "State of [joguki-]" when "Notification key type" when it is not directed is directed by "Off".

(3) The combination of "[Jogu] key number" and "Functional information" is different depending on inducing ahead and the model. The list of the combination is shown in appendix 7.4.

6.1.5.7. File transfer event (Event-FileTransfer)

Parameter to notify main device from terminal generation of file transfer demand.

. addition message .

It adds to the NOTIFY request.

. format .

Event-FileTransfer = forwarding type: Forwarding data type

Name	Definition value	Explanation
Forwarding type	dl	Download instruction
	ul	Up-loading instruction
Forwarding data type	firmware	Terminal firmware
	dir	Terminal local telephone book
	history	Terminal local arrival and departure Makoto history
	tone	Call progress tone
	menu	Download menu
	app-info	Softphone application program updated information
	app-prog	Softphone application program program

. usage example .

(1) Event-FileTransfer=dl:firmware when

terminal firmware is downloaded(2)

Event-FileTransfer=ul:dir when terminal local telephone

book file is up-loaded

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the file transfer event is generated.

6.1.5.8. System service start event (Event-SysService)

Parameter to notify service of system to have been selected from menu from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Event-SysService = service type

Name	Definition value	Explanation
Service type	dir	Central telephone book
	history	Central arrival and departure Makoto history
	mcall	Absent message history
	vmail	Voice mail

. usage example .

(1) Event-SysService=Dir when central telephone

book is selected from menu

(2) Event-SysService=History when central arrival and departure

Makoto history is selected from menu

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when service is selected in the menu.

(2) The character string of the undefined service type specified for the download menu data is allowed in the definition value in consideration of the extensibility. However, the terminal only transmits adding the character string to this parameter, and is not concerned of the content.

6.1.5.9. Option changeability function key event (Event-OptPkey)

Parameter to notify main device from terminal generation of option changeability function key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-OptPkey = changeable function key number state of changeable function key)

Name	Definition value	Explanation
Changeable function key number	1. 40	
State of changeable function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-OptPkey=1:down when changeable function key 1 to

option equipment is pressed

(2) Event-OptPkey=1:up when changeable function key 1 to

option equipment is separated

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the option changeability function key event is generated.

(2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.10. Console changeability function key event (Event-ConsolePkey)

Parameter to notify main device from terminal generation of console changeability function key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-ConsolePkey = changeable function key number state of changeable function key)

Name	Definition value	Explanation
Changeable function key number	1. 60	
State of changeable function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-ConsolePkey=10:down when the eighth respect is active and changeable function

key 10 to console is pressed

(2) Event-ConsolePkey=10:up when the eighth respect is active and changeable function

key 10 to console is separated

. condition etc. .

- (1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the console changeability function key event is generated.
- (2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".
- (3) Do not specify, and judge "Page number" with a main device in this parameter.

6.1.5.11. Cordless handset changeability function key event (Event-BthPkey)

Parameter to notify main device from terminal generation of cordless handset changeability function key event.

. addition message .

It adds to the NOTIFY request.

. format .

Event-BthPkey = changeable function key number state of changeable function key)

Name	Definition value	Explanation
Changeable function key number	1. 16	
State of changeable function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-BthPkey=1:down when changeable function key

1 to cordless handset is pressed

(2) Event-BthPkey=1:up when changeable function key 1

to cordless handset is separated

. condition etc. .

(1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the cordless handset changeability function key event is generated.

(2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.12. Cordless handset fixation function key event (Event-BthFkey)

Parameter to notify main device from terminal generation of fixed function key event of cordless handset.

. addition message .

It adds to the NOTIFY request.

. format .

Event-BthFkey = fixed function key number state of fixed function key)

Name	Definition value	Explanation
Fixed function key number	1. 16	
State of fixed function key	down	The key was pressed.
	up	The key was separated.

. usage example .

(1) Event-BthFkey=3:down when reservation key

to cordless handset is pressed

. condition etc. .

- (1) The terminal must notify a main device the generation of the event by using this parameter regardless of the state of the session when the cordless handset fixation function key event is generated.
- (2) The state of the key of this parameter is added when there is only a transmission instruction from a main device depending on key pressing end setting instruction (Ind-KeyupInfo) parameter. Do not add the state of the key when "Notification key type" when it is not directed is directed by "Off".

6.1.5.13. Bluetooth equipment hook event (Event-BtxHook)

Parameter to notify main device from terminal state of hook from Bluetooth equipment.

. addition message .

It adds to the NOTIFY request.

. format .

Event-BtxHook = state of hook

Name	Definition value	Explanation
State of hook	on	State of on hook
	off	State of off hook

. usage example .

(1) Event-BtxHook=off when Bluetooth equipment

enters state of off hook

(2) Event-BtxHook=on when Bluetooth equipment

enters state of on hook

. condition etc. .

(1)

6.1.6. Instruction notification parameter (Ind-xxxx: Main device . terminal)

Table X-1 shows the instruction notification parameter that a main device for KTS-SIP adds. The instruction notification parameter that the terminal for the current state and KTS-SIP adds is not defined. Details are described only about the parameter that is corrected in this paragraph or newly added.

Instruction notification parameter list that main device for table X-1 KTS-SIP adds (1/3)

Name	Parameter name	Remarks
The first line in display display is instructed.	Ind-DispLine1	
The second line in display display is instructed.	Ind-DispLine2	
The third line in display display is instructed.	Ind-DispLine3	
Changeable function key lamp state instruction	Ind-Pkey	
Fixed function key lamp state instruction	Ind-Fkey	
Speaker instruction	Ind-Speaker	
Mike instruction	Ind-Mic	
Head set instruction	Ind-Headset	
Hand set instruction	Ind-Handset	
[Ringa] instruction	Ind-Ringer	
Display instruction of call duration	Ind-Tktime	
Setting at time	Ind-SetTime	
Changeable function key display	Ind-PkeyDisp	
Tone instruction	Ind-Tone	
Short tone instruction	Ind-ShortTone	
PAD instruction	Ind-Pad	
[Jittabaffa] instruction	Ind-Jitter	
Echo canceller instruction	Ind-EchoCanceller	
Media packet ToS instruction	Ind-MediaTos	
Reset instruction	Ind-Reset	
Registration server specification	Ind-RegServer	
Cigna ring packet ToS instruction	Ind-SignalTos	
DTMF signal transmission instruction	Ind-SendDTMF	
Instruction at SUBSCRIBE expiration date	Ind-ExprSUBSCRIBE	
Fixed lamp state instruction	Ind-Lamp	
[Ringato-n] instruction	Ind-RingerTone	
Display instruction 2 of call duration	Ind-Tktime2	
Gain instruction	Ind-DefaultGain	
Server address list notification	Ind-RegServerList	
Option function instruction when being talking over the telephone	Ind-OptFuncVc	It adds to NOTIFY.
Telephone call log instruction	Ind-CallLog	It adds to NOTIFY.
Option function instruction	Ind-OptFunc	
Restart reply information instruction	Ind-RstReply	It adds it in the 4.0th edition of NEC-SIP.
Login display content instruction	Ind-LogDsp	It adds it in the 4.0th edition of NEC-SIP.
Error display content instruction	Ind-ErrDsp	It adds it in the 4.0th edition of NEC-SIP.

Instruction notification parameter list that main device for table X-1 KTS-SIP adds (2/3)

Name	Parameter name	Remarks
Terminal information addition instruction	Ind-AddTermType	New
Short ring instruction	Ind-ShortRing	New
DTMF signal transmission instruction 2	Ind-SendDTMF2	New
The fourth line in display display is instructed.	Ind-DispLine4	New
Display..display..instruction.	Ind-DispLineN	New
Soft key n display instruction	Ind-DispSkeyN	New
Cursor flash display instruction	Ind-DispCurFlash	New
Display information clearness instruction	Ind-DispClear	New
Length double size line display instruction	Ind-DispDouble	New
Clock display format instruction	Ind-TimeDispFmt	New
Right or wrong of clock display setting instruction	Ind-TimeDisp	New
Fixed lamp state instruction 2	Ind-Lamp2	New
Personal ID maintenance instruction	Ind-RemainPID	New
Terminal operation beginning instruction	Ind-TermWakeup	New
Instruction of method of controlling volume of terminal	Ind-TermVolCtrl	New
Level of volume of terminal instruction	Ind-TermVolLv	New
Range of volume of terminal specification instruction	Ind-TermVolRange	New
Instruction of display of volume of terminal	Ind-TermVolDisp	New
Terminal protection control instruction	Ind-TermProtect	New
Multicast RTP instruction	Ind-MulticastRTP	New
Media mixing instruction	Ind-MediaMixing	New
Power failure mode instruction	Ind-PowerSave	New
Eco-mode instruction	Ind-EcoMode	New
Terminal backlight control instruction	Ind-TermBacklit	New
DESILESS page switch instruction	Ind-DesilessPage	New
DESILESS page icon control instruction	Ind-DesilessPageIcon	New
Changeable function key icon display instruction	Ind-PkeyIcon	New
Key pressing end setting instruction	Ind-KeyupInfo	New
[Joguki-ranpu] state instruction	Ind-Jkey	New
Classification by countries restriction instruction	Ind-CountryRule	New
Display..icon..display..instruction.	Ind-DispIcon	New
Line display mode instruction only for icon	Ind-IconMode	New
Short cut icon display instruction	Ind-ShortcutIcon	New
Menu start instruction	Ind-MenuWakeup	New
Menu time-out time designation instruction	Ind-MenuTimeout	New
[Ringa] instruction 2	Ind-Ringer2	New
[Ringapasu] instruction	Ind-RingerPath	New
Right or wrong of off hook ring rumbling setting instruction	Ind-OffHookRing	New
Terminal loop back test instruction	Ind-TermLoopback	New
LCD monochrome reversing instruction	Ind-DispReverse	New
Right or wrong of key confirmation sound rumbling setting instruction	Ind-KeyConfTone	New
Right or wrong of key reading out setting instruction	Ind-KeyConfVoice	New
Terminal resource liberating instruction	Ind-TermResource	New
Terminal tone level instruction	Ind-TermToneLv	New
Terminal media information control instruction	Ind-MediaCapRtp	New
Terminal media information control instruction 2	Ind-MediaCapDtmf	New
Terminal touch panel control instruction	Ind-TermTouchPanel	New

Instruction notification parameter list that main device for table X-1 KTS-SIP adds (3/3)

Name	Parameter name	Remarks
Option changeability function key lamp state instruction	Ind-OptPkey	New
Option changeability function key display instruction	Ind-OptPkeyDisp	New
Option changeability function key icon display instruction	Ind-OptPkeyIcon	New
Console changeability function key lamp state instruction	Ind-ConsolePkey	New
Console page switch instruction	Ind-ConsolePage	New
Option equipment state instruction	Ind-OptStatus	New
Cordless handset..display..display..instruction.	Ind-BthDispLineN	New (Bluetooth)
Cordless handset cursor flash display instruction	Ind-BthCurFlash	New (Bluetooth)
Cordless handset fixation function key lamp state instruction	Ind-BthFkey	New (Bluetooth)
Cordless handset changeability function key lamp state instruction	Ind-BthPkey	New (Bluetooth)
Cordless handset [ringa] instruction	Ind-BthRinger	New (Bluetooth)
Cordless handset telephone call compulsion cutting instruction	Ind-BtxCallDisc	New (Bluetooth)
Cordless handset specification outside line supplementation instruction	Ind-BthPkeySelect	New (Bluetooth)
Display instruction of cordless handset call duration	Ind-BthTktime	New (Bluetooth)
Bluetooth equipment voice passing instruction	Ind-BtxVoicePath	New (Bluetooth)
Instruction for carrying	Ind-BtxConnect	New (Bluetooth)
Display..presence..display..instruction.	Ind-DispPresN	New (presence)

6.1.6.1. Tone instruction (Ind-Tone)

Parameter that directs terminal from main device rumbling of tone.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Tone = tone type

Name	Definition value	Explanation
Tone type	DT	Dial tone
	SPDT	
	RBT	Ringbakk tone
	CWT	Call-waiting tone
	BT	Busy tone
	ROT	[Rio-da-to-n]
	SST	
	SDT	[Sekandodaiyaruto-n]
	TRG	
	SDTT	
	CWRBT	
	ICPT	
	CSDT	
	TEST	Test tone
	MUSIC	Music tone (holding tone)
	HT	
	No-Tone	There is no tone generation (tone stop).
	T1. T64	It follows the data specified with Info-ToneData.

. usage example .

(1) Ind-Tone=DT when rumbling of dial tone is

directed to terminal

(2) Ind-Tone=T10 when download tone T10 rumbling is directed

to terminal

. condition etc. .

(1) The terminal must control the tone regardless of the state of the session when you receive this parameter.

(2)

6.1.6.2. Display instruction 2 (Ind-Tktime2) of call duration

Parameter that directs terminal from main device display at call duration and update.

. addition message .

It adds to the NOTIFY request.

. format .

Display beginning instruction at call duration

Ind-Tktime2 = display instruction (start) of control lead (disp) *::: second * count: The update instruction of the second (* pos: the line: digit).

Name	Definition value	Explanation
Control lead	disp	Display at call duration
Display instruction	start	When beginning to display it, it is instructed.
Time (hh)	00. 09	. - " is specified when not displaying it.
Amount (mm)	00. 59	
Second (ss)	00. 59	
Update instruction of second	on	Count improvement beginning of second
	off	Count improvement stop of second
Line	1. 4	The display beginning line is specified.
Digit	1. 24	The display beginning digit is specified.

Instruction at display intervals at call duration

Ind-Tktime2 = display instruction (time) of control lead (disp) *: Second (* pos: Line: Digit)

Name	Definition value	Explanation
Control lead	disp	Display at call duration
Display instruction	time	The timer display time is instructed.
Second (ss)	0.	
Line	1. 4	The display beginning line is specified.
Digit	1. 24	The display beginning digit is specified.

Clearness/initialization instruction at call duration

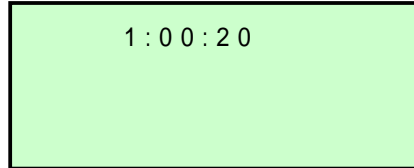
Ind-Tktime2 = control lead (clr/init)

Name	Definition value	Explanation
Control lead	clr	Display clearness of call duration
	init	Counter initialization

. usage example .

- (1) When call duration "20 seconds of 1 hour and 0 minutes" is displayed at the position where default is displayed and the count improvement beginning at the second is directed

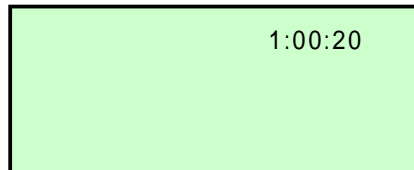
Ind-Tktime2=disp start:01:00:20 count:on



1 : 0 0 : 2 0

- (2) When the display beginning position is assumed to be the 20th character of LCD of one line, call duration "20 seconds of 1 hour and 0 minutes" is displayed, and the count improvement beginning at the second is directed

Ind-Tktime2=disp start:01:00:20 count:on pos:1:20



1:00:20

- (3) When the display beginning position is assumed to be the 24th character of LCD of two lines, call duration "30 seconds of one minute" is displayed, and the count improvement beginning at the second is directed

Ind-Tktime2=disp start:-:01:30 count:on pos:2:24



01:30

- (4) Ind-Tktime2=disp time:5 when call duration that terminal maintains information is displayed for five seconds(5)

Ind-Tktime2=clr when display at call

duration is cleared(6)

Ind-Tktime2=init when call duration

counter is initialized

. condition etc. .

- (1) Display the terminal regardless of the state of the session at call duration when you receive this parameter.
- (2) The terminal must stop the count improvement at call duration by this parameter when you receive the session end demand.
- (3) Do not initialize count information on call duration without the instruction of a main device after end of telephone call.
- (4) The instruction by this parameter must display from a main device other than ..the telephone call.. and the terminal in case of being must display the maintained call duration.
- (5) Assume the LCD display to be "h" though "Time" is directed by this parameter by "Hh".
- (6) Within the range of the display time, continue counting after returning the display to "0:00:00" with the terminal when it is assumed, "9:59:59"0:00:00" - ", and exceeds "9:59:59".
- (7) Omit "Time" display to LCD, and display the terminal from the place specified by "Display beginning position" by "Mm:ss" form when "-" is specified for "Time (hh)" of this parameter.

6.1.6.3. Option function instruction when being talking over the telephone (Ind-OptFuncVc)

Parameter to direct addition function operation while talking over the telephone from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-OptFuncVc = function number: Functional parameter *
function number: Functional parameter * ...

Name	Definition value	Explanation
Function number	f1	DTMF reproduction
	f2	RTP warning sound
	f3	Change in media transport information
	f4. f255	Undefined
Functional parameter	It is different in each function number.	

. usage example .

(1) Ind-OptFuncVc=f1:0 f2:1 without DTMF reproduction when there

is no RTP warning sound reproduction

. condition etc. .

- (1) The functional parameter is described in alphanumeric characters other than space, and the content is different in each function number.
- (2) The terminal must disregard the function number and the functional parameter when it unsupports, and an undefined function number is received.
- (3) The terminal must have both "Mode according to the server" and "Mode of the terminal fixation", and default to the former.
- (4) Do not reproduce DTMF about function number f1 (DTMF reproduction) when this parameter is not notified from a main device while operating it by "Mode according to the server". Moreover, correspond examining it enough when this function is used with the terminal (GW and recording device) served by the DTMF reception.
- (5) Reproduce the RTP warning sound about function number f2 (RTP warning sound) when this parameter is not notified from a main device while operating it by "Mode according to the server".

- DTMF reproduction (f1)

Function number	Function set up information	Explanation
f1	0	DTMF is not reproduced.
	1	DTMF is reproduced.

- RTP warning sound (f2)

Function number	Function set up information	Explanation
f2	0	The RTP warning sound is reproduced.
	1	The RTP warning sound is not reproduced.

- Change in media transport information (f3)

Function number	Function set up information	Explanation
f3	0	Media transport information in SDP offer of the same dialog The change is prohibited.
	1	Media transport information in SDP offer of the same dialog The change is permitted.

6.1.6.4. Telephone call log instruction (Ind-CallLog)

Parameter to direct terminal from main device beginning or end of telephone call log collection.

. addition message .

It adds to the NOTIFY request.

. format .

Control lead Ind-CallLog = * id: Log ID

Name	Definition value	Explanation
Control lead	start	Beginning of telephone call log collection
	end	End of telephone call log collection
Log ID	Character string	16 characters or less

. usage example .

(1) Ind-CallLog=start id:fds9k3iu when telephone

call log collection beginning is directed

(2) Ind-CallLog=end id:fds9k3iu when telephone

call log collection stop is directed

. condition etc. .

- (1) Log ID is assumed to be a character string of 16 characters or less that consists of the alphanumeric character. Terminals are four logs or less Logs of ID should be able to collect at the same time.
- (2) The terminal must notify a main device collected log information by the Info-CallLog parameter at the same time as ending the log collection concerning specified log ID when you receive telephone call log collection end (end) by this parameter.
- (3) Do not set two or more telephone call log collection beginning instructions in one message.
- (4) You may set two or more telephone call log collection end instructions in one message.
- (5) The terminal must clear telephone call log information when logging it on again in some reasons while collecting the telephone call logs.

6.1.6.5. Logon display content instruction (Ind-LogDsp)

Parameter to direct information displayed from main device to terminal on logon screen.

. addition message .

It adds to 403 responses to the REGISTER request from the terminal.

. format .

Ind-LogDsp = display character-code :* display
position number: Display information and
display position number: Display information

Name	Definition value	Explanation
Display character-code	nec-code	NEC original code (Dterm alphanumeric display mode)
	nec-code-rus	NEC original code (Dterm Russian display mode)
	ascii	American Standard Code for Information Interchange
	sjis	Shift-JIS (A typewriter font and a part of original code are contained).
	unicode	Unicode
Display position number	1	..display position.. one (logon ID)
	2	..display position.. two (password)
	3	..display position.. three (soft key 1)
	4	..display position.. four (soft key 2)
	5	..display position.. five (soft key 3)
	6	..display position.. six (soft key 4)
Display information	To maximum n character	

For the terminal with the display ability of 28x4

Display position 1														(input logon ID)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Display position 2														(input password)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

For the terminal with the display ability of 28x3

Display position 1										(input logon ID)									
Display position 2										(input password)									
Display position 3					Display position 4					Display position 5					Display position 6				

. usage example .

- (1) When . LOGON ID : " is directed to the terminal with the display ability of 28x4 at display position 1, . PASSWORD : " is directed at display position 2, . CANCEL " is directed at display position 3, . BACK " is directed at display position 4, . SET " is directed at display position 5, and . OK " is directed to display position 6

Ind-LogDsp=1:LOGON ID :,2:PASSWORD :,3:CANCEL ,4: BACK ,5: SET ,6: OK

```
LOGON ID :
PASSWORD :

CANCEL BACK SET OK
```

- (2) When . LOGON ID : " is directed to the terminal with the display ability of 28x3 at display position 1, . PASSWORD : " is directed at display position 2, . CANCEL " is directed at display position 3, . BACK " is directed at display position 4, . SET " is directed at display position 5, and . OK " is directed to display position 6

Ind-LogDsp=1:LOGON ID :,2:PASSWORD :,3:CANCEL ,4: BACK ,5: SET ,6: OK

```
LOGON ID :
PASSWORD :

CANCEL BACK SET OK
```

. condition etc. .

- (1) You may notify from a main device when the registration of the terminal operates. The terminal must display the logon screen of default when it is not notified.
- (2) The display character-code is assumed to be NEC original code (alphanumeric Japanese syllabary) fixation.
- (3) Specify display information at specification by the normal-width ten character fixation and display position 3-6 for display information at display position 1-2 by the normal-width seven character fixation.
- (4) The terminal must execute the cancellation processing (Again annulling logon input information The REGISTER request is transmitted) when soft key 1 is pressed regardless of display information at display position 3 while displaying the screen directed by this parameter.
- (5) The terminal must execute the back space processing (Input information at the left of the cursor position is deleted by one character) when soft key 2 is pressed regardless of display information at display position 4 while displaying the screen directed by this parameter.
- (6) The terminal must execute the set processing (Input focus is switched) when soft key 3 is pressed regardless of display information at display position 5 while displaying the screen directed by this parameter.
- (7) The terminal must execute the OK processing (Transmit to a main device ending the logon screen, and adding the input authentication information to the REGISTER request) when soft key 4 is pressed regardless of display information at display position 6 while displaying the screen directed by this parameter.

6.1.6.6. Error display content instruction (Ind-ErrDsp)

Parameter to direct information displayed from main device to terminal on error screen.

. addition message .

It adds to the error response to the request message from the terminal or the NOTIFY request from a main device.

. format .

Ind-ErrDsp = display character-code

:*Display position number (1-2): Display information (Display position number (1-2): Display information) display position number (3-6): Control instruction number: Display information Display time-out time

Name	Definition value	Explanation
Display character-code	nec-code	NEC original code (Dterm alphanumeric display mode)
	nec-code-rus	NEC original code (Dterm Russian display mode)
	ascii	American Standard Code for Information Interchange
	sjis	Shift-JIS (A typewriter font and a part of original code are contained).
	unicode	Unicode
Display position number	1	..display position.. one (error notification 1)
	2	..display position.. two (error notification 2)
	3	..display position.. three (soft key 1)
	4	..display position.. four (soft key 2)
	5	..display position.. five (soft key 3)
	6	..display position.. six (soft key 4)
Display information	To maximum n character	
Control instruction number	1	Error display end (soft reset)
	2	Override execution
	3	Override cancellation
Display time-out time	0. 255	Time-out none every second in case of 0

For the terminal with the display ability of 28x4

Display position 1																											
Display position 2																											
Display position 3							Display position 4							Display position 5							Display position 6						

For the terminal with the display ability of 28x3

Display position 1																											
Display position 2																											
Display position 3							Display position 4							Display position 5							Display position 6						

. usage example .

(1) When you notify the terminal with the display ability of 28x4 the server connection error

Ind-ErrDsp=1:Server is busy... ,2:(Retry after 30 seconds) , 6:1: EXIT ,30

```

Server is busy...
(Retry after 30 seconds)

EXIT

```

(2) When you notify the terminal with the display ability of 28x3 the override confirmation screen

Ind-ErrDsp=1:Override ? ,
3:2: YES ,6:3: NO ,0

```

Override ?

Y E S   N O

```

. condition etc. .

