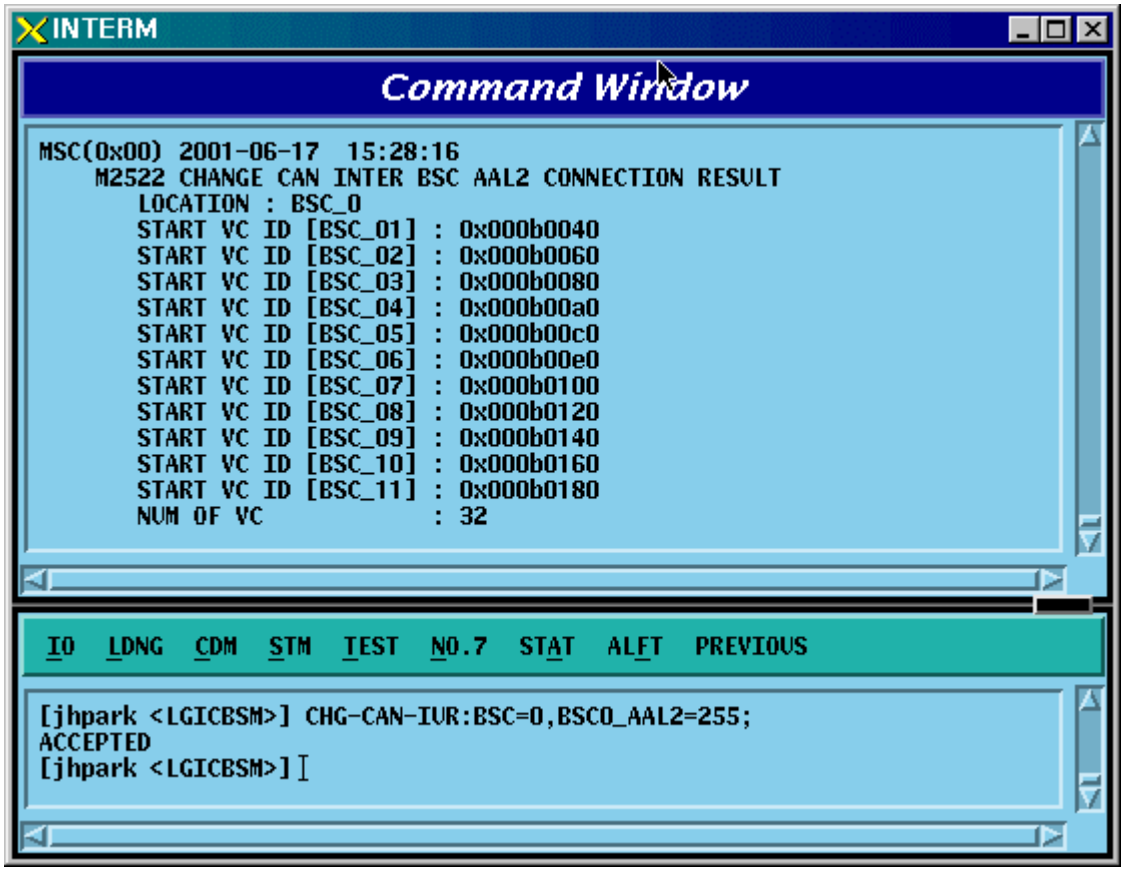
4.3.6. Network Parameter Information Change (Change_Parameter_Info_3)

4.3.6.1. CAN INTER BSC AAL2 Setting Information Change

• Command CHG-CAN-IUR: BSC=a, [BSC0_AAL2=b], [BSC1_AAL2=c], [BSC2_AAL2=d], [BSC3_AAL2=e], [BSC4_AAL2=f], [BSC5_AAL2=g], [BSC6_AAL2=h], [BSC7_AAL2=i], [BSC8_AAL2=j],[BSC9_AAL2=k],[BSC10_AAL2=l], [BSC11_AAL2=m], [NO_AAL2_VC=n];

• Input CHG-CAN-IUR: BSC=0, BSC0_AAL2=255

• Output



4.3.6.2. CAN INTER BSC AAL5 Setting Information Change

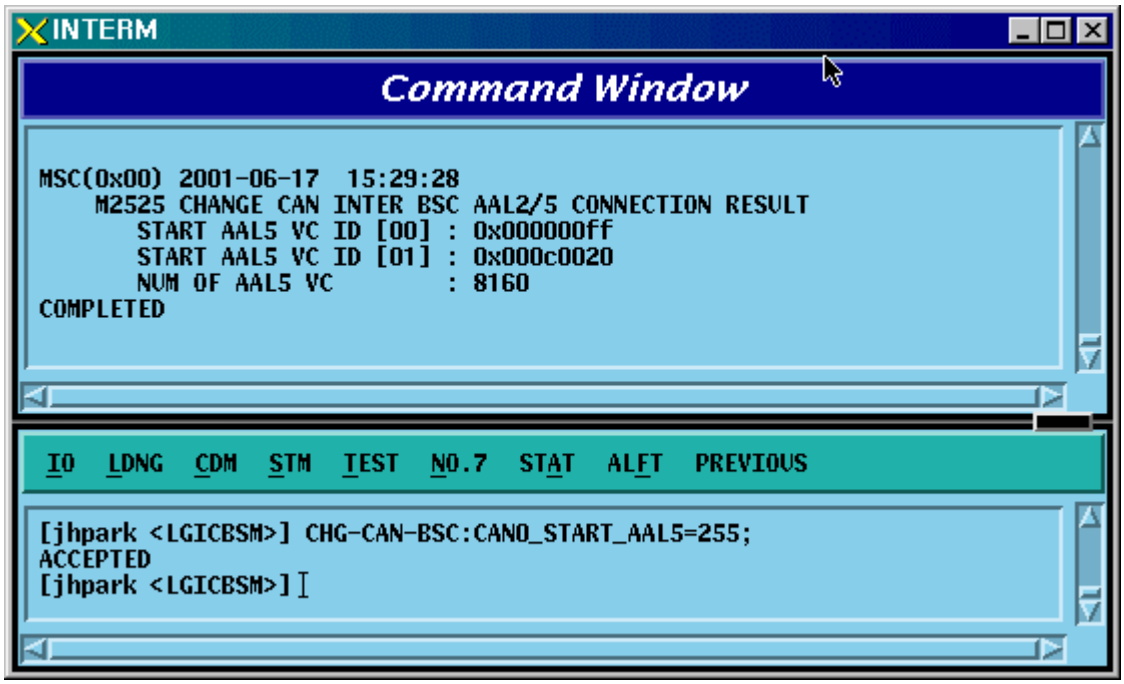
• Command CHG-CAN-BSC: [CAN0_START_AAL5=a],
[CAN1_START_AAL5=b], [NO_AAL5_VC=0~],

a ,b: 0~0xffffff

c: 0~

• Input CHG-CAN-BSC: CAN0_START_AAL5=255

• Output



4.3.6.3. CPN INTER DATA AAL5 Setting Information Change

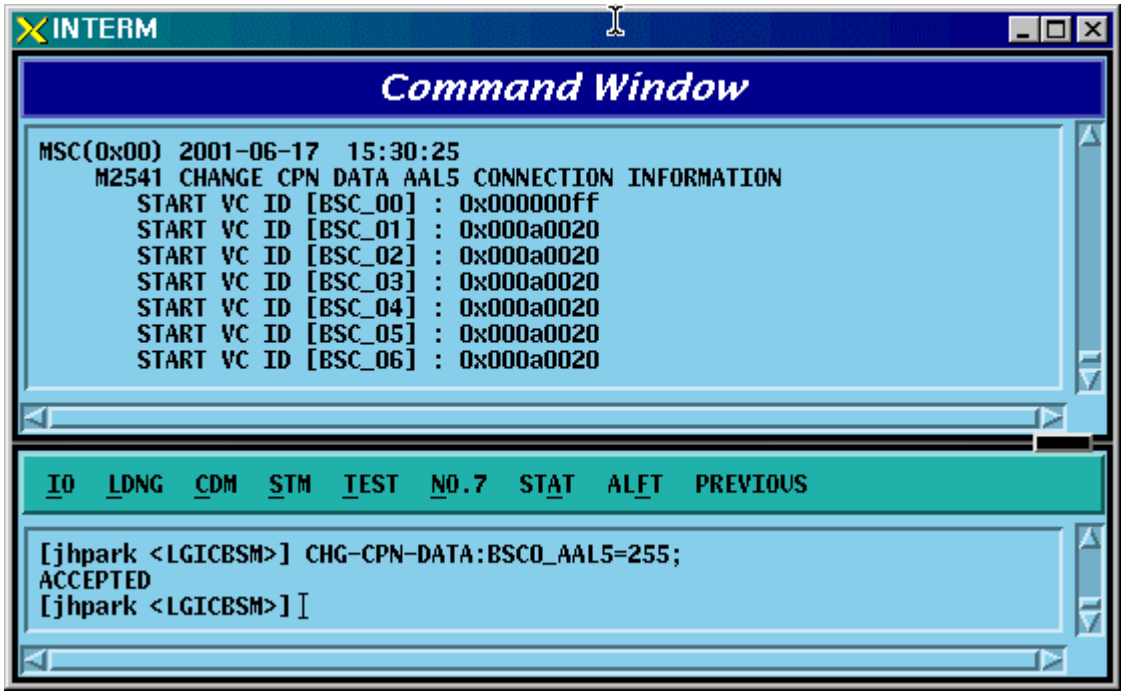
• Command CHG-CPN-DATA: [BSC0_AAL5=a], [BSC1_AAL5=b], [BSC2_AAL5=c],
[BSC3_AAL5=d], [BSC4_AAL5=e], [BSC5_AAL5=f],
[BSC6_AAL5=g], [BSC7_AAL5=h], [BSC8_AAL5=i],
[BSC9_AAL5=j], [BSC10_AAL5=k], [BSC11_AAL5=l],
[NO_AAL5_VC=m];

a ~n: BSC AAL5 (32~0xffffff)

m: 0~32

• Input CHG-CPN-DATA: BSC0_AAL5=255;

• Output



4.3.6.4. CPN INTER PCF AAL5 Setting Information Change

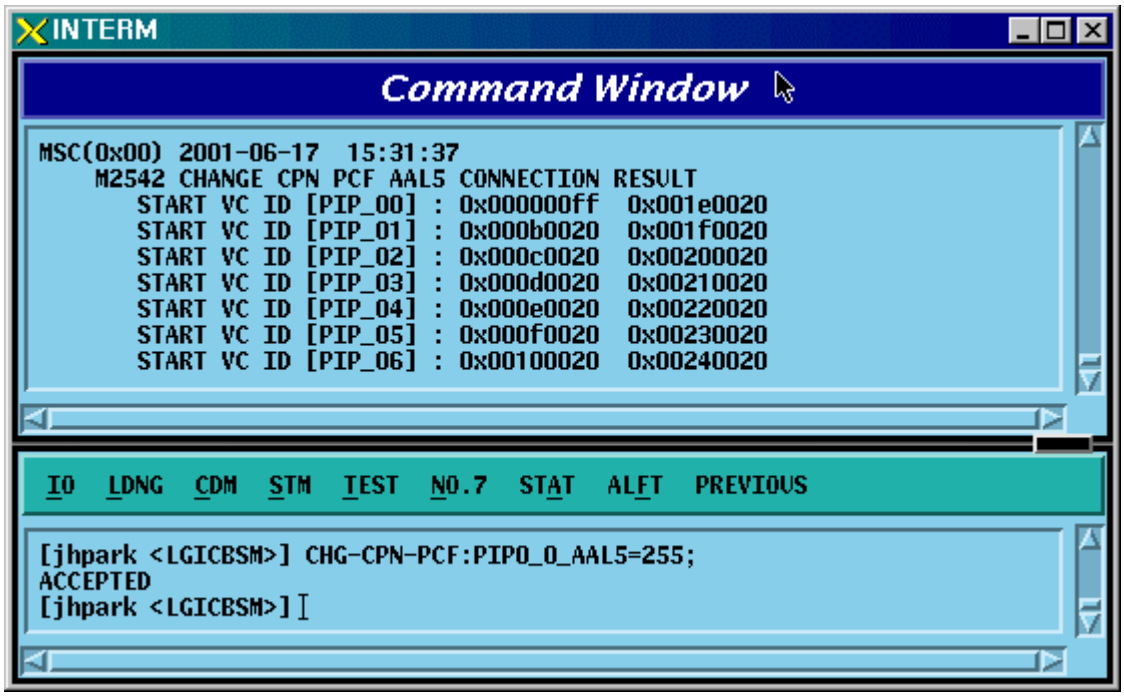
• Command CHG-CPN-PCF: [PIP0_0_AAL5=a], [PIP0_1_AAL5=b], [PIP1_0_AAL5=c], [PIP1_1_AAL5=d], [PIP2_0_AAL5=e], [PIP2_1_AAL5=f], [PIP3_0_AAL5=g], [PIP3_1_AAL5=h], [PIP4_0_AAL5=i], [PIP4_1_AAL5=j], [PIP5_0_AAL5=k], [PIP5_1_AAL5=l], [PIP6_0_AAL5=m], [PIP6_1_AAL5=n], [PIP7_0_AAL5=o], [PIP7_1_AAL5=p], [PIP8_0_AAL5=q], [PIP8_1_AAL5=r], [PIP9_0_AAL5=s], [PIP9_1_AAL5=t], [PIP10_0_AAL5=u], [PIP10_1_AAL5=v], [NO_AAL5_VC=w]

a~v: PIP AAL5 (32~0xffffff)

w: 0~480

• Input CHG-CPN-PCF: PIP0_0_AAL5=255 ;

• Output



4.3.6.5. BSC INTER BSC AAL2 Setting Information Change

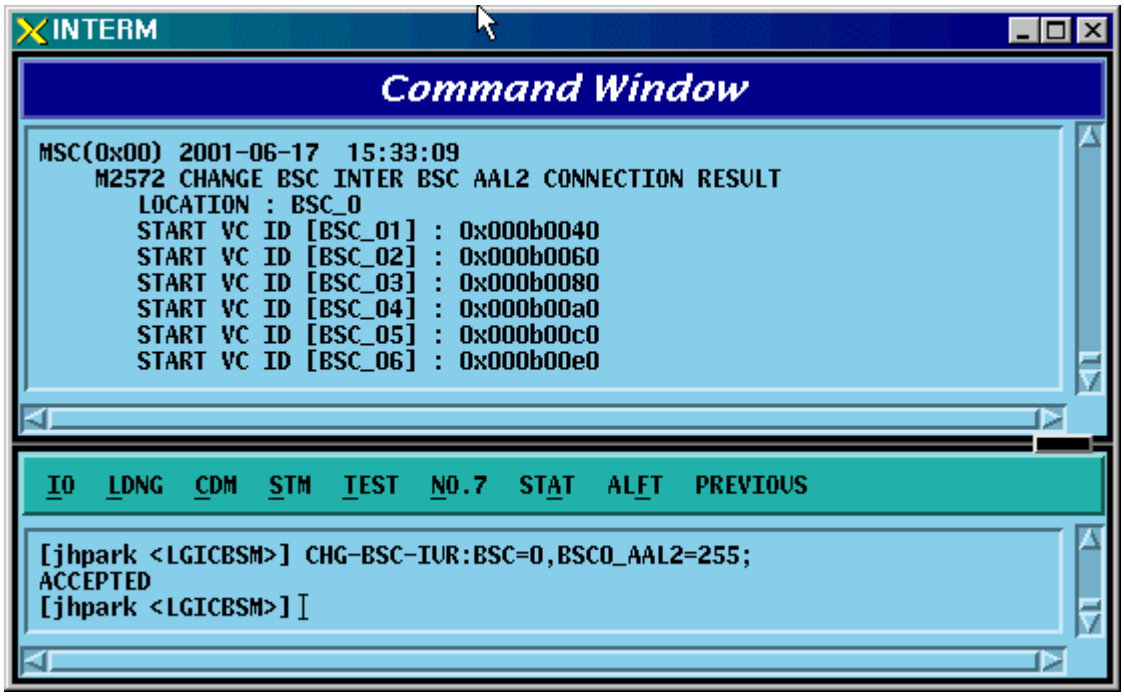
- Command CHG-BSC-IUR: BSC=a, [BSC0_AAL2=b], [BSC1_AAL2=c], [BSC2_AAL2=d], [BSC3_AAL2=e], [BSC4_AAL2=f], [BSC5_AAL2=g], [BSC6_AAL2=h], [BSC7_AAL2=i], [BSC8_AAL2=j], [BSC9_AAL2=k], [BSC10_AAL2=l], [BSC11_AAL2=m], [NO_AAL2_VC=n];

  a : BSC Number(0~11)

  b~m: BSC AAL2 (0~0xffffff)

  n: 0~

- Input CHG-BSC-IUR: BSC=0, BSC0_AAL2=255;
- Output



4.3.6.6. BSC INTER BTSC AAL2 Setting Information Change

• Command CHG-BSC-IUB: BSC=a, BTS=b, LICA=c, LINK=d,
[LINK0_AAL2=e], [LINK1_AAL2=f], [LINK2_AAL2=g],
[LINK3_AAL2=h], [LINK4_AAL2=i], [LINK5_AAL2=j],
[LINK6_AAL2=k], [LINK7_AAL2=l], [LINK8_AAL2=m],
[LINK9_AAL2=n], [LINK10_AAL2=o], [LINK11_AAL2=p],
[LINK12_AAL2=q], [LINK13_AAL2=r], [LINK14_AAL2=s],
[LINK15_AAL2=t]

a : BSC Number(0~11)

b : BTS Number(0~47)

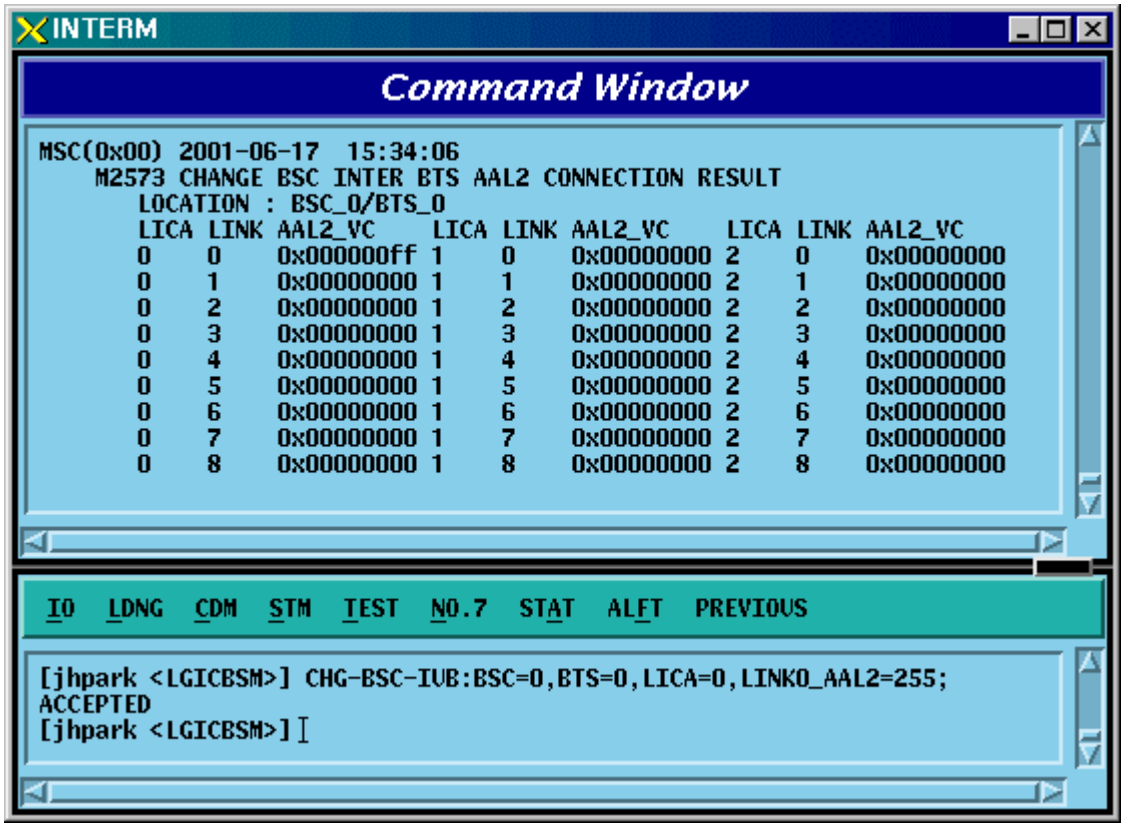
c : LICA Number(0~2)

d : LINK Number(0~15)

e~t: 0~0xffffff

• Input CHG-BSC-IUB: BSC=0, BTS=0, LICA=0, LINK0_AAL2=255;

• Output



4.3.6.7. BSC INTER CAN AAL2/5 Setting Information Change

• Command CHG-BSC-CAN: BSC=a, [CAN0_START_AAL5=b],
[CAN1_START_AAL5=c], [NO_AAL5_VC=d]