- (1) You may notify from a main device when the override of the terminal operates. The terminal must display the override confirmation screen of default when it is not notified.
- (2) The display character-code is assumed to be NEC original code (alphanumeric Japanese syllabary) fixation.
- (3) Specify display information at specification by the normal-width 28 character fixation and display position 3-6 for display information at display position 1-2 by the normal-width seven character fixation.
- (4) Continue displaying to the display directed by this parameter with the terminal until time that whether a soft key for which "Control instruction number" was specified was pressed was specified by "Display time-out time" passes.
- (5) When "Display time-out time" is . 0", the terminal continues displaying until a soft key for which "Control instruction number" is specified is pressed. Add one even if the soft key display of a main device that specifies "Control instruction number" for this parameter to do the error screen in the time-out is the lowest. Disregard this parameter in the terminal if it is not added.
- (6) Anything must not control the soft key display not directed by this parameter even if a soft key that doesn't display anything at the display position by the terminal and corresponds is pressed.

6.1.6.7. Terminal information addition instruction (Ind-AddTermType)

Parameter to add terminal information (Info-TermType) to all messages transmitted from terminal without fail and to demand.

. addition message .

It adds to 200 responses or NOTIFY requests to the REGISTER request with the attestation.

. format .

Ind-AddTermType = addition instruction

Name	Definition value	Explanation
Addition instruction	on	Terminal information is added (default).
	off	Terminal information is not added.

. usage example .

(1) Ind-AddTermType=on when directing to add

terminal information(2)

Ind-AddTermType=off when directing not to add

terminal information

. condition etc. .

- (1) When this parameter is made "Terminal information is added", the message (INVITE request/200 responses) with the message body sent from the terminal is transmitted by the multi part.
- (2) Note that security decreases to the unlawful computer access of the identity theft etc. because a partial encryption is not applied as for the message that doesn't contain the enhancement parameter sent from the terminal when this parameter is made "Terminal information is not added".
- (3) The terminal must work in "Terminal information is added" mode when you do not receive this parameter.
- (4) The advantage when this parameter is made "Terminal information is not added" is to decrease the message penetration processing load when a main device is made proxy. When the message penetrates, unnecessary Perth can be avoided because the message sent from the terminal doesn't become a multi part. However, the examination is needed about security to the unlawful computer access of the identity theft etc. besides the encryption.

6.1.6.8. Short ring instruction (Ind-ShortRing)

Parameter to direct terminal from main device control of original tone.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-ShortRing = tone type: Specification at cycle: The first frequency (the second + frequency)
(priority specification of *: End notification)

Name	Definition value	Explanation
Tone type	8hz	No 8Hz modulation or modulation
	16hz	16Hz modulation
	door	Intercom
	envl	Envelope
Specification at cycle	0	Turning off always
	1	0.125sON
	2	0.125sON-0.125sOFF-0.125sON
	3	0.125sON-0.125sOFF-0.125sON-0.125sOFF-0.125sON
	4	0.125sON-0.125sOFF-0.125sON-0.125sOFF-0.125sON-0.125sOFF-0.125sON
	5	0.25sON
	6	0.25sON-0.25sOFF-0.25sON
	7	0.25sON-0.25sOFF-0.25sON-0.25sOFF-0.25sON
	8	0.25sON-0.25sOFF-0.25sON-0.25sOFF-0.25sON-0.25sOFF-0.25sON
	9	0.375sON
	10	0.375sON-0.375sOFF-0.375sON
	11	0.375sON-0.375sOFF-0.375sON-0.375sOFF-0.375sON
	12	0.5sON
	13	0.5sON-0.5sOFF-0.5sON
	14	1sON
	15	reserve
The first frequency	1. 3999	
The second frequency	1. 3999	
Priority specification	on	It gives priority to the short ring rumbling.
	off	It gives priority to rumbling usually.
End notification	on	The short ring rumbling end is notified.
	off	The short ring rumbling end is not notified.

. usage example .

(1) Ind-ShortRing=8hz:1:440+494 when short ring that synthesizes 8Hz modulation/125msON/frequency

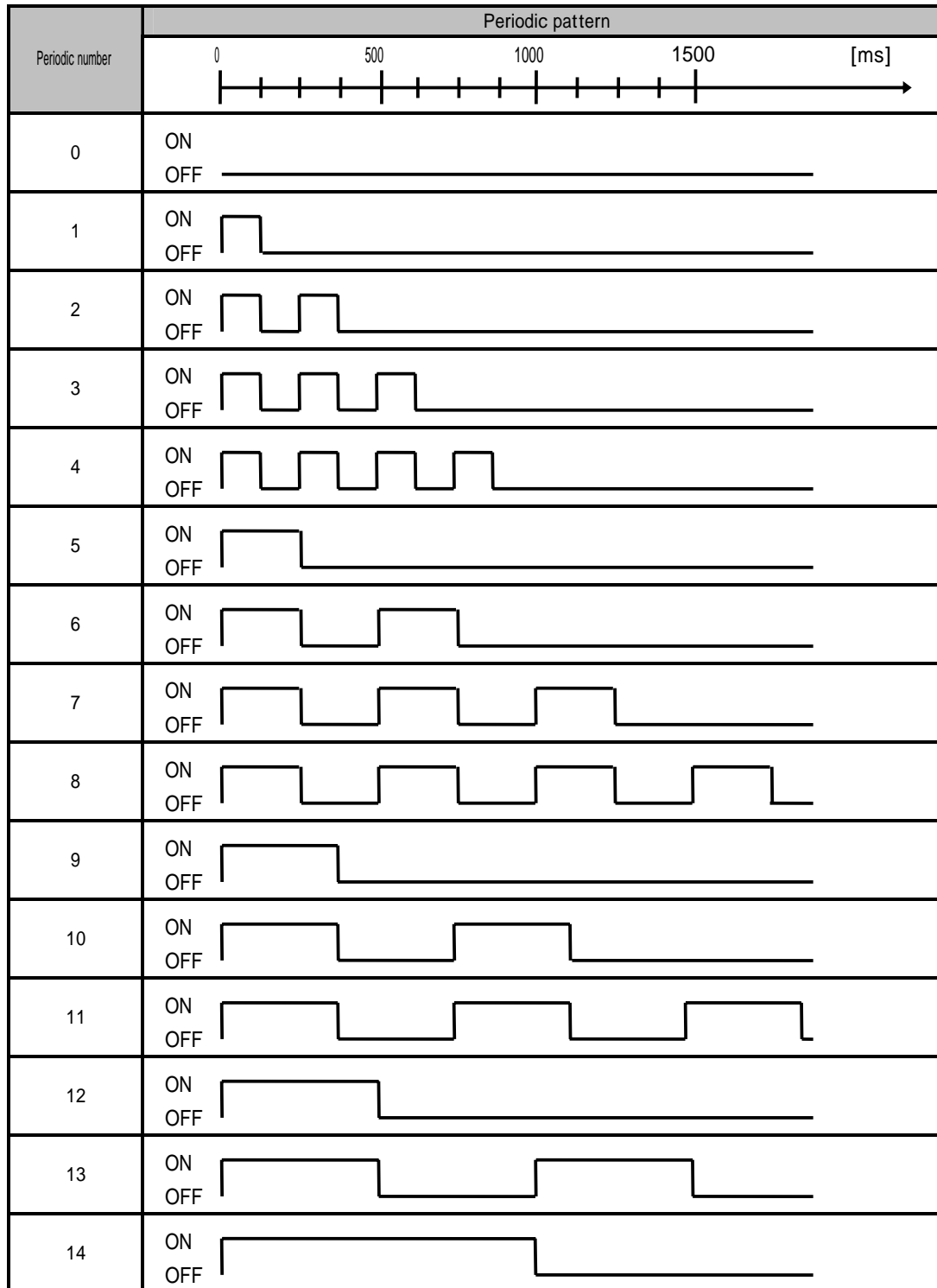
440Hz to 494Hz is directed

(2) When it gives priority to the short ring rumbling, and the end notification is demanded

Ind-ShortRing=8hz:2:440+494 on:on

. condition etc. .

- (1) The terminal must work according to the content received at the end when you receive the new, short ring rumbling demand while a short ring is rumbling.
- (2) The volume control of a short ring synchronizes with the volume of the ring.
- (3) This parameter is enabled to be usually transmitted regardless of the state of rumbling.
- (4) The terminal must transmit the Info-ShortRingEnd parameter to a main device after the short ring rumbling ends when "On" is specified for "End notification" of this parameter.



6.1.6.9. DTMF signal transmission instruction 2 (Ind-SendDTMF2)

Parameter to direct terminal from main device DTMF signal sending to other party who is talking over the telephone.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-SendDTMF2 = transmission method

Name	Definition value	Explanation
Transmission method	InBand	DTMF signal notification by considering voice
	OutBand	DTMF signal notification by RFC2833
	Both	DTMF is transmitted by a method considered the voice and RFC2833 both.

. usage example .

(1) In case of the considering sound

Ind-SendDTMF2=Inband

(2) For RFC2833

Ind-SendDTMF2=OutBand

(3) In case of both considering and RFC2833

Ind-SennDTMF2=Both

. condition etc. .

(1) It is notified from Serer to UA.

(2) DC that can be used is the following.

0 1 2 3 4 5 6 7 8 9 * #

(3) UA must not disregard this parameter even when you receive this parameter when RTP is being transmitted.

(4) UA must disregard this parameter when the method of transmitting the uncorrespondence is specified.

However, UA must transmit DTMF when UA that supports only the method of transmitting one DTMF receives the both specification by the supported method.

(5) UA must execute the transmission of DTMF by the method specified whenever Digit Key is pushed after this parameter is received. Moreover, the digit key event must not stop.

6.1.6.10. Display..display..instruction.

Parameter to direct terminal from main device display information or state information on specified line of display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispLineN = line - number: Control lead state information); Display information (CRLF)

Name	Definition value	Explanation
Line - number	1. 4	
Control lead	Dsp	Character string display
	Clr	State clearness
	Blk	Blinking (Blink)
	Rvs	Reversing (Reverse)
	Brv	Reversing blinking
	Gry	Gray out (Grayout)
State information (HE X rating acceptable)	0	Control release
	1	Control beginning
Display information	To maximum n character	

. usage example .

(1) Ind-DispLineN=1:Dsp when three lines' worth of display information is directed to terminal

that can be displayed by 28 characters a line by batch: Telephone book 10/500
(CRLF) Ind-DispLineN=2:Dsp:1 . Taro Suzuki (CRLF) Ind-DispLineN=3:Dsp:2 . Jiro
T a n a k a (C R L F) (2)

```
Telephone book 10/5001.Taro
Suzuki2.Jiro
Tanaka
```

When reversing, displayed "1. Taro Suzuki" .. 2.. ..Susumu.. is continuously

written in the second line Ind-DispLineN=2:Rvs:111111111100000000000000000000
The hexadecimal mark of Ind-DispLineN=2:Rvs:0xFFC0000.

```
Telephone book 10/500
1.Taro Suzuki2.Jiro
Tanaka
```

- (3) When reversing "1. Taro Suzuki" continuously displayed in the second line is released, and "2. Jiro Tanaka" displayed in the third line is reversed

Ind-DispLineN=2:Clr

Hexadecimal mark of Ind-DispLineN=3:Rvs:0xFFC0000

Telephone book 10/5001.Taro S u z u k i 2.Jiro Tanaka

. condition etc. .

- (1) The terminal must maintain latest display information and state information on the display specification line regardless of the state of the session when you receive this parameter. Display information maintained when the display display changes from a local control into a main device control again.
- (2) Maintain various state information on each line directed from the main device side respectively on the terminal side. As a result, a main device can direct two or more state information more than once, and clear state information from a main device specifying it when you do not want to reflect state information instructed to new display information so that the terminal may maintain state information regardless of display information.
- (3) Show state information by one byte of one byte of display information worth at a binary mark. Show state information at the hexadecimal mark by the character string that . 0x" continuously converted a binary mark into the hexadecimal mark.
- (4) Mean no use be gray out, and cannot execute be dynamic operations such as reversing and blinking at the same time. However, when the state of reversing and blinking is directed even when the gray out is released, the state is restarted.

6.1.6.11. Soft key n display instruction (Ind-DispSkeyN)

Parameter to direct terminal from main device display information on soft key.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispSkeyN = key number: Control lead: Display information (CRLF)

Name	Definition value	Explanation
Key number	1. 4	
Control lead	Dsp	Character string display
	Clr	State clearness
	Blk	Blinking (Blink)
	Rvs	Reversing (Reverse)
	Brv	Reversing blinking
	Gry	Gray out (Grayout)
Display information	To maximum n character	

. usage example .

(1) Ind-DispSkeyN=1:Dsp:MIC(CRLF) when display

information all soft keys is
switched Ind-DispSkeyN=2:Dsp: (CRLF)
Ind-DispSkeyN=3:Dsp: (CRLF)
Ind-DispSkeyN=4:Dsp:>>>(CRLF)

(2) When you blink display information on soft key 1

Ind-DispSkeyN=1:Blk

. condition etc. .

- (1) The terminal must maintain latest display information and state information on specification soft key number regardless of the state of the session when you receive this parameter. Display information maintained when the display display changes from a local control into a main device control again.
- (2) Maintain various state information on each soft key directed from the main device side respectively on the terminal side. As a result, a main device can direct two or more state information more than once, and clear state information from a main device specifying it when you do not want to reflect state information instructed to new display information so that the terminal may maintain state information regardless of display information.
- (3) Each control lead is assumed to be specification with each soft key. Moreover, mean no use be gray out, and cannot execute be dynamic operations such as reversing and blinking at the same time.

6.1.6.12. Cursor flash display instruction (Ind-DispCurFlash)

Parameter to direct terminal from main device flash display of display cursor.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispCurFlash = control lead: Display line - number: Display digit number

Name	Definition value	Explanation
Control lead	Start	Flash operation beginning
	Stop	Flash operation stop
Display line - number	1. 4	
Display digit number	1. 28	

. usage example .

(1) Ind-DispCurFlash=start:1:10 when cursor flash is executed at

position of the tenth digit of one line

(2) When you stop the cursor flash

Ind-DispCurFlash=stop

. condition etc. .

- (1) Stop the cursor flash operation regardless of the line specification or the digit specification when . stop" is directed by this parameter.
- (2) Move the position of the cursor to a new place when . start" is newly directed to the different location by this parameter with the cursor flash display has already been executed and continue the cursor flash operation.
- (3) When the cursor flash is directed, the terminal alternately displays character at a specified position and " _ (under bar)". Moreover, only one cursor flash is displayed on the LCD screen.
- (4) When the em-size Chinese character is displayed because this parameter becomes an effect on the one-byte character, attention is needed.

6.1.6.13. Display information clearness instruction (Ind-DispClear)

The parameter in the terminal from a main device to direct the equipment that mounts the display including the option the clearness of all display information.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispClear = clear object equipment: Clear object information

Name	Definition value	Explanation
Clear object equipment	All	All equipment that mount display
	Main	The main display
	Sub	Sub-display (DESILESS)
	Side	Side option display (24ADM)
	Bottom	[Botomuobushondei;supurei] (BCH)
Clear object information	All	All display information
	Char	Textual information (The Blink/Reverse/CursorFlash control is included).
	Icon	Icon (The Blink control is included).

. usage example .

(1) Ind-DispClear=M-disp:all when all information on

the main display is cleared

(2) When you clear all display display information including the option equipment

Ind-DispClear=all:all

. condition etc. .

- (1) It means non-display in case of the replacement with the space character, and the icon if the clearness of display information by this parameter is a character representation.
- (2) The telephone call count by display instruction (Ind-Tktime/Tktime2/Tktime3) parameter of call duration is not cleared by the instruction by this parameter.
- (3) Interrupt the display when you receive this parameter while displaying a local volume.

6.1.6.14. Length double size line display instruction (Ind-DispDouble)

Parameter to direct terminal from main device length double size display of specified line. Line of four lines of the state of the display how many is concealed and line how many is made a double height size can be specified usually.

. addition message .

It adds to the NOTIFY request.

. format .

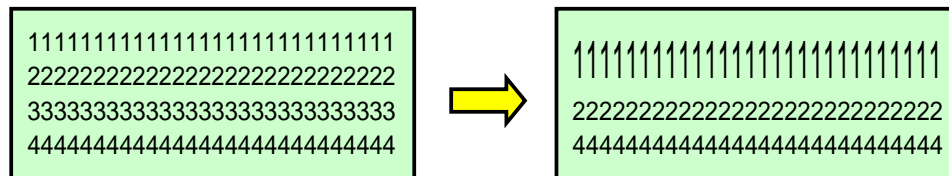
Ind-DispDouble = control lead: Length double size line - number: Non-display line - number

Name	Definition value	Explanation
Control lead	ON	The length double size display begins.
	OFF	The length double size display is released.
Length double size line - number	1. 4	
Non-display line - number	1. 4	

. usage example .

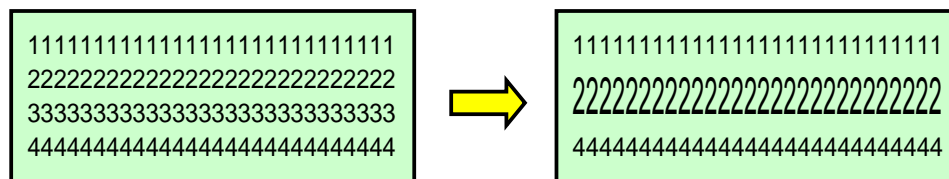
(1) Erase the third line under the display of LCD information and the first line when you display the length double size

Ind-DispDouble=ON:1:3



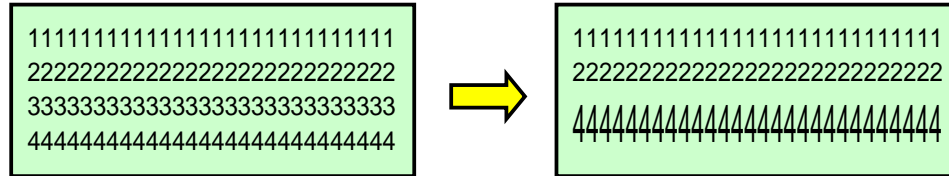
(2) Erase the third line under the display of LCD information and the second line when you display the length double size

Ind-DispDouble=ON:2:3



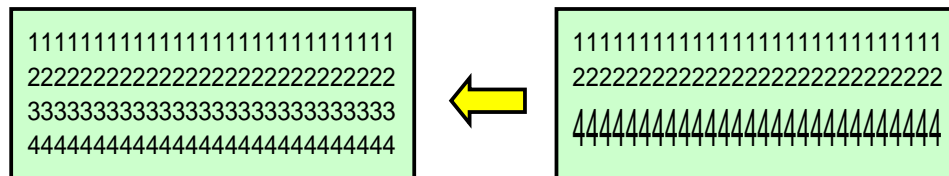
(3) Erase the third line under the display of LCD information and the fourth line when you display the length double size

Ind-DispDouble=ON:4:3



(4) When you release the double size display of the terminal

Ind-DispDouble=OFF



. condition etc. .

- (1) The terminal must judge the direction of the length double size from "Length double size line - number" and "Non-display line - number", and display LCD information three lines other than "Non-display line - number" of the reception again when you receive this parameter.
- (2) Maintain LCD information four lines with the terminal while executing the length double size display.
- (3) Release the length double size display when changing into the terminal local control screen of the menu display etc. while displaying the length double size. However, restore the length double size display when it returns to a main device control.
- (4) When "Length double size line - number" of this parameter and "Non-display line - number" are the same, the instruction is assumed to be invalid.

6.1.6.15. Clock display format instruction (Ind-TimeDispFmt)

Parameter to direct terminal from main device display form of clock information.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TimeDispFmt=fmt: 表示フォ. マット定義 * (Time: Time display form *) (pos: Display beginning digit: Display beginning line *) (AM0: Display specification at AM0 o'clock *) (PM0: Display specification at PM0 o'clock)

Name	Definition value	Explanation
Display format definition	YYYY	Christian era (age)
	MM	The moon (figure display)
	MMM	The moon (character representation)
	DD	Day (figure display)
	WWW	A day of the week (character representation)
	hh	Time (figure display)
	mm	Amount (figure display)
	AP	AM/PM display
Time display form	24	24 time displays
	12	12 time displays
Display beginning digit	1. 28	The display beginning digit that displays the clock is specified.
Display beginning line	1. 4	The display beginning line that displays the clock is specified.
Display specification at AM0 o'clock	ON	"0 o'clock" Display
	OFF	"12/24 o'clock" Display
Display specification at PM0 o'clock	ON	"0 o'clock" Display
	OFF	"12 o'clock" Display

. usage example .

(1) When the display beginning position is specified for the fourth character of LCD of three lines, and it directs it like displaying clock information by the format of . 2006 JUL 24 13:00"

Ind-TimeDispFmt=fmt:[YYYY MMM DD hh:mm] time:24 pos:3:4

2006 JUL 24 13:00

(2) Ind-TimeDispFmt=fmt when directing it like displaying clock information by

format of . 1:00 7-24 PM": Hh:mm MM-DD AP Time:12

1:00 7-24 PM

(3) Ind-TimeDispFmt=fmt when directing it like displaying clock information by

format of . 1:00 7-24 MON": Hh:mm MM-DD WWW Time:12

1:00 7-24 MON

(4) Ind-TimeDispFmt=fmt when directing it like displaying clock information by format

of . PM12:00 7-24 MON": APhh:mm MM-DD WWW Time:12 PM0:OFF

PM12:00 7-24 MON

. condition etc. .

- (1) The terminal must display the clock of default when you do not direct the clock display form from a main device.
- (2) Display the terminal in a past clock display line (PBX 2 line and KTS 1 lines) when you do not specify the display beginning position.
- (3) "Display specification at AM0 o'clock" is specification whether for 12/24 time displays to display "AM0 o'clock".
- (4) "Display specification at PM0 o'clock" is specification whether for 12 time displays to display "PM0 o'clock".
- (5) Display ""And" - " specified in the display format definition on the display as it is.
- (6) Distinguish the capital letter and the small letter about the character string in the display format definition.
- (7) It becomes a character string display for (MMM) of the figure display and three characters or more about the moon display in case of two characters (MM). Only either is enabled to be specified.

6.1.6.16. Right or wrong of clock display setting instruction (Ind-TimeDisp)

Parameter to direct terminal from main device right or wrong setting of clock display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TimeDisp = right or wrong of display

Name	Definition value	Explanation
Right or wrong of display	off	The time display is invalidated.
	on	The clock display is made effective.

. usage example .

(1) Ind-TimeDisp=off when clock

display is invalidated

. condition etc. .

(1) A main device non-displays the . off" direction and the clock display by using this parameter when some characters are displayed in clock display LCD line.

(2) Direct . on" by using this parameter when you return it to the clock display.

6.1.6.17. Fixed lamp state instruction (Ind-Lamp2)

Parameter to direct terminal from main device state of fixed lamp.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Lamp2 = fixed lamp number: Lamp state number: Lamp color specification number

Name	Definition value	Explanation
Fixed lamp number	1. 8	
Lamp state number	0. 7	0: OFF 1: Slow Flash 2: Wink 3: Rapid Wink 4: Burst Wink 5: Interrupted Lit 6: Interrupted Wink 7: Steady
Lamp color specification number	0. 7	0: Gradation 1: Red 2: Green 3: Blue 4: Purple 5: Yellow 6: Light blue 7: White

. usage example .

(1) When the steadiness is displayed in blue, Ind-Lamp2 = 1:7:3

of fixed lamp number 1.

(2) Ind-Lamp2=3:0 when fixed lamp number

3 is turned off

. condition etc. .

(1) The terminal must change the state of a fixed lamp regardless of the state of the session when you receive this parameter.

(2) Disregard it when you receive the state instruction of a fixed lamp that doesn't exist in the terminal.

(3) According to Info-Lamp parameter of fixed lamp number notified from terminal(4)

Give priority to the instruction to the arrival of a message notification function when you achieve the arrival of a message notification function and the message waiting lamp function with one fixed lamp.

6.1.6.18. Personal ID maintenance instruction (Ind-RemainPID)

Parameter to direct not to delete and to leave from main device to terminal user ID for attestation. When logging off, user ID and the password are deleted when this parameter is not specified.

. addition message .

It adds to 200 responses to the REGISTER request (The value of the Expires header is 0) transmitted from the terminal when logging off.

. format .

Ind-RemainPID

. usage example .

(1) The personal ID is Ind-RemainPID in logoff because it omits the personal ID input when being log it on next time when not deleting it.

. condition etc. .

- (1) This parameter is an option. Notify a main device by the XXXX parameter when the terminal corresponds to this option.
- (2) It is assumed an effective parameter only in a manual log on mode.
- (3) In a manual log on mode, the terminal preserves neither the name of the user nor the password used when logging it on in the nonvolatile memory.

6.1.6.19. Terminal operation beginning instruction (Ind-TermWakeup)

To direct it, the parameter such as the notifications of a main device doing all the collection completion to the terminal from a main device as for terminal information, and beginning of usual operation of the terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermWakeup

. usage example .

(1) Ind-TermWakeup when collection of terminal information by ReqInfo-TermInfo and ReqInfo-TermInfo2
is completed

. condition etc. .

(1) The use of the telephone function enters a possible state as for the terminal when this parameter is received.

6.1.6.20. Instruction of method of controlling volume of terminal (Ind-TermVolCtrl)

Parameter to direct terminal from main device control techniques of volume.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermVolCtrl = control techniques volume compulsion instruction)

Name	Definition value	Explanation
Control techniques	Local	Local volume control (terminal automatic operation judgment)
	System	Control of volume of system (volume key notification)
Volume compulsion instruction	V1	Handset
	V2	Speaker
	V3	Speaker Ring
	V4	Off-Hook Speaker Ring
	V5	LCD Contrast
	V6	BGM
	V7	Headset Ring
	V8	Off-Hook Headset Ring

. usage example .

(1) Ind-TermVolCtrl=Local when terminal does volume

control by automatic judgment

(2) Ind-TermVolCtrl=Local:V7 when directing only to be able to control volume

of head set ring compulsorily

(3) When a main device controls the volume or a main device uses the volume key
by another usage

Ind-TermVolCtrl=System

. condition etc. .

- (1) Judge by the automatic operation though the terminal changes which volume according to the state when the volume key is pressed when . Local" is specified for control techniques by this parameter.
- (2) The terminal must not do an automatic judgment of the volume control when . Local" and the volume compulsion instruction are specified for control techniques by this parameter, and control the specified volume.
- (3) Volume automatic operation notification setting (F6) of system basic set up information (Info-SysConfig) parameter must not notify a main device level of the volume of the terminal individual notification (Info-TermVolLv) parameter automatically though the terminal controls the volume when . Local" is specified for control techniques by this parameter in "OFF".
- (4) Volume automatic operation notification setting (F6) of system basic set up information (Info-SysConfig) parameter notifies, and the terminal must control the volume, and notify a main device level of the volume of the terminal individual notification (Info-TermVolLv) parameter automatically when . Local" is specified for control techniques by this parameter in "ON".
- (5) The terminal must not control the volume, and notify a main device the volume key pressing event or the cursor key pressing event when . System" is specified for control techniques by this parameter.
- (6) The terminal must do the automatic judgment control of a local volume when this parameter is not directed from a main device.

6.1.6.21. Level of volume of terminal instruction (Ind-TermVolLv)

Parameter to direct terminal from main device volume level.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermVolLv = volume number: Volume level *
 volume number: Volume level * . . .

Volume number	Volume level	Initial value	Explanation
V1	-14. 22 [dB]	0[dB]	Handset (14dB is the maximum at Article OFF 508).
V2	-36. -6 [dB]	-12[dB]	Speaker
V3	-60. 0 [dB]	-20[dB]	Speaker Ring
V4	0. -24 [dB]	-20[dB]	Off-Hook Speaker Ring
V5	1. 8 5		LCD Contrast
V6	-36. -6 [dB]	-22[dB]	BGM
V7	0. -48 [dB]	-20[dB]	Headset Ring
V8	0. -24 [dB]	-20[dB]	Off-Hook Headset Ring

. usage example .

(1) Ind-TermVolLv=V1:-14 when hand set volume

is directed to -14dB

. condition etc. .

- (1) V1, V2, V4, V6, and V8 must specify 2dB step, V3, and V7 in 4dB step.
- (2) The volume level of Off-Hook Speaker Ring(V4) is assumed to be relative value specification for the volume level of Speaker Ring(V3).
- (3) The volume level of Off-Hook Headset Ring(V8) is assumed to be relative value specification for the volume level of Headset Ring(V7).

6.1.6.22. Range of volume of terminal specification instruction (Ind-TermVolRange)

Parameter that specifies adjustable range of volume from main device for terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermVolRange = volume number: Minimum value of volume: Volume maximum value

Volume number	Range of volume	Explanation
V1	-14. 14 [dB]	Handset
V2	-36. -6 [dB]	Speaker

. usage example .

(1) Ind-TermVolRange=V1:-14:0 when adjustable range of hand set volume is

specified from -14dB for 0dB

(2) When specifying it from ..0dB.. ..adjustable range of volume of the speaker.. - from 14dB ..adjustable range of the hand set volume.. -36 the dB for 0dB

Ind-TermVolRange=V1:-14:0 V2:-36:0

. condition etc. .

- (1) Specify V1 and V2 in 2dB step.
- (2) When a value that is larger than "Volume maximum value" is specified for "Minimum value of the volume", the terminal disregards this parameter.
- (3) "Minimum value of the volume" And, the terminal works by the maximum value fixation (It is not possible to adjust it) when a value that is larger than the setting range of the volume is specified for "Volume maximum value".
- (4) When the setting of Article 508 mode of system basic set up information (Info-SysConfig) parameter is "ON", the adjustment from the maximum value by this parameter to +8dB is enabled.
- (5) When a volume level outside the restriction range of this parameter is specified by level of the volume of the terminal instruction (Ind-TermVolLv) parameter, the terminal judges the instruction to be invalid.

6.1.6.23. Instruction of display of volume of terminal (Ind-TermVolDisp)

Parameter that directs terminal from main device right or wrong of local volume display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermVolDisp = display control: Display mode

Name	Definition value	Explanation
Display control	Off	There is no local volume display.
	On	There is a local volume display.
Display mode	System	There is a changeable, local volume display (default).
	Alpha	There is fixation and local a volume display (alphabet).
	Kanji	There is fixation and local a volume display (Chinese character).
	Kana	There is fixation and local a volume display (katakana).

. usage example .

(1) Ind-TermVolDisp=On:System when name that main device directed local

volume display of terminal is used

(2) Ind-TermVolDisp=On:Kanji when Chinese character name is used for

local volume display of terminal

(3) Ind-TermVolDisp=Off when local volume of

terminal is not displayed

. condition etc. .

(1) The terminal must display the name directed from a main device by name of the display of the volume of the terminal information (Info-TermVolName) parameter when . System" is specified for a display mode by this parameter. The terminal must display the alphabet when you do not receive the name of the display of the volume of the terminal information parameter.

(2) When . On" is specified for the display control by this parameter, the terminal displays a local volume on the display by the volume key or the cursor key upper and lower pressing detection. The display continuance is assumed to be two seconds after the key pressing is ended.

(3) Receive the parameter of the instruction related to the display by a main device while displaying a local volume.

6.1.6.24. Terminal protection control instruction (Ind-TermProtect)

Parameter that directs terminal from main device control of terminal protection.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermProtect = right or wrong of protection setting: Protection instruction

Name	Definition value	Explanation
Right or wrong of protection setting	Enable	The protection function is made effective.
	Disable	The protection function is invalidated.
Protection instruction	I	Initialization (clear password and compulsion release)
	R	Protection compulsion release
	L	Data lock (individual information)
	M	Data lock (corporate information)
	H	Telephone service lock

. usage example .

(1) Ind-TermProtect=Enable:H when directing to execute terminal
protection at High level

(2) When you direct the release of the terminal protection

Ind-TermProtect=Enable:R

(3) Ind-TermProtect=Disable when terminal protection function of
common telephone is invalidated

. condition etc. .

(1) When this parameter is received

6.1.6.25. Multicast RTP instruction (Ind-MulticastRTP)

Parameter to direct terminal from main device multicast RTP control.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-MulticastRTP = multicast object: Control lead * Internet Protocol address: Port number

Name	Definition value	Explanation
Multicast object	EHM	External holding tone (Extra Hold Music)
	BGM	BGM
	PAGING	Paging
Control lead	send	Multicast RTP is transmitted.
	recv	Multicast RTP is received.
	stop	Multicast RTP is stopped.
Internet Protocol address		Multicast Internet Protocol address
Port number		Multicast port number

. usage example .

(1) Ind-MulticastRTP=EHM:recv xxx.xxx.xxx.xxx:yyyy when multicast RTP

reception is directed for external reservation sound listening

(2) Ind-MulticastRTP=PAGING:send xxx.xxx.xxx.xxx:yyyy when multicast RTP

transmission is directed to do paging from terminal

. condition etc. .

(1) When this parameter is received

6.1.6.26. Media mixing instruction (Ind-MediaMixing)

Parameter to direct terminal from main device control of media mixing.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-MediaMixing = control lead

Name	Definition value	Explanation
Control lead	on	Media mixing beginning
	off	Media mixing stop

. usage example .

(1) Ind-MediaMixing=on when media mixing

beginning is directed

(2) Ind-MediaMixing=off when media

mixing stop is directed

. condition etc. .

(1) When this parameter is received

6.1.6.27. Power failure mode instruction (Ind-PowerSave)

Parameter to suppress power consumption of shift direction to state of power saving and terminal from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-PowerSave = function for power saving: Power saving instruction * function for power saving: Power saving instruction * . . .

Name	Definition value	Explanation
Function for power saving	All	All functions for power saving
	Ring	Ring volume function
	Speaker	Speaker volume function
	Led	LED lighting function
	Handsfree	Hands-free function
	Backlit	Backlight function
Power saving instruction	ON	Power saving is executed (The content of power saving is different in each function).
	OFF	Power saving is released.

. usage example .

(1) Ind-PowerSave=All:ON when all functions of terminal for power saving

are put into state of power saving

(2) Ind-PowerSave=Ring:ON Speaker:ON when Ring volume function and Speaker volume function of

terminal are put into state of power saving

(3) Ind-PowerSave=All:OFF when all power savings

of terminal are released

. condition etc. .

(1) When this parameter is received, the content of processing in each function is as follows.

Function for power saving	Content of power saving
Ring Volume	Maximum Volume value is set to -20 the dB.
Speaker(BGM) Volume	Maximum Volume value is set to -20 the dB.
LED	The brightness of LED is decreased to usual 1/2(always eco-mode).
Handsfree	Hands-free operation is prohibited.
Backlit	The backlight lighting is prohibited (As well as Disable of Ind-TermBacklit). - Do you set it for desktop Sophisticated terminal at a minimum level?

(2) Operate by former Volume value when usually restoring it from the state of power saving in the state.

6.1.6.28. Eco-mode instruction (Ind-EcoMode)

Parameter that specifies time until shifting from main device for terminal to change into power saving mode when state of idol during fixed time continues.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-EcoMode = power saving instruction: Power saving shift time

Name	Definition value	Explanation
Power saving instruction	ON	It shifts to the power saving mode.
	OFF	It doesn't shift to the power saving mode.
Power saving shift time	0. 120	The unit shifts at once in case of the amount and 0.

. usage example .

(1) Ind-EcoMode=ON:60 when shifting to power saving mode when state of idol

for one hour continues

(2) Ind-EcoMode=OFF when not shifting

to power saving mode

. condition etc. .

(1) Usually lower the brightness of light/blinking LED to 1/2 at time and control the terminal when this parameter is received and it shifts to the power saving mode.

(2) Restore it to the ordinary mode when you detect the state variation of the voice passing control, the key pressing detection or ring/hook switch in the state of the power saving mode.

6.1.6.29. Terminal backlight control instruction (Ind-TermBacklit)

Parameter that directs terminal from main device control of backlight.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermBacklit = right or wrong of backlight function

LCD backlight control: KEY backlight control

Lighting time-out time

Name	Definition value	Explanation
Right or wrong of backlight function	Enable	The backlight function is effective.
	Disable	Backlight function invalidity
LCD backlight control	ON	Lighting instruction
	OFF	Turning off instruction
Key backlight control	ON	Lighting instruction
	OFF	Turning off instruction
Lighting time-out time	0	Time-out prohibition (always lighting)
	1. 60	Every second

. usage example .

(1) When a main device sets the backlight lighting time-out time at five seconds (The instruction of turning off the backlight is included at the same time)

Ind-TermBacklit=Enable:OFF:OFF:5

(2) When a main device always sets the backlight to lighting (The instruction of the backlight lighting is included at the same time)

Ind-TermBacklit=Enable:ON:ON:0

(3) Ind-TermBacklit=Disable when main device invalidates

backlight function of terminal

. condition etc. .

- (1) The ON/OFF control of the backlight is done with the terminal usually. It is time when the condition that the terminal shifts the state of the backlight from turning off to turning on detected the key pressing or the hook switch state change in case of receive ring rumbling ON or voice passing ON instruction from a main device by the terminal in the state of the idol.
- (2) "Right or wrong of lighting" and "Lighting time-out time" are parameters that direct the method of controlling the backlight in a local terminal from a main device, and "Lighting control" is parameters that in real time direct backlight ON/OFF control.
- (3) As for a desktop terminal, the LCD/KEY backlight operation cooperates. As for a wireless terminal, the backlight control of LCD and KEY is independent.

6.1.6.30. DESI-less page switch instruction (Ind-DesilessPage)

Parameter to direct part DESI-less of terminal from main device page switch.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DesilessPage = page switch restriction

Page switch control: Page icon control: Page number

Name	Definition value	Explanation
Page switch restriction	ON	Page fixation
	OFF	The page is changeable.
Page switch control	Terminal	Terminal local control
	System	Main device control (The terminal executes the key notification).
Page icon control	Terminal	Terminal local control
	System	Main device control
Page number	0	There is no respect switch instruction.
	1. 4	

. usage example .

(1) Ind-DesilessPage=OFF:Terminal:Terminal:2 when part

DESI-less of terminal is switched to two externals

. condition etc. .

- (1) The terminal must transmit the Info-DesilessPage parameter as a response after executing the respect switch in the part DESI-less when the respect switch of DESI-less is directed by this parameter.
- (2) The terminal must ..page switch restriction.. work by default as "Terminal local control" when this parameter is not transmitted from a main device .."Page changeability" and page switch control.. .."Terminal local control" and page icon control...
- (3) "Page switch restriction", "Page switch control", and "Page icon control" are parameters that direct the method of switching the DESI-less page in a local terminal from a main device, and "Page number" is parameters that in real time direct the page number of DESI-less to be displayed.

6.1.6.31. DESI-less page icon control instruction (Ind-DesilessPagelcon)

Parameter to direct part DESI-less of terminal from main device control of page icon.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DesilessPagelcon=P1: Right or wrong of display: Control lead * P2: Right or wrong of display: Control lead * P3:
Right or wrong of display: Control lead * P4: Right or wrong of display: Control lead

Name	Definition value	Explanation
Right or wrong of display	ON	Page icon display
	OFF	Page icon non-display
Control lead	Dsp	Display usually
	Blk	Blinking (Blink)
	Rvs	Reversing (Reverse)
	Brv	Reversing blinking

. usage example .

(1) When page icons of four all are displayed in the part DESI-less of the terminal, and page icons of the front page eyes are reversed

Ind-DesilessPagelcon=P1:ON:Rvs P2:ON:Dsp P3:ON:Dsp P4:ON:Dsp

(2) When page two icons are displayed in the part DESI-less of the terminal, and page icon of two externals is blinked

Ind-DesilessPagelcon=P1:ON:Dsp P2:ON:Blk P3:OFF P4:OFF

. condition etc. .

- (1) When "Page icon control" of DESI-less page switch instruction (Ind-DesilessPage) parameter is only "Main device control (System)", this parameter is assumed to be effective.
- (2) "Page icon control" displays and when this parameter is not transmitted from a main device by "Main device control (System)", the terminal doesn't display page icon by default.
- (3) F11 of system basic set up information (Info-SysConfig) parameter displays and when "0(terminal control)", and "Page icon control" is "Terminal local control (Terminal)", the terminal displays page icons of four all by default.

6.1.6.32. Changeable function key icon display instruction (Ind-Pkeylcon)

Parameter to direct terminal from main device icon display to changeable function key.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Pkeylcon = changeable function key number: State of display: Icon color specification number positional specification)

Name	Definition value	Explanation
Changeable function key number	1. 40	
State of display	Disp	Display usually
	Clr	Display clearness
	Blink	Blinking display
Color specification	m	Black and white
	c	Color
Icon number	1. XX	Refer to appendix "Icon number list".
Positional specification	1. 13	It makes it to the normal-width position.

. usage example .

(1) Ind-Pkeylcon=1:Disp:m1 when black and white image of icon number 1 is displayed in part LCD of changeable function key 1

(2) When blinking is displayed, the color image of icon number 1 is Ind-Pkeylcon=1:Blink:c1 in the part LCD of changeable function key 1.

. condition etc. .

(1) The terminal must display the icon in the changeable function key regardless of the state of the session when you receive this parameter.

6.1.6.33. Key pressing end setting instruction (Ind-KeyupInfo)

Parameter that directs terminal from main device right or wrong of event notification of key pressing end.

. addition message .

It adds to the NOTIFY request.

. format .

Notification key type of notification key type * Ind-KeyupInfo = * . . .

Name	Definition value	Explanation
Notification key type	all	All keys
	digitkey	[Dei;jittoki -]
	skey	Soft key
	pkey	Changeable function key
	fkey	Fixed function key
	jkey	[Joguki -]
	optpkey	Option changeability function key
	consolepkey	Console changeability function key
	off	It doesn't notify.

. usage example .

(1) Ind-KeyupInfo=digitkey pkey when pressing end event notification of [dei;jittoki-]

and changeable function key is necessary

(2) Ind-KeyupInfo=digitkey when only pressing end event notification of changeable function key is invalidated

after the above-mentioned instruction

(3) Ind-KeyupInfo=off when all key pressing state

notifications are invalidated

. condition etc. .

(1) When this parameter is received, the terminal makes the notification key type directed clearing everything, and renewing the notification key type that had been received before the object of the pressing end event notification.

6.1.6.34. [Joguki-ranpu] state instruction (Ind-Jkey)

Parameter to direct terminal from main device lamp state change of [joguki-].

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Jkey = [jogu] key number: Lamp state number: Lamp color specification number *
[jogu] key number: Lamp state number: Lamp color specification number * . . .

Name	Definition value	Explanation
[Jogu] key number	1. 16	
Lamp state number	0. 7	0: OFF 1: Slow Flash 2: Wink 3: Rapid Wink 4: Burst Wink 5: Interrupted Lit 6: Interrupted Wink 7: Steady
Lamp color specification number	1. 2	1: Red 2: Green

. usage example .

(1) When the steadiness is displayed in red, Ind-Jkey = 9:7:1 of the lamp

of [jogu] key number 9.

(2) Ind-Jkey=9:0 when lamp of [jogu] key number

9 is turned off

. condition etc. .

(1) The terminal must change the state of [joguki-ranpu] regardless of the state of the session when you receive this parameter.

(2) Disregard it when you receive the lamp state instruction of [joguki-] that doesn't exist in the terminal.

(3) According to Info-Jkey parameter of [jogu] key number notified from terminal

6.1.6.35. Classification by countries restriction instruction (Ind-CountryRule)

Parameter to direct terminal from main device restriction (Article 508 in North America etc.) operation in each each country.

. addition message .

It adds to the NOTIFY request.

. format .

Classification by countries restriction type Ind-CountryRule =

*R1: Key pressing confirmation sound * R2: Volume upper bound improvement

Name	Definition value	Explanation
Classification by countries restriction type	us-508	Article 508 in North America
Key pressing confirmation sound (R1)	on	
	off	
Volume upper bound improvement (R2)	on	
	off	

. usage example .

(1) Ind-CountryRule=us-508 R1:off R2:on when key pressing confirmation sound for

Article 508 in North America is temporarily released

. condition etc. .

- (1) Only when Article 508 in system basic set up information (Info-SysConfig) parameter mode setting (F1) is specified for . on", the instruction that sets "Classification by countries restriction type" of this parameter to . us-508" is effective. At this time, key pressing confirmation sound (R1) and volume upper bound improvement (R2) are defaults, . on" states, and switching the setting to . off" becomes possible by using this parameter.
- (2) The terminal must ..confirmation sound.. rumble when keys other than speaker/volume key are pressed to confirm the key pressing according to hearing when "Key pressing confirmation sound (R1)" of this parameter is "On".
- (3) When "Volume upper bound improvement (R2)" of this parameter is "On", the terminal should be able to be enhanced up to +4 stages (Improve by +8dB in 2dB step) by comparing the maximum receiving talk volume of the hand set and the head set with the ordinary mode.

6.1.6.36. Display..icon..display..instruction.

The parameter in the terminal from a main device to direct a specified line of the display the icon display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Displcon = line number: State of display: Icon color specification number positional specification)

Name	Definition value	Explanation
Line number	1. 4	1-3 in case of Economy
State of display	disp	Display usually
	clr	Display clearness
	blink	Blinking display
Color specification	m	Black and white
	c	Color
Icon number	1. XX	Refer to appendix "Icon number list".
Positional specification	1. 27	It makes it to the normal-width position.

. usage example .

(1) Ind-Displcon=1:disp:m1 when black and white image of icon number 1 is displayed

in the first line in display

(2) When blinking is displayed, the color image of icon number 1 is Ind-Displcon=1:blink:c1

in the first line in display.

. condition etc. .

(1) The terminal must display the icon in the changeable function key regardless of the state of the session when you receive this parameter.

(2) The number of icons that can be displayed at the same time is assumed in maximums until 16 pieces.

6.1.6.37. Line display mode instruction only for icon (Ind-IconMode)

Parameter to direct whether to display icon that terminal local displays on display from main device to terminal effectively or to invalidate it.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-IconMode = control lead

Name	Definition value	Explanation
Control lead	ON	Icon effective display of local terminal (default)
	OFF	Icon display invalidity of local terminal

. usage example .

(1) Ind-IconMode=ON when the first line in display is done

only for icon display

(2) Ind-IconMode=OFF when icon display is temporarily released to display textual information in the

first line in display

. condition etc. .

(1) This parameter is assumed to be an instruction command only for Value/Value-DESIless. Disregard it on the terminal side when specifying it for Economy and the Sophisticated terminal.

(2) The terminal must judge the control lead to be . ON" from default and display the icon of a local terminal when this parameter is not transmitted from a main device.

6.1.6.38. Short cut icon display instruction (Ind-ShortcutIcon)

Parameter that directs terminal from main device display of short cut icon.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-ShortcutIcon = icon type: Right or wrong of display icon number)*

icon type: Right or wrong of display icon number)* . . .

Name	Definition value	Explanation
Icon type	History	Absent message history
	Vmail	Voice mail
	Cursor	Cursor key
Right or wrong of display	ON	It displays it.
	OFF	It doesn't display it.
Icon number	65	Absent arrival of a message icon
	75	Voice mail icon
	24. 38	Cursor icon (Default is 24).

. usage example .

(1) Ind-ShortcutIcon=History:ON when absent

arrival of a message icon is displayed

(2) When you display the absent arrival of a message icon, the voice mail icon, and the cursor key icon (default)

Ind-ShortcutIcon=History:ON Vmail:ON Cursor:ON

(3) Ind-ShortcutIcon=Cursor:ON:28 when changing to cursor

key icon only of arrow in the under

. condition etc. .

- (1) "Icon type" of this parameter displays it, and "History" and "Right or wrong of the display" display and when "Icon number" is omitted by "ON", the terminal displays icon number 65 by default. Moreover, direct default icon number 65 when a main device specifies the icon number.
- (2) "Icon type" of this parameter displays it, and "Vmail" and "Right or wrong of the display" display and when "Icon number" is omitted by "ON", the terminal displays icon number 75 by default. Moreover, direct default icon turn 75X when a main device specifies the icon number.
- (3) "Icon type" of this parameter displays it, and "Cursor" and "Right or wrong of the display" display and when "Icon number" is omitted by "ON", the terminal displays icon number 24 by default. Moreover, judge the instruction to be invalid from the terminal side when a main device specifies the icon number or it specifies it excluding icon number 24-38.

6.1.6.39. Menu start instruction (Ind-MenuWakeup)

Parameter that directs terminal from main device menu start. Display information on the main device service is matched when the short cut menu is started and it notifies.

. addition message .

It adds to the NOTIFY request.

. format .

Menu type Ind-MenuWakeup =

Service type: Name display: The number of displays the number of cases)

service type: Name display: The number of display the number of cases)* . . .

Name	Definition value	Explanation
Menu type	LM_TOP	Local menu (top)
	LM_HISTORY	Local menu (history)
	LM_DIR	Local menu (telephone book)
	DM	Download menu
	SM	Short cut menu
Service type	History	Absent message history
	Vmail	Voice mail
Name display	ON	It displays it.
	OFF	It doesn't display (If it is possible, gray scale).
The number of displays	ON	It displays it.
	OFF	It doesn't display it.
The number of cases	0. n	The maximum number is different according to service.

. usage example .

(1) Ind-MenuWakeup=LM when start of local

menu is directed

(2) Ind-MenuWakeup=DM when start of download

menu is directed

(3) When the start of the short cut menu is directed, and 3 absent message histories and voice mails of 0 as display information are notified

Ind-MenuWakeup=SM History:ON:ON:3 Vmail:ON:ON:0

. condition etc. .