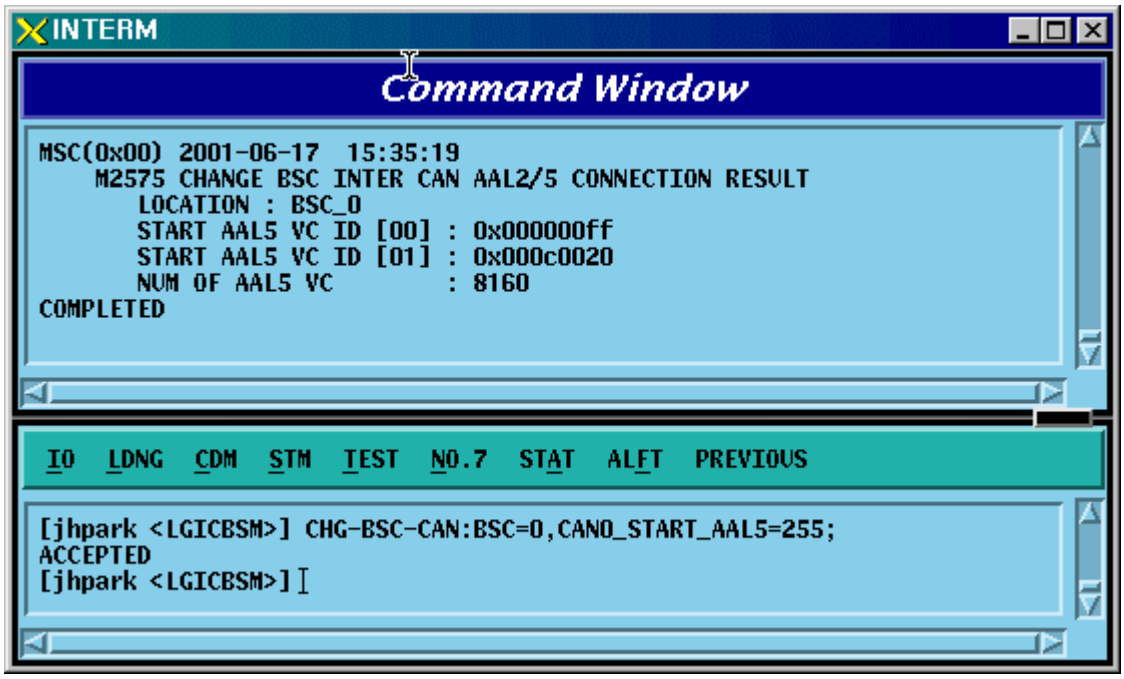
a: BSC Number(0~11)

b,c: 32~0xffffff

d: 0~8160

• Input CHG-BSC-CAN: BSC=0, CAN0_START_AAL5=255;

• Output



4.3.6.8. BSC INTER SLB AAL5 Setting Information

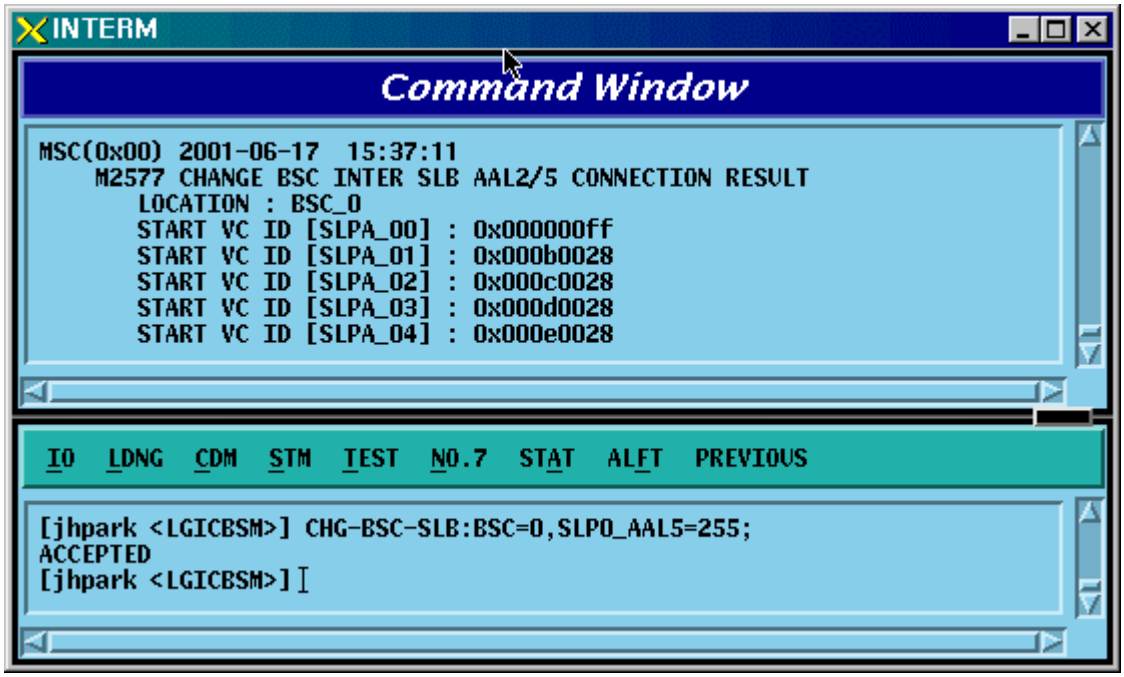
- Command CHG-BSC-SLB: BSC=a, [SLP0_AAL5=b], [SLP1_AAL5=c], [SLP2_AAL5=d], [SLP3_AAL5=e], [SLP4_AAL5=f], [SLP5_AAL5=g], [SLP6_AAL5=h], [SLP7_AAL5=i], [SLP8_AAL5=j], [SLP9_AAL5=k], [SLP10_AAL5=l], [SLP11_AAL5=m], [SLP12_AAL5=n], [SLP13_AAL5=o], [SLP14_AAL5=p], [SLP15_AAL5=q], [SLP16_AAL5=r], [SLP17_AAL5=s], [NO_AAL5_VC=t]

  a: BSC Number(0~11)

  b~s: 40~0xffffff

  t: 0~984

- Input CHG-BSC-SLB: BSC=0, SLP0_AAL5=255;
- Output



4.3.6.9. BSC INTER VCB AAL5 Setting Information Change

• Command CHG-BSC-VCB: BSC=a,
[VCP0_AAL5=b], [VCP1_AAL5=c], [VCP2_AAL5=d],
[VCP3_AAL5=e], [VCP4_AAL5=f], [VCP5_AAL5=g],
[VCP6_AAL5=h], [VCP7_AAL5=i], [VCP8_AAL5=j],
[VCP9_AAL5=k], [VCP10_AAL5=l], [VCP11_AAL5=m],
[VCP12_AAL5=n], [VCP13_AAL5=o], [VCP14_AAL5=p],
[VCP15_AAL5=q], [NO_AAL5_VC=r]

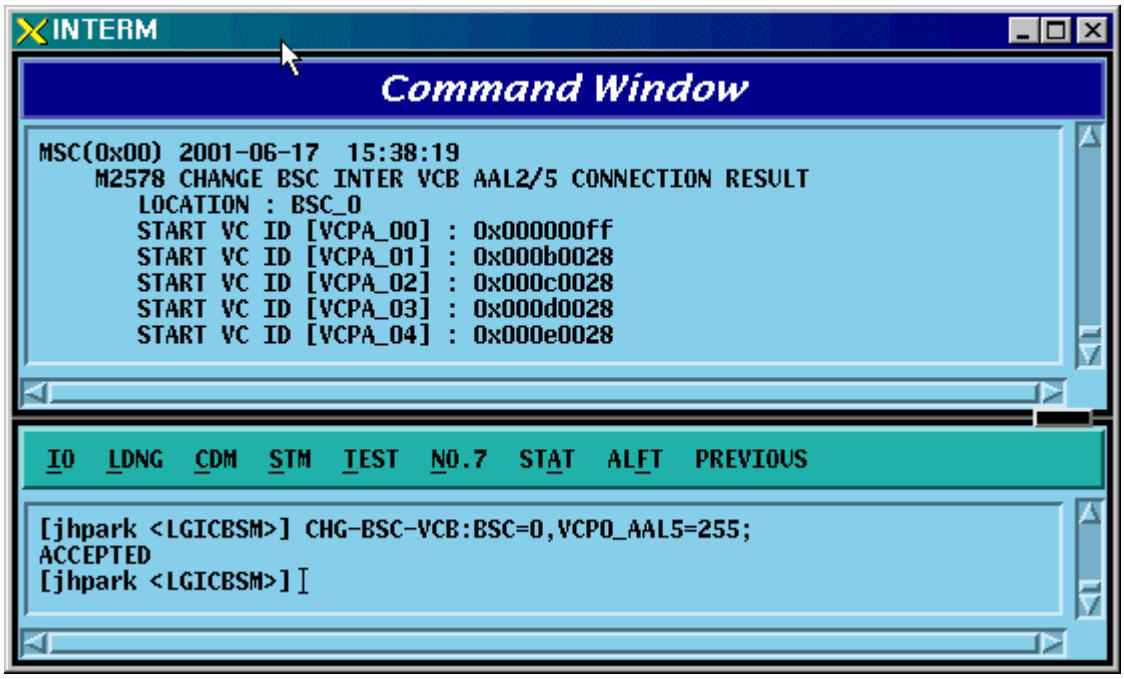
a: BSC Number(0~11)

b~q: 40~0xffffff

r: 0~88

• Input CHG-BSC-VCB: BSC=0, VCP0_AAL5=255;

• Output



4.3.6.10. BSC INTER ALB AAL5 Setting Information Change

• Command CHG-BSC-ALB: BSC=a,
[ALMA0_ALP0_0=b], [ALMA0_ALP0_1=c], [ALMA0_ALP1_0=d],
[ALMA0_ALP1_1=e], [ALMA0_ALP2_0=f], [ALMA0_ALP2_1=g],
[ALMA0_ALP3_0=h], [ALMA0_ALP3_1=i], [ALMA0_ALP4_0=j],
[ALMA0_ALP4_1=k], [ALMA1_ALP0_0=l], [ALMA1_ALP0_1=m],
[ALMA1_ALP1_0=n], [ALMA1_ALP1_1=o], [ALMA1_ALP2_0=p],
[ALMA1_ALP2_1=q], [ALMA1_ALP3_0=r], [ALMA1_ALP3_1=s],
[ALMA1_ALP4_0=t], [ALMA1_ALP4_1=u], [NO_AAL5_VC=v]

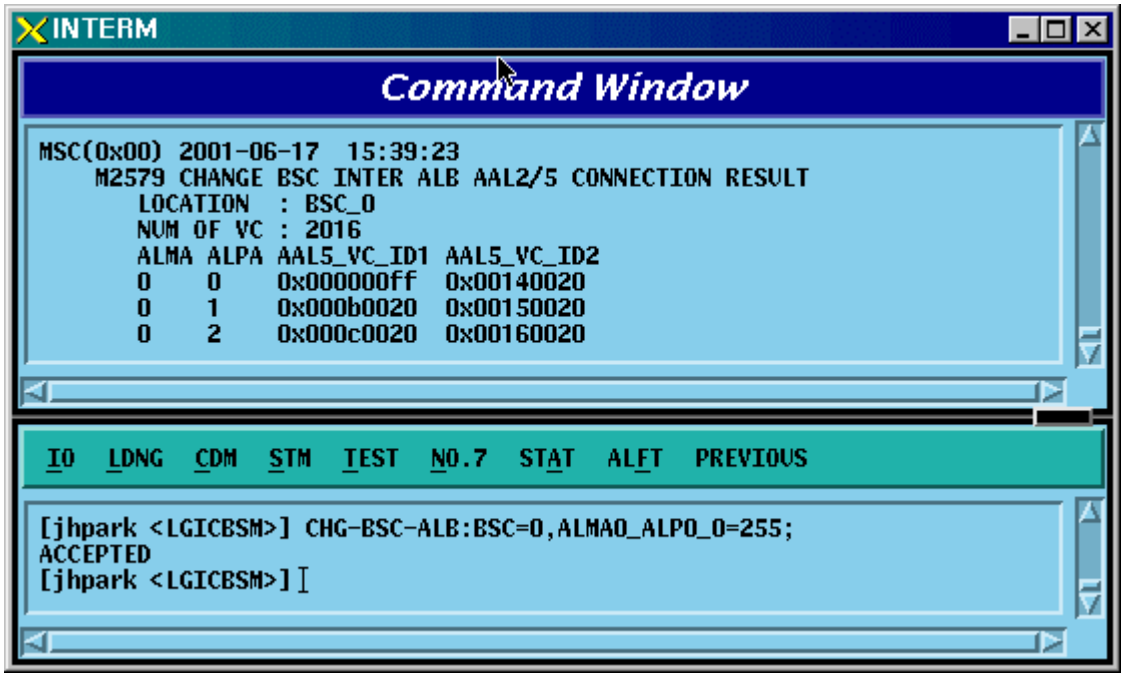
a: BSC Number(0~11)

b~u: 32~0xffffff

v: 0~2016

• Input CHG-BSC-ALB: BSC=0, ALMA0_ALP0_0=255;

• Output



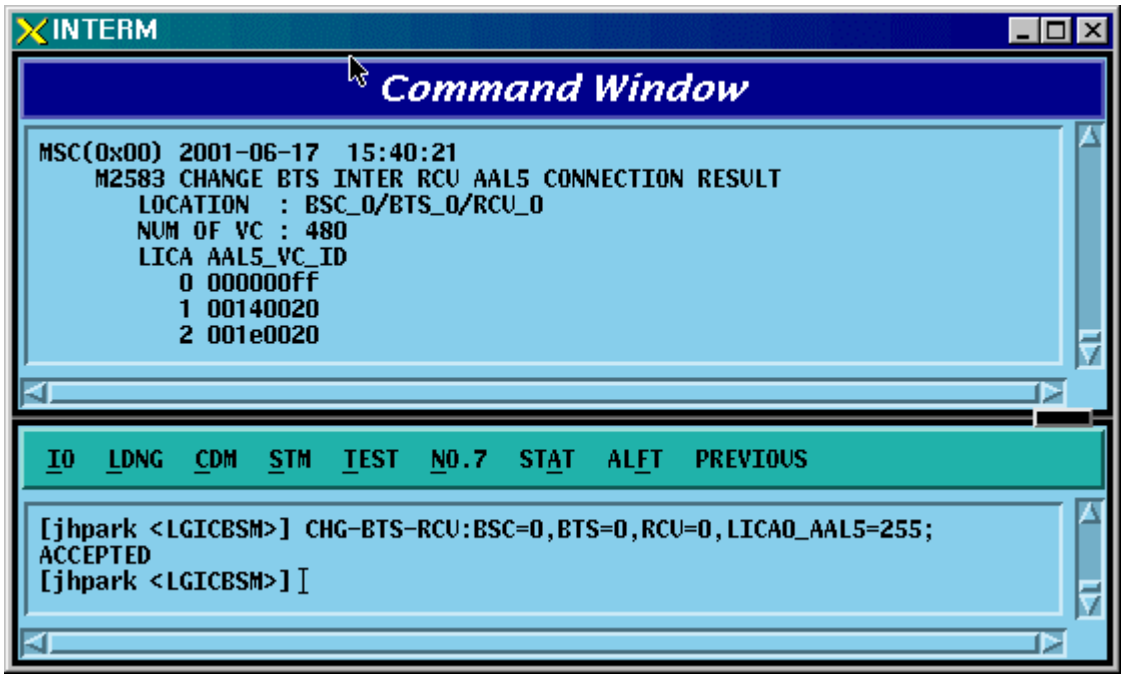
4.3.6.11. BTS INTER RCU AAL5 Setting Information Change

• Command CHG-BTS-RCU: BSC=a, BTS=b, RCU=c,
[LICA0_AAL5=d], [LICA1_AAL5=e], [LICA2_AAL5=f],
[LICA0_NO_VC=g], [LICA1_NO_VC=h], [LICA2_NO_VC=i]

a: BSC Number(0~11)
b:BTS Number(0~47)
c: RCU Number(0~9)
d~i: 0~

• Input CHG-BTS-RCU: BSC=0,BTS=0,RCU=0, LICA0_AAL5=255;

• Output



4.3.7. Configuration Information Display(Display_Configuration_Data)

This section describes the comands that are used to inquire the configuration information which is related to processors, devices, and overhead channels which are currently used in BTS and BSC.

Table 4.3-3 Configuration Information Display

CRN	MMC	Description
2101	DIS-BSS-CONF	BSS configuration information verification
2103	DIS-SMP-CONF	SMP configuration information verification
2105	DIS-VMP-CONF	VMP configuration information verification
2112	DIS-BTS-CONF	BTS configuration information verification
2115	DIS-CHIP-CONF	DBPA CHIP configuration information verification
2125	DIS-OVHD-CONF	OVERHEAD CHANNEL configuration information verification
2133	DIS-PDSN-CONF	PDSN configuration information verification

4.3.7.1. BSS Configuration Information Verification

This is a command to check the BTS, Processors and PCF counts in the BSC.

- Command DIS-BSS-CONF: BSC=a;

- Input DIS-BSS-CONF: BSC=0;
- Output

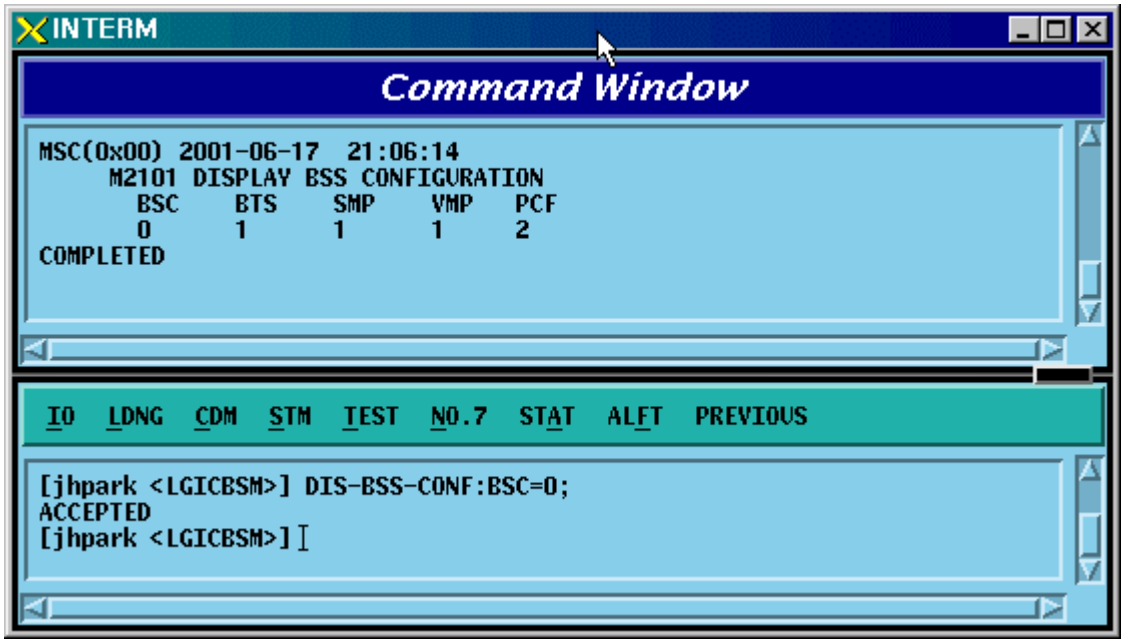


Fig. 4.3-126 BSS Configuration Information Display

4.3.7.2. SMP Configuration Information Verification

• Command DIS-SMP-CONF: BSC=a;

a: BSC Number(#0~11)

• Input DIS-SMP-CONF: BSC=0;