(1) When this parameter is received

6.1.6.40. Menu time-out time designation instruction (Ind-MenuTimeout)

Parameter to direct terminal from main device timeout period of menu.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-MenuTimeout = timeout period

Name	Definition value	Explanation
Timeout period	0	Time-out prohibition
	1. 16	The unit is an amount.

. usage example .

(1) Ind-MenuTimeout=1 when timeout period of menu

is set at one minute

(2) Ind-MenuTimeout=0 when time-out of

menu is prohibited

. condition etc. .

(1) The terminal must end the menu panel after the specified time-out time passes, and return to the display control screen of a main device when you receive this parameter.

(2) The terminal must do the menu panel by default in the time-out in four minutes when you do not receive this parameter.

6.1.6.41. [Ringa] instruction 2 (Ind-Ringer2)

Parameter to direct terminal from main device ring rumbling.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-Ringer2 = tone type: Specification at cycle: (the first frequency (the second + frequency))

Name	Definition value	Explanation
Tone type	8Hz	No 8Hz modulation or modulation
	16Hz	16Hz modulation
	Door	Intercom
	Envl	Envelope
	Wavdoor	Intercom music scale ring tone
	Wav1	Music scale ring tone 1
	Wav2	Music scale ring tone 2
	Wav3	Music scale ring tone 3
	Wav4	Music scale ring tone 4
	Wav5	Music scale ring tone 5
Specification at cycle	0	Turning off always
	1	Turning on always
	2	2sON - 4sOFF
	3	1sON - 2sOFF
	4	0.5sON - 0.5sOFF
	5	0.25sON - 0.25sOFF
	6	0.5sON - 0.5sOFF - 0.5sON - 1.5sOFF
	7	0.25sON - 0.25sOFF - 0.25sON - 5.25sOFF
	8	0.375sON - 0.25sOFF - 0.375sON - 2sOFF
	9	0.25sON - 0.125sOFF - 0.25sON - 0.125sOFF - 0.25sON - 2sOFF
	10	1sON - 4sOFF
	11	0.25sON - 0.25sOFF - 0.25sON - 4.25sOFF
	12	1sON - 3sOFF
	13	0.25sON - 0.25sOFF - 0.25sON - 2.25sOFF
	14	Reserve
	15	Reserve
The first frequency	1. 3999	
The second frequency	1. 3999	

. usage example .

(1) Ind-Ringer2=8Hz:2:440+494 when ring rumbling that synthesizes 8Hz modulation/100msON/frequency

440Hz to 494Hz is directed

























(2) Ind-Ringer2=Wav1:1 when ring rumbling is directed

by music scale ring tone 1

. condition etc. .

(1) Direct the cycle specification for the music scale ring tone by "1(turn on always)".

(2) The specification of "The first frequency" and "The second frequency" is assumed to be unnecessary for the music scale ring tone.

Periodic number	Periodic pattern						
	0	1	2	3	4	5	6 [sec]
0	ON _____ OFF _____						
1	ON _____ OFF _____						
2	ON  OFF 						
3	ON  OFF 						
4	ON  OFF 						
5	ON  OFF 						
6	ON  OFF 						
7	ON  OFF 						
8	ON  OFF 						
9	ON  OFF 						
10	ON  OFF 						
11	ON  OFF 						
12	ON  OFF 						
13	ON  OFF 						

6.1.6.42. [Ringpasu] instruction (Ind-RingerPath)

Parameter to direct passing connection destination when ring rumbles from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-RingerPath = right or wrong of rumbling (head set) when being talking: Right or wrong of rumbling (speaker) when being talking
 Usual right or wrong of rumbling (head set): Usual right or wrong of rumbling (speaker)
 Ring passing switch time

Name		Definition value	Explanation
Right or wrong of rumbling when being talking	Head set	ok	Permission
		ng	Prohibition (default)
	Speaker	ok	Permission (default)
		ng	Prohibition
Right or wrong of rumbling usually	Head set	ok	Permission
		ng	Prohibition (default)
	Speaker	ok	Permission (default)
		ng	Prohibition
Ring passing switch time		0	Switch prohibition (default)
		10. 60	The unit is a second.

. usage example .

(1) When rumbling is permitted from both head set and speaker at time,

Ind-RingerPath=ok:ok:ok:ng:0 usually(2)

Ind-RingerPath=ok:ng:ok:ng:0 when only head set rumbling is

permitted at time of usual talk at time

(3) Usually prohibit the speaker rumbling, and when compulsorily switching to the speaker rumbling when the head set rumbling is left for ten seconds

Ind-RingerPath=ok:ng:ok:ng:10

. condition etc. .

- (1) The terminal must execute the ring rumbling from both devices when you make both the head set rumbling and the speaker rumbling "On".
- (2) The head set rumbling assumes "Ring passing switch time" to be effective for only "Ok", and "Ng" the speaker rumbling. Even if the speaker rumbling is prohibited ..this.., the head set rumbling is a function to prevent it as for leaving. specified time
- (3) When the terminal notifies "Head set setting (F2)" of the Info-TermConfig parameter by "0(head set control OFF)", the head set rumbling instruction of this parameter becomes invalid.
- (4) When "Ng (prohibition)" is specified by right or wrong of the off hook ring rumbling setting instruction (Ind-OffHookRing) parameter, the instruction of right or wrong of the story inside rumbling of this parameter (head set/speaker) becomes invalid.

6.1.6.43. Right or wrong of off hook ring rumbling setting instruction (Ind-OffHookRing)

Parameter to direct terminal from main device right or wrong of rumbling of off hook ring.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-OffHookRing = control lead

Name	Definition value	Explanation
Control lead	OK	Off hook ring rumbling permission
	NG	Off hook ring rumbling prohibition

. usage example .

(1) Ind-OffHookRing=OK when rumbling of off

hook ring is permitted

(2) Ind-OffHookRing=NG when off hook ring is

prohibited from rumbling

. condition etc. .

(1)

6.1.6.44. Terminal loop back test instruction (Ind-TermLoopback)

Parameter to direct terminal from main device beginning/end of voice loop back test.

. addition message .

It adds to the NOTIFY request.

. format .

Control lead loop back point) Ind-TermLoopback = * wait: Waiting time (* snd: Telephone PAD value)(* rcv: Receiving talk PAD value)

Name	Definition value	Explanation
Control lead	on	Loop back test beginning
	off	Loop back test end
Loop back point	terminal	Only the terminal main body
Waiting time wait	0	Waiting time none
	10. 300	The unit is ms.
Telephone PAD value snd	-127. 127	The unit is dB.
Receiving talk PAD value rcv	-127. 127	The unit is dB.

. usage example .

(1) Ind-TermLoopback=on wait:0 when loop back test begins via voice

passing of terminal main body

(2) When the loop back test begins by 10 telephone PAD value-at waiting time 100ms dB via the voice passing of the terminal main body

Ind-TermLoopback=on:terminal wait:100 snd:-10

(3) Ind-TermLoopback=off when voice

loop back test is ended

. condition etc. .

(1) The terminal must be discontinued the loop back test and usually return to the state when you detect the state variation of the key pressing or the hook switch while testing the loop back.

6.1.6.45. Display monochrome reversing instruction (Ind-DispReverse)

Parameter to direct terminal from main device black and white reverse of display display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispReverse = background color specification

Name	Definition value	Explanation
Control lead	White	White background and black character (default)
	Black	Black background and white character

. usage example .

(1) Ind-DispReverse=Black when background of

display is changed to black

(2) Ind-DispReverse=White when background of

display is returned to white

. condition etc. .

(1)

6.1.6.46. Right or wrong of key pressing confirmation sound rumbling setting instruction (Ind-KeyConfTone)

Parameter to direct terminal from main device rumbling control of key pressing confirmation sound (1kHz).

. addition message .

It adds to the NOTIFY request.

. format .

Rumbling control Ind-KeyConfTone = * mode: Continuance rumbling mode * st: Short tone rumbling instruction

Name	Definition value	Explanation
Rumbling control	all	All ..key.. rumbling
	digitkey	Only [dei;jittoki-] rumbles.
	off	Rumbling prohibition
Continuance rumbling mode mode	0	- Operation is different depending on the condition.
	1	- Operation is different depending on the condition.
Short tone rumbling instruction st	off	There is no rumbling instruction.
	on	There is a rumbling instruction (Between 100ms).

. usage example .

(1) Ind-KeyConfTone=all mode:0 st:off when

confirmation sound of all keys is made to rumble

(2) Ind-KeyConfTone=off mode:0 st:off when confirmation

sound rumbling of all keys is prohibited

(3) When it synchronizes with the DSS console key pressing and a main device directs the short tone rumbling as a confirmation sound

Ind-KeyConfTone=all mode:0 st:on

. condition etc. .

- (1) The terminal must be done to invalid "Rumbling control" of this parameter, and work in Article 508 mode (..key confirmation sound.. rumble excluding speaker/volume key) when Article 508 in the parameter mode setting (F2) of system basic set up information (Info-SysConfig) when it starts is set to the parameter and . on" of . on" and classification by countries restriction instruction (Ind-CountryRule) "Key confirmation sound rumbling".

Article 508 Mode setting	Classification by countries restriction instruction (key confirmation sound rumbling)	Right or wrong of key confirmation sound rumbling setting instruction (rumbling control)
ON	ON	Invalidity (Article 508 mode operation)
	OFF	Effective (all/digitkey/off)
OFF	Invalidity	Effective (all/digitkey/off)

- (2) As for "Continuance rumbling mode" of this parameter, operation is different according to the sales channel as follows.

Sales channel	mode=0	mode=1
A	Rumbling is continued while pressing the key.	Rumbling is stopped with 100ms while pressing the key.
B	Rumbling is stopped with 100ms while pressing the key.	Rumbling is continued while pressing the key.

- (3) Every time, when this parameter is received, "Rumbling control", "Continuance rumbling mode", and "Short tone rumbling instruction" are directed regardless of the change existence in the state. "Rumbling control" and "Continuance rumbling mode" are parameters that direct the method of controlling the key confirmation sound in a local terminal from a main device, and "Short tone rumbling instruction" is parameters that in real time direct the key confirmation sound rumbling.

6.1.6.47. Right or wrong of key reading out setting instruction (Ind-KeyConfVoice)

Parameter to direct terminal from main device right or wrong setting of key reading out function.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-KeyConfVoice = right or wrong setting

Name	Definition value	Explanation
Right or wrong setting	OFF	The key reading out function is invalidated.
	ON	The key reading out function is made effective.

. usage example .

(1) Ind-KeyConfVoice=ON when key reading out function

of terminal is made effective

(2) Ind-KeyConfVoice=OFF when key reading out function

of terminal is invalidated

. condition etc. .

(1) The key reading out function reproduces the voice instead of the key confirmation sound rumbling. Therefore, do not execute the key reading out similarly when the key confirmation sound is restricted.

(2) The key reading out targets only [dei;jittoki-]. ..usual key confirmation sound.. rumble when all key confirmation sound rumbling is effective, and things except [dei;jittoki-] are pressed.

6.1.6.48. Terminal resource liberating instruction (Ind-TermResource)

Parameter to liberate terminal resource that terminal is local and occupies from main device to terminal compulsorily.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermResource = terminal resource type (terminal resource type * . . . of *)

Name	Definition value	Explanation
Terminal resource type	ALL	The control right of all the resources is demanded.
	LCD	The control right of LCD is demanded.
	LED	The control right of LED is demanded.
	VOICE	The control right of the voice is demanded.
	KEY	The control right of the key is demanded.

. usage example .

(1) Ind-TermResource=ALL when main device needs control right

all terminal resources

(2) Ind-TermResource=LCD LED when main device needs

control right of LCD and LED

. condition etc. .

(1) The terminal must liberate the specified resource when you receive this parameter. However, when usually operating it based on being directed from a main device only in the emergency, it is necessary not to direct this parameter.

6.1.6.49. Terminal tone level instruction (Ind-TermToneLv)

Parameter to direct terminal from main device tone level.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-TermToneLv = tone number: Tone level *
tone number: Tone level * . . .

Tone number	Tone level	Explanation
T1	-54. -12 [dB]	Side Tone (initial 30 ..value :-.) and 6dB step
T2	- 6. +12 [dB]	Key Confirmation Tone (Initial value: 0) and 6dB step

. usage example .

(1) Ind-TermToneLv=T1:-24 when lateral

consonant level is set to -24dB

(2) When the key confirmation sound level is set to +6 the dB by -24 the dB, the lateral

consonant level is Ind-TermToneLv=T1:-24 T2:6.

. condition etc. .

(1) It is preferable that a main device controls the switch of the lateral consonant level whether the telephone call line is a digital network or an analog network. The lateral consonant level is specified when the digital network of the extension telephone call etc. is talked over the telephone and the lateral consonant level is specified low when the analog network of the outside line telephone call etc. is talked over the telephone to improving.

6.1.6.50. Terminal media information control instruction (Ind-MediaCapRtp)

Parameter to direct terminal from main device SDP information used for media (RTP).

. addition message .

It adds to the NOTIFY request.

. format .

Ind-MediaCapRtp=type: Payload type: Size of payload
(* type: Payload type: Size of payload)

Name	Definition value	Explanation (encoding method name/speed Hz of clock)
Payload type	0	PCMU/8000
	2	G.726-32/8000
	3	G.S.M/8000
	4	G.723/8000
	8	PCMA/8000
	9	G.722/8000
	12	QCELP/8000
	15	G.728/8000
	18	G.729/8000
	26	JPEG/90000
	31	H.261/90000
	34	H.263/90000
Size of payload	10. 100	Value 10ms of size of payload interval

. usage example .

(1) Ind-MediaCapRtp=type:0:20 type:18:30 when PCMU Payload 20ms

and G729 30ms are set to SDP(rtpmap)

. condition etc. .

- (1) A main device must set the parameter according to priority.
- (2) Set SDP when this parameter is not notified from a main device or the values other than the terminal's supporting it are specified by the ability supported by the terminal.

6.1.6.51. Terminal media information control instruction 2 (Ind-MediaCapDtmf)

Parameter to direct terminal from main device SDP information used for media (DTMF).

. addition message .

It adds to the NOTIFY request.

. format .

Ind-MediaCapDtmf=type: Payload type

Name	Definition value	Explanation
Payload type	96. 127	Dynamic payload type

. usage example .

(1) Ind-MediaCapDtmf=type:97 when payload type "97" of

DTMF is set to SDP(fmtp)

. condition etc. .

(1) Set SDP by the value of the default of the terminal when this parameter is not notified from a main device or the values other than the terminal's supporting it are specified.

6.1.6.52. Terminal touch panel setting instruction (Ind-TermTouchPanel)

Parameter to direct terminal from main device effective and invalidity of touch panel.

. addition message .

It adds to the NOTIFY request.

. format .

Set Ind-TermTouchPanel = instruction

Name	Definition value	Explanation
Set instruction	Enable	The touch panel is effective.
	Disable	Touch panel invalidity

. usage example .

(1) Ind-TermTouchPanel=Enable when

touch panel is made effective

(2) Ind-TermTouchPanel=Disable

when touch panel is invalidated

. condition etc. .

(1) This parameter is a parameter only for the Sophisticated type of a desktop terminal, and when it directs the terminal of other types, it becomes invalid.

6.1.6.53. Changeable function key n display instruction (Ind-PkeyDispN)

Parameter to direct terminal from main device LCD display to changeable function key.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-PkeyDispN = changeable function key number: Control lead state information) display information)

Name	Definition value	Explanation
Changeable function key number	1. 40	
Control lead	dsp	Character string display
	clr	State clearness
	blk	Blinking (Blink)
	rvs	Reversing (Reverse)
	brv	Reversing blinking
	gry	Gray out (Grayout)
State information (HE X rating acceptable)	0	Control release
	1	Control beginning
Display information	Maximum n character	It follows the ability notification by Info-Pkey.

. usage example .

(1) Ind-PkeyDispN=1:dsp when "[Fuzaitensou]" is usually displayed in part LCD of

changeable function key number 1: [Fuzaitensou] (CRLF)

(2) Ind-PkeyDispN=1:blk:11110000000 .. 2.. ..Susumu.. mark when "[Fuzaitensou]" displaying it

in part LCD of changeable function key number 1 is blinking
displayed Hexadecimal mark of Ind-PkeyDispN=1:blk:0xF00

(3) Ind-PkeyDispN=1:clr when "[Fuzaitensou]" is usually returned to display in part LCD of

changeable function key number 1

. condition etc. .

- (5) The terminal must maintain latest display information and state information on the changeable function key number regardless of the state of the session when you receive this parameter. Display information maintained when the display display changes from a local control into a main device control again.
- (6) Maintain various state information on each changeable function key number directed from the main device side respectively on the terminal side. As a result, a main device can direct two or more state information more than once, and clear state information from a main device specifying it when you do not want to reflect state information instructed to new display information so that the terminal may maintain state information regardless of display information.
- (7) Show state information by one byte of one byte of display information worth at a binary mark. Show state information at the hexadecimal mark by the character string that . 0x" continuously converted a binary mark into the hexadecimal mark.
- (8) Mean no use be gray out, and cannot execute be dynamic operations such as reversing and blinking at the same time. However, when the state of reversing and blinking is directed even when the gray out is released, the state is restarted.
- (9) A main device must specify the value specified in the part XX of the DESI-less ability notification "DispXXpY" of the Info-Pkey parameter from the terminal for "Display information" of this parameter for a number of maximum characters.
- (10) Follow "F1 (display ability setting)" of the Info-SysConfig parameter about the character-code about information specified for "Display information".

6.1.6.54. Option changeability function key lamp state instruction (Ind-OptPkey)

Parameter to direct terminal from main device state of option equipment of changeable function key lamp.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-OptPkey = changeable function key number: Lamp state number *
changeable function key number: Lamp state number * . . .

Name	Definition value	Explanation
Changeable function key number	1. 40	
Lamp state number	(Refer to the lamp state number list.)	(Refer to the lamp state number list.)

. usage example .

(1) Ind-OptPkey=1:1 when lamp of changeable function key 1 to option equipment is put

into red state of Steady

(2) The lamp of changeable function key 3 to the option equipment when you put the lamp of turning off and changeable function key 5 into a green state of Interrupted Wink

Ind-OptPkey=3:0 5:6

. condition etc. .

- (1) The terminal must change the state of the changeable function key lamp regardless of the state of the session when you receive this parameter.
- (2) Refer to the list of the lamp state number of the appendix for the lamp state number.
- (3) The terminal must disregard the lamp state instruction to the key when you receive the lamp state instruction to the key without the lamp function.

6.1.6.55. Option changeability function key n display instruction (Ind-OptPkeyDispN)

Parameter to direct terminal from main device LCD display to option changeability function key.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-OptPkeyDispN = changeable function key number: Control lead state information) display information)

Name	Definition value	Explanation
Changeable function key number	1. 40	
Control lead	dsp	Character string display
	clr	State clearness
	blk	Blinking (Blink)
	rvs	Reversing (Reverse)
	brv	Reversing blinking
	gry	Gray out (Grayout)
State information (HE X rating acceptable)	0	Control release
	1	Control beginning
Display information	Maximum n character	It follows the ability notification by Info-Pkey.

. usage example .

(1) Ind-OptPkeyDispN=1:dsp when "[Fuzaitensou]" is usually displayed in part LCD of

changeable function key number 1: [Fuzaitensou] (CRLF)

(2) Ind-OptPkeyDispN=1:blk:11110000000 .. 2.. ..Susumu.. mark when "[Fuzaitensou]" displaying

it in part LCD of changeable function key number 1 is blinking
displayed Hexadecimal mark of Ind-OptPkeyDispN=1:blk:0xF00

(3) Ind-OptPkeyDispN=1:clr when "[Fuzaitensou]" is usually returned to display in part LCD

of changeable function key number 1

. condition etc. .

- (1) The terminal must maintain latest display information and state information on the changeable function key number regardless of the state of the session when you receive this parameter. Display information maintained when the display display changes from a local control into a main device control again.
- (2) Maintain various state information on each changeable function key number directed from the main device side respectively on the terminal side. As a result, a main device can direct two or more state information more than once, and clear state information from a main device specifying it when you do not want to reflect state information instructed to new display information so that the terminal may maintain state information regardless of display information.
- (3) Show state information by one byte of one byte of display information worth at a binary mark. Show state information at the hexadecimal mark by the character string that . 0x" continuously converted a binary mark into the hexadecimal mark.
- (4) Mean no use be gray out, and cannot execute be dynamic operations such as reversing and blinking at the same time. However, when the state of reversing and blinking is directed even when the gray out is released, the state is restarted.
- (5) A main device must specify the value specified in the part XX of the DESI-less ability notification "DispXXpY" of the Info-Pkey parameter from the terminal for "Display information" of this parameter for a number of maximum characters.
- (6) Follow "F1 (display ability setting)" of the Info-SysConfig parameter about the character-code about information specified for "Display information".

6.1.6.56. Option changeability function key icon display instruction (Ind-OptPkeyIcon)

The parameter in the terminal from a main device to direct the changeable function key to the option equipment the icon display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-OptPkeyIcon = changeable function key number: State of display: Icon color specification number positional specification)

Name	Definition value	Explanation
Changeable function key number	1. 40	
State of display	Disp	Display usually
	Clr	Display clearness
	Blink	Blinking display
Color specification	m	Black and white
	c	Color
Icon number	1. XX	Refer to appendix "Icon number list".
Positional specification	1. 13	It makes it to the normal-width position.

. usage example .

- (1) When you display the black and white image of icon number 1 in the part LCD of changeable function key 1 to the option equipment

Ind-OptPkeyIcon=1:Disp:m1

- (2) When you blinking display the color image of icon number 1 in the part LCD of changeable function key 1 to the option equipment

Ind-OptPkeyIcon=1:Blink:c1

. condition etc. .

- (1) The terminal must display the option changeability function key regardless of the state of the session when you receive this parameter.

6.1.6.57. Console changeability function key lamp state instruction (Ind-ConsolePkey)

Parameter to direct terminal from main device state of console of changeable function key lamp.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-ConsolePkey = page number: Changeable function key number: Lamp state number *
page number: Changeable function key number: Lamp state number * . . .

Name	Definition value	Explanation
Page number	1. 10	
Changeable function key number	1. 60	
Lamp state number	(Refer to the lamp state number list.)	(Refer to the lamp state number list.)

. usage example .

(1) Ind-ConsolePkey = 1:1:1 when lamp of changeable function key 1 to the first console page is

put into red state of Steady

(2) The lamp of changeable function key 3 to the second console page is turned off, and the changeable function key to the third page When you put the lamp of five into a green state of Interrupted Wink

Ind-ConsolePkey=2:3:0 3:5:6

. condition etc. .

- (1) The terminal must change the state of the changeable function key lamp regardless of the state of the session when you receive this parameter.
- (2) Refer to the list of the lamp state number of the appendix for the lamp state number.
- (3) The terminal must disregard the lamp state instruction to the key when you receive the lamp state instruction to the key without the lamp function.

6.1.6.58. Console page switch instruction (Ind-ConsolePage)

Parameter to direct DSS console option of terminal from main device page switch.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-ConsolePage = page switch restriction: Page number

Name	Definition value	Explanation
Page switch restriction	ON	Page fixation
	OFF	The page is changeable.
Page number	1. 10	

. usage example .

(1) When you switch the DSS console option of the terminal to the second page

Ind-ConsolePage=OFF:2

(2) When you fix the DSS console option of the terminal by one page

Ind-ConsolePage=ON:1

. condition etc. .

(1) The respect switch of the DSS console option is done with a main device control. The terminal must execute the respect switch of the DSS console option when the respect switch is directed by this parameter.

6.1.6.59. Option equipment state instruction (Ind-OptStatus)

Parameter to direct terminal from main device movement of option equipment connected with terminal.

. addition message .

It adds to the NOTIFY request.

. basic format .

Ind-OptStatus = equipment type: Movement directive

Name	Definition value	Explanation
Equipment type	ada	Recording adaptor
State of operation	-	It is different according to the option equipment.

- Recording adaptor (ADA)

To reproduce by the recording adaptor from which the voice data recorded to PC is connected with a desktop terminal, a main device directs the reproduction by this parameter. A desktop terminal executes the voice passing control according to the directed state.

. format .

Ind-OptStatus = equipment type: Control type: Control lead

Name	Definition value	Explanation
Equipment type	ada	Recording adaptor
Control type	rec	Recording passing
	play	Reproduction passing
Control lead	on	Passing connection
	off	Passing cutting

. usage example .

(1) Ind-OptStatus=ada:rec:on when connection of recording passing

is directed to recording adaptor

(2) Ind-OptStatus=ada:rec:off when cutting recording passing

is directed to recording adaptor

. condition etc. .

(1) The priority level is assumed to be the order of head set > hand set > speaker at the voice output destination of the terminal.

(2) The telephone call recording using the line for the power failure of PSA/PSD is assumed to be improper.