• Output

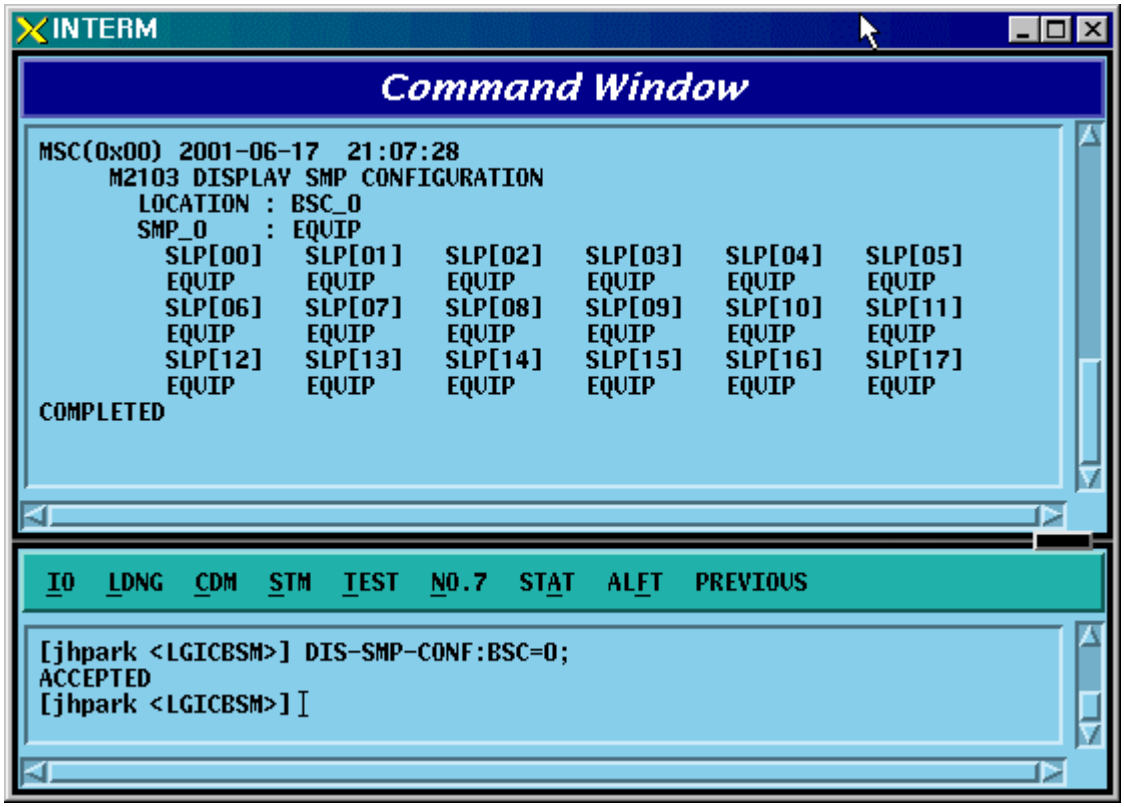


Fig. 4.3-127 SMP Configuration Information Display

4.3.7.3. VMP Configuration Information Verification

• Command DIS-VMP-CONF: BSC=a;

a: BSC Number(#0~11)

• Input DIS-VMP-CONF: BSC=0;

• Output

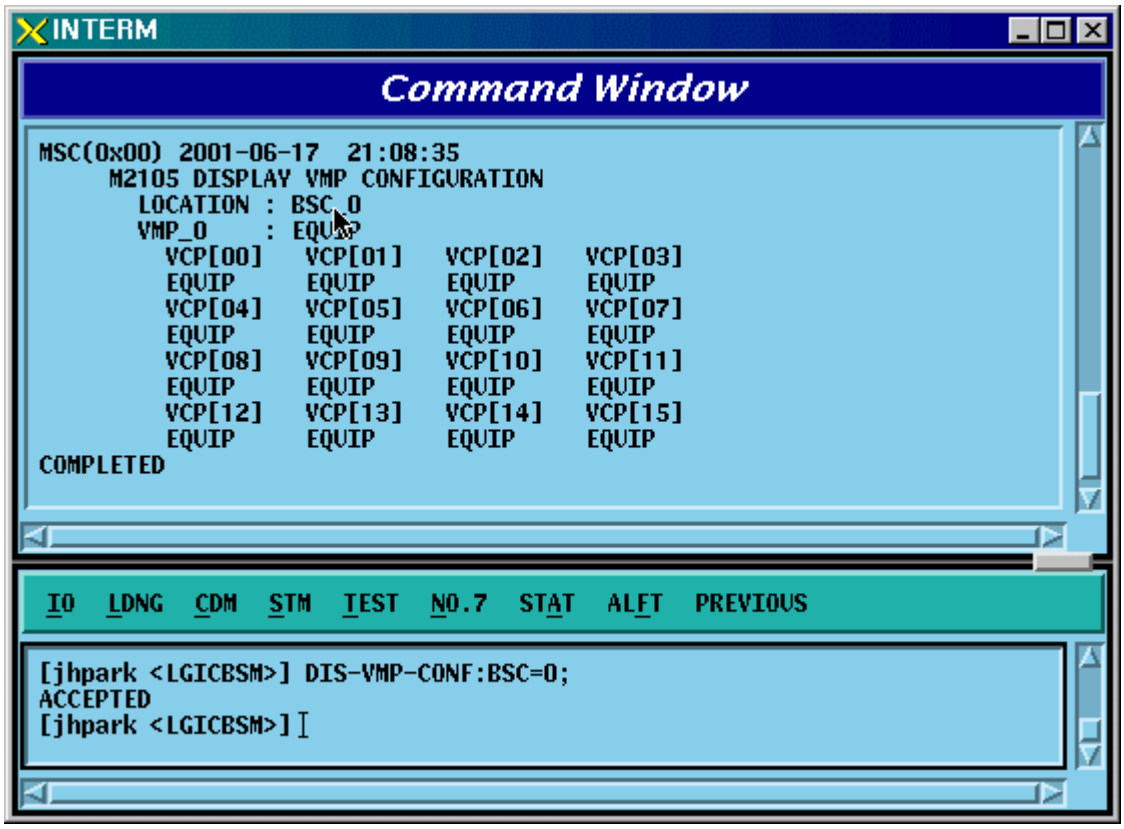


Fig. 4.3-128 VMP Configuration Information Display

4.3.7.4. BTS Configuration Information Verification

• Command DIS-BTS-CONF: BSC=a, BTS=b;

a: BSC Number(#0~11)

b: BTS Number(#0~47)

• Input DIS-BTS-CONF: BSC=0, BTS=0;

• Output

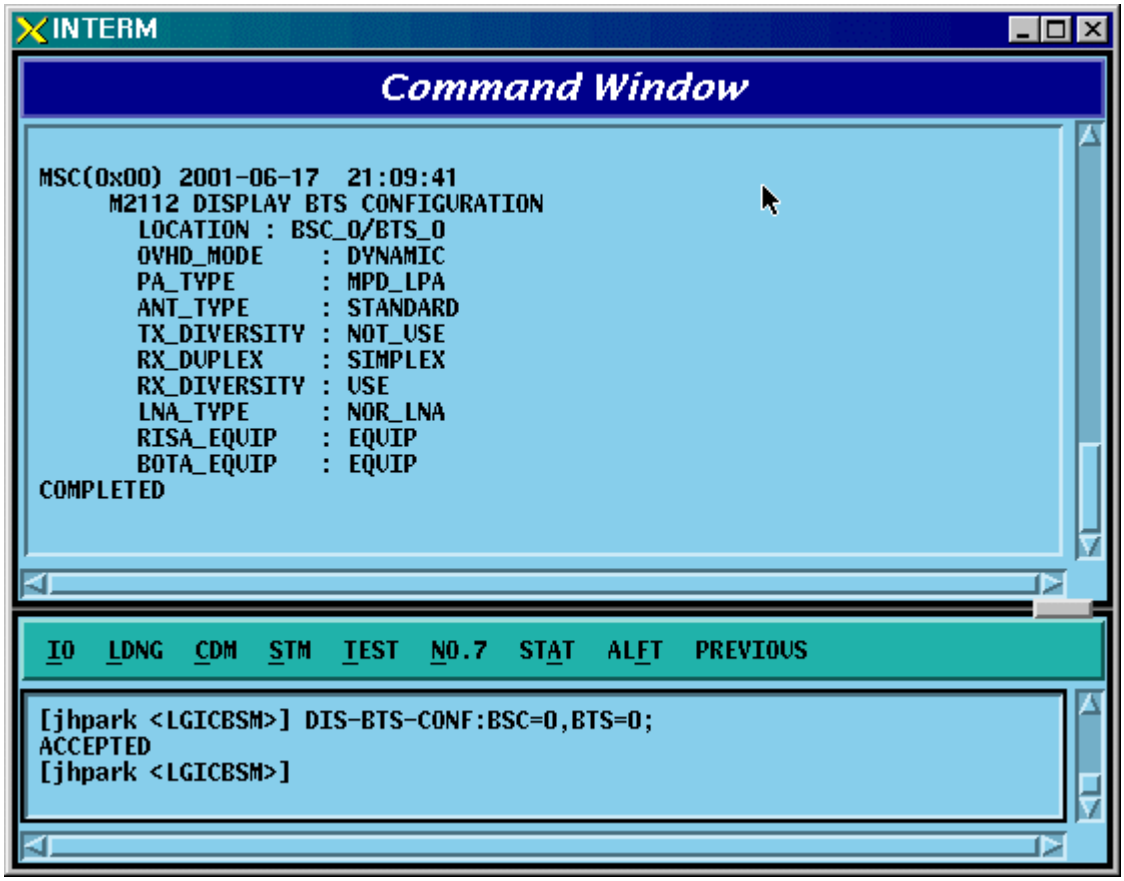


Fig. 4.3-129 BTS Configuration Information Display

4.3.7.5. DBPA CHIP Configuration Information Verification

- Command DIS-CHIP-CONF: BSC=a, BTS=b;

  a: BSC Number(#0~11)

  b: BTS Number(#0~47)

- Input DIS-CHIP-CONF: BSC=0, BTS=0;
- Output

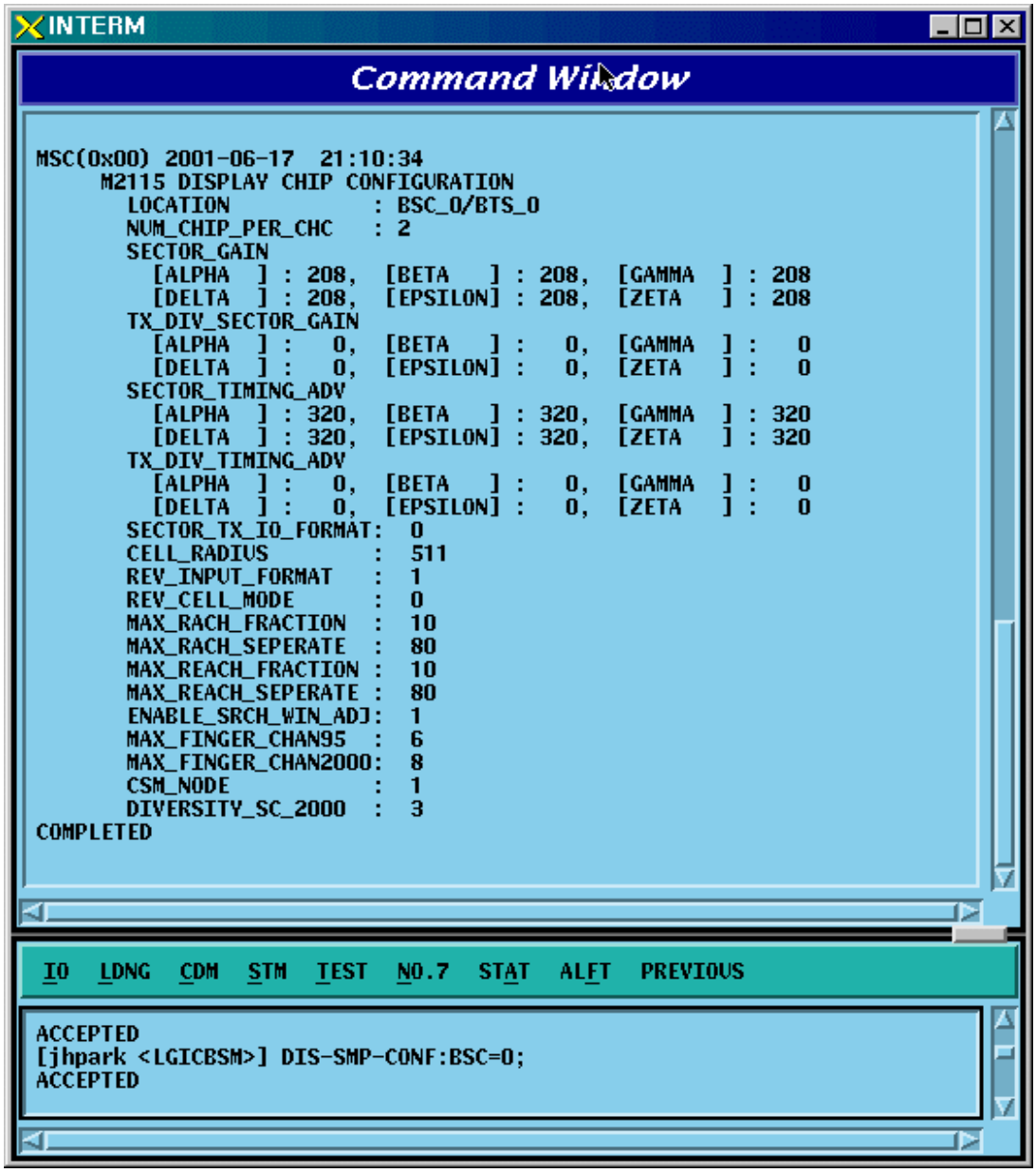


Fig. 4.3-130 DBPA CHIP Configuration Information Display

4.3.7.6. OVERHEAD CHANNEL Configuration Information Verification

• Command DIS-OVHD-CONF: BSC=a, BTS=b;

a: BSC Number(#0~11)

b: BTS Number(#0~47)

• Input DIS-OVHD-CONF: BSC=0, BTS=0;

• Output

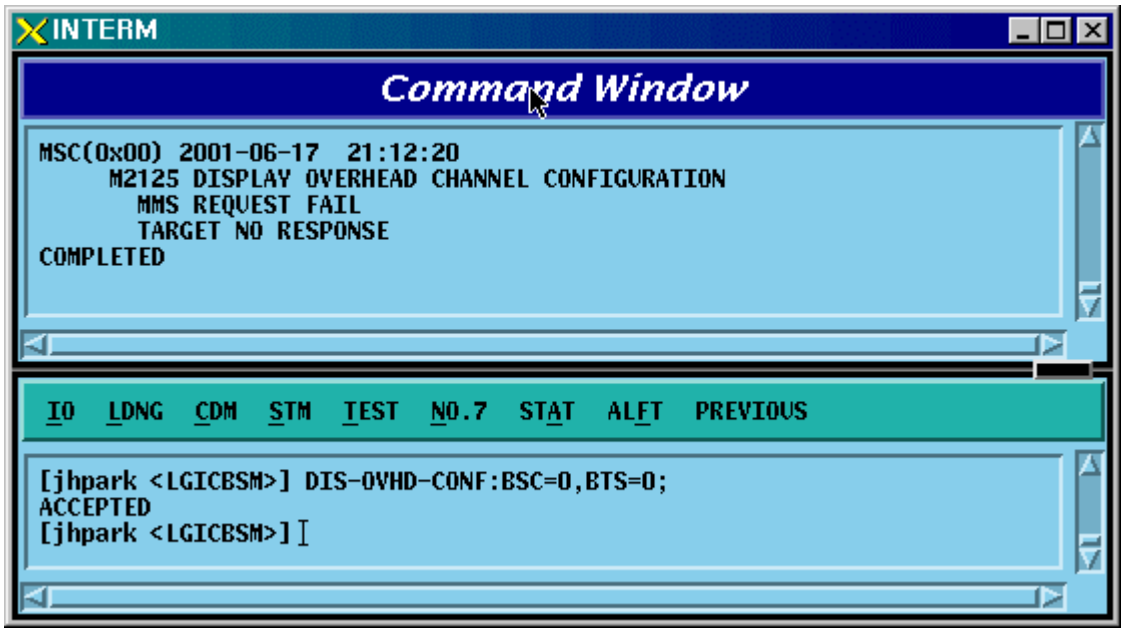


Fig. 4.3-131 OVHD Channel Configuration Information Display

4.3.7.7. PDSN Configuration Information Verification

• Command DIS-PDSN-CONF: PCP=a;

a: PCP Number(#0~2)

• Input DIS-PDSN-CONF: PCP=0;

• Output

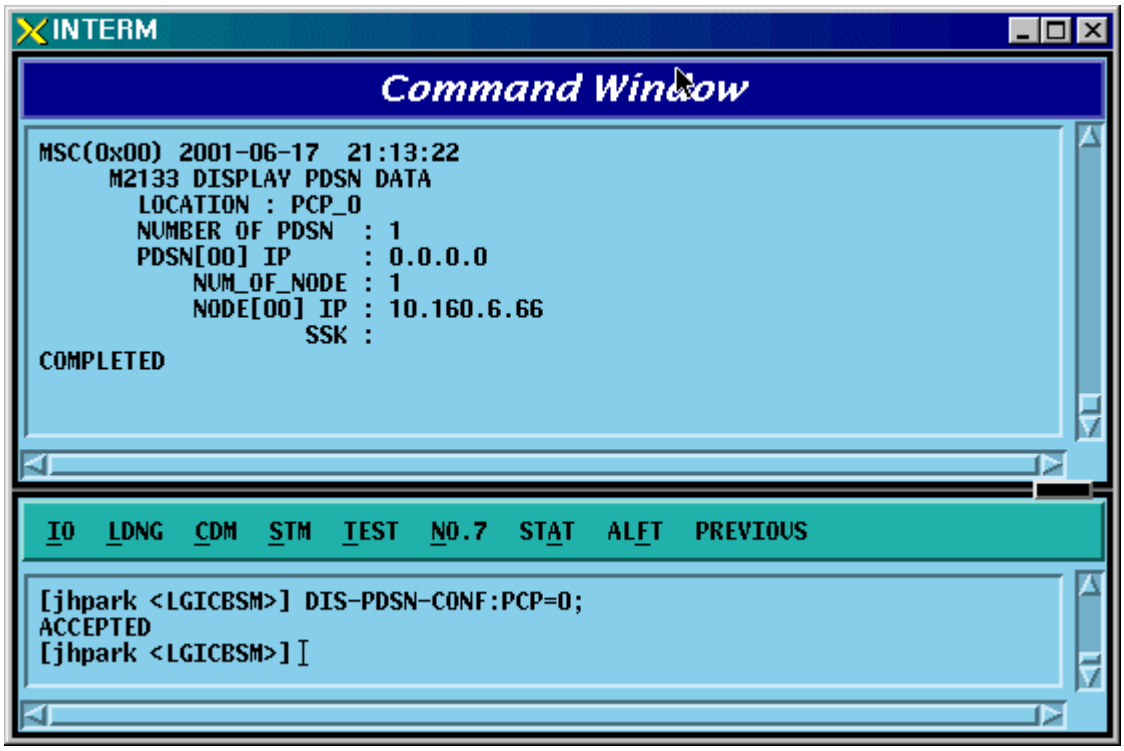


Fig. 4.3-132 PDSN Configuration Information Display

4.3.8. Configuration Information Change (Change_Configuration_Data)

This section describes commands that are used to add or delete BTS and BSC processors and devices. The configuration information that can be added and deleted are presented below. For the command that has many parameters to input, input image on the inpout Widow. This section does not cover details of each parameter.

Table 4.3-4 Configuration Information Change

CRN	MMC	Description
C2312	CHG-BTS-CONF	BTS configuration information change
C2315	CHG-CHIP1-CONF	Channel Card Chip configuration information(1) change
C2317	CHG-CHIP2-CONF	Channel Card Chip configuration information(2) change
C2333	ADD-PDSN-CONF	PDSN CONFIG addition
C2334	RMV-PDSN-CONF	PDSN CONFIG deletion
C2335	CHG-PDSN-CONF	PDSN CONFIG change
C2337	ADD-PDSN-NODE	PDSN NODE addition
C2338	RMV-PDSN-NODE	PDSN NODE deletion
C2339	CHG-PDSN-NODE	PDSN NODE change
C2601	MOV-BSC-NODE	BSC Node movement
C2602	MOV-PCF-NODE	PCF Node movement
C2603	MOV-SMP-NODE	SMP Node movement
C2604	MOV-VMP-NODE	VMP Node movement
C2605	MOV-BTS-ID	BTS ID movement
C2606	MOV-BTS-TRNK	BTS TRUNK Node movement
C2607	MOV-LICA-LINK	LICA LINK movement
C2610	MOV-OVHD-CONF	OVERHEAD CHANNEL configuration information movement
C2701	ADD-BSC-CONF	BSC configuration addition
C2702	RMV-BSC-CONF	BSC configuration deletion
C2711	ADD-PCF-CONF	PCF configuration addition
C2712	RMV-PCF-CONF	PCF configuration deletion

C2721	ADD-SMP-CONF	SMP configuration addition
C2722	RMV-SMP-CONF	SMP configuration deletion
C2731	ADD-VMP-CONF	VMP configuration addition
C2732	RMV-VMP-CONF	VMP configuration deletion
C2741	ADD-BTS-CONF	BTS configuration addition
C2742	RMV-BTS-CONF	BTS configuration deletion
C2751	ADD-SECT-CONF	SECTOR configuration addition
C2752	RMV-SECT-CONF	SECTOR configuration deletion
C2761	ADD-FA-CONF	FA configuration addition
C2762	RMV-FA-CONF	FA configuration deletion
C2771	ADD-TRNK-CONF	BSC-BTS TRUNK configuration addition
C2772	RMV-TRNK-CONF	BSC-BTS TRUNK configuration deletion
C2781	ADD-CAN-PVC	CAN PVC configuration addition
C2782	RMV-CAN-PVC	CAN PVC configuration deletion
C2783	ADD-CPN-PVC	CPN PVC configuration addition
C2784	RMV-CPN-PVC	CPN PVC configuration deletion
C2785	ADD-BSC-PVC	BSC PVC configuration addition
C2786	RMV-BSC-PVC	BSC PVC configuration deletion

4.3.8.1. BTS Configuration Information Change

- Command CHG-BTS-CONF :BSC=a ,BTS=b [,PA_TYPE=c] [,ANT_TYPE=d] [,ANT_DUP=e] [,RX_DIV=f] [,LNA_EQP=g] [,RISA_EQP=h] [,BOTA_EQP=i];

- Input CHG-BTS-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;
- Output

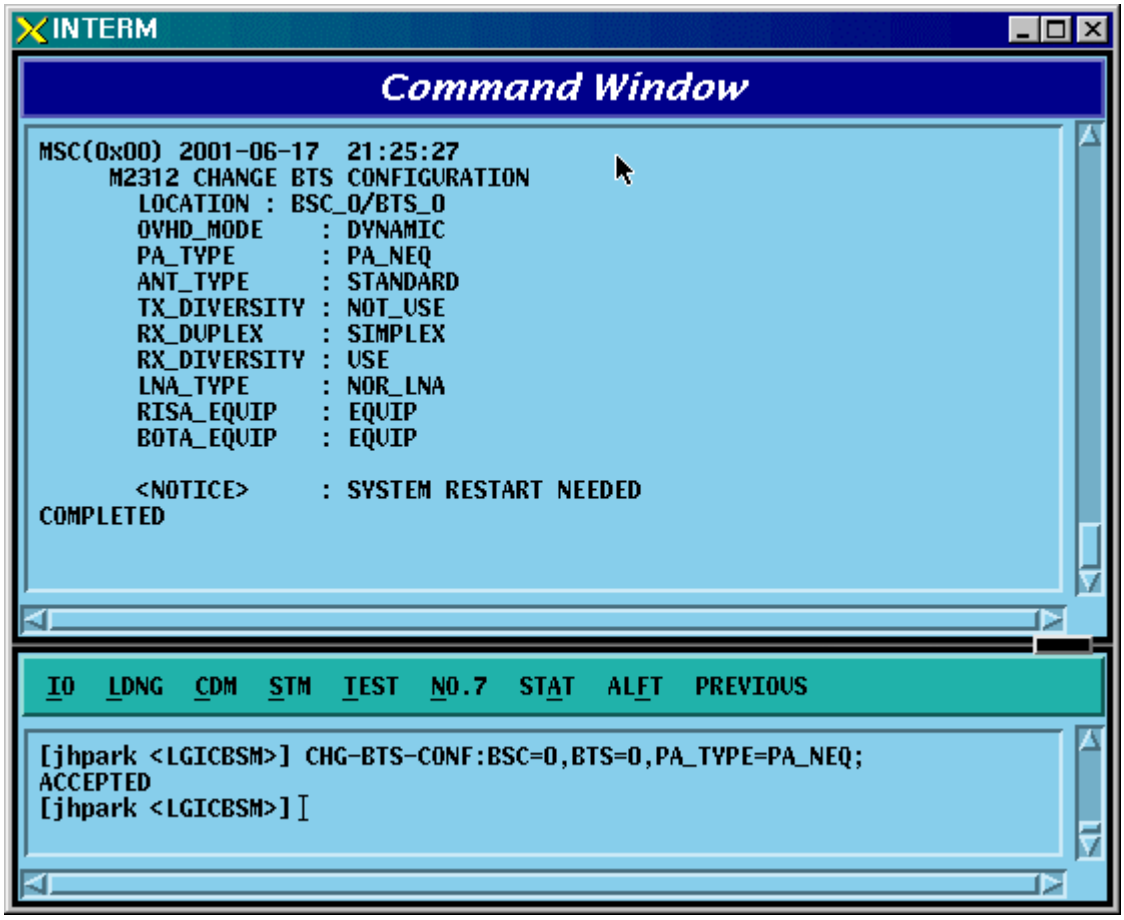


Fig. 4.3-133 BTS Configuration Information Change Display

4.3.8.2. Channel Card Chip Configuration Information (1) Change

- Command CHG-CHIP1-CONF :BSC=a ,BTS=b [,SECT_GAIN_A=c] [,SECT_GAIN_B=d] [,SECT_GAIN_G=e] [,SECT_GAIN_D=f] [,SECT_GAIN_E=g] [,SECT_GAIN_Z=h] [,T_DIV_SECT_A=i] [,T_DIV_SECT_B=j] [,T_DIV_SECT_G=k] [,T_DIV_SECT_D=l] [,T_DIV_SECT_E=m] [,T_DIV_SECT_Z=n] [,SECT_T_ADV_A=o] [,SECT_T_ADV_B=p] [,SECT_T_ADV_G=q] [,SECT_T_ADV_D=r] [,SECT_T_ADV_E=s] [,SECT_T_ADV_Z=t] [,T_DIV_T_ADV_A=u] [,T_DIV_T_ADV_B=v] [,T_DIV_T_ADV_G=w] [,T_DIV_T_ADV_D=x] [,T_DIV_T_ADV_E=y] [,T_DIV_T_ADV_Z=z];

• Input CHG-CHIP1-CONF:BSC=0, BTS=0,SECT_GAIN_A=255;

• Output

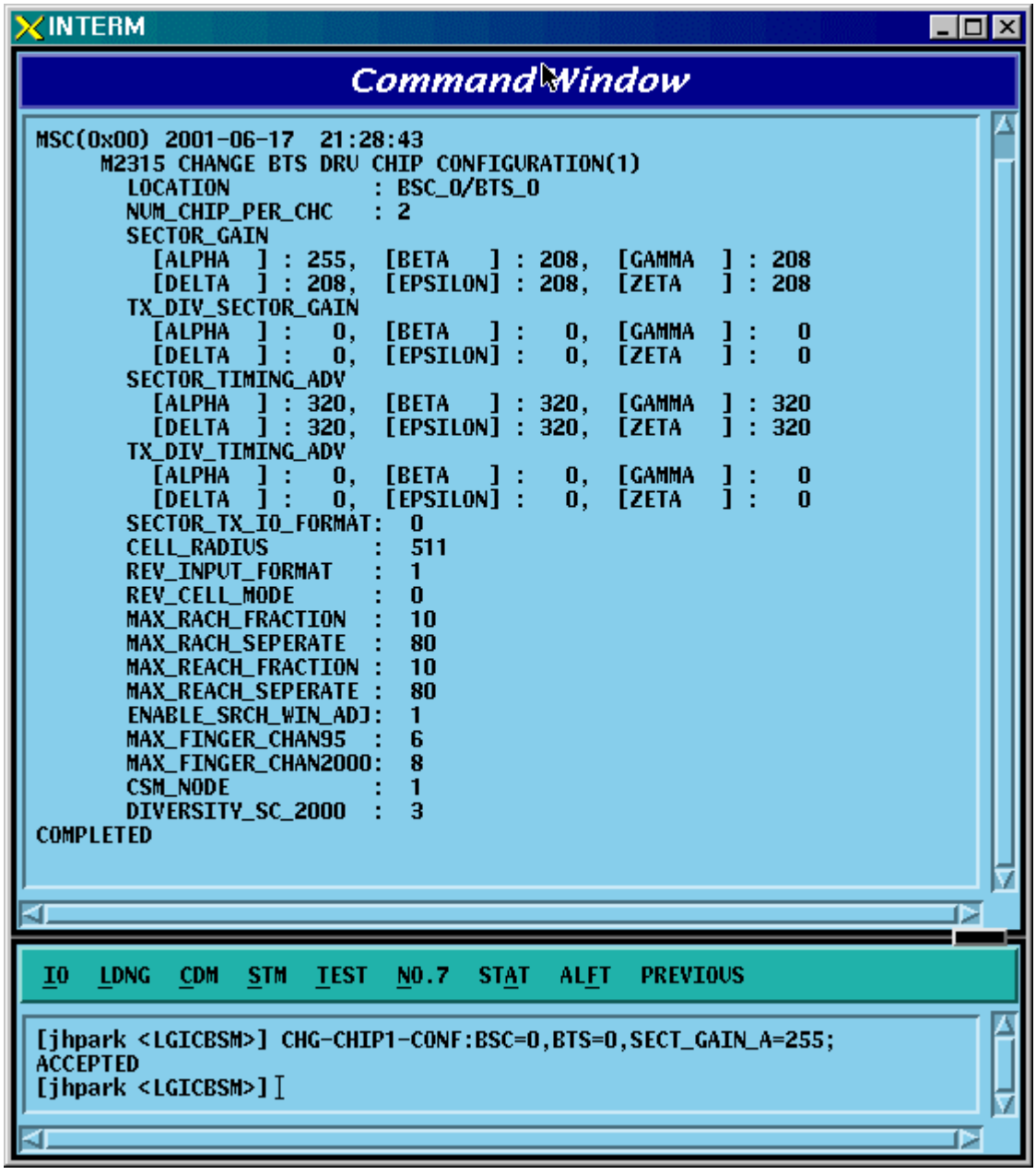


Fig. 4.3-134 Channel Card Chip Configuration Information (1) Change Display

4.3.8.3. Channel Card Chip Configuration Information (2) Change

• Command CHG-CHIP2-CONF :BSC=a ,BTS=b [,NUM_CHIP=c] [,SECT_T_IO=d]
[,CELL_RADIUS=e] [,REV_IN_FORM=f] [,R_CELL_MODE=g]
[,MAX_RACH_F=h] [,MAX_RACH_S=i] [,MAX_REACH_F=j]
[,MAX_REACH_S=k] [,SRCH_WIN_ADJ=l] [,MAX_CH95=m]
[,MAX_CDMA2K=n] [,CSM_MODE=o] [,DIV_SCALE_2K=p];

• Input CHG-CHIP2-CONF: BSC=0, BTS=0,NUM_CHIP=255;

• Output

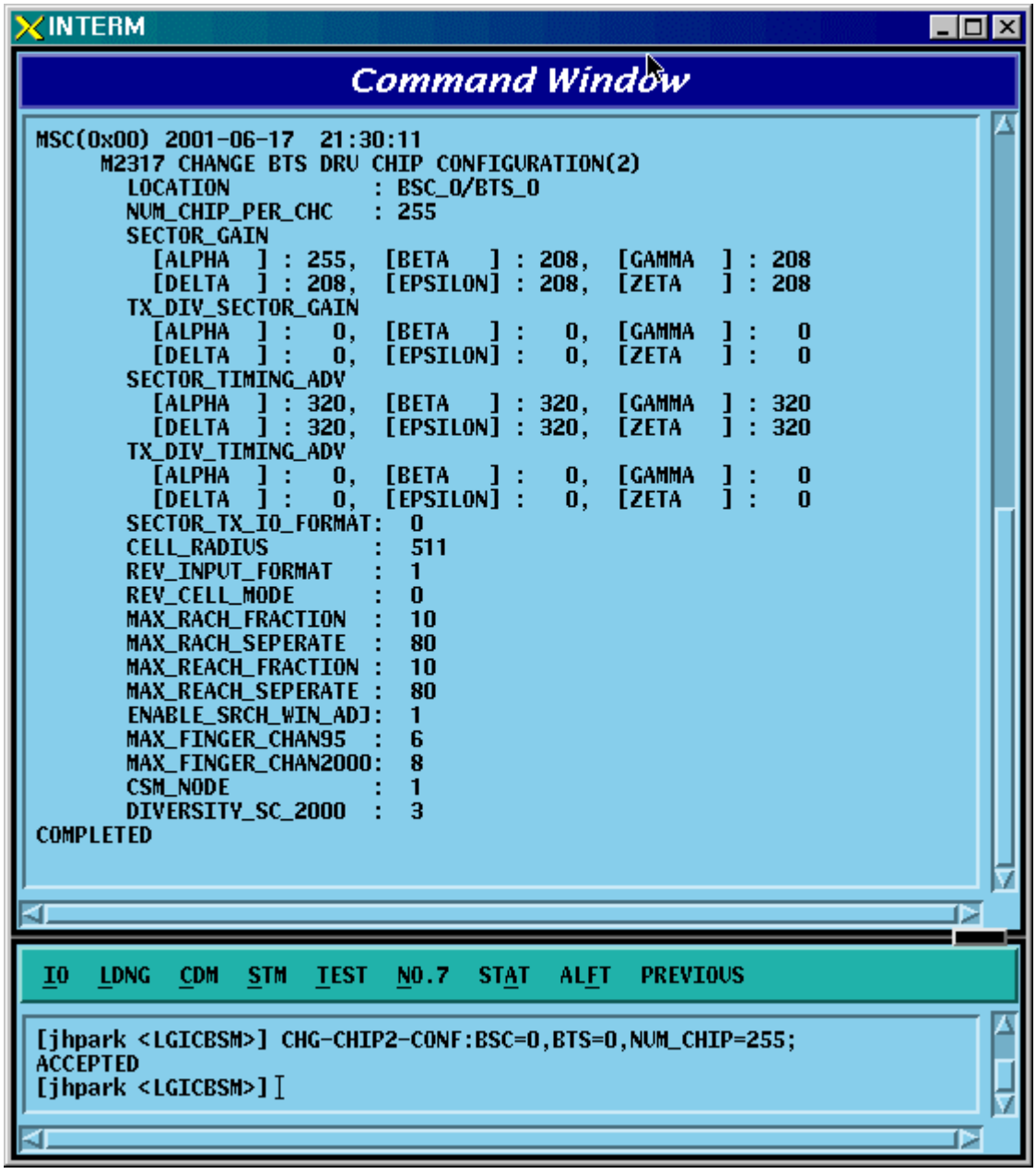


Fig. 4.3-135 Channel Card Chip Configuration Information (2) Change Display

4.3.8.4. PDSN CONFIG Addition

• Command ADD-PDSN-CONF :PCF=a ,PDSN_IDX=b ,PDSN_IP=c;

• Input ADD-PDSN-CONF: BSC=0, BTS=0,PDSN_IP=255.255.255.0;

• Output

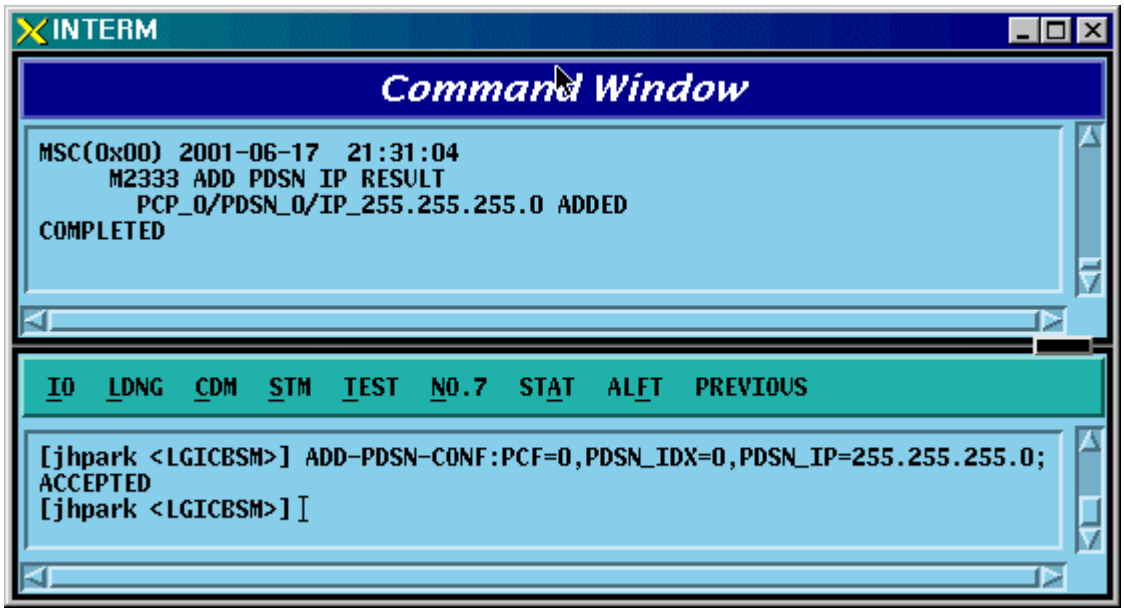


Fig. 4.3-136 PDSN Configuration Addition Display

4.3.8.5. PDSN CONFIG Deletion

- Command RMV-PDSN-CONF :PCF=a ,PDSN_IDX=b;
- Input RMV-PDSN-CONF: BSC=0, BTS=0,PDSN_IDX=1;
- Output

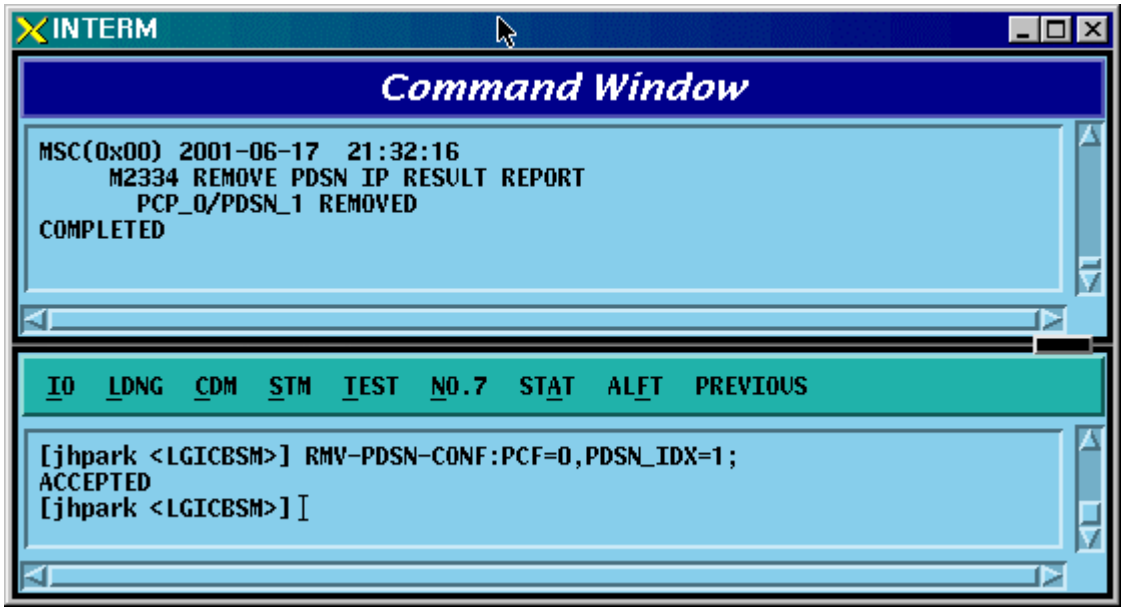


Fig. 4.3-137 PDSN Configuration Deletion Display

4.3.8.6. PDSN CONFIG Change

• Command CHG-PDSN-CONF :PCF=a ,PDSN_IDX=b ,PDSN_IP=c;

• Input CHG-PDSN-CONF: BSC=0, BTS=0,PDSN_IP=127.0.0.1;

• Output

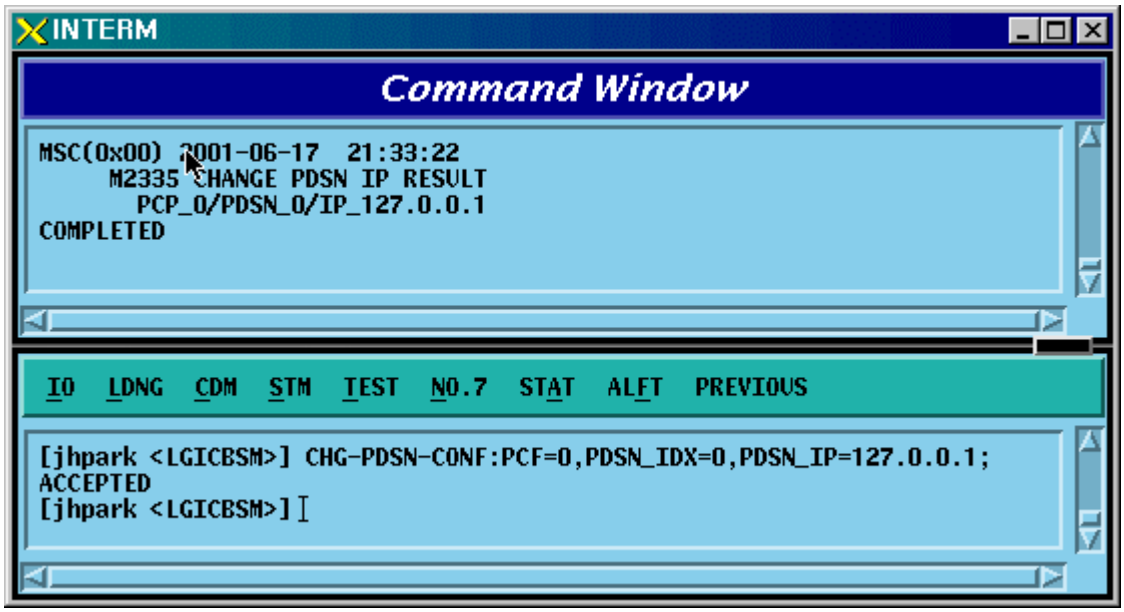


Fig. 4.3-138 PDSN Configuration Change Display

4.3.8.7. PDSN NODE Addition

• Command ADD-PDSN-NODE :PCF=a ,PDSN_IDX=b ,PDSN_NODE_IDX=c ,
PDSN_NODE_IP=d ,SSK_VALUE=e

• Input ADD-PDSN-NODE: BSC=0, BTS=0,PDSN_NODE_IDX=0,
PDSN_NODE_IP:128.128.128.128;