6.1.6.60. Cordless handset..display..display..instruction.

Parameter to direct terminal from main device display information or state information on specified line of cordless handset display.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthDispLineN = line - number: Control lead state information): Display information (CRLF)

Name	Definition value	Explanation
Line - number	2, 3	
Control lead	Dsp	Character string display
	Clr	State clearness
	Blk	Blinking (Blink)
	Rvs	Reversing (Reverse)
	Brv	Reversing blinking
State information (HE X rating acceptable)	0	Control release
	1	Control beginning
Display information	Up to 20 characters or less	

. usage example .

(1) Ind-BthDispLineN=2:Dsp when display is usually directed to

the third two lines of cordless handset LCD: Telephone book 10/500
(CRLF) Ind-BthDispLineN=3:Dsp:1 . Taro Suzuki (CRLF)(2)

When reversing, the character string displayed in the third line of cordless

handset LCD .. 2.. ..Susumu.. is written Ind-BthDispLineN=3:Rvs:111111111000000000
The hexadecimal mark of Ind-BthDispLineN=3:Rvs:0xFFC00.

(3) When blinking, the character string displayed in the third line of cordless

handset LCD .. 2.. ..Susumu.. is written Ind-BthDispLineN=3:Blk:111111111000000000
The hexadecimal mark of Ind-BthDispLineN=3:Blk:0xFFC00.

. condition etc. .

- (1) Maintain latest display information and state information on the display specification line in the cordless handset regardless of the state of the session when you receive this parameter. Display information maintained when the display display changes from a local control into a main device control again.
- (2) Maintain various state information on each line directed from the main device side respectively on the cordless handset side. As a result, a main device can direct two or more state information more than once, and clear state information from a main device specifying it when you do not want to reflect state information instructed to new display information so that the terminal may maintain state information regardless of display information.
- (3) Show state information by one byte of one byte of display information worth at a binary mark. Show state information at the hexadecimal mark by the character string that . 0x" continuously converted a binary mark into the hexadecimal mark.

6.1.6.61. Cordless handset cursor flash display instruction (Ind-BthCurFlash)

Parameter to direct terminal from main device control of flash of cursor displayed on display of cordless handset.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthCurFlash = control lead: Display line - number: Display digit number

Name	Definition value	Explanation
Control lead	Start	Flash operation beginning
	Stop	Flash operation stop
Display line - number	2. 3	
Display digit number	1. 20	

. usage example .

(1) Ind-BthCurFlash=start:2:10 when cordless handset cursor flash is executed at

position of the tenth digit of two lines

(2) When you stop the cordless handset cursor flash

Ind-BthCurFlash=stop

. condition etc. .

- (1) Stop the cursor flash operation regardless of the line specification or the digit specification when . stop" is directed by this parameter.
- (2) Move the position of the cursor to a new place when . start" is newly directed to the different location by this parameter with the cursor flash display has already been executed and continue the cursor flash operation.
- (3) The cursor flash is assumed to be a normal-width display.
- (4) It is only the second line, the third line that the control is possible in cordless handset LCD (four line x20 digit) from a main device, and assumes the first line and the fourth line to be a cordless handset local control.

6.1.6.62. Cordless handset fixation function key lamp state instruction (Ind-BthFkey)

Parameter to direct terminal from main device lamp state change of cordless handset fixation function key.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthFkey = fixed function key number: Lamp state number: Lamp color specification number *
fixed function key number: Lamp state number: Lamp color specification number * . . .

Name	Definition value	Explanation
Fixed function key number	1. 16	
Lamp state number	0. 7	0: OFF 1: Slow Flash 2: Wink 3: Rapid Wink 4: Burst Wink 5: Interrupted Lit 6: Interrupted Wink 7: Steady
Lamp color specification number	1. 2	1: Red 2: Green

. usage example .

(1) When the steadiness is displayed in red, Ind-BthFkey = 1:7:1 of the lamp of cordless handset

fixation function key number 1.

(2) Ind-BthFkey=3:0 when lamp of cordless handset fixation function

key number 3 is turned off

. condition etc. .

- (1) When the Bluetooth option is not connected, this parameter is disregarded with the terminal.
- (2) The terminal must change the state of the cordless handset fixation function key lamp regardless of the state of the session when you receive this parameter.
- (3) Disregard it when you receive the lamp state instruction of the fixed function key that doesn't exist in the cordless handset.
- (4) According to Info-BthFkey parameter of cordless handset fixation function key number notified from terminal

6.1.6.63. Cordless handset changeability function key lamp state instruction (Ind-BthPkey)

Parameter to direct terminal from main device state of cordless handset of changeable function key lamp.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthPkey = changeable function key number: Lamp state number

Name	Definition value	Explanation
Changeable function key number	1. 16	
Lamp state number	(Refer to the lamp state number list.)	(Refer to the lamp state number list.)

. usage example .

(1) Ind-BthPkey=1:1 when lamp of changeable function key 1 to cordless handset is put

into red state of Steady

(2) The lamp of changeable function key 3 to the cordless handset when you put the lamp of turning off and changeable function key 5 into a green state of Interrupted Wink

Ind-BthPkey=3:0 5:6

. condition etc. .

(1) Refer to the list of the lamp state number of the appendix for the lamp state number.

(2) Line LED is turned off about ten seconds after cordless handset line LED is always displayed, and the telephone call begins while the cordless handset ring is rumbling. Line LED is not displayed in the state of the idol, and line LED is displayed for about ten seconds when entering the state of the idol while using it. Moreover, when the charge with an off hook ends, line LED is displayed when beginning to charge it with on a hook though line LED is turned off. Moreover, when some keys to the cordless handset are pressed, line LED is displayed.

6.1.6.64. Cordless handset [ringa] instruction (Ind-BthRinger)

Parameter to direct terminal from main device cordless handset ring rumbling.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthRinger = tone type: Specification at cycle: (the first frequency (the second + frequency))

Name	Definition value	Explanation
Tone type	8Hz	No 8Hz modulation or modulation
	16Hz	16Hz modulation
	Door	Intercom
	Envl	Envelope
	Wavdoor	Intercom music scale ring tone
	Wav1	Music scale ring tone 1
	Wav2	Music scale ring tone 2
	Wav3	Music scale ring tone 3
	Wav4	Music scale ring tone 4
	Wav5	Music scale ring tone 5
Specification at cycle	0	Turning off always
	1	Turning on always
	2	2sON - 4sOFF
	3	1sON - 2sOFF
	4	0.5sON - 0.5sOFF
	5	0.25sON - 0.25sOFF
	6	0.5sON - 0.5sOFF - 0.5sON - 1.5sOFF
	7	0.25sON - 0.25sOFF - 0.25sON - 5.25sOFF
	8	0.375sON - 0.25sOFF - 0.375sON - 2sOFF
	9	0.25sON - 0.125sOFF - 0.25sON - 0.125sOFF - 0.25sON - 2sOFF
	10	1sON - 4sOFF
	11	0.25sON - 0.25sOFF - 0.25sON - 4.25sOFF
	12	1sON - 3sOFF
	13	0.25sON - 0.25sOFF - 0.25sON - 2.25sOFF
	14	Reserve
	15	Reserve
The first frequency	1. 3999	
The second frequency	1. 3999	

. usage example .

(1) Ind-BthRinger=8Hz:2:440+494 when ring rumbling that synthesizes 8Hz modulation/100msON/frequency

440Hz to 494Hz is directed

(2) Ind-BthRinger=Wav1:1 when ring rumbling is directed

by music scale ring tone 1

. condition etc. .

(1) When the Bluetooth option is not connected, this parameter is disregarded with the terminal.

(2) Direct the cycle specification for the music scale ring tone by "1(turn on always)".

(3) The specification of "The first frequency" and "The second frequency" is assumed to be unnecessary for the music scale ring tone.

Periodic number	Periodic pattern						
	0	1	2	3	4	5	6 [sec]
0	<div>ON</div> <div>OFF</div>						
1	<div>ON</div> <div>OFF</div>						
2	<div>ON</div> <div>OFF</div>						
3	<div>ON</div> <div>OFF</div>						
4	<div>ON</div> <div>OFF</div>						
5	<div>ON</div> <div>OFF</div>						
6	<div>ON</div> <div>OFF</div>						
7	<div>ON</div> <div>OFF</div>						
8	<div>ON</div> <div>OFF</div>						
9	<div>ON</div> <div>OFF</div>						
10	<div>ON</div> <div>OFF</div>						
11	<div>ON</div> <div>OFF</div>						
12	<div>ON</div> <div>OFF</div>						
13	<div>ON</div> <div>OFF</div>						

6.1.6.65. Cordless handset telephone call compulsion cutting instruction (Ind-BtxCallDisc)

Parameter to direct terminal from main device forced release of cordless handset telephone call.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BtxCallDisc

. usage example .

(1) Ind-BtxCallDisc when telephone call of cordless

handset is compulsorily cut

. condition etc. .

(1) When the Bluetooth option is not connected, this parameter is disregarded with the terminal.

(2) It doesn't enter the state of the out of the sphere so that the cordless handset may do the telephone call cutting when this parameter is received with the Bluetooth connection maintained. After cutting the telephone call, changing in the state of the idol, and executing the arrival and departure Makoto operation etc. again become possible.

6.1.6.66. Cordless handset specification outside line catching instruction (Ind-BthPkeySelect)

Parameter to direct whether for cordless handset to make specified outside line catching function effective or to invalidate it from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthPkeySelect = control lead

Name	Definition value	Explanation
Control lead	ON	The specified outside line catching function is effective.
	OFF	The specified outside line catching function is invalid (default).

. usage example .

(1) Ind-BthPkeySelect=ON when specified outside line catching function

of cordless handset is made effective

(2) Ind-BthPkeySelect=OFF when specified outside line catching

function of cordless handset is invalidated

. condition etc. .

(1) When the Bluetooth option is not connected, this parameter is disregarded with the terminal.

(2) Judge the control lead to be "OFF" from default about the cordless handset when this parameter is not transmitted from a main device.

6.1.6.67. Display instruction of cordless handset call duration (Ind-BthTktime)

Parameter that directs terminal from main device display position of call duration and start of counting value of cordless handset.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BthTktime = display instruction (start) of control lead (disp) *::: second * count: The update instruction of the second (* pos: the line: digit).

Name	Definition value	Explanation
Control lead	disp	Display at call duration
Display instruction	start	When beginning to display it, in is instructed.
Time (h)	0. 9	. - " is specified when not displaying it.
Amount (mm)	00. 59	
Second (ss)	00. 59	
Update instruction of second	on	Count improvement beginning of second
	off	Count improvement stop of second
Line	2. 3	The display beginning line is specified.
Digit	1. 20	The display beginning digit is specified.

Ind-BthTktime = control lead (clr/init)

Name	Definition value	Explanation
Control lead	clr	Display clearness of call duration
	init	Counter initialization

. usage example .

(1) When in is assumed to be 20 seconds of 1 hour and 0 minutes when the display beginning position begins to be specified, and to be talked over the telephone to the seventh character of two lines of cordless handset LCD and the second count/update of the display is directed

Ind-BthTktime=disp start:01:00:20 count:on pos:2:7

(2) When in is assumed to be 30 seconds of one minute when the display beginning position begins to be specified, and to be talked over the telephone to the 12th character of two lines of cordless handset LCD and the second count/update of the display is directed

Ind-BthTktime=disp start:-:01:30 count:on pos:1:12

(3) Ind-BthTktime=clr when display at call duration of

cordless handset is cleared(4)

Ind-BthTktime=init when counter of call duration of

cordless handset is initialized

. condition etc. .

- (1) Display the cordless handset regardless of the state of the session at call duration when you receive this parameter.
- (2) Stop the count improvement at call duration by this parameter about the cordless handset when you receive the session end demand.
- (3) Do not initialize count information on call duration without the instruction of a main device after end of telephone call.
- (4) The instruction by this parameter must display the maintained call duration by a main device other than ..the telephone call.. the cordless handset in case of being.

6.1.6.68. Bluetooth equipment voice passing instruction (Ind-BtxVoicePath)

Parameter to direct terminal from main device voice passing connection with Bluetooth equipment.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BtxVoicePath = control lead

Name	Definition value	Explanation
Control lead	ON	The Bluetooth equipment and the voice passing are connected.
	OFF	The Bluetooth equipment and the voice passing are cut.

. usage example .

(1) Ind-BtxVoicePath=ON when telephone call begins

with Bluetooth equipment

(2) Ind-BtxVoicePath=OFF when telephone call

of Bluetooth equipment is cut

. condition etc. .

(1) When the Bluetooth option is not connected, this parameter is disregarded with the terminal.

6.1.6.69. Instruction for carrying (Ind-BtxConnect)

Parameter that directs terminal from main device operation of portable coordinated function of Bluetooth option.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-BtxConnect = right or wrong for carrying: Mode for carrying

Name	Definition value	Explanation
Right or wrong for carrying	Enable	A portable coordinated function is made effective.
	Disable	A portable coordinated function is invalidated (default).
Mode for carrying	Local	For carrying by local mode
	System	For carrying with main device

. usage example .

(1) Ind-BtxConnect=Enable:Local when portable coordinated function of Bluetooth

option is made effective in local mode

(2) Ind-BtxConnect=Enable:System when portable coordinated function of Bluetooth option

is made effective in main device mode

(3) Ind-BtxConnect=Disable when portable coordinated function of

Bluetooth option is invalidated

. condition etc. .

(1) Assume a portable coordinated function to be invalid to the Bluetooth option when you do not receive this parameter.

6.1.6.70. Display..presence..display..instruction.

The parameter in the terminal from a main device to direct a specified line of the display presence information.

. addition message .

It adds to the NOTIFY request.

. format .

Ind-DispPresN = line - number

< TT > terminal </ MS><SS > Sub-Status TT><MS > Main-Status </ SS >

Name	Definition value	Explanation
Line - number	1. 6	
Terminal type		<TT></TT>
Main-Status		<MS></MS>
Sub-Status		<SS></SS>

. usage example .

(1) When you direct three lines' worth of presence information by the batch

Ind-DispPresN=1:<TT>terminal</TT><MS>offline</MS><SS>away</SS>

Ind-DispPresN=2:<TT>terminal</TT><MS>offline</MS><SS>away</SS>

Ind-DispPresN=3:<TT>terminal</TT><MS>offline</MS><SS>away</SS>

. condition etc. .

(1) The terminal must display the icon directed a specified line of the display by presence information regardless of the state of the session when you receive this parameter.

6.1.7. Event demand parameter (ReqEvent-xxxx: Main device . terminal)

Table X-1 shows the event demand parameter that a main device for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Event demand parameter list that main device for table X-1 KTS-SIP adds

Name	Parameter name	Remarks
Session demand	ReqEvent-Session	Definition addition of reservation and translocational regulation
Program starting download demand	ReqEvent-Download	Definition addition of communication protocol
File transfer beginning demand	ReqEvent-FileTransfer	New
Terminal local data deletion demand	ReqEvent-DelTermData	New
Terminal function license control demand	ReqEvent-TermLicense	New

6.1.7.1. Session demand (ReqEvent-Session)

When the transmission of the message concerning the session is demanded from a main device to the terminal, it uses it. The session control that can be demanded is as follows.

Demand number	Demand	Terminal operation
1	Session establishment	New..call..establish..request..device..sent to.
2	Session response	[No] INVITE request is INVITE when having received it. call ..correspond.. Request..response..device..sent to.
3	Closing of a session	Correspond..call..telephone call..request..device..sent to.
4	Session cancellation	The one that corresponding INVITE ..calling.. request of [ga] ..terminal.. own was transmitted The CANCEL request is transmitted to a main device before it responds.
5	Session change	To call and to change [no] media information, re-INVITE is requested correspondence. Sent to [wo] main device
6	Session forwarding	Because it calls and [no] media information is transmitted to other users, corresponding REFER. Sent to request's main device

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req: Demand number * . . .

. usage example .

Session establishment: Extension paging talked over the telephone extension
(unicast transmission)(multicast transmission)

Session response: Extension telephone call session

end: Extension telephone call session cancellation:

Extension [yo] abandonment session change: Extension

reservation (reservation demand), voice [yobi] representation response, telephone

call interruption (media Cho substitution demand), and telephone cutting (RTP transmission

direction instruction demand)

Session forwarding: Forwarding after it forwards in extension call, and extension responds

- Session establishment

Parameter to demand establishment of session from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

(status: State of session)

ReqEvent-Session=req:1 * (no:
 Other party number information *) *
 (jmin: Minimum value of buffer * jmax: Maximum in buffer value
) (tos: ToS value h)
 (sdp_kind: Kind of information put on SDP)

Name	Definition value	Explanation
Other party number information		Number of intended party who sets it to part user of To header
State of session	inactive	Demand of stop of sending and receiving story of RTP
	recvonly	Telephone stop demand of RTP
	sendonly	Receiving talk stop demand of RTP
	sendmute	Telephone stop demand of RTP (silent packet sending)
Minimum value of Jitter buffer	0. 256	The minimum value of Jitter of RTP is set.
The maximum in Jitter buffer value	0. 256	Jitter maximum value of RTP is set.
Tos	00- FF (hexadecimal number)	The TOS value of RTP is set (h is added to the end).
[**] to SDP_kind (SDP information. Fixed [suru] SrcIP and Po Kind of [to])	Local	In Src of SDP of INVITE, local IP [a] of the terminal. The dress and the port are set.
	Global	In Src of SDP of INVITE, global IP of the terminal. The address and the port are set.

. usage example .

(1) When the session the dial fixation demands establishment (Local IP information is used

for SDP) ReqEvent-Session=req:1 no:100 jmin:0 jmax:150 tos:c0h SDP_kind:Local.

. condition etc. .

- (1) Dialog information (Call-ID, To tag and From tag) is not added to this parameter. Generate dialog information with the terminal and transmit the INVITE request.
- (2) Set the terminal to user part SIP-URI of the request line and the To header as it is when other party number information is specified for this parameter. Set . Overlap_sending" of default when it is not specified. Moreover, add information specified with Info-ServerURI as it is about the specification since @.
- (3) Codec information used with media established by this parameter is directed by the multi part in another message body. SDP information for details of codec information.
InstructionRefer to [wo].
- (4) The Jitter buffer value and the ToS value specified by this parameter are assumed to be effective only with media established by a session concerned.
- (5) Operate when neither the Jitter buffer value nor the ToS value are specified by this parameter by the value specified by the Ind-MediaTos parameter and the Ind-Jitter parameter.

- Session response

Parameter to demand response of session from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req:2*

Call-id: [Yoshiki] another child * to: To tag * from: From tag *
 (jmin: Minimum value of buffer * jmax: Maximum in buffer value
 *) (tos: ToS value
 h*) (sdp_kind: Kind of information put on SDP)

Name	Definition value	Explanation
[Yoshiki] another child		Call-ID header value of INVITE that has been received
To tag		To tag value of 180Ringing message
From tag		From tag value of INVITE message
Minimum value of Jitter buffer	0. 256	The minimum value of Jitter of RTP is set.
The maximum in Jitter buffer value	0. 256	Jitter maximum value of RTP is set.
Tos	00- FF (hexadecimal number)	The TOS value of RTP is set (h is added to the end).
[**] to SDP_kind (SDP information. Fixed [suru] SrcIP and Po Kind of [to])	Local	In Src of SDP of INVITE, local IP [a] of the terminal. The dress and the port are set.
	Global	In Src of SDP of INVITE, global IP of the terminal. The address and the port are set.

. usage example .

(1) When the session the dial fixation demands establishment (Local IP information is

used for SDP) ReqEvent-Session=req:2

call-id:123456@172.

16.0.10 to:5678 from

91011 jitter min:0 max :150 tos:c0 SDP_kind:Local

. condition etc. .

- (1) Transmit this parameter with 180 response reception from the arrival of a message terminal.
- (2) Codec information used with media established by this parameter is directed by the multi part in another message body. SDP information for details of codec information. InstructionRefer to [wo].
- (3) The Jitter buffer value and the ToS value specified by this parameter are assumed to be effective only with media established by a session concerned.
- (4) Operate when neither the Jitter buffer value nor the ToS value are specified by this parameter by the value specified by the Ind-MediaTos parameter and the Ind-Jitter parameter.

- Closing of a session

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req:3*

Call-id: [Yoshiki] another child * to: To tag * from: From tag

Name	Definition value	Explanation
[Yoshiki] another child		Call-ID header value of INVITE that has been received
To tag		To tag value of 180Ringing message
From tag		From tag value of INVITE message

. usage example .

(1) When you end the session under the telephone call

ReqEvent-Session=req:3 call-id:123456@172.16.0.10 to:5678 from 91011

. condition etc. .

(1)

- Session cancellation

Parameter to demand cancellation of session from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req:4*

Call-id: [Yoshiki] another child (* to: To tag)* from: From tag

Name	Definition value	Explanation
[Yoshiki] another child		Call-ID header value of INVITE that has been received
To tag		To tag value of 180Ringing message
From tag		From tag value of INVITE message

. usage example .

(1) When you end the session under the call

ReqEvent-Session=req:4 call-id:123456@172.16.0.10 from 91011

. condition etc. .

(1) To tag information is not given when to tag information is a unsetting and the cancel message is transmitted.

- Session change

Parameter to demand change in session from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req:5*

Call-id: [Yoshiki] another child * to: To tag * from: From tag

* (status: * of state of session)

(jmin: Minimum value of buffer * jmax: Maximum in buffer value

*) (Tos: ToS value h)-

()It peels off and it is possible to omit it. However, when media are changed, status is not set.

Name	Definition value	Explanation
[Yoshiki] another child		Call-ID header value of INVITE that has been received
To tag		To tag value of 180Ringing message
From tag		From tag value of INVITE message
State of session	inactive	Demand of stop of sending and receiving story of RTP
	recvonly	Telephone stop demand of RTP
	sendonly	Receiving talk stop demand of RTP
	sendmute	Telephone stop demand of RTP (silent packet sending)
Minimum value of Jitter buffer	0. 256	The minimum value of Jitter of RTP is set.
The maximum in Jitter buffer value	0. 256	Jitter maximum value of RTP is set.
Tos	00- FF (hexadecimal number)	The TOS value of RTP is set (h is added to the end).

. usage example .

When you put the session under the telephone call into the state of the reservation

ReqEvent-Session=req:5 call-id:123456@172.16.0.10 from 91011 status:inactive jitter
min:10 max:150 tos:c0

When you put the session into the state of the person passing while talking over the telephone

ReqEvent-Session=req:5 call-id:123456@172.16.0.10 from 91011 status: recvonly jitter
min:10 max:150 tos:c0

When changing while talking over the telephone at the destination of the RTP putting

ReqEvent-Session=req:5 call-id:123456@172.16.0.10 from 91011 jitter min:10 max:150
tos:c0

. condition etc. .

- (1) Codec information used with media established by this parameter is directed by the multi part in another message body. The SDP information finger for details of codec information.
Shine Refer to [wo].
- (2) The Jitter buffer value and the ToS value specified by this parameter are assumed to be effective only with media established by a session concerned.
- (3) Operate when neither the Jitter buffer value nor the ToS value are specified by this parameter by the value specified by the Ind-MediaTos parameter and the Ind-Jitter parameter.

- Session forwarding

Parameter to demand forwarding session from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Session=req:6*

Call-id: [Yoshiki] another child * to: To tag * from: From tag * Forwarding
instruction content of forwarding instruction)

Name	Definition value	Explanation
[Yoshiki] another child		Call-ID header value of INVITE that has been received
To tag		To tag value of 180Ringing message
From tag		From tag value of INVITE message
Forwarding instruction	refer-to	REFER transmission instruction
	replace	INVITE transmission instruction with Replaces header
	referred-by	INVITE transmission instruction with Referred-by header
	result	Forwarding result NOTIFY transmission instruction
Content of forwarding instruction	(forwarding site number)	When the forwarding instruction is refer-to Other party turn of forwarding site that sets Refer-To header Title
	(forwarding former number)	When the forwarding instruction is replace Other party in forwarding origin set to Replaces header Number
	(forwarding instruction terminal number)	When the forwarding instruction is referred-by Forwarding instruction set to Referred-By header Number of terminal
	(status of terminal to be forwarded)	When the forwarding instruction is result Transmitted content of forwarding result

. usage example .

When you direct a forwarding former terminal the transmission of the REFER request

ReqEvent-Session=req:6 call-id:123456@172.16.0.10 from:91011 to:1234
refer-to:2000

. condition etc. .

6.1.7.2. Program starting download demand (ReqEvent-Download)

Parameter to demand starting download of program from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-Download = address type: Server address: Protocol type
Login name: Password: Directory name: File name

Name	Definition value	Explanation
Address type	IP4	IPv4
	IP6	IPv6
	FQDN	FQDN
Server address	XXX.XXX.XXX.XXX	For the IPv4 address
	[XXXX:XXXX:XXXX:XXXX:XXXX]	[De] is bundled for the IPv6 address.
	ftp.aaa.com	FQDN form
Protocol type	FTP	
	TFTP	
Login name		Login name with FileServer
Password		Login password of FileServer
Directory name		Storage location remote directory of object data
File name		File name of object data

. usage example .