• Output

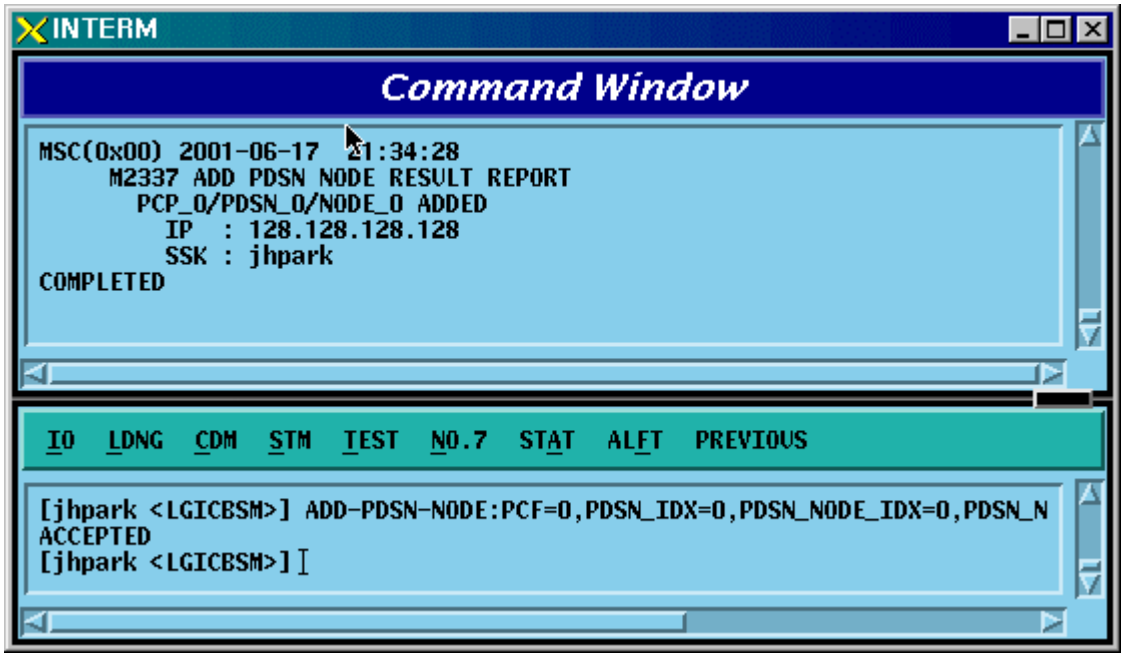


Fig. 4.3-139 PDSN NODE Addition Display

4.3.8.8. PDSN NODE Deletion

• Command RMV-PDSN-NODE :PCF=a ,PDSN_IDX=b ,PDSN_NODE_IDX=c;

• Input RMV-PDSN-NODE: BSC=0, BTS=0,PDSN_IDX=0,PDSN_NODE_IDX=0;

• Output

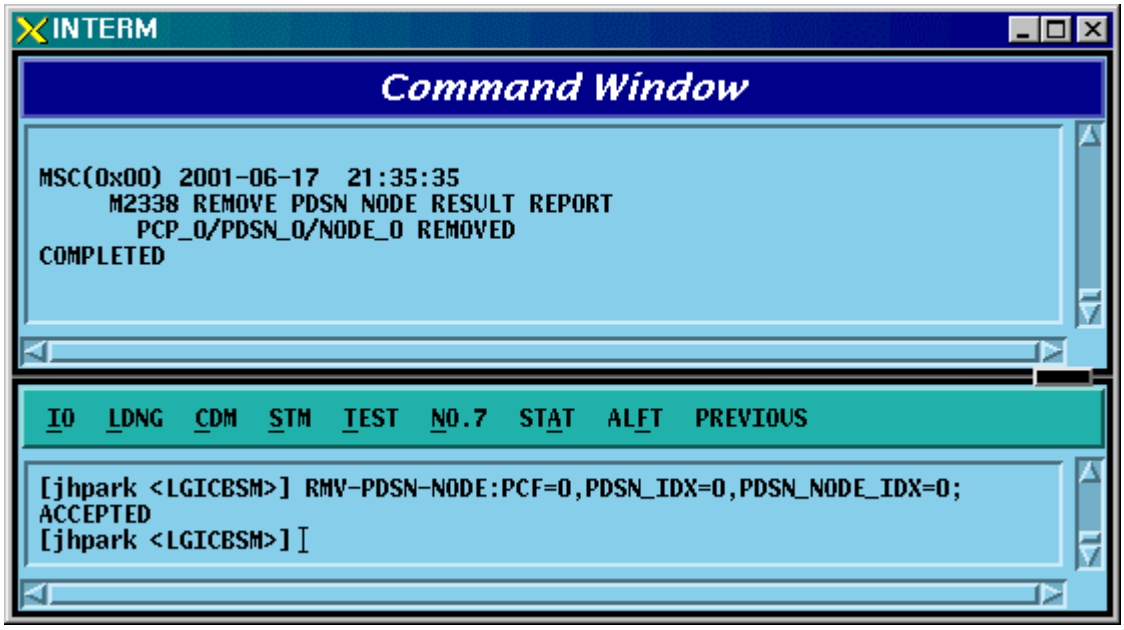


Fig. 4.3-140 PDSN NODE Deletion Display

4.3.8.9. PDSN NODE Change

• Command CHG-PDSN-NODE :PCF=a ,PDSN_IDX=b ,PDSN_NODE_IDX=c
[,PDSN_NODE_IP=d] [,SSK_VALUE=e]

• Input CHG-PDSN-NODE: BSC=0, BTS=0,PDSN_IDX=0,PDSN_NODE_IDX=0,
PDSN_NODE_IP=100.100.0.1, SSK_VALUE=gamdok;

• Output

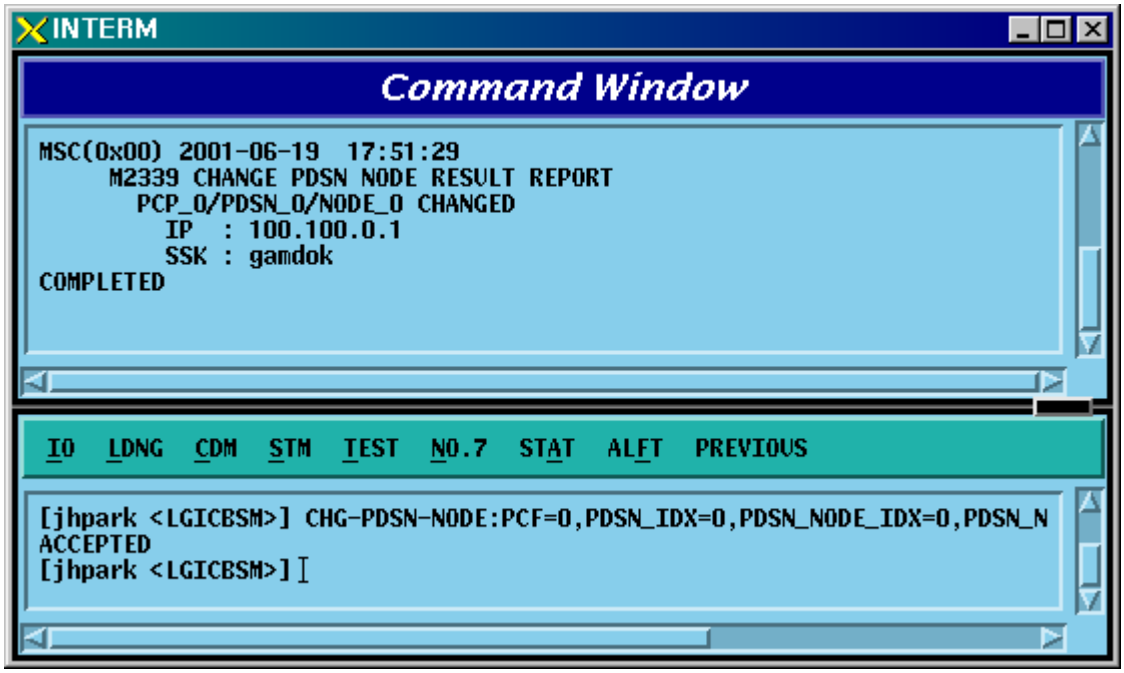


Fig. 4.3-141 PDSN NODE Change Display

4.3.8.10. BSC Node Movement

• Command MOV-BSC-NODE :T_PROC=a ,BSC=b ,CARD=c ,LINK=d;

• Input MOV-BSC-NODE: T_PROC=CNP,BSC=0,CARD=1,LINK=6;;

• Output

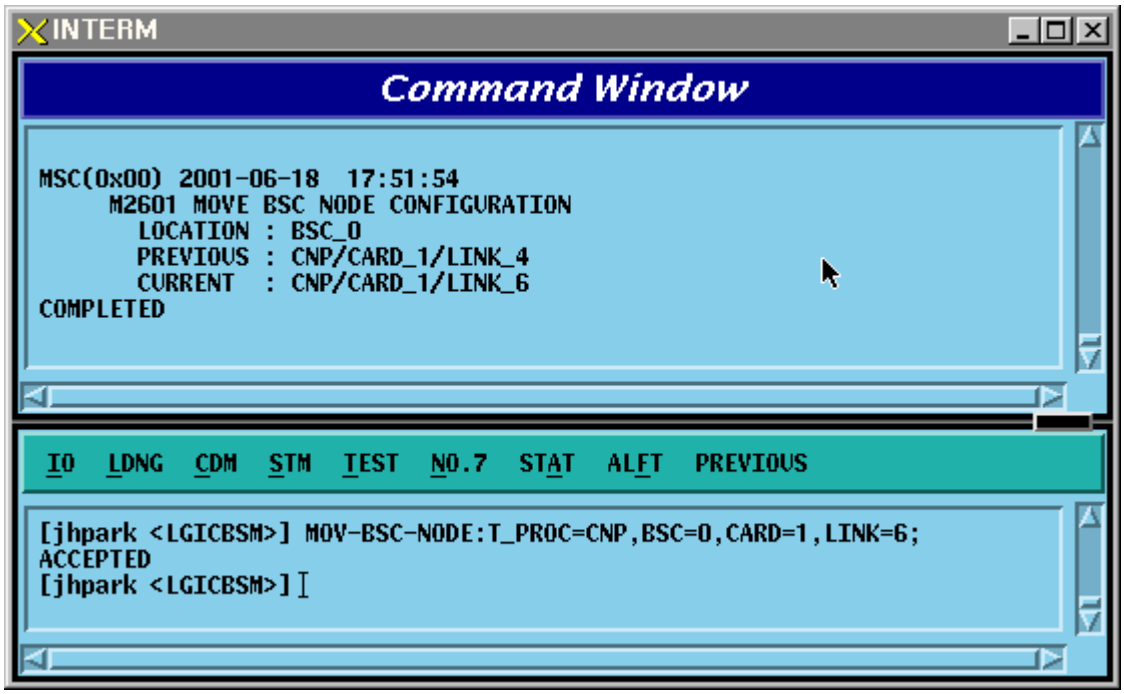


Fig. 4.3-142 BSC NODE Movement Display

4.3.8.11. PCF Node Movement

• Command MOV-PCF-NODE :PCF=a ,CARD0=b ,LINK0=c ,CARD1=d ,LINK1=e
,CARD2=f ,LINK2=g ,CARD3=h ,LINK3=i;

• Input MOV-PCF-NODE: BSC=0, BTS=0,PA_TYPE=FA_NEQ;

• Output

4.3.8.12. SMP Node Movement

• Command MOV-SMP-NODE :BSC=a ,SMP=b ,CARD=c ,LINK=d;

• Input MOV-SMP-NODE: BSC=0, SMP=0,CARD=1,LINK=6

• Output

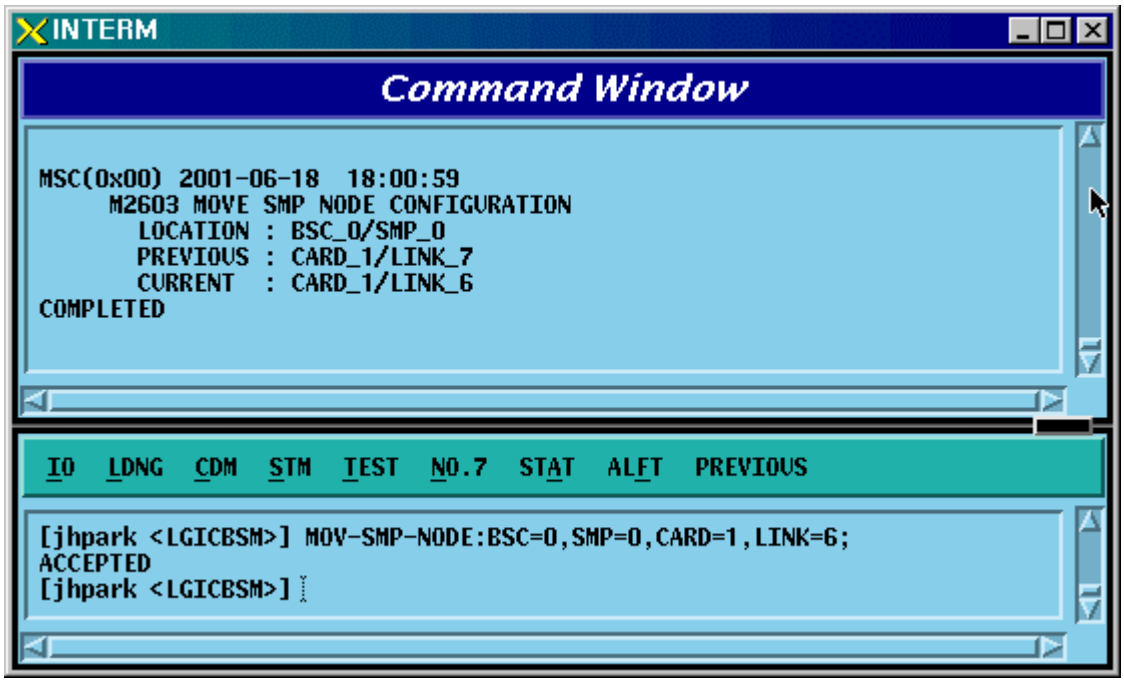


Fig. 4.3-143 SMP NODE Movement Display

4.3.8.13. VMP Node Movement

• Command MOV-VMP-NODE :BSC=a ,VMP=b ,CARD=c ,LINK=d;

• Input MOV-VMP-NODE: BSC=0, VMP=0, CARD=1, LINK=6;

• Output

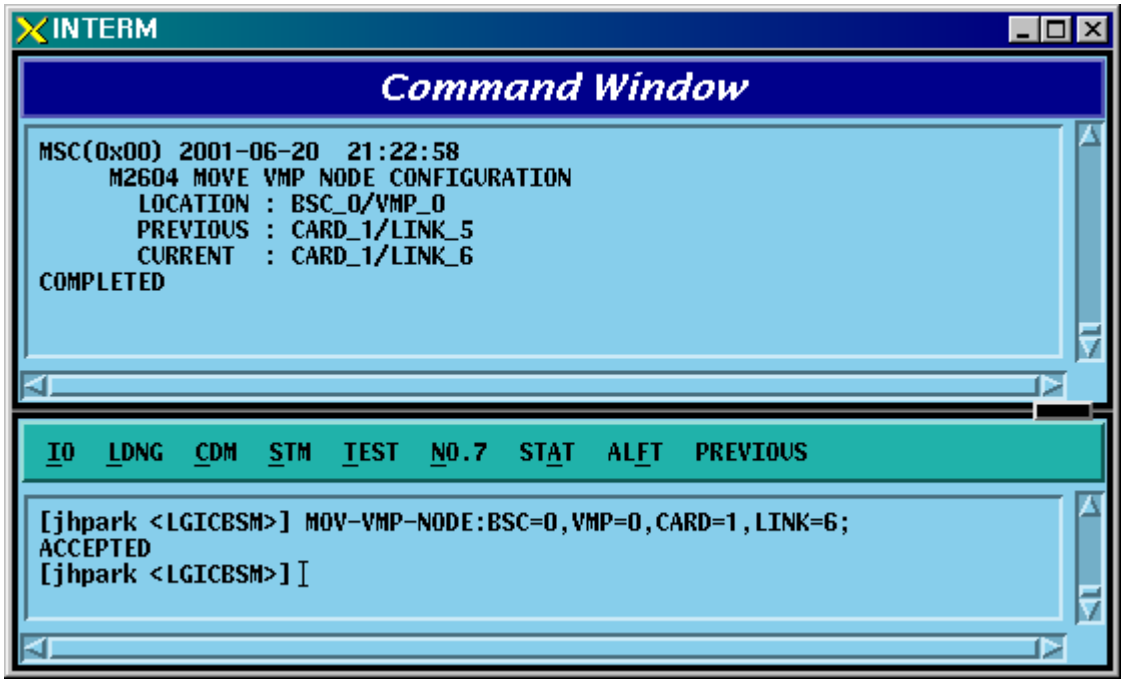


Fig. 4.3-144 VMP NODE Movement Display

4.3.8.14. BTS ID Movement

• Command MOV-BTS-ID :BSC=a ,OLD_BTS=b ,NEW_BTS=c;

• Input MOV-BTS-ID: BSC=0, OLD_BTS=0,NEW_BTS=2;

• Output

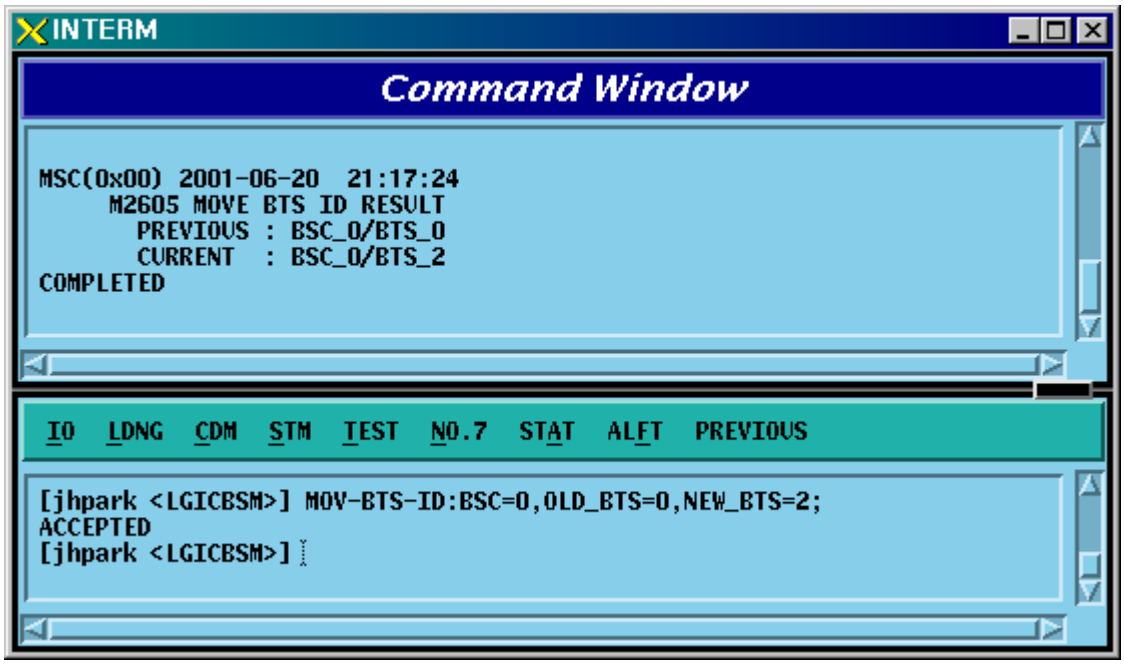


Fig. 4.3-145 BTS ID Movement Display

4.3.8.15. BTS TRUNK Node Movement

For this command, execute DIS-TRNK-DATA first to input the parameter value.

• Command MOV-BTS-TRNK :BSC=a ,BTS=b ,OLD_ALMA=c ,OLD_ALPA=d ,
OLD_ALPA_LINK=e ,NEW_ALMA=f ,NEW_ALPA=g ,NEW_ALPA_LINK=h;

• Input MOV-BTS-TRNK: BSC=0, BTS=2,
OLD_ALMA=0,OLD_ALPA=0,OLD_ALPA_LINK=0,
NEW_ALMA=1,NEW_ALPA=1,NEW_ALPA_LINK=1;

• Output

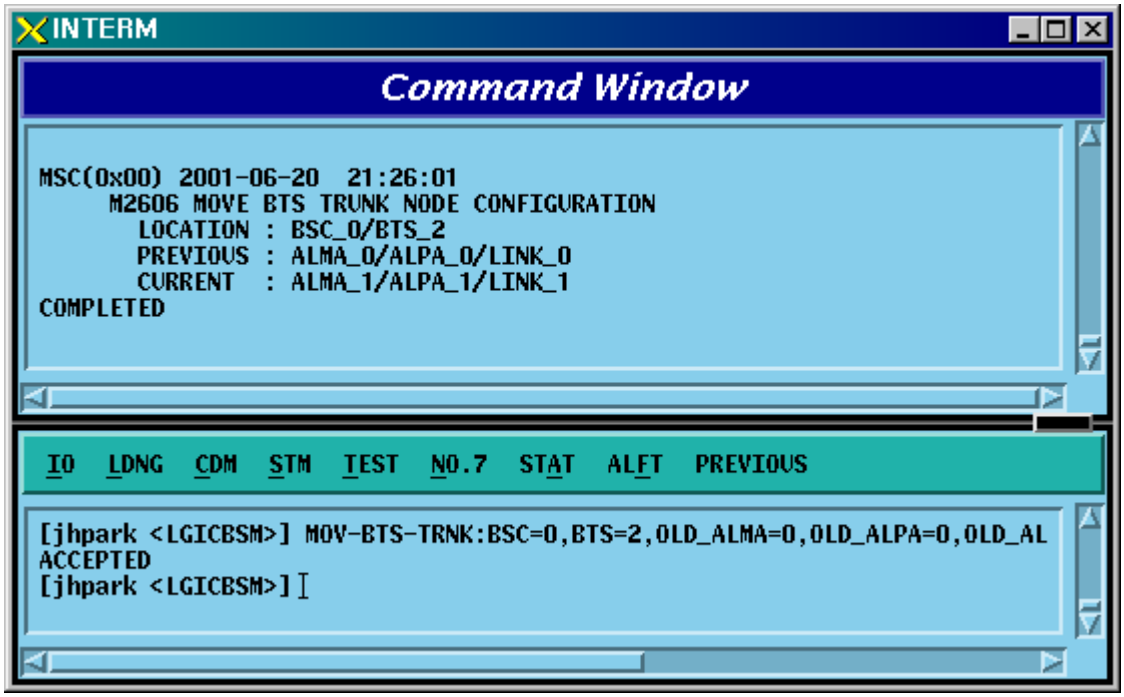


Fig. 4.3-146 BTS TRUNK Movement display

4.3.8.16. LICA LINK Movement

• Command MOV-LICA-LINK :BSC=a ,BTS=b ,OLD_LICA=c ,OLD_LINK=d ,NEW_LICA=e ,NEW_LINK=f;

• Input MOV-LICA-LINK: BSC=0, BTS=1, OLD_LICA=0, OLD_LINK=0, NEW_LICA=1, NEW_LINK=1;

• Output

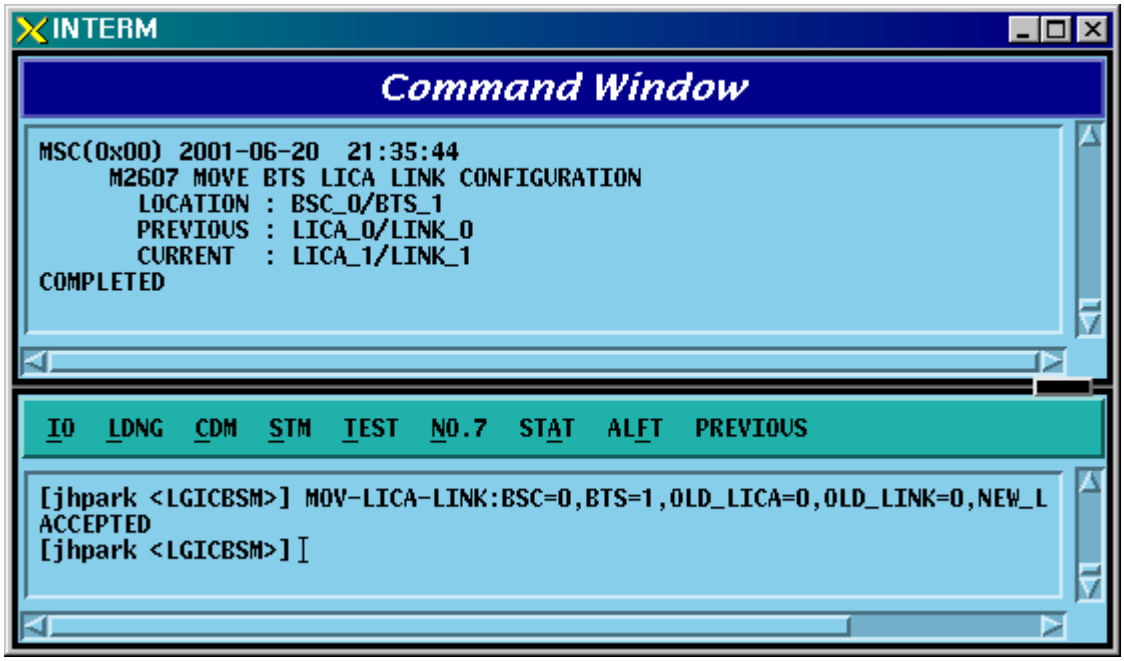


Fig. 4.3-147 LICA LINK Movement Display

4.3.8.17. OVERHEAD CHANNEL Configuration Information Movement

Refer to DIS-OVHD-CONF command

• Command MOV-OVHD-CONF :BSC=a ,BTS=b ,SECT=c ,CDMACH=d ,
NEW_CHC=e ;

• Input MOV-OVHD-CONF: BSC=0, BTS=0,
SECTOR=ALPHA,CDMACH=0,NEW_CHC=1;

• Output

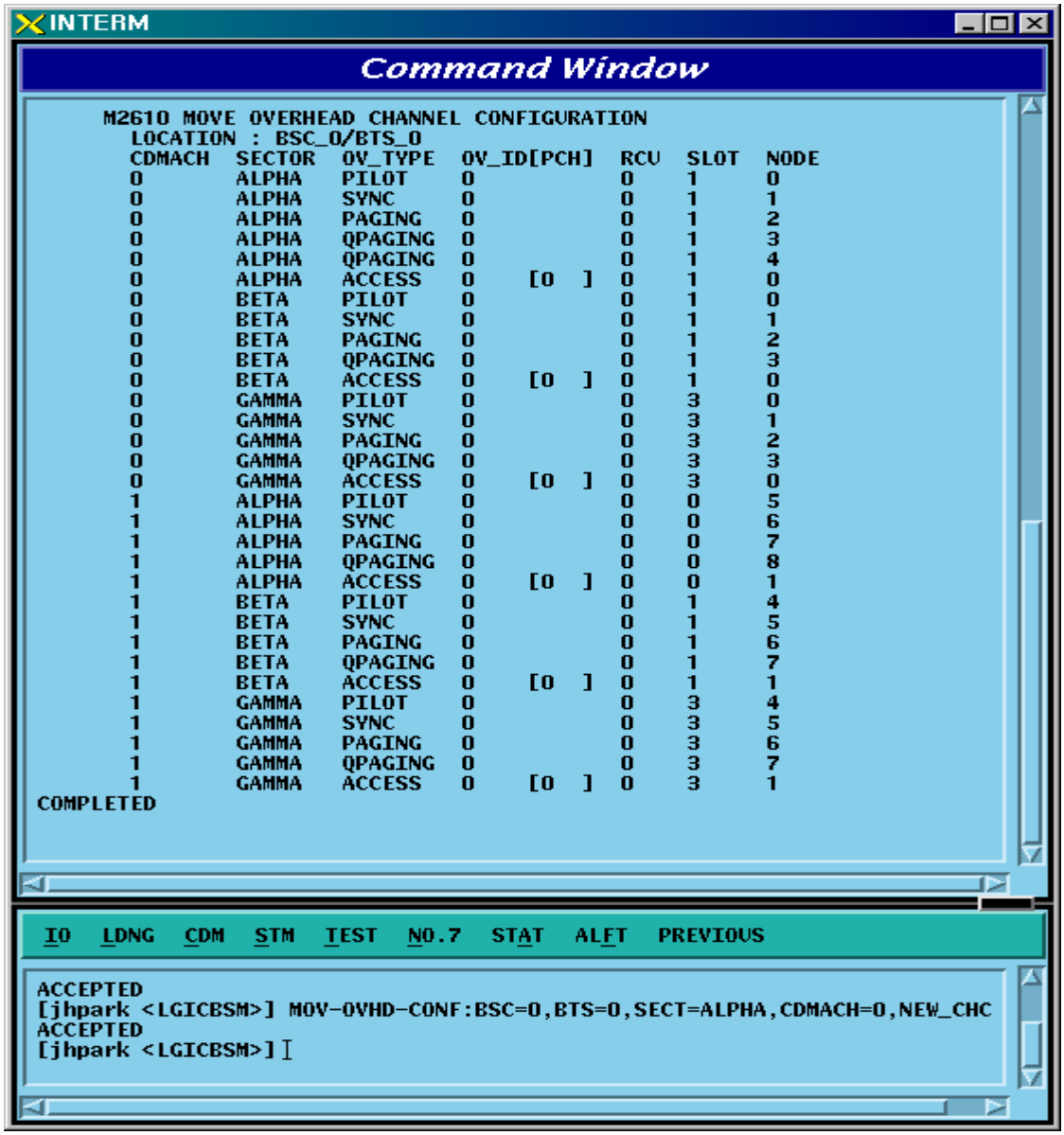


Fig. 4.3-148 OVHD Channel Configuration Information Movement Display

4.3.8.18. BSC Configuration Addition

- Command ADD-BSC-CONF :T_PROC=a ,BSC=b ,CARD=c ,LINK=d;

- Input ADD-BSC-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;
- Output

4.3.8.19. BSC Configuration Deletion

• Command RMV-BSC-CONF :T_PROC=a ,BSC=b;

• Input RMV-BSC-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;

• Output

4.3.8.20. PCF Configuration Addition

• Command ADD-PCF-CONF :PCF=a ,CARD0=b ,LINK0=c ,CARD1=d ,LINK1=e ,CARD2=f ,LINK2=g ,CARD3=h ,LINK3=i;

• Input ADD-PCF-CONF:PCF=1,CARD0=3,LINK0=4,CARD1=3,LINK1=4,CARD2=3,LINK2=4,CARD3=3,LINK3=4;

• Output

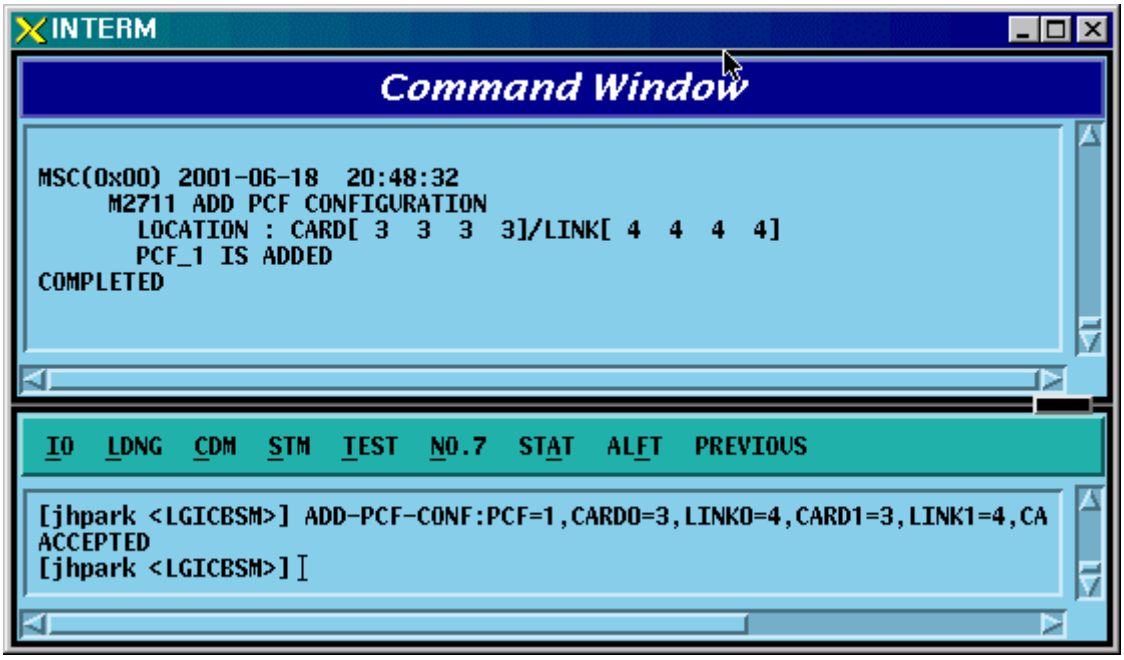


Fig. 4.3-149 PCF Configuration Addition Display

4.3.8.21. PCF Configuration Deletion

- Command RMV-PCF-CONF :PCF=a;

- Input RMV-PCF-CONF: PCF=1;
- Output

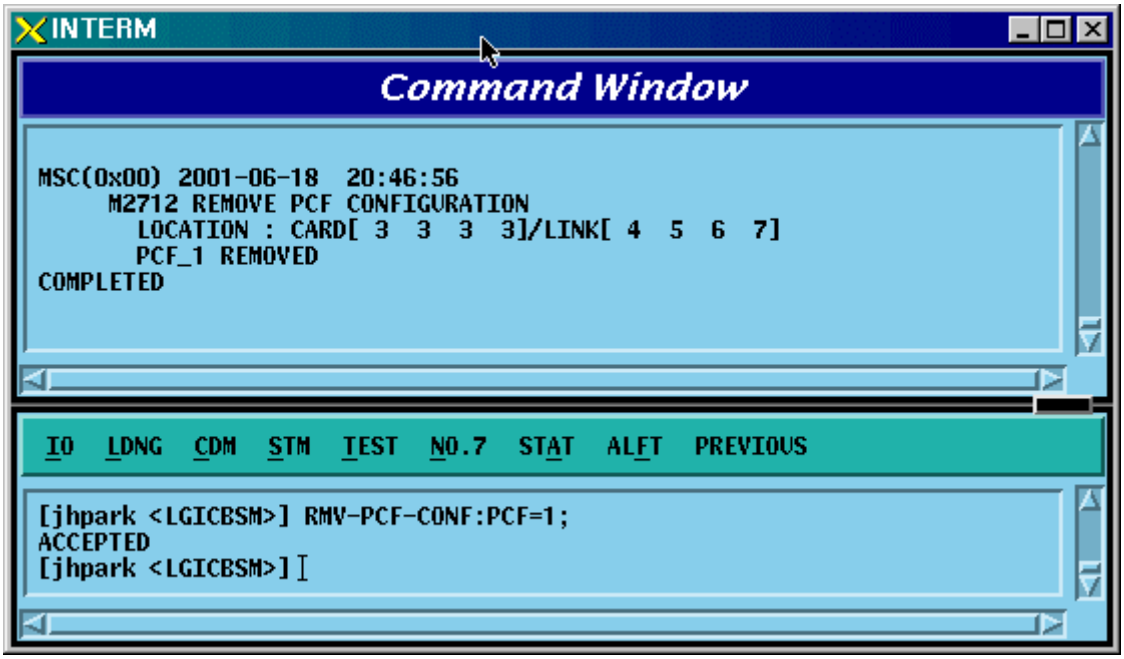


Fig. 4.3-150 PCF Configuration Deletion Display

4.3.8.22. SMP Configuration Addition

• Command ADD-SMP-CONF :BSC=a ,SMP=b ,CARD=c ,LINK=d;

• Input ADD-SMP-CONF: BSC=0,SMP=0,CARD=1,LINK=7;

• Output

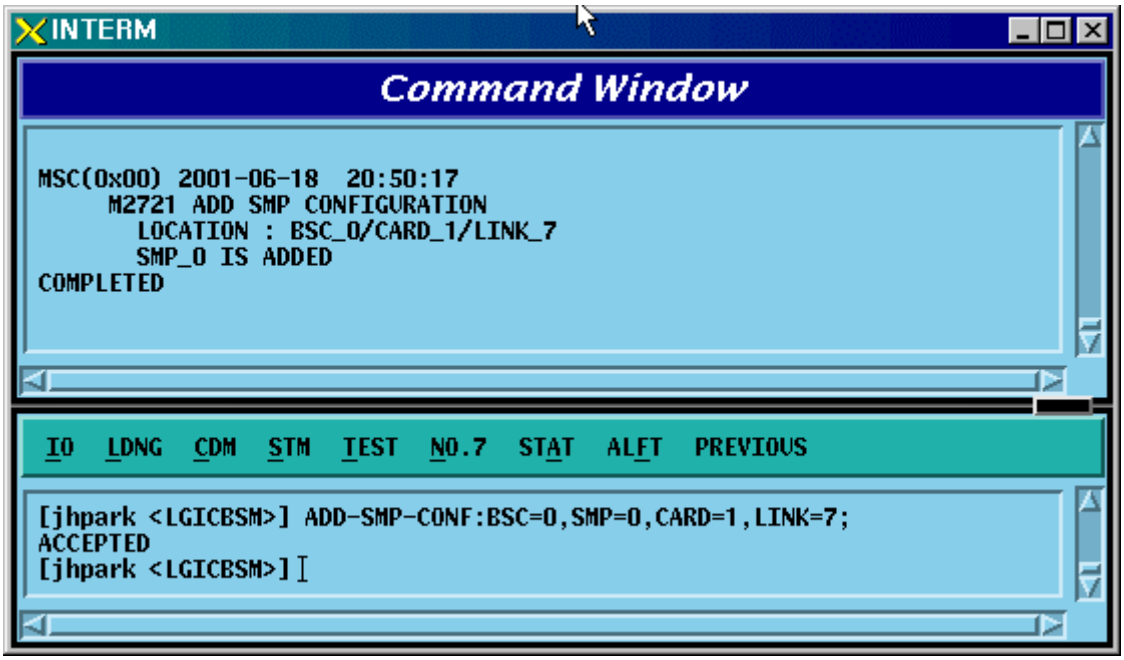


Fig. 4.3-151 SMP Configuration Addition Display

4.3.8.23. SMP Configuration Deletion

• Command RMV-SMP-CONF :BSC=a ,SMP=b;

• Input RMV-SMP-CONF: BSC=0, SMP=0;

• Output

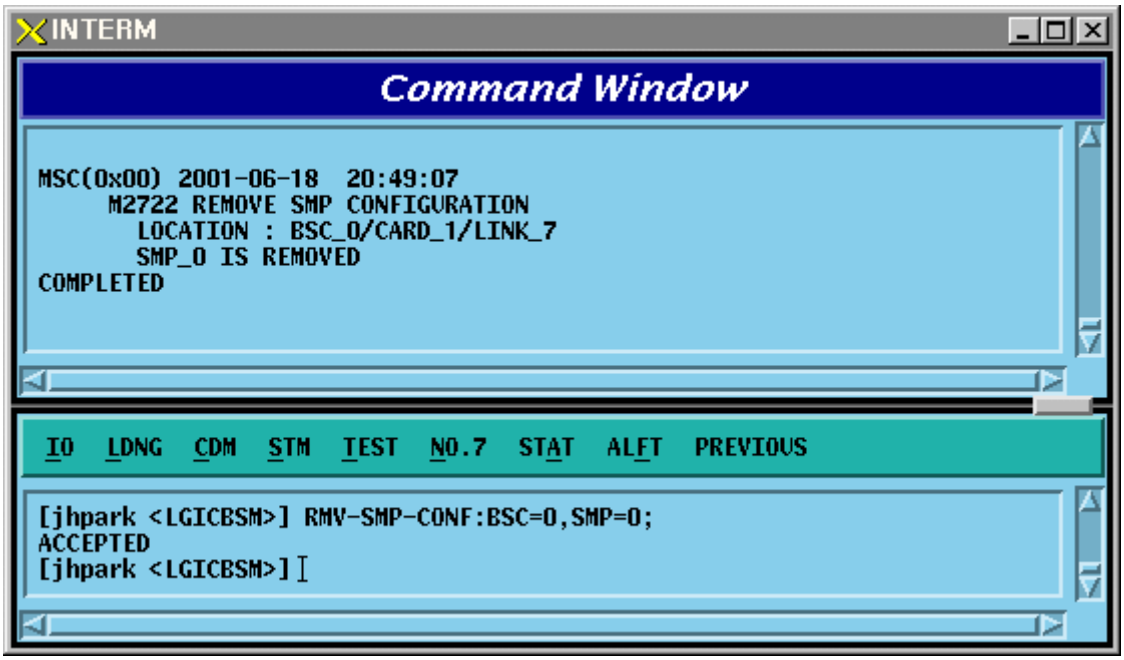


Fig. 4.3-152 SMP Configuration Deletion Display

4.3.8.24. VMP Configuration Addition

• Command ADD-VMP-CONF :BSC=a ,VMP=b ,CARD=c ,LINK=d;