(1) IPv4 when program download by FTP is demanded

ReqEvent-Download=IP4:10.10.10.10:FTP:nec:nec:/home/nec:-

(2) IPv6 when program download by FTP is demanded

ReqEvent-Download=IP6: 3ffe:ffff:ffff::1: FTP:nec:nec:/home/nec:-

. condition etc. .

- (1) The login name, the password, and the directory name are necessary only for the FTP.
- (2) Describe "-" when there are no specification in the login name, the password, the directory name, and the file name.
- (3) When the protocol specifies neither the login name nor the password in the case of the FTP, it logs in with Anonymous, and the password is not specified.

6.1.7.3. File transfer beginning demand (ReqEvent-FileTransfer)

Parameter to demand beginning file transfer from main device to terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-FileTransfer = forwarding type: Forwarding

data type * address type: Server address: Protocol type

Login name: Password: Directory name: File name

Name	Definition value	Explanation
Forwarding type	dl	Download instruction
	ul	Up-loading instruction
Forwarding data type	firmware	Terminal firmware
	dir	Terminal local telephone book
	history	Terminal local arrival and departure Makoto history
	tone	Call progress tone
	menu	Download menu
	app-info	Softphone application program updated information
	app-prog	Softphone application program program
Address type	ip4	IPv4
	ip6	IPv6
	fqdn	FQDN
Server address	XXX.XXX.XXX.XXX	For the IPv4 address
	[XXXX:XXXX:XXXX:XXXX:XXXX]	[De] is bundled for the IPv6 address.
	ftp.aaa.com	FQDN form
Protocol type	ftp	
	tftp	
Login name		Login name with FileServer
Password		Login password of FileServer
Directory name		Storage location remote directory of object data
File name		File name of object data

. usage example .

(1) IPv4 when telephone book download by FTP is

demandReqEvent-FileTransfer=dl:dir ip4:10.10.10.10:ftp:nec:nec:/home/nec:-

(2) IPv6 when telephone book download by FTP is

demandReqEvent-FileTransfer=dl:dir ip6:[3ffe:ffff:ffff::1]:ftp:nec:nec:/home/nec:-

V e r s i o n c o r r e c t i o n	p a g e		
TSX-xxxxx-xxx-xxxx	1.2	-	459/516

. condition etc. .

- (1) The login name, the password, and the directory name are necessary only for the FTP.
- (2) Describe " - " when there are no specification in the login name, the password, the directory name, and the file name.
- (3) When the protocol specifies neither the login name nor the password in the case of the FTP, it logs in with Anonymous, and the password is not specified.
- (4) Do not specify the file name when the forwarding data type is . app-info" . app-prog".

6.1.7.4. Terminal local data deletion demand (ReqEvent-DelTermData)

Parameter to direct terminal from main device deletion of various data that is local and managed.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-DelTermData = deletion data type function identification code)

Name	Definition value	Explanation
Deletion data type	All	All data
	Tcfg	Terminal setting data
	Pcfg	Individual, set data
	Pdata	Individual information data
	PID-pass	Personal ID password
	Cert	802.1X certificate
	License	Terminal function license
	Menu	Download menu
Function identification code	00. FF	- Only for the terminal function license

. usage example .

(1) ReqEvent-DelTermData=all when deletion of all

terminal local data is directed(2)

ReqEvent-DelTermData=Pdata when deletion of individual

information data of terminal is directed

(3) ReqEvent-DelTermData=License:01 when deletion of license data of function

identification code "01" of terminal is directed

. condition etc. .

- (1) When this parameter is received, the terminal deletes the data specified local and management.
However, individual information preserved in an external server by the personal data roaming function is not deleted (examination of the necessity).
- (2) Transmit the ResEvent-DelTermData parameter from the terminal as a response of this parameter.
- (3) If "Function code" is not specified when "Deletion data type" is "License (terminal function license)", all the license data (copy) that the directed terminal maintains is deleted.
When "Function code" is specified, only the license data is deleted. Refer to the paragraph of terminal function license control demand (ReqEvent-TermLicense) parameter for details of "Function code".

6.1.8. Event demand parameter (ReqEvent-xxxx: Terminal . main device)

Table X-1 shows the event demand parameter that the terminal for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Event demand parameter list that main device for table X-1 KTS-SIP adds

Name	Parameter name	Remarks
Terminal license information demand	ReqEvent-TermLicense	New
Terminal option demand	ReqEvent-TermOption	New
Real-time update demand of presence	ReqEvent-PreRealUD	New
Update request of presence	ReqEvent-UpDatePres	New
Buddy list registration demand	ReqEvent-AddBuddyList	New
Buddy list deletion demand	ReqEvent-DelBuddyList	New
Substatus change demand	ReqEvent-ChgStatus	New
Comment change demand	ReqEvent-ChgComment	New

6.1.8.1. Terminal function license control demand (ReqEvent-TermLicense)

Parameter to demand control concerning terminal function license from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-TermLicense = control type Function identification code: Number of licenses)

Name	Definition value	Explanation
Control type	Info	Reference to terminal function license
	Assign	Allocation of terminal function license
	Remove	Release of terminal function license
Function identification code	00	Reservation code
* Only at Assign/Remove	01. FF	Two byte character string (one hexadecimal bytecode corresponding)
Number of licenses	01. FF	Two byte character string (one hexadecimal bytecode corresponding)
* Only at Assign/Remove		

. usage example .

(1) When you demand all Semi-Floating license information allocated in the terminal

ReqEvent-TermLicense=Info

(2) When you demand one Semi-Floating license allocation of terminal function A(function identification code =01)

ReqEvent-TermLicense=Assign:01:01

(3) When you release one license allocation of terminal function A(function identification code =01)

ReqEvent-TermLicense=Remove:01:01

(4) When you release all licenses that have been allocated in the terminal

ReqEvent-TermLicense=Remove

. condition etc. .

- (1) The terminal in terminal registration (REGISTER) replaces, and .."Terminal identification code".. uses a main device for the following character strings of notified "Terminal type" (correspond one hexadecimal bytecode) in the User-Agent header by two bytes as a retrieval key to Semi-Floating license information.

Terminal type	Terminal identification code	Explanation
DPT	50	Desktop phone (Desktop Phone Terminal)
DPE	50	Desktop phone (Desktop Phone Economy)
DPV	50	Desktop phone (Desktop Phone Value)
DPD	50	Desktop phone (Desktop Phone Desiless)
DPS	50	Desktop phone (Desktop Phone Sophisticated)
SPT	51	Softphone (Soft Phone Terminal)
WPT	52	Wireless phone (Wireless Phone Terminal)
CTI	53	CTI application
AGW	54	Application gateway server
Undecided	55 . 59	Reservation area
-	1x-4x, 6x-FF	(*) that cannot be used

- The license server (NECII management) is a decimal number and 00 as for the terminal identification code Because the license can be issued only within the range of 99, E4 . FF (100-255) cannot be used.

- (2) It doesn't provide in this specifications so that "Function identification code" may depend on "Terminal type". However, it is necessary to be managed as a code unique in each "Terminal type". Moreover, it should be the same as the definition of "Function identification code" included in the Activation code that the license server actually issues.
- (3) Semi-Floating license information is registered by way of a main device.
- (4) The number of demand licenses specified when allocation (Assign) of the terminal function license is demanded remains, and in a main device, when it is more than the number of licenses, the terminal function license control response responds by "NG", and even if one or more exists, the number of comparison remainder licenses doesn't allocate any license.
- (5) The number of allocation licenses releases only release though the number of release demand licenses remains when release (Remove) of the terminal function license is demanded and it is assumed "NG" response when it is more than the number of licenses. In a word, the number of remainder licenses becomes 0.

6.1.8.2. Terminal option demand (ReqEvent-TermOption)

Parameter to notify main device from terminal demand by option equipment connected with terminal.

. addition message .

It adds to the NOTIFY request.

. basic format .

ReqEvent-TermOption = option demand number: Option demand information

Name	Definition value	Explanation
Option demand number	F1	Control right demand of terminal resource
	F2. F255	Undefined
Option demand information	It is different in each command number.	

- Control right demand of terminal resource (F1)

Parameter that inquires the right or wrong of use of main device to control resource (LCD/LED/KEY/VOICE) of main body of telephone with option equipment.

. format .

F1: Terminal resource type terminal resource type)

Name	Definition value	Explanation
Terminal resource type	ALL	The control right of all the resources is demanded.
	LCD	The control right of LCD is demanded.
	LED	The control right of LED is demanded.
	VOICE	The control right of the voice passing is demanded.
	KEY	The control right of the key is demanded.
	CLEAR	The control right of all the resources is liberated.

. usage example .

- (1) When the option equipment demands the control right of LCD and the key to the main body of the telephone

ReqEvent-TermOption=F1:LCD:KEY

- (2) When the option equipment demands all resources of the main body of the telephone control rights

ReqEvent-TermOption=F1:ALL

- (3) When liberating it excluding the control right of the key with the option equipment has all resources of the main body of the telephone control rights

ReqEvent-TermOption=F1:KEY

- (4) When the option equipment liberates all resources of the main body of the telephone control rights

ReqEvent-TermOption=F1:CLEAR

. condition etc. .

- (1)

6.1.8.3. Real-time update demand of presence (ReqEvent-PreRealUD)

Parameter to do real-time update request of Presence from terminal to main device in On/Off.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-PreRealUD = state of update

Name	Definition value	Explanation
State of update	ON	It in real time updates it.
	OFF	It doesn't in real time update it.

. usage example .

(1) ReqEvent-PreRealUD=On when real-time

update demand is turned on(2)

ReqEvent-PreRealUD=Off when real-time

update demand is turned off

. condition etc. .

(1) Cygnus is assumed to be initial value . Off" of a real-time update.

(2) The response is answered with ResEvent-PreRealUD.

6.1.8.4. Update request of presence (ReqEvent-UpDatePres)

The parameter of Presence in a main device from the terminal to do the update demand.

. addition message .

It adds to the NOTIFY request.

. format .

ReqEvent-UpDatePres=<xx > extension number/personal ID/nickname </ xx>* <xx
extension number/personal ID/..>.. nickname </ xx>*.

- Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Personal ID		Personal ID number
Extension number	1. 9,0,*,#	Extension number information (Up to eight digits).
Nickname	Alphanumeric character	Alias that specifies individual
<xx></xx>	ID	The personal ID is enclosed with < ID></ID >.
	EN	The extension number is enclosed with < EN></EN >.
	NN	Nickname is enclosed with < NN></NN >.
	ALL	The part placed among is disregarded.

. usage example .

(1) When the update demand is done specifying the extension number, extension 100 and extension

200 are updated ReqEvnet-UpDatePres=<EN>100</EN><EN>200</EN>

>(2) When the update demand is done specifying the personal ID and the extension number, 1234 and personal ID =

extension 200 are updated ReqEvnet-UpDatePres=<ID>1234</ID><EN>200</EN>

>(3) When the update demand is done specifying the personal ID and nickname, 1234 and personal ID = nickname = Alice is renewed.

ReqEvnet-UpDatePres=<ID>1234</ID><NN>Alice</NN>

(4) ReqEvent-UpDatePres=<ALL></ALL> when update

demand is done for all BuddyList >

. condition etc. .

(1) When Terminal Type is . terminal" . softphone", BuddyList of an individual terminal is transmitted. Registered information all terminal is transmitted for Server.

(2) It transmits by presence information Info-Presence message of the update.

6.1.8.5. Buddy list registration demand (ReqEvent-AddBuddyList)

Parameter to register terminal from terminal to main device to Buddy List.

. addition message .

It adds to the NOTIFY request.

. format .

Extension number/personal ID/nickname </ ReqEvent-AddBuddyList=<xx > xx >-

Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Personal ID		Personal ID number
Extension number	1. 9,0,*,#	Extension number information (Up to eight digits).
Nickname	Alphanumeric character	Alias that specifies individual
<xx></xx>	ID	The personal ID is enclosed with < ID></ID >.
	EN	The extension number is enclosed with < EN></EN >.
	NN	Nickname is enclosed with < NN></NN >.

. usage example .

(1) ReqEvnet-AddBuddyList=<EN>100</EN when extension

number 100 is added to Buddy list

>(2) The personal ID to the Buddy list

ReqEvnet-AddBuddyList=<ID>1234</ID when 1234 is added

>(3) ReqEvnet-AddBuddyList=<NN>Alice</NN when

nickname Alice is added to Buddy list >

. condition etc. .

(1) It responds this parameter with ResEvent-AddBuddyList.

6.1.8.6. Buddy list deletion demand (ReqEvent-DelBuddyList)

The parameter in a main device from the terminal to Buddy List to delete the terminal.

. addition message .

It adds to the NOTIFY request.

. format .

Extension number/personal ID/nickname </ ReqEvent-DelBuddyList=<xx > xx >-

Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Personal ID		Personal ID number
Extension number	1. 9,0,*,#	Extension number information (Up to eight digits).
Nickname	Alphanumeric character	Alias that specifies individual
<xx></xx>	ID	The personal ID is enclosed with < ID></ID >.
	EN	The extension number is enclosed with < EN></EN >.
	NN	Nickname is enclosed with < NN></NN >.
	ALL	The part placed among is disregarded.

. usage example .

(1) ReqEvnet-DelBuddyList=<EN>100</EN when extension

number 100 is deleted from Buddy list

>(2) Personal ID from Buddy list ReqEvnet-DelBuddy

List=<ID>1234</ID when 1234 is deleted

>(3) ReqEvnet-DelBuddyList=<NN>Alice</NN when nickname

Alice is deleted from Buddy list

>(4) ReqEvent-DelBuddyList=<ALL></ALL when all information

registered in Buddy list is deleted >

. condition etc. .

(1)

6.1.8.7. Substatus change demand of presence (ReqEvent-ChgStatus)

Parameter to demand substatus change in presence from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Substatus </ xx><SS > ReqEvent-ChgStatus=<xx > SS of extension number/personal ID/nickname </>-

Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Personal ID	Omission when not existing	Personal ID number
Extension number	1. 9,0,*,#	Extension number information (Up to eight digits).
Nickname	Alphanumeric character	Alias that specifies individual
<xx></xx>	ID	The personal ID is enclosed with < ID></ID >.
	EN	The extension number is enclosed with < EN></EN >.
	NN	Nickname is enclosed with < NN></NN >.
Substatus	Character string	Arbitrary character string displayed in terminal (Britain and number, Japanese syllabary, and Chinese character)

. usage example .

(1) Personal ID ReqEvent-ChgStatus=<ID>1234</ID><SS>Away</SS>

(2) ReqEvent-ChgStatus=<EN>1234</EN><SS>Away</SS>

when substatus of extension number 100 is changed to . Away"

when substatus of 1234 is changed to . Away"

>(3) When you change status to . Away" without the ReqEvent-ChgStatus=<

NN>Alice</NN><SS>Away</SS> (4) personal ID when the substatus

of nickname Alice is changed to . Away" (Note: In this case,
the status of the terminal that has been transmitted is changed)

ReqEvent-ChgStatus=<SS>Away</SS>

. condition etc. .

- (1) It responds this parameter with ResEvent-ChgStatus.
- (2) When neither the identification number nor the terminal that has been sent are corresponding, it sets aside a claim excluding AGW/CTI.
- (3) When it is sent and the coming terminal is not corresponding to the extension number, it sets aside a claim excluding AGW/CTI.
- (4) The substatus is notified to the terminal for being able other strings when the substatus change is executed to the personal ID by one of the terminals for the string.

6.1.8.8. Comment change demand (ReqEvent-ChgComment)

Parameter to demand comment change from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Comment </ xx><CO > ReqEvent-ChgComment=<xx > CO of extension number/personal ID/nickname </ >-

Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Personal ID	Omission when not existing	Personal ID number
Extension number	1. 9,0,*,#	Extension number information (Up to eight digits).
Nickname	Alphanumeric character	Alias that specifies individual
<xx></xx>	ID	The personal ID is enclosed with < ID></ID >.
	EN	The extension number is enclosed with < EN></EN >.
	NN	Nickname is enclosed with < NN></NN >.
Comment	Normal-width 20 characters	Character string for each terminal display (Britain and number, Japanese syllabary, and Chinese character)

. usage example .

(1) Personal ID ReqEvent-ChgComment=<ID>1234</ID><CO>Away</CO>

(2) ReqEvent-ChgComment=<EN>1234</EN><CO>Away</CO>

when comment on extension number 100 is changed to

. Busy" when comment on 1234 is changed to . Busy"

>(3) When you change the comment to . Busy" without the

ReqEvent-ChgComment=<NN>Alice</NN><CO>Away</CO> (4) personal ID when the

comment of nickname Alice is changed to . Busy" (Note: In this case,
the comment on the terminal that has been transmitted is changed)

ReqEvent-ChgComment=<CO>Away</CO>

. condition etc. .

(1) It responds this parameter with ResEvent-ChgComment.

(2) When neither the identification number nor the terminal that has been sent are corresponding, it sets aside a claim excluding AGW/CTI.

(3) When it is sent and the coming terminal is not corresponding to the extension number, it sets aside a claim excluding AGW/CTI.

(4) The comment is notified to the terminal for being able other strings when the comment change is executed to the personal ID by one of the terminals for the string.

6.1.9. Event demand response parameter (ResEvent-xxxx: Terminal . main device)

Table X-2 shows the event demand response parameter that the terminal for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Event demand response parameter list that terminal for table X-2 KTS-SIP adds

Name	Parameter name	Remarks
Session demand response	ResEvent-Session	
Program download result notification	ResEvent-Download	
File transfer result notification	ResEvent-FileTransfer	New
Terminal local data deletion demand	ResEvent-DelTermData	New
Terminal license information demand response	ResEvent-TermLicense	New (Only Remove :).

6.1.9.1. Session demand response (ResEvent-Session)

Parameter to notify main device from terminal response to session demand.

. addition message .

It adds to the response to the NOTIFY request including the session demand.

. format .

ResEvent-Session = answering cord: Content of response

Answering cord	Content of response	Reason
0	OK	Session demand normality receipt. The specified session demand is normally processed.
1	Not Acceptable Status	The specified session demand is not accepted. The session demand not suitable in the state was received.
2	Dialog does not exist	The specified dialog doesn't exist.
3	No Resource	There is no resource. The session more than this cannot be established.
4	Request is not supported	The specified session demand is unsupported.
5	Other reason	Error by other reasons.

. usage example .

(1) ResEvent-Session=0:OK when session

demand is normally accepted

(2) ResEvent-Download=1:Not Acceptable Status

when specified session demand is not accepted

. condition etc. .

(1) It uses it to notify the result from the terminal to a main device when a main device demanded the session from the terminal.

6.1.9.2. Program download result notification (ResEvent-Download)

Parameter to notify main device from terminal result of program download.

. addition message .

It adds to the NOTIFY request.

. format .

ResEvent-Download = answering cord: Content of response

Answering cord	Content of response	Reason
0	OK	Normal termination
1	Busy	It is talking over the telephone
2	File does not exist	There is no pertinent download file.
3	H/W ver does not	[Ba-doweaba-jon;era-]
99	Other reason	Other reasons

. usage example .

(1) ResEvent-Download=0:OK in case of

normal termination of download

(2) ResEvent-Download=1:Busy when download demand is not accepted because

it is talking over the telephone

. condition etc. .

(1) It uses it to notify the result from the terminal to a main device when a main device did the download demand to the terminal.

6.1.9.3. File transfer result notification (ResEvent-FileTransfer)

Parameter to notify main device from terminal result of file transfer.

. addition message .

It adds to the NOTIFY request.

. format .

ResEvent-FileTransfer = file transfer result

Name	Definition value	Explanation
File transfer result	OK	Normal termination of forwarding
	FileServerNotFound	The file server doesn't exist.
	LoginError	Login attestation error
	FileDirectoryNotFound	The directory doesn't exist.
	OtherError	Other errors

. usage example .

(1) ResEvent-FileTransfer=OK when

file transfer ends normally

. condition etc. .

(1) The terminal that receives the file transfer beginning demand must notify the file transfer result and notify a main device the generation of the event by using this parameter.

6.1.9.4. Terminal local data deletion result notification (ResEvent-DelTermData)

Parameter to notify main device from terminal deletion result of terminal local data.

. addition message .

It adds to the NOTIFY request.

. format .

ResEvent-DelTermData = deletion result

Name	Definition value	Explanation
Deletion result	ok	Normal termination
	busy	It is processing it.
	othererrorr	Other errors

. usage example .

(1) ResEvent-DelTermData=ok when deletion of terminal

local data ends normally

(2) ResEvent-DelTermData=busy when it is not possible to execute it because deletion of terminal

local data is processing download

. condition etc. .

(1) Judge that the specified data is not deleted as for a main device when "Busy" or "Othererror" is returned from the terminal by "Deletion result".

(2)

6.1.10. Event demand response parameter (ResEvent-xxxx: Main device . terminal)

Table X-2 shows the event demand response parameter that a main device for KTS-SIP adds. Details are described only about the parameter that is corrected in this paragraph or newly added.

Event demand response parameter list that terminal for table X-2 KTS-SIP adds

Name	Parameter name	Remarks
Terminal function license control response	ResEvent-TermLicense	New
Terminal option demand response	ResEvent-TermOption	New
Real-time update response of presence	ResEvent-PreRealUD	New
Update response of presence	ResEvent-UpDatePres	New
Buddy list registration response	ResEvent-AddBuddyList	New
Buddy list deletion response	ResEvent-DelBuddyList	New
Substatus change response	ResEvent-ChgStatus	New
Comment change response	ReqEvent-ChgComment	New

6.1.10.1. Terminal function license control response (ResEvent-TermLicense)

Parameter to notify terminal from main device control result concerning terminal function license.

. addition message .

It adds to the NOTIFY request.

. format .

ResEvent-TermLicense = control type: Control result NG

reason: Number of excess and deficiencies: Error code)

License function identification code number of licenses ..(/.. type

License function identification code number of licenses type)

Name	Definition value	Explanation
Control type	Info	Reference to terminal function license
	Assign	Allocation of terminal function license
	Remove	Release of terminal function license
Control result	OK	Success
	NG	Failure
NG reason	NONE	License none *Only at Info
	UNMATCH	Excess and deficiency * Only at Assign/Remove
	ETC	Others
Number of excess and deficiencies * Only at Assign/Remove	01. FF	Two byte character string (one hexadecimal bytecode corresponding) When only the control result "NG" and the NG reason is "UNMATCH", it applies it. ..taking part. [suru]. At the answer of the acquisition demand: The number of lack. At the answer of the return demand: The number more.
Error code	00. FF	When only the control result "NG" and the NG reason is "ETC", it gives it. [Ru]. 01:Data base error 02:The data base is being initialized. 00 and 03 FF: Reservation
Function identification code	00	Reservation code
	01. FF	Two byte character string (one hexadecimal bytecode corresponding)
License type	01	Reserve
	02	Semi-Floating
Number of licenses	01. FF	One hexadecimal bytecode ..character string (.. corresponding two bytes At the answer of acquisition/return demand: The number of demands. At the answer of the reference: The number of current possession.

. usage example .

- (1) When you notify all Semi-Floating license information allocated in the terminal

ResEvent-TermLicense=Info:OK:010102020102030102040102

- (2) When there is no license information allocated in the terminal when reference (Info) to the terminal function license is demanded

ResEvent-TermLicense=Info:NG:NONE

- (3) When there is no license information allocated in the terminal when release (Remove) of the terminal function license (function identification code "33") is demanded (Release is demanded 1 piece)

ResEvent-TermLicense=Remove:NG:UNMATCH:01:330201

- (4) When the main device data base error occurs when reference (Info) to the terminal function license is demanded

ResEvent-TermLicense=Info:NG:ETC:01

- (5) When the license allocation demand by the terminal to the terminal function license (function identification code "33") succeeds (The allocation is demanded 1 piece)

ResEvent-TermLicense=Assign:OK:330201

- (6) When the license release demand by the terminal to the terminal function license (function identification code "33") succeeds (Release is demanded 1 piece)

ResEvent-TermLicense=Remove:OK:330201

. condition etc. .

- (1)

6.1.10.2. Terminal option demand response (ResEvent-TermOption)

Parameter to notify terminal from main device response to option to connect with terminal.

. addition message .

It adds to the NOTIFY request.

. format .

ResEvent-TermOption = option demand number: Option response information

Name	Definition value	Explanation
Option demand number	F1	Control right response of terminal resource
	F2. F255	Undefined
Option response information	It is different in each command number.	

- Control right response of terminal resource (F1)

Parameter that notifies result of inquiring the right or wrong of use of main device to control resource (LCD/LED/KEY/VOICE) of main body of telephone with option equipment.