• Input ADD-VMP-CONF: BSC=0,VMP=0,CARD=1,LINK=5;

• Output

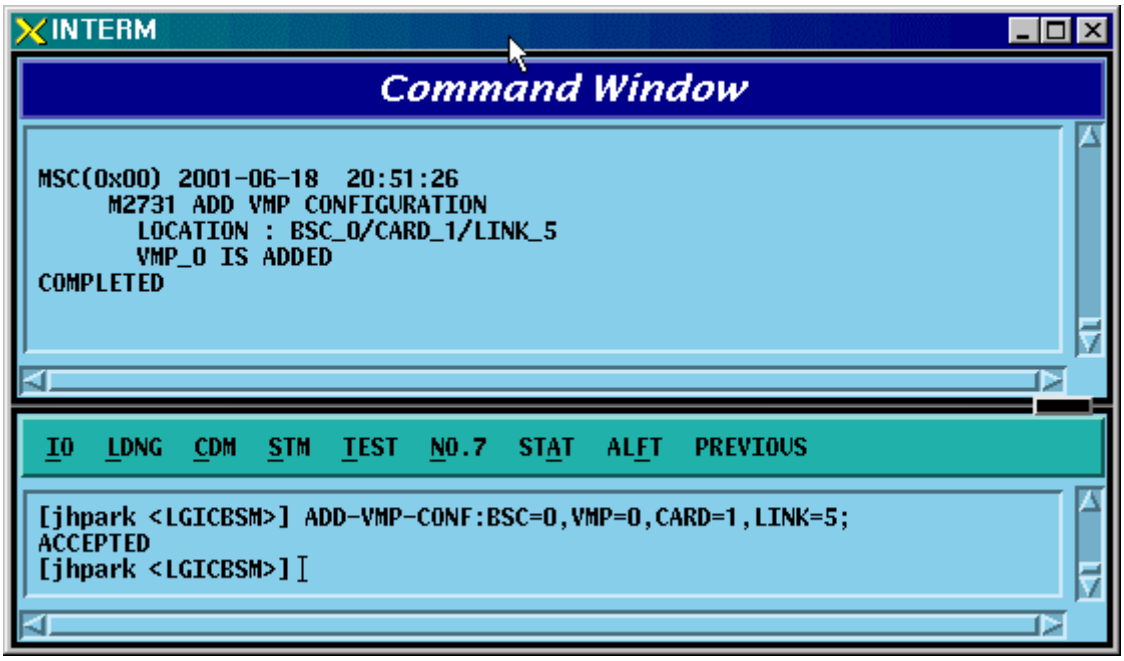


Fig. 4.3-153 VMP Configuration Addition Display

4.3.8.25. VMP Configuration Deletion

• Command RMV-VMP-CONF :BSC=a ,VMP=b;

• Input RMV-VMP-CONF: BSC=0, VMP=0;

• Output

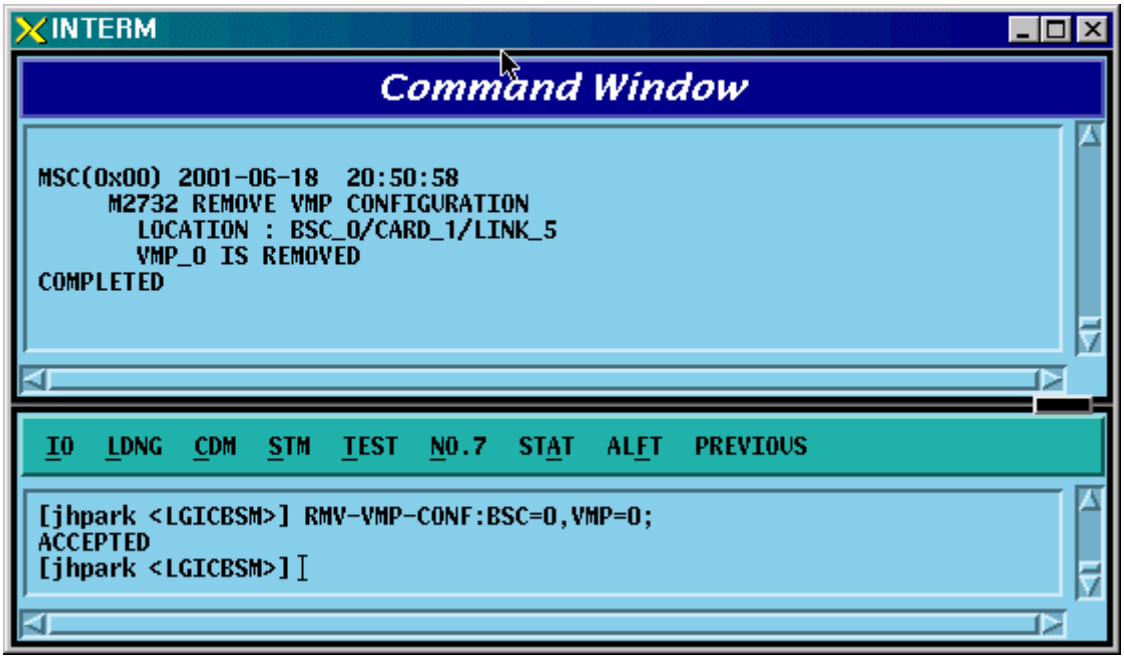
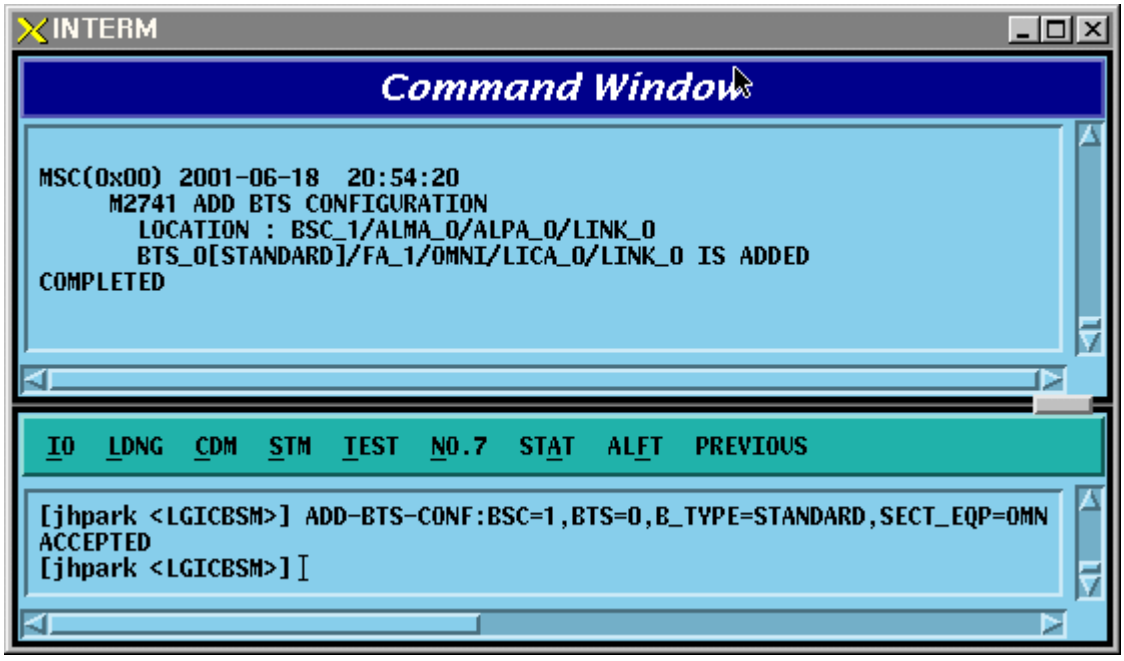


Fig. 4.3-154 VMP Configuration Deletion Display

4.3.8.26. BTS Configuration Addition

- Command ADD-BTS-CONF :BSC=a ,BTS=b ,B_TYPE=c ,SECT_EQP=d ,SECT_RANGE=e
  ,ALMA=f ,ALPA=g ,ALPA_LINK=h ,LICA=i ,LICA_LINK=j
  ,FA0_CH_NUM=k ,PN_ALPHA=l [,PN_BETA=m]
  [,PN_GAMMA=n] [,PN_DELTA=o] [,PN_EPSILON=p]
  [,PN_ZETA=q] [,PA_TYPE=r] [,ANT_TYPE=s] [,LNA_TYPE=t]
  [,RISA_EQP=u] [,BOTA_EQP=v];

- Input Input ADD-BTS-CONF: BSC=0, BTS=0; -> ADD-BTS-CONF: BSC=1, BTS=0,B_TYPE=STANDARD,SECT_EQP=OMNI;
- Output



4.3.8.27. BTS Configuration Deletion

• Command　RMV-BTS-CONF :BSC=a ,BTS=b;

• Input RMV-BTS-CONF: BSC=1, BTS=0;

• Output

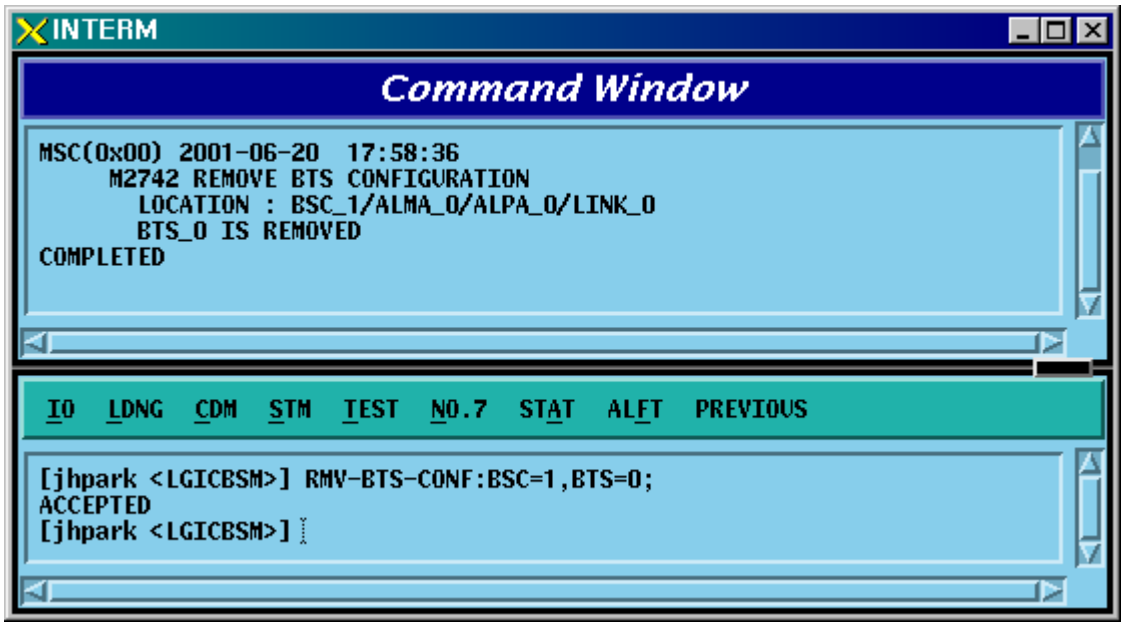


Fig. 4.3-155　BTS Configuration Deletion Display

4.3.8.28. SECTOR Configuration Addition

• Command ADD-SECT-CONF :BSC=a ,BTS=b ,SECT=c ,PN=d;

• Input ADD-SECT-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;

• Output

4.3.8.29. SECTOR Configuration Deletion

• Command RMV-SECT-CONF :BSC=a ,BTS=b ,SECT=c;

• Input RMV-SECT-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;

• Output

4.3.8.30. FA Configuration Addition

• Command ADD-FA-CONF :BSC=a ,BTS=b ,FA=c ,CH_NUM=d;

• Input ADD-FA-CONF: BSC=1, BTS=0,FA=0,CH_NUM=25;

• Output

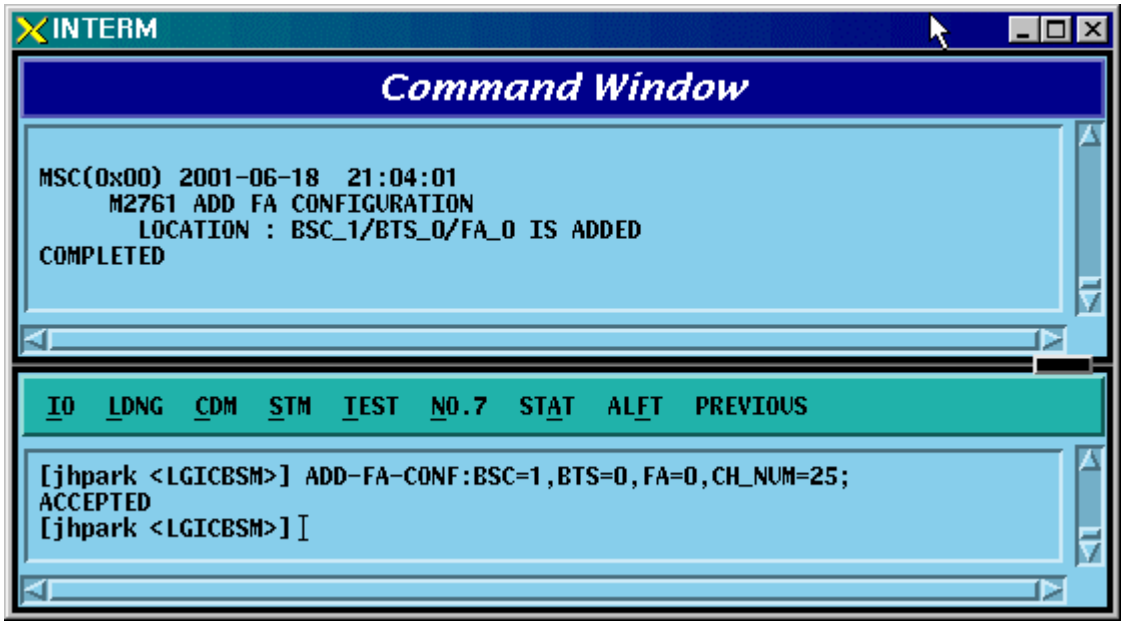


Fig. 4.3-156 FA Configuration Addition Display

4.3.8.31. FA Configuration Deletion

• Command　RMV-FA-CONF :BSC=a ,BTS=b ,FA=c;

• Input RMV-FA-CONF: BSC=1, BTS=0,FA=0;

• Output

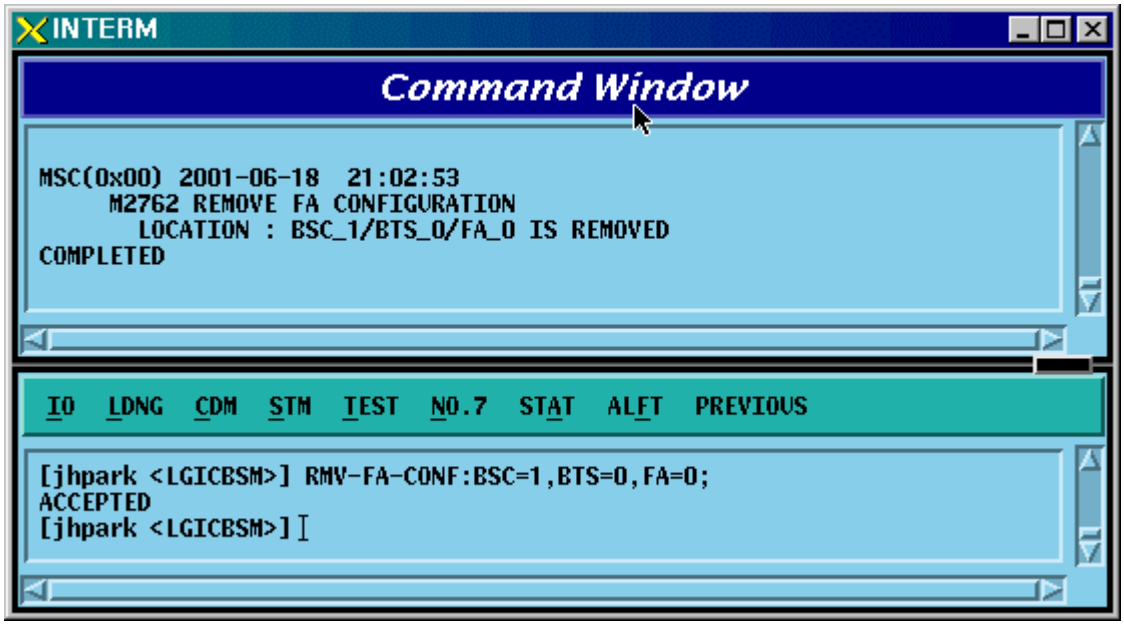


Fig. 4.3-157　FA Configuration Deletion Display

4.3.8.32. BSC-BTS TRUNK Configuration Addition

- Command ADD-TRNK-CONF :BSC=a ,BTS=b ,ALMA=c ,ALPA=d ,ALPA_LINK=e ,LICA=f ,LICA_LINK=g ,ALLOC_TYPE=h;

- Input ADD-TRNK-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;
- Output

4.3.8.33. BSC-BTS TRUNK Configuration Deletion

• Command RMV-TRNK-CONF :BSC=a ,BTS=b ,ALMA=c ,ALPA=d ,ALPA_LINK=e ;

• Input RMV-TRNK-CONF: BSC=0, BTS=0,PA_TYPE=FA_NEQ;

• Output

4.3.8.34. CAN PVC Configuration Addition

• Command ADD-CAN-PVC :NODE_A=a ,NODE_B=b ,VPCI_A=c ,VPCI_B=d
[,NO_VC=e] ;

• Input ADD-CAN-PVC: NODE_A=CTYPE_BSM_A, NODE_B=CTYPE_CNP_A, VPCL_A=0,VPCL_B=0;

• Output

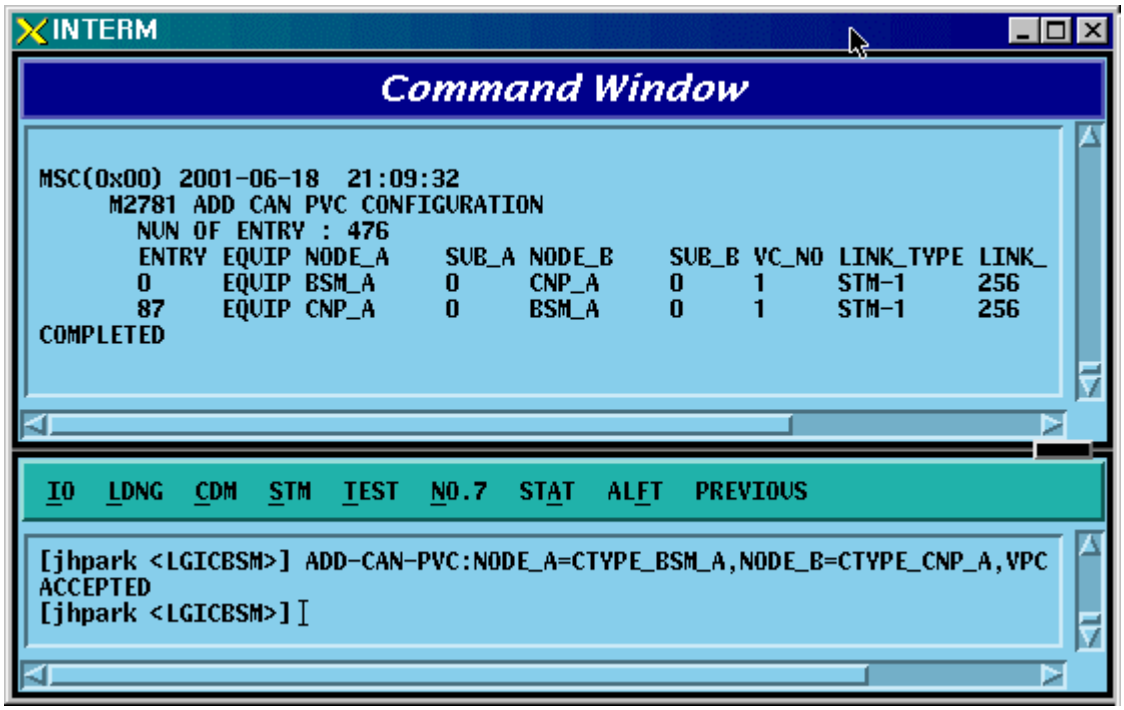


Fig. 4.3-158 CAN PVC Configuration Addition Display

4.3.8.35. CAN PVC Configuration Deletion

• Command RMV-CAN-PVC :INDEX=a;

• Input RMV-CAN-PVC: INDEX=0;