. format .

F1: Demand result of terminal resource type demand result of terminal resource type)

Name	Definition value	Explanation
Terminal resource type	lcd	The control right of LCD is demanded.
	led	The control right of LED is demanded.
	voice	The control right of the voice passing is demanded.
	key	The control right of the key is demanded.
Demand result	(ok)	The demand by the option equipment is permitted.
	(ng)	The demand by the option equipment is refused.

. usage example .

(5) When you notify the option equipment the demand result of the control right of LCD and the key to the main body of the telephone

ResEvent - TermOption=F1:lcd(ok):key(ok)

(6) When you notify the option equipment the demand result of all resources of the main body of the telephone control rights

ResEvent - TermOption=F1:lcd(ok):led(ok):voice(ok):key(ok)

. condition etc. .

(2)

6.1.10.3. Real-time update response of presence (ResEvent-PreRealUD)

Response parameter of real-time update request of Presence sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Update result </ ResEvent-PreRealUD=<RE > RE >

Name	Definition value	Explanation
Update result (RE)	OK	Success
	NG	Failure

. usage example .

(1) ResEvent-PreRealUD=<RE>OK</RE when real-time

update demand is accepted

>(2) ResEvent-PreRealUD=<RE>NG</RE when

real-time update demand is refused >

. condition etc. .

(1) It is used as a response of ReqEvent-PreRealUD.

6.1.10.4. Update response of presence (ResEvent-UpDatePres)

Response parameter of update request of Presence sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Update result </ ResEvent-UpDatePres=<RE > RE

>Cause of failure </ xx><CA > CA of < xx > extension number/personal ID/nickname </ >

- ... -

Xx changes depending on the parameter set as follows.

Name	Definition value	Explanation
Update result (RE)	OK	Success
	NG	Failure
Personal ID (ID)		Personal ID number
Extension number (EN)	1, 9, 0, *, #	(Up to eight digits.)
Nickname (NN)	Alphanumeric character	Alias that specifies individual
Cause of failure (CA)	403	Prohibition of update
	404	The specified extension number is not found.
	500	Internal error
	503	Service cannot be used.

. usage example .

(1) ResEvent-UpDatePres=<RE>OK</RE

when update request is accepted

>(2) A part of the update request : normally.

Treatable..extension..demand..fail.

. condition etc. .

- (1) Cause is not set for OK. It is set only for NG.
- (2) OK/NG is answered to all items in ReqEvent-UpDatePres with the demand.
- (3) This parameter is used as a response parameter of ReqEvent-UpDatePres.
- (4) Presence information with the update request is notified with Info-Presence.

6.1.10.5. Buddy list registration response (ResEvent-AddBuddyList)

Response parameter of registration demand for Buddy List sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Cause of failure </ RE><CA > ResEvent-AddBuddyList=<RE > CA of registration result </ >

Name	Definition value	Explanation
Registration result (RE)	OK	Success
	NG	Failure
Cause of failure (CA)	403	Additional prohibition to Buddy List
	404	The specified extension number is not found.
	500	Internal error
	503	Service cannot be used.

. usage example .

(1) ResEvent-AddBuddyList=<RE>OK</RE when registration

demand for Buddy list is accepted

>(2) ResEvent-AddBuddyList=<RE>NG</RE><CA>404</CA when extension

number specified by registration demand is not found >

. condition etc. .

(1) Cause is not set for OK. It is set only for NG.

(2) This parameter is used as a response parameter of ReqEvent-AddBuddyList.

6.1.10.6. Buddy list deletion response (ResEvent-DelBuddyList)

Response parameter of deletion demand by Buddy List sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Cause of failure </ RE><CA > ResEvent-DelBuddyList=<RE > CA of deletion result </ >

Name	Definition value	Explanation
Deletion result (RE)	OK	Success
	NG	Failure
Cause of failure (CA)	404	The specified extension number is not found.
	500	Internal error
	503	Service cannot be used.

. usage example .

(1) ResEvent-DelBuddyList=<RE>OK</RE when deletion

demand from Buddy list is accepted >

. condition etc. .

(1) Cause is not set for OK. It is set only for NG.

(2) This parameter is used as a response parameter of ReqEvent-DelBuddyList.

6.1.10.7. Substatus change response of presence (ResEvent-ChgStatus)

Response parameter of substatus change demand sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Cause of failure </ RE><CA > ResEvent-ChgStatus=<RE > CA of change result </ >

Name	Definition value	Explanation
Change result (RE)	OK	Success
	NG	Failure
Cause of failure (CA)	404	Status none of specification
	500	Internal error
	503	Service cannot be used.

. usage example .

(1) ResEvent-ChgStatus=<RE>OK</RE when change

request of substatus is accepted

>(2) ResEvent-ChgStatus=<RE>NG</RE><CA>404</CA

when change request of substatus is refused >

. condition etc. .

(1) Cause is not set for OK. It is set only for NG.

(2) This parameter is used as a response parameter of ReqEvent-ChgStatus.

6.1.10.8. Comment change response (ResEvent-ChgComment)

Response parameter of comment change demand sent from terminal to main device.

. addition message .

It adds to the NOTIFY request.

. format .

Cause of failure </ RE><CA > ResEvent-ChgComment=<RE > CA of change result </ >

Name	Definition value	Explanation
Change result (RE)	OK	Success
	NG	Failure
Cause of failure (CA)	404	The specified extension number is not found.
	500	Internal error
	503	Service cannot be used.

. usage example .

(1) ResEvent-ChgComment=<RE>OK</RE> when change

request of comment is accepted

>(2) ResEvent-ChgComment=<RE>NG</RE><CA>404</CA>

when change request of comment is refused >

. condition etc. .

(1) Cause is not set for OK. It is set only for NG.

(2) This parameter is used as a response parameter of ReqEvent-ChgComment.

7. Appendix

7.1. Response code

7.1.1. Response list of REGISTER request

7.1.1.1. OK (200)

Answering cord		Reason	Remarks
200	OK (Un-Register)	Override	Ind-ErrDsp Display information "Overrid Log Off"

7.1.1.2. Bad Request (400)

Answering cord		Reason	Remarks
400	Bad Request	Message indispensable information shortage	Ind-ErrDsp Display information "Paramter Missing"

7.1.1.3. Unauthorized (401)

Answering cord		Reason	Remarks
401	Unauthorized	Terminal registration demand	ReqInfo-TermlInfo
		Override confirmation	ReqInfo-Override

7.1.1.4. Forbidden (403)

Answering cord	Reason	Remarks
403 Forbidden	It has registered at the other end.	. automatic log in . . plug and play (extension number specification). Ind-ErrDsp Display information "Duplicate Register Port"
	Compulsion registration refusal	. plug and play (extension number specification). Ind-ErrDsp Display information "Rejected"
	All ports are being used.	. plug and play (automatic operation). Ind-ErrDsp Display information "Full Port"
	Cygnus unsupport terminal type (User-Agent header)	Ind-ErrDsp Display information "Not Support"
	Automatic log on attestation error	. automatic log in . Ind-ErrDsp Display information "Unauthorized Auto"
	Manual log on attestation error	Ind-LogDsp
	License shortage	Ind-ErrDsp Display information "Exceeded Capability"
	The terminal for the CTI control extension number is illegal.	. automatic log in . . manual log in . . plug and play (automatic operation). . plug and play (extension number specification). Ind-ErrDsp Display information " Invalid Extension(CTI)" *Only at terminal type CTI. Display when terminal for control extension number doesn't exist. (When there is not logoff but no registration.)
	The terminal for the CTI control has been registered.	. automatic log in . . manual log in . . plug and play (automatic operation). . plug and play (extension number specification). Ind-ErrDsp Display information " Duplicate Register(CTI)" *Only at terminal type CTI. Display when terminal for control has already been registered with other CTI terminals
	The NGT terminal has been registered.	. automatic log in . . manual log in . . plug and play (automatic operation). . plug and play (extension number specification). Ind-ErrDsp Display information "Duplicate Register(NGT)" *Display when NGT protocol terminal has already been registered with same MAC in SoftPhone etc.

7.1.1.5. Not Found (404)

Answering cord	Reason	Remarks
404 Not Found	Main device extension number unsetting	Ind-ErrDsp Display information "Not Found Extension No"

7.1.1.6. Busy Here (486)

Answering cord	Reason	Remarks
486 Busy Here	Override refusal	. manual log in . Ind-ErrDsp Display information "Rejected Override"
	Extension number repetition	. plug and play (extension number specification). Ind-ErrDsp Display information "Double Assignment"

7.1.1.7. Not Acceptable Here (488)

Answering cord	Reason	Remarks
488 Not Acceptable Here server switch		

7.1.1.8. Server Internal Error (500)

Answering cord	Reason	Remarks
500 Internal error of Server Internal Error main device		Ind-ErrDsp Display information "Internal Error"

7.1.1.9. Server Unavailable (503)

Answering cord	Reason	Remarks
503 The Service Unavailable license is being registered.		Ind-ErrDsp Display information "License Processing"

7.2. Original character-code table

7.2.1. NEC original code (alphanumeric Japanese syllabary mode)

The original character-code table used for the correspondence character-code used for the display display when . nec-code' is selected is shown below.

L\H	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	☒	月	SP	0	@	P	`	p	Q	É	☒	-	タ	ミ	α	ρ
1	↓	日	!	1	A	Q	a	q	ü	æ	。	ア	チ	ム	ã	ɑ
2	À	á	"	2	B	R	b	r	é	Æ	Γ	イ	ツ	メ	β	θ
3	Á	í	#	3	C	S	c	s	â	ô	Ј	ウ	テ	モ	ε	∞
4	Â	ó	\$	4	D	T	d	t	ä	ö	、	エ	ト	ヤ	μ	Ω
5	Ã	ú	%	5	E	U	e	u	à	ò	・	オ	ナ	ユ	σ	ü
6	Ê	ñ	&	6	F	V	f	v	a	û	ヲ	カ	ニ	ヨ	ρ	Σ
7	Ë	Ñ	'	7	G	W	g	w	ç	ù	ア	キ	ヌ	ラ	ς	π
8	↑	*	(	8	H	X	h	x	ê	ÿ	イ	ク	ネ	リ	√	̄
9	☒	°	)	9	I	Y	i	y	ë	Ö	ウ	ケ	ノ	ル	-¹	y
A	☒	¿	*	:	J	Z	j	z	è	Ü	エ	コ	ハ	レ	j	千
B	☒	¬	+	;	K	[	k	{	ĩ	ø	オ	サ	ヒ	ロ	ˣ	万
C	☒	¬	,	<	L	¥	l	|	î	£	ヤ	シ	フ	ワ	ø	円
D	☒	í	-	=	M	]	m	}	ì	¥	ユ	ス	ヘ	ン	£	÷
E	☒	«	.	>	N	^	n	→	Ä	℔	ヨ	セ	ホ	°	ñ	☒
F	☒	»	/	?	O	_	o	←	Å	f	ツ	ソ	マ	°	ö	■

- The above-mentioned code table shows all the normal-width fonts.
- Use prohibition of code 00h. Moreover, . SP" indicates the blank (space).
- 09h-0Fh, A0h, and FEh are made a reservation area. Note that there is a possibility of allocating a different character in the future, too and the blank (space) is not guaranteed though it becomes blank (space) if it uses it.
- The blue net multiplication part shows the Japanese Japanese syllabary font.
- Note the point that depends on the font mounted on the terminal about the character actually displayed.

7.2.2. NEC original code (alphanumeric Russia and Turkish mode)

The original character-code table used for the correspondence character-code used for the display display when . nec-code-rus' is selected is shown below.

L \ H	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	☒	月	SP	0	@	P	`	p	ç	É	☒	-	О	Ю	α	в
1	↓	日	!	1	A	Q	a	q	ü	æ	。	A	П	Я	ä	ɑ
2	À	á	"	2	B	R	b	r	é	Æ	Г	Б	Р	Ğ	β	θ
3	Á	í	#	3	C	S	c	s	â	ô	Ј	В	С	İ	ε	∞
4	Â	ó	\$	4	D	T	d	t	ä	ö	,	Г	Т	Ş	μ	Ω
5	Ã	ú	%	5	E	U	e	u	à	ò	.	Д	У	ğ	σ	ü
6	Ê	ñ	&	6	F	V	f	v	â	û	☒	Е	Ф	ı	ρ	Σ
7	Ë	Ñ	'	7	G	W	g	w	ç	ù	☒	Ё	Х	ş	ς	π
8	↑	*	(	8	H	X	h	x	ê	ÿ	☒	Ж	Ц	€	√	̄
9	☒	°	)	9	I	Y	i	y	ë	ö	☒	З	Ч	☒	-¹	γ
A	☒	¿	*	:	J	Z	j	z	è	Ü	☒	И	Ш	☒	j	千
B	☒	¬	+	;	K	[	k	{	ı	ø	☒	Й	Щ	☒	ˣ	万
C	☒	¬	,	<	L	¥	l	|	î	£	☒	К	Ъ	☒	ø	円
D	☒	ì	-	=	M	]	m	}	ì	¥	☒	Л	Ы	☒	£	÷
E	☒	«	.	>	N	^	n	→	Ä	℔	☒	М	Ь	☒	ñ	☒
F	☒	»	/	?	O	_	o	←	Å	f	☒	Н	Э	☒	ö	■

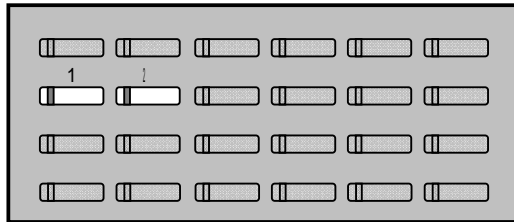
- The above-mentioned code table shows all the normal-width fonts.
- Use prohibition of code 00h. Moreover, . SP" indicates the blank (space).
- 09h-0Fh, A0h, A6h-Afh, D9h-DFh, and FEh are made a reservation area. Note that there is a possibility of allocating a different character in the future, too and the blank (space) is not guaranteed though it becomes blank (space) if it uses it.
- The blue net multiplication part shows Russia and the Turkish font.
- Note the point that depends on the font mounted on the terminal about the character actually displayed.

7.3. Changeable function key definition table

7.3.1. Desktop Economy terminal

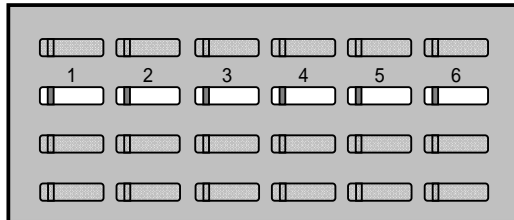
Because the option equipment cannot be connected with desktop Economy terminal, the increase of the changeable function key by 8/16LK or 24ADM is impossible. Therefore, it becomes either of . 2" or . 6" of the definition of the changeable function key.

7.3.1.1. Two buttons



Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-2	led2	Two colors LED	

7.3.1.2. Six buttons

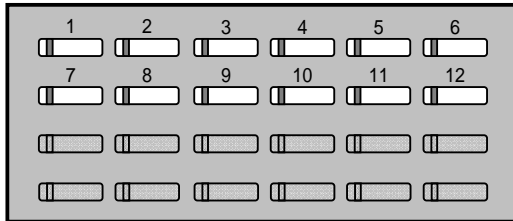


Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-6	led2	Two colors LED	

7.3.2. Desktop Value terminal

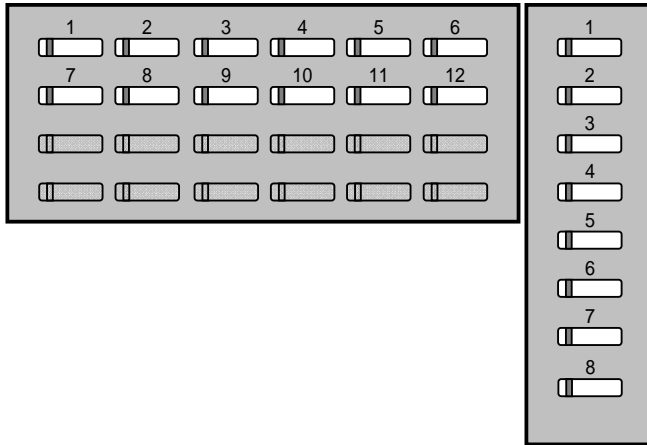
Because desktop Value terminal can connect the option equipment, the changeable function key can be increased by 8/16LK or 24ADM. Therefore, either . 12", . 20", . 24", . 28", . 32", and . 36", . 40" or . 48" becomes it the definition of the changeable function key.

7.3.2.1. 12 buttons



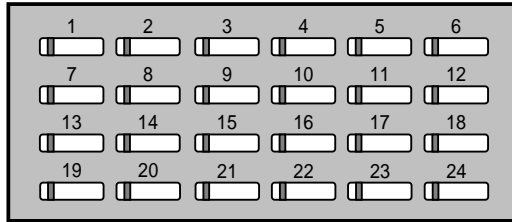
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-12	led2	Two colors LED	

7.3.2.2. 20 buttons (8 12 buttons + LK)



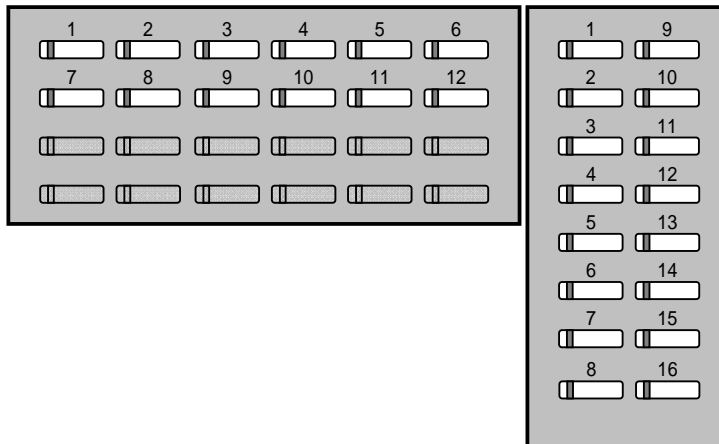
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-12	led2	Two colors LED	
Info-OptPkey	1-8	led2	Two colors LED	8LK

7.3.2.3. 24 buttons



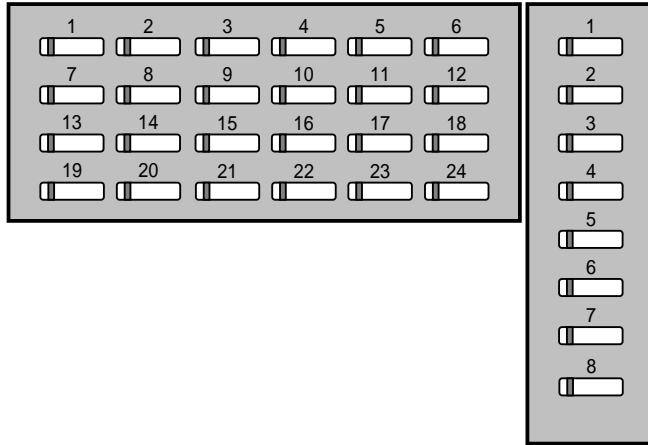
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-24	led2	Two colors LED	

7.3.2.4. 28 buttons (16 12 buttons + LK)



Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-12	led2	Two colors LED	
Info-OptPkey	1-16	led2	Two colors LED	16LK

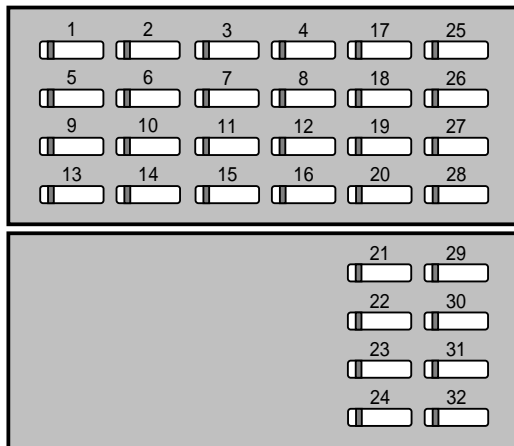
7.3.2.5. 32 buttons (8 24 buttons + LK)



Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-24	led2	Two colors LED	
Info-OptPkey	1-8	led2	Two colors LED	8LK

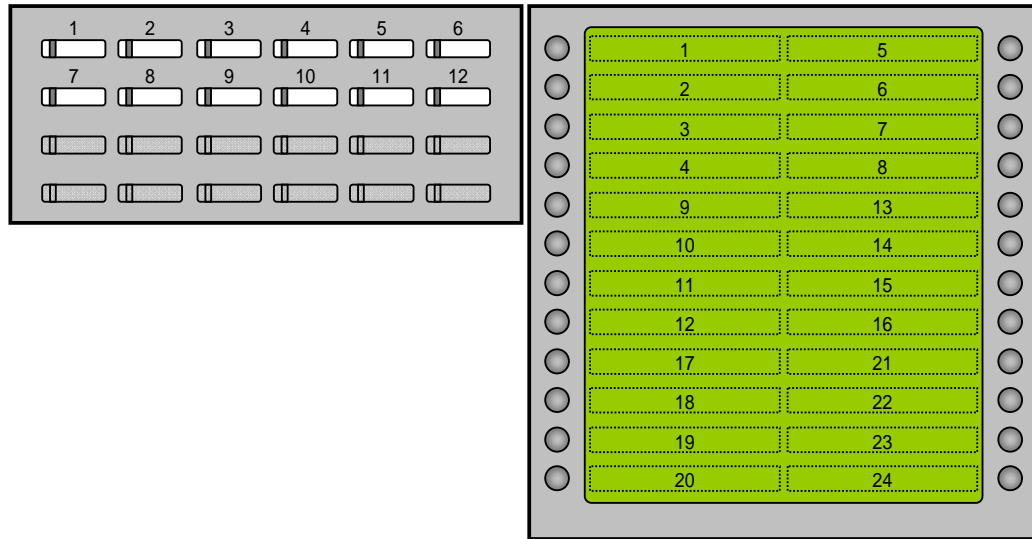
7.3.2.6. 32 buttons (24 buttons + eight button kit)

- PBX exclusive use



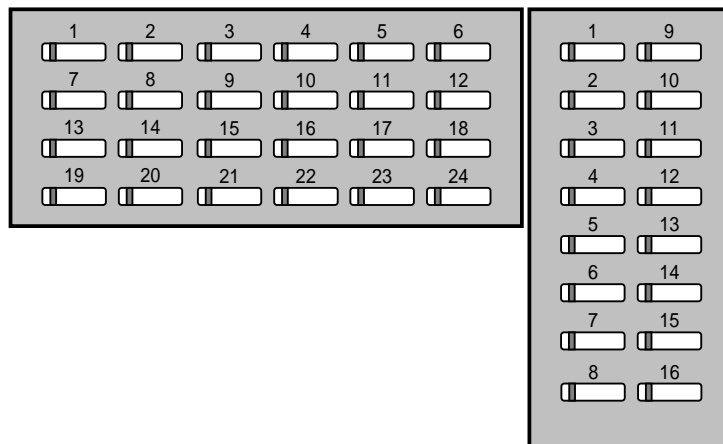
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-32	led2	Two colors LED	25-32 is button kit 8.

7.3.2.7. 36 buttons (24 12 buttons + ADM)



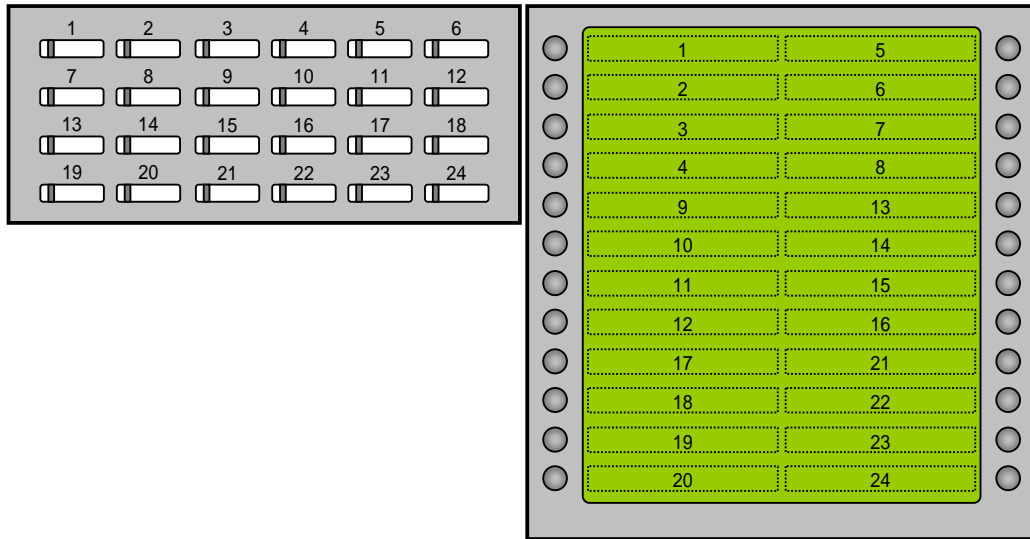
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-12	led2	Two colors LED	
Info-OptPkey	1-24	Led2/disp/icon 2	color LED/LCD 24ADM	..it is...

7.3.2.8. 40 buttons (16 24 buttons + LK)



Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-24	led2	Two colors LED	
Info-OptPkey	1-16	led2	Two colors LED	16LK

7.3.2.9. 48 buttons (24 24 buttons + ADM)

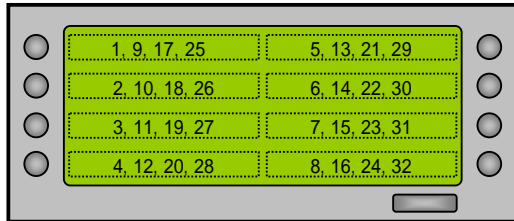


Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-24	led2	Two colors LED	
Info-OptPkey	1-24	Led2/disp/icon 2	color LED/LCD 24ADM	..it is...

7.3.3. Desktop Value-DESless terminal/Sophisticated terminal

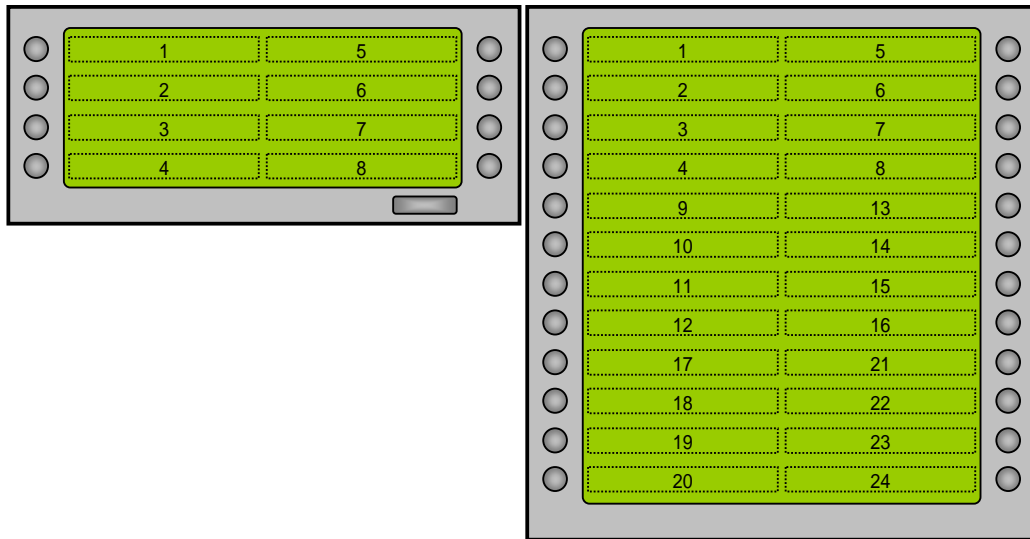
Because desktop Value terminal and the Sophisticated terminal can connect the option equipment, the changeable function key can be increased by 8/16LK or 24ADM. Therefore, it becomes either of . 32", . 40" or . 48" of the definition of the changeable function key.

7.3.3.1. 32 buttons (eight buttons . 4)



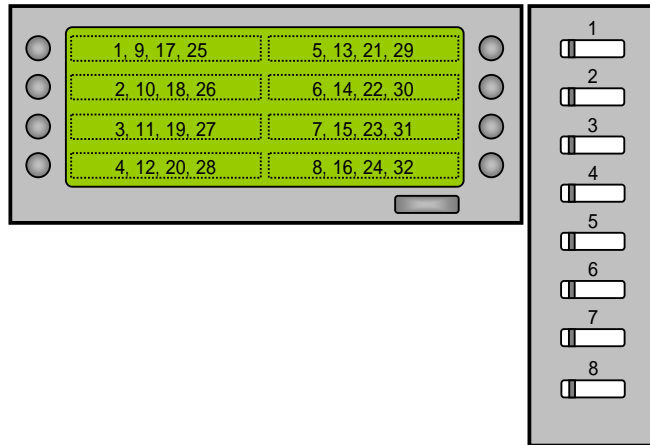
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-32	Led2/disp/icon 2	color LED/LCD DESI-less	..it is..

7.3.3.2. 32 buttons (24 eight buttons . front page + ADM)



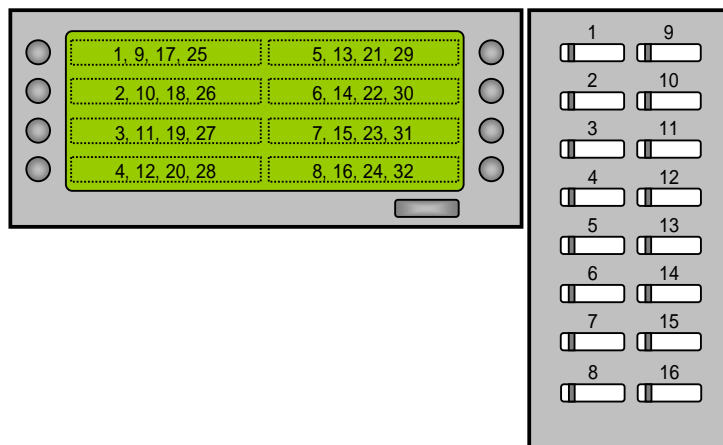
Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-8	Led2/disp/icon 2	color LED/LCD DESI-less	..it is..
Info-OptPkey	1-24	Led2/disp/icon 2	color LED/LCD 24ADM	..it is...

7.3.3.3. 40 buttons (8 eight buttons . 4+ LK)



Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-32	Led2/disp/icon 2	color LED/LCD DESI-less	..it is..
Info-OptPkey	1-8	led2	Two colors LED	8LK

7.3.3.4. 48 buttons (16 eight buttons . 4+ LK)

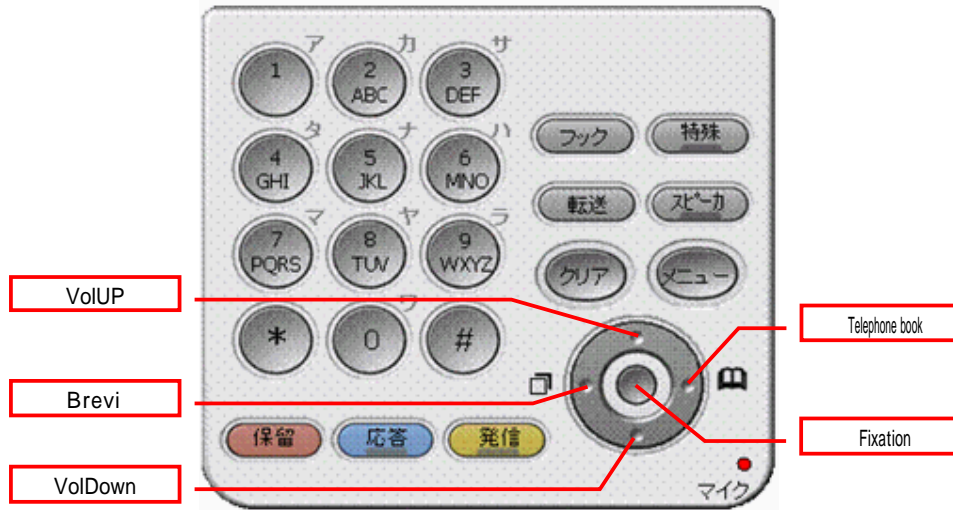


Enhancement parameter	Function key information			Remarks
	Key No	Optional function	Explanation	
Info-Pkey	1-32	Led2/disp/icon 2	color LED/LCD DESI-less	..it is..
Info-OptPkey	1-16	led2	Two colors LED	16LK

7.4. Fixed function key definition table

7.4.1. Button kit for new user interface Japan

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 1" is as follows.

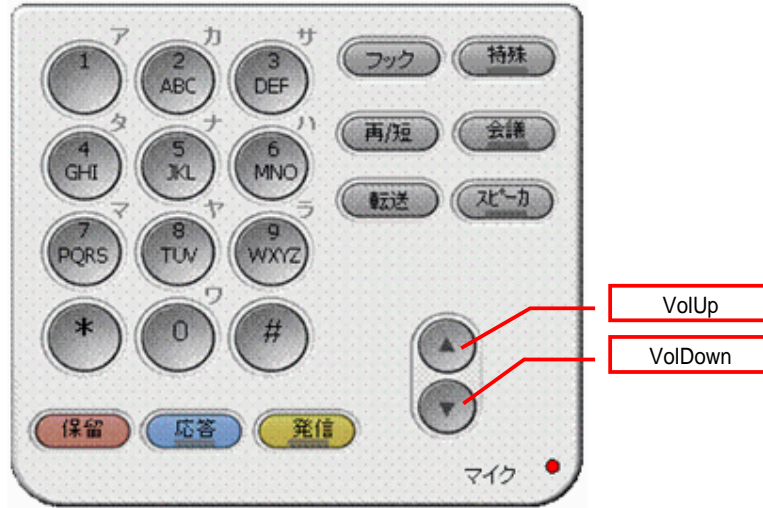


Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	1	transfer	-	Forwarding
	4	hold	-	Reservation
	5	hook	-	Hook
	6	feature	led2	Special
	7	answer	led2	Response
	8	speaker	led2	Speaker
	9	org	led2	Sending
	10	mic	led1	Mike
Info-Skey	-	exit	-	Exit
	-	help	-	Help
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).
	10	menu	-	Menu
	11	clear	-	Clearness
	12	enter	-	Fixation
	13	up	-	On cursor
	14	down	-	The cursor under
	15	left	-	The left of cursor
	16	right	-	The right of cursor

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.

7.4.2. Button kit for present Dterm85 retrofit Japan

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 9" is as follows.

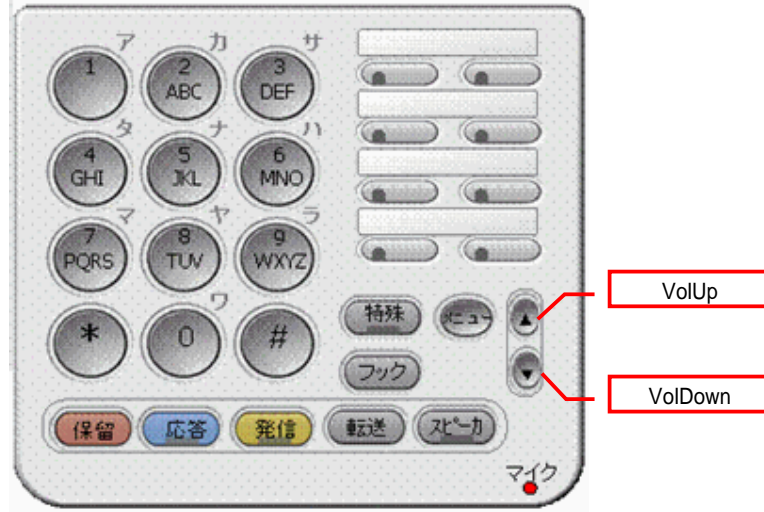


Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	1	transfer	-	Forwarding
	2	redial	-	Brevi
	3	conf	led2	Conference
	4	hold	-	Reservation
	5	hook	-	Hook
	6	feature	led2	Special
	7	answer	led2	Response
	8	speaker	led2	Speaker
	9	org	led2	Sending
	10	mic	led1	Mike
	15	voldown	-	Volume improvement
	16	volup	-	Down of volume
Info-Skey	-	exit	-	Exit
	-	help	-	Help
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.

7.4.3. Button kit for Japan with eight line key enhancing

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 8" is as follows.



Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	1	transfer	-	Forwarding
	4	hold	-	Reservation
	5	hook	-	Hook
	6	feature	led2	Special
	7	answer	led2	Response
	8	speaker	led2	Speaker
	9	org	led2	Sending
	10	mic	led1	Mike
	15	voldown	-	Volume improvement
	16	volup	-	Down of volume
Info-Skey	-	exit	-	Exit
	-	help	-	Help
Info-Jkey	9	protect	led1	Protection (Excluding Economy).
	10	menu	-	Menu

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.

7.4.4. Button kit for new user interface foreign countries/PHILIPS

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 2" is as follows.



Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	1	transfer	-	Transfer
	4	hold	-	Hold
	5	recall	-	Recall
	6	feature	led2	Feature
	7	answer	led2	Answer
	8	speaker	led2	Speaker
	10	mic	led1	Mic
Info-Skey	-	exit	-	Exit
	-	help	-	Help
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).
	10	menu	-	Menu
	12	enter	-	Enter
	13	up	-	On cursor
	14	down	-	The cursor under
	15	left	-	The left of cursor
	16	right	-	The right of cursor

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.
- The mark of the character of the button is a pictogram though the key arrangement for PHILIPS is the same (icon).

7.4.5. Button kit for present Dterm85 retrofit foreign countries/PHILIPS

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 10" is as follows.

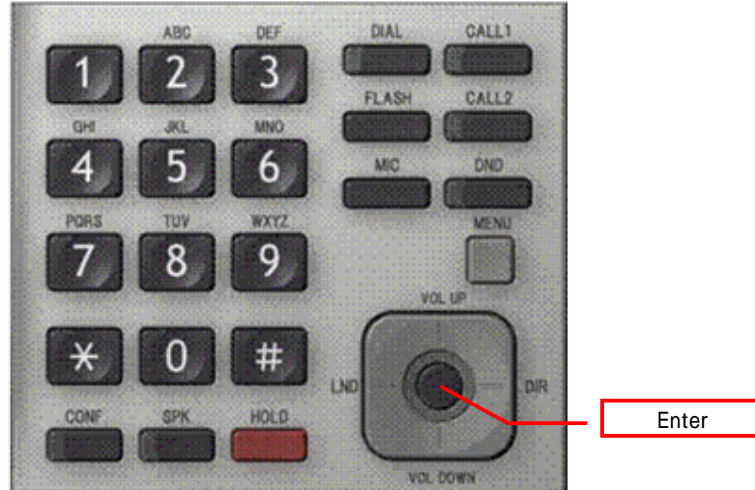


Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	1	transfer	-	Transfer
	2	redial	-	Redial
	3	conf	led2	Conf
	4	hold	-	Hold
	5	recall	-	Recall
	6	feature	led2	Feature
	7	answer	led2	Answer
	8	speaker	led2	Speaker
	10	mic	led1	Mic
	11	message	-	Message
	12	dic	-	Directory
	15	voldown	-	Volume improvement
	16	volup	-	Down of volume
Info-Skey	-	exit	-	CLEAR
	-	help	-	CHECK
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.
- The mark of the character of the button is a pictogram though the key arrangement for PHILIPS is the same (icon).

7.4.6. Button kit for new user interface North America/Europe

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 3" is as follows.

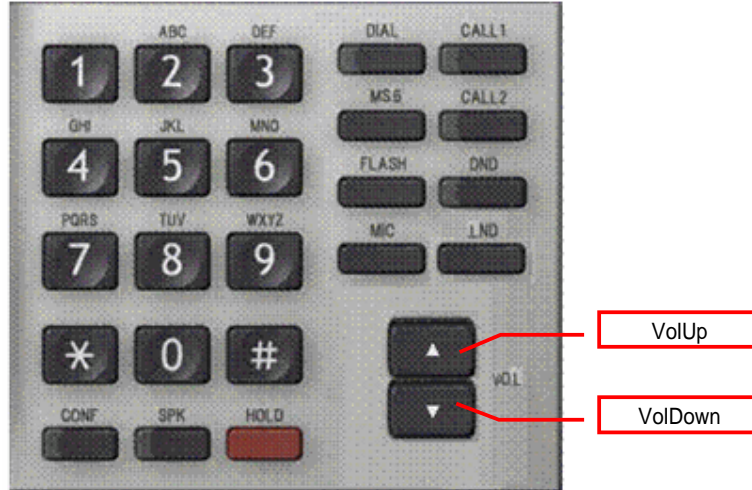


Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	3	conf	-	CONF
	4	hold	-	HOLD
	5	flash	-	FLASH
	6	dnd	led2	DND
	7	call1	led2	CALL1
	8	speaker	led2	SPK
	9	call2	led2	CALL2
	10	mic	led1	MIC
	12	dial	-	DIAL
Info-Skey	-	exit	-	CLEAR
	-	help	-	CHECK
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).
	10	menu	-	MENU
	12	enter	-	Enter
	13	up	-	On cursor
	14	down	-	The cursor under
	15	left	-	The left of cursor
	16	right	-	The right of cursor

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.

7.4.7. Button kit for present Dterm85 retrofit North America/Europe

Each key information definition notified from the telephone surface of the board image and the terminal when fixed function key button kit (Info-FkeyKitType) parameter is set to . 11" is as follows.



Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Info-Fkey	2	Ind	-	LND
	3	conf	-	CONF
	4	hold	-	HOLD
	5	flash	-	FLASH
	6	dnd	led2	DND
	7	call1	led2	CALL1
	8	speaker	led2	SPK
	9	call2	led2	CALL2
	10	mic	led1	MIC
	11	message	-	MSG
	12	dial	-	DIAL
	15	voldown	-	Volume improvement
	16	volup	-	Down of volume
Info-Skey	-	exit	-	CLEAR
	-	help	-	CHECK
Info-Jkey	8	page	-	Page switch (Only DESI-less :).
	9	protect	led1	Protection (Excluding Economy).

- The key event is notified with Event-Fkey/Event-Skey/Event-Jkey.
- The LED control is instructed with Ind-Fkey/Ind-Jkey.

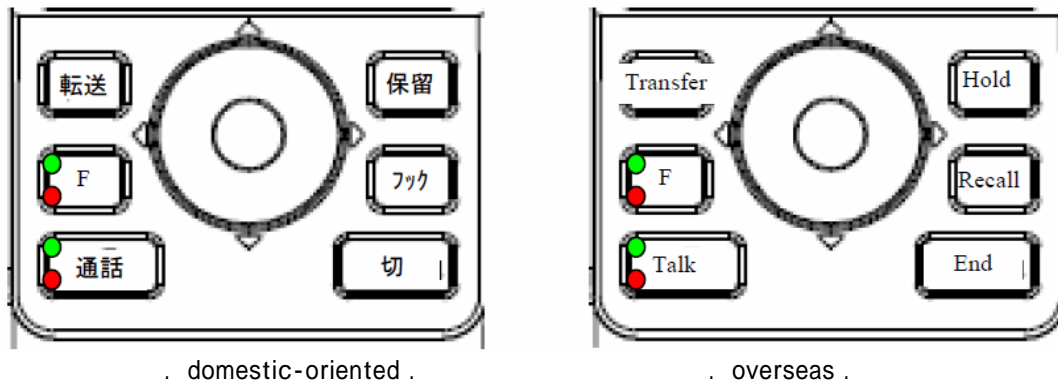
7.4.8. Button kit for [ba-chikaruma-ketto]

When fixed function key button kit (Info-FkeyKitType) parameter is set from . 4" to . 7", each key information definition notified from the terminal is as follows.

Parameter	Function key information						
	Key No	Key name	Reserve	Call Center	Hotel 1	Hotel 2	Retirement House
			No.12	No.4	No.5	No.6	No.7
Info-Fkey	1	service10	Service10	Transfer	Emergency	Bell Attn	
	2	service01		Tally	Check-Out	Restaurant	
	3	service02	Service02	Conf		Wake Up	
	4	service09	Service09	HOLD	Station #	HOLD	HOLD
	5	service03	Service03	Break		Spa	NURSE CALL
	6	service04	Service04	Logon		Hse Keep	
	7	service05	Service05				ANSWER
	8	service11	Service11			Speaker	SPEAKER
	9		Service01				
	10	service06	Service06	Mic	M		
	11	service07	Service07	Work	Message	Message	MESSAGE
	12	service08	Service08	Release	Service	Operator	
	15	voldown	.			.	
	16	volup	.			.	
Info-Skey	-	exit	Exit/CLEAR	Exit/CLEAR	Exit/CLEAR	Exit/CLEAR	Exit/CLEAR
	-	help	Help/CHECK	Help/CHECK	Help/CHECK	Help/CHECK	Help/CHECK
Info-Jkey	8	page	page	page	page	page	page
	9	protect	protect	protect	protect	protect	protect
	10	menu	MENU		MENU	MENU	
	11						
	12	enter	Enter		Enter	Enter	
	13	up	.	.			
	14	down	.	.			
	15	left	.	.			
	16	right	.	.			

7.4.9. Bluetooth hand set button arrangement

Each key information definition notified from the fixed function key arrangement and the terminal of BTH is as follows.













Enhancement parameter	Function key information			
	Key No	Key name	Additive information	Explanation
Event-BthFkey	2	-	-	Hook / Recall
	3	-	-	Reservation
	4	-	-	Conference (two colors LED)
	5	-	-	Telephone call (two colors LED)
	6	-	-	Forwarding
	12	-	-	Enter
	13	-	-	On cursor
	14	-	-	The cursor under
	15	-	-	The left of cursor
	16	-	-	The right of cursor

- Key kit information is not notified to a main device because BTH doesn't correspond to the button kit exchange.
- BTH doesn't notify a main device function key ability information (key name and additive information).
- The LED control is instructed with Ind-BthFkey.
- The mark of the character of the button is a pictogram though the key arrangement for PHILIPS is the same (icon).

7.5. Icon number table














7.5.1. DESI-less icon

The icon group that uses it on the DESI-less screen of a desktop telephone.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
Icon none	0	None	None	None		
Pending state	1					
Recall	2					
Ring transfer	3					
It is talking over the telephone.	4					
Another pending state etc.	5					
Arrival of a message inside etc.	6					
It is talking over the telephone. another	7					
Message waiting	8					
It is variously setting it.	9					
Others	10					













7.5.2. Telephone book icon

The icon group that can use it the item of the telephone book and to display the category.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
Name	20					
Furigana name	21					
Group	22					
Telephone number						
Category (carrying)	11					
Category (voice mail)	12,75					
Category (home)	58					
Category (company)	59					
Category (others)						
Company name	80					
Illumination	81					
Ring tone	82					
Memory number	83					











7.5.3. Number icon with frame

The icon group that can use it for the display of the number at each list when the list of the menu etc. is displayed on the display.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
0 with frame	45					
One with frame	46					
Two with frame	47					
Three with frame	48					
Four with frame	49					
Five with frame	50					
Six with frame	51					
Seven with frame	52					
Eight with frame	53					
Nine with frame	54					
# with frame	55					
* with frame	56					











7.5.4. Desktop icon

The icon group that can use it for the state display of each application.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
There is absent arrival of a message.	57					
There is absent arrival of a message.	65					
There is a voice mail.	12,75					
There is an instant message.	76					
My presence	77					
Backlight lighting	63					
Terminal protection inside	64					
The bluetooth equipment is being connected.	61,78					
RTP encryption	79					
Head set arrival of a message inside	62					









7.5.5. Mail icon

The icon group that can use it for the display that relates to the mail of the instant message etc.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
New making mail	96					
Unsent e-mail	97					
[Youke] already Makoto mail	98					
Unread [uke] Makoto mail	99					
Mail that has replied	100					
Mail Sending success	101					
Two or more Mail Sending success	102					
Mail Sending failure	103					
Two or more Mail Sending failure (part)	104					
Two or more Mail Sending failure (all)	105					

7.5.6. Icon for menu item

The icon group that can use it to display each item displayed in the menu.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
History	84					
Telephone book	85					
Tools	86					
Voice Features	87					
Setting	88					
Favorites Setting	89					
Presence	90					
Favorites	91					

7.5.7. Cursor key icon

The icon group that can use it for the state display of the cursor key that can be used by the menu manipulation.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
Menu	15					
Fixation	14					
Arrow 2-1	16					
Arrow 2-2	17					
Arrow 2-3	18					
Arrow 2-4	19					
Arrow 1-1	24					
Arrow 1-2	25					
Arrow 1-3	26					
Arrow 1-4	27					
Arrow 1-5	28					
Arrow 1-6	29					
Arrow 1-7	30					
Arrow 1-8	31					
Arrow 1-9	32					
Arrow 1-10	33					
Arrow 1-11	34					
Arrow 1-12	35					
Arrow 1-13	36					
Arrow 1-14	37					
Arrow 1-15	38					

7.5.8. Control icon

The icon group that can use it for the display of the selective state on a set screen etc.

Icon type	Number	Image of each terminal type				
		DPE	DPV/DPD	DPS		
Radiobutton (off)	92					
Radiobutton (on)	93					
Check box (off)	94					
Check box (on)	95					

V e r s i o n c o r r e c t i o n	p a g e		
TSX-xxxxx-xxx-xxxx	1.2	-	516/516