• Output

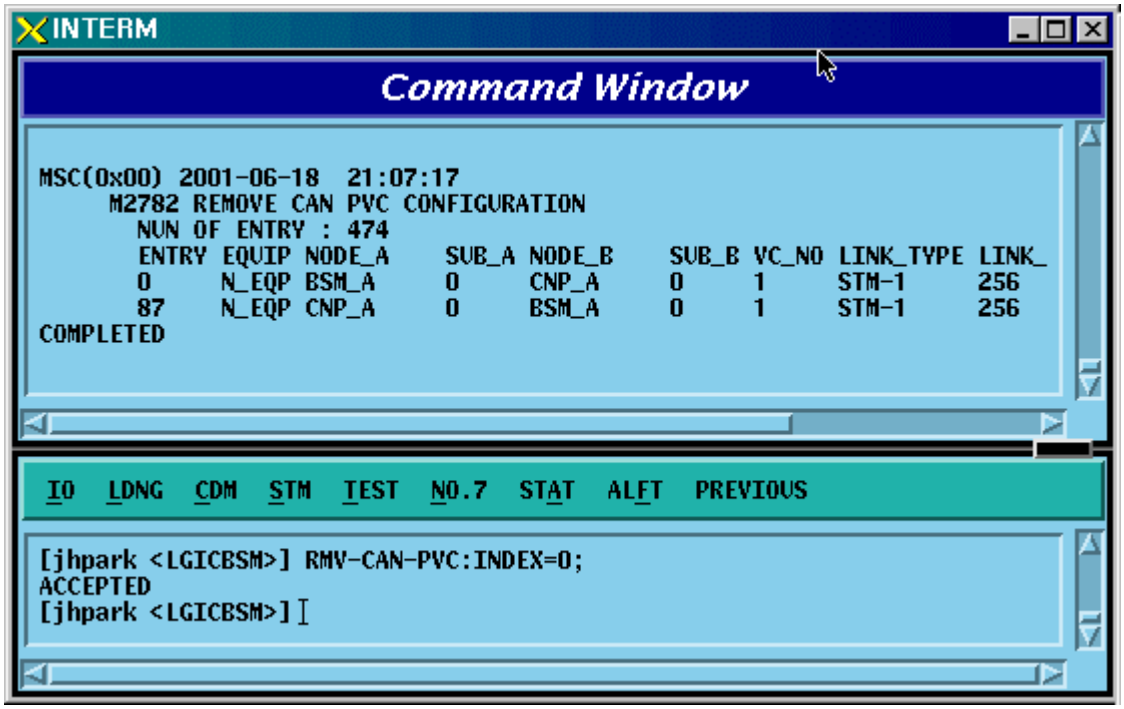


Fig. 4.3-159 CAN PVC Configuration Deletion Display

4.3.8.36. CPN PVC Configuration Addition

• Command ADD-CPN-PVC :NODE_A=a ,NODE_B=b ,VPCI_A=c ,VPCI_B=d
[,NO_VC=e] ;

• Input ADD-CPN-PVC:NODE_A=CTYPE_CAN_A, NODE_B=CTYPE_CAN_B, VPCI_A=0, VPCI_B=0;

• Output

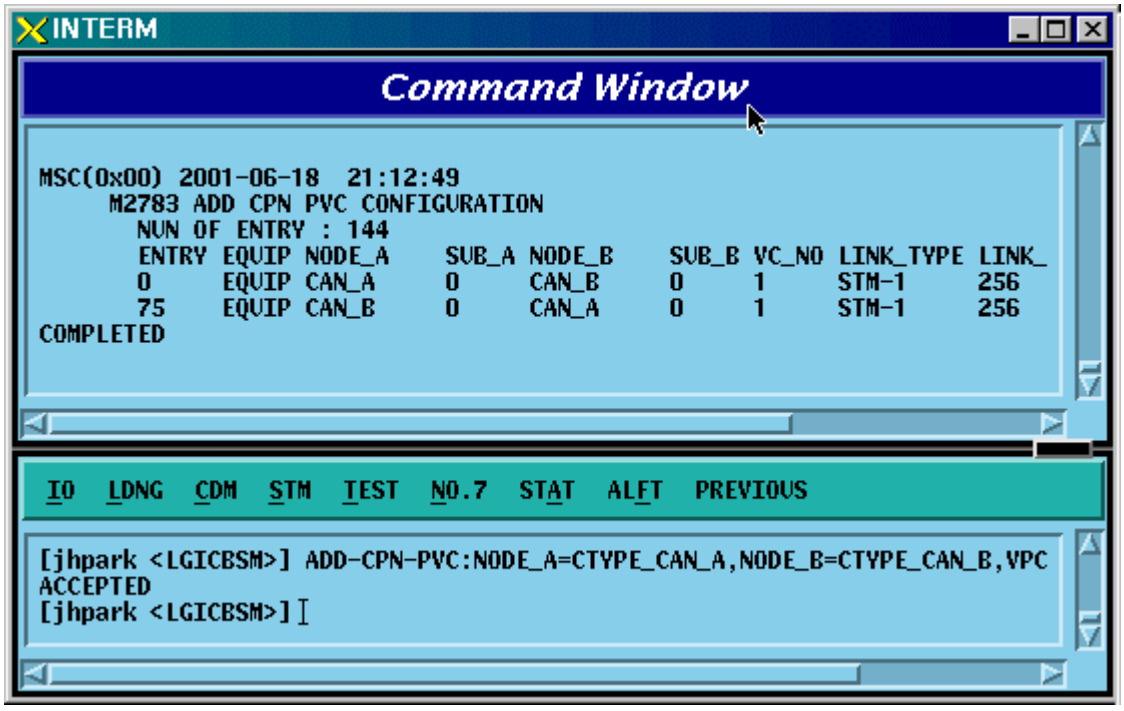


Fig. 4.3-160 CPN PVC Configuration Addition Display

4.3.8.37. CPN PVC Configuration Deletion

• Command　RMV-CPN-PVC :INDEX=a;

• Input RMV-CPN-PVC: INDEX=0;

• Output

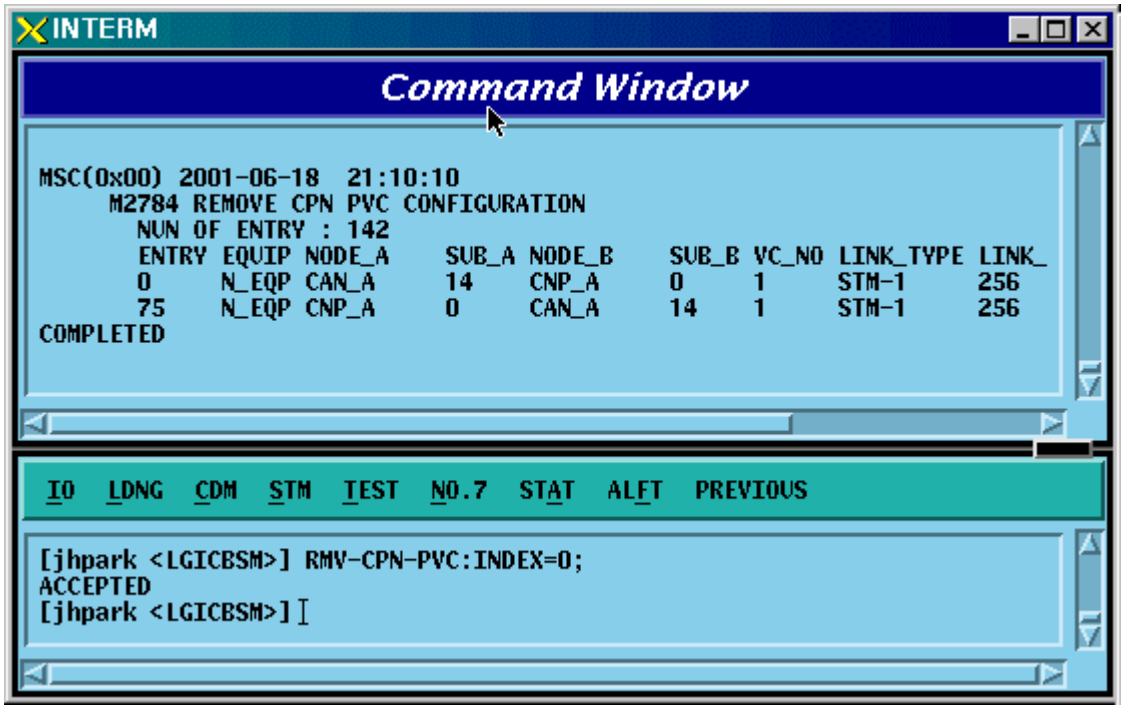


Fig. 4.3-161　CPN PVC Configuration Deletion Display

4.3.8.38. BSC PVC Configuration Addition

• Command ADD-BSC-PVC :BSC=a ,NODE_A=b ,NODE_B=c ,VPCI_A=d ,VPCI_B=e [,NO_VC=f];

• Input ADD-BSC-PVC:BSC=0, NODE_A=CTYPE_CCP_A, NODE_B=CTYPE_CCP_B, VPCI_A=0, VPCI_B=0;

• Output

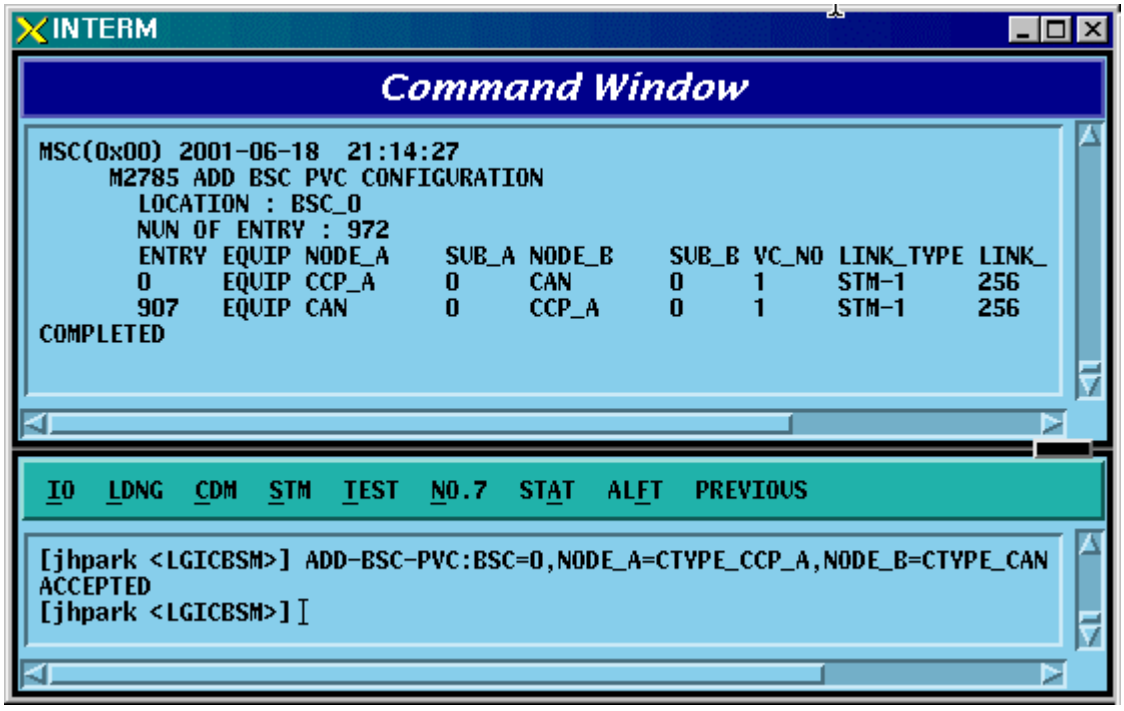


Fig. 4.3-162 BSC PVC Configuration Addition Display

4.3.8.39. BSC PVC Configuration Deletion

• Command RMV-BSC-PVC :BSC=a ,INDEX=b;

• Input RMV-BSC-PVC:BSC=0, INDEX=0;

• Output

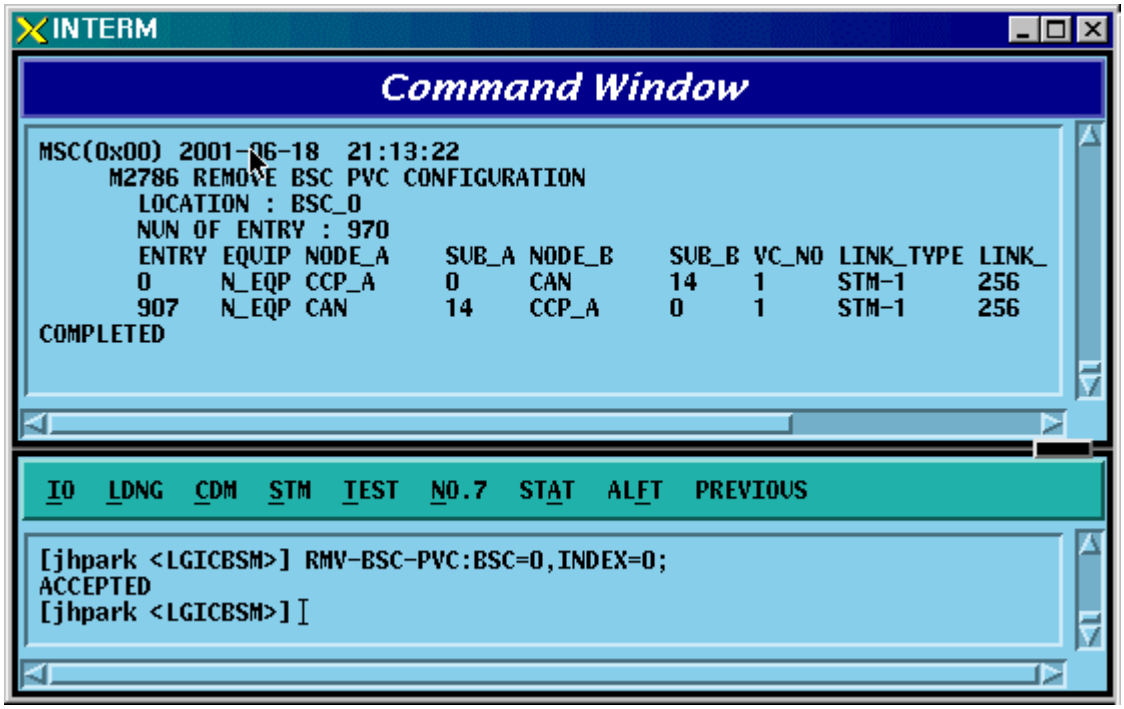


Fig. 4.3-163 BSC PVC Configuration Deletion Display

4.4. STATUS COMMAND

4.4.1 PROCESSOR STATUS CONTROL

Table 4.4-1 Processor Status LIST

Status Types	Definition
NORM	NORMAL
ABNM	Abnormal
DCPY	Dual Copy
LDNG	StandBy Loading
NORM(OLD)	Normal (After StandBy Loading, Old version)
NORM(NEW)	Normal (After StandBy Loading, New version)
ABN_K	Abnormal with Keep Alive Fault
ABN_I	Abnormal with Process Isolation
UNDEF	Undefined Status

4.4.1.1. BSM CAN PROCESSOR STATUS DISPLAY COMMAND

Function to display processor status inserted in CAN.

Command : DIS-CAN-PRC;

Input : DIS-CAN-PRC;

Fig. 4.4-1 Result of CAN Processor Status Display Command

4.4.1.2. BSC Processor Status Display Command

Function to display Processor status inserted in BSC.

Command : DIS-BSC-PRC[:BSC=a];

a : BSC Number(0~11)

Input : DIS-BSC-PRC:BSC=0;

Fig. 4.4-2 Result of BSC Processor Status Display

4.4.1.3. Status Display Command of BTS Processor

Function to display operation status of processors mounted in all the BTSs within the corresponding BSC or in each BTS

Command : DIS-BTS-STS:BSC=a[,BTS=b];

a:BSC Number (0~11)

b:BTS Number (0~47)

Input : DIS-BTS-STS:BSC=0,BTS=0;

Output

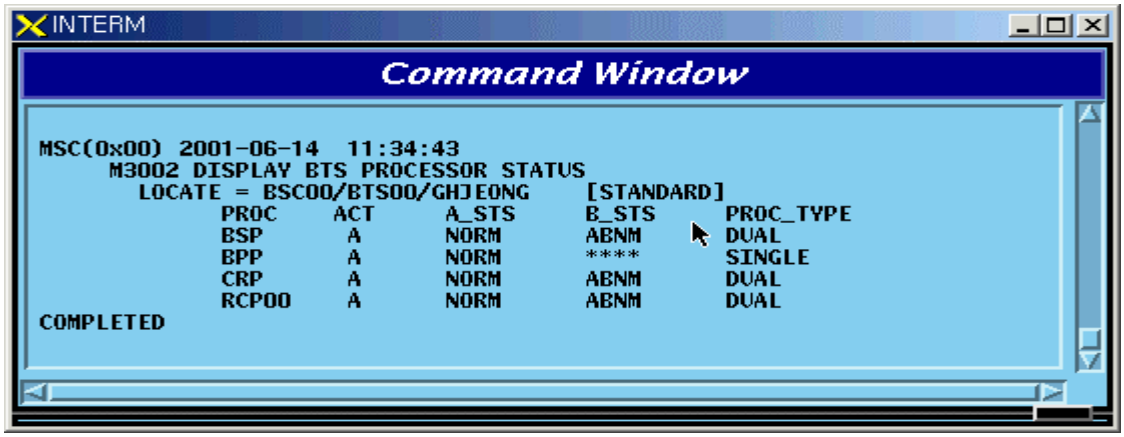


Fig. 4.4-3 Result of BTS Processor Status Display Command

4.4.1.4. Processor Restart Command

Function to restart Processors

• Command : RST-PRC[:BSC=a][,BTS=b],RANGE=c,SIDE=d,CLS=e;

a : BSC Number (0~11)

b : BTS Number (0~47)

c : Scope of restart(All the Processors of CCP, PNP,NCP,PCP., etc.)

d : Side to restart (A,B,BOTH)

e : Class (RESTART, REBOOT, FLASH)

RESTART : Restart O/S and receive loading of PLD only.

REBOOT : It executes BOOTER. In case of the processors equipped with Flash ROM, they check upper level processors and version of each block. If they are different, they receive loading from the upper level processors. However, if they are the same, they do not receive loading from the upper level processors. The processors with no Flash ROM receive loading from the upper level processors without checking version.

. For reference, Active Side before and after reboot does not change.

FLASH : Delete Flash content of the Processor with Flash ROM equipped and reboot it to receive loading of all the files from the upper level Processor. For reference, Active Side before and after Flash Reboot changes.

Input : RST-PRC:BSC=0,BTS=0,RANGE=RCP00,SIDE=A,CLS=RESTART;

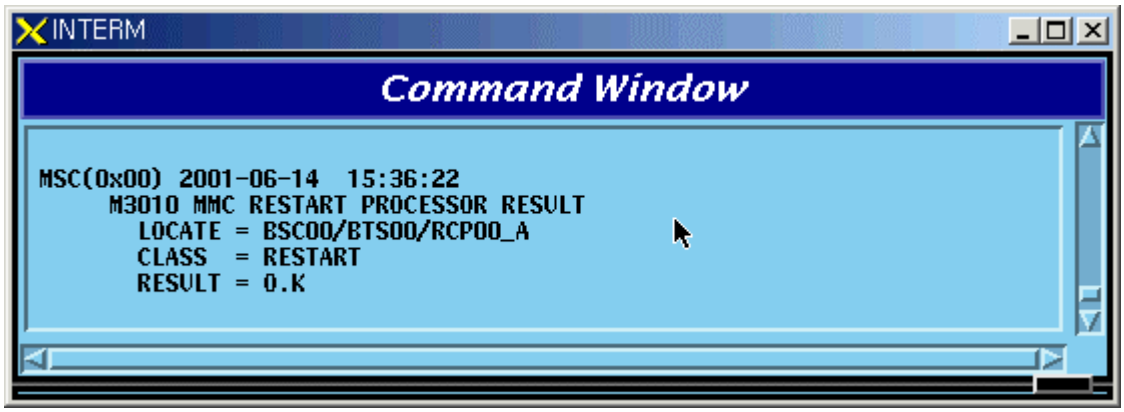


Fig. 4.4-4 Result of Processor Restart Command

4.4.1.5. CAN Processor H/W RESET(ISOLATION) COMMAND

Function to reset CAN Processor H/W.

Command : RMT-CAN-PRC:PROC=a,SIDE=b,CLS=c;

a: Processor Name : CNP,PNP,PCP,PMP

b: Side : A,B

c: CLASS : HARDRST,ISOLAT,UNISOL

HARDRST : Function to reset Processor on H/W Level (using Register Setting).

ISOLAT : Function to isolate Processor on H/W Level (maintaining Status of RESET)

UNISOL : Function to release the isolation

Input : RMT-CAN-PRC:PROC=PNP,SIDE=A,CLS=ISOLAT;

Fig. 4.4-5 CAN Processor H/W Command Result

4.4.1.6. BSC Processor H/W RESET(ISOLATION) COMMAND

Function to reset BSC Processor H/W.

Command : RMT-BSC-PRC:BSC=a,PROC=b,[SIDE=c],CLS=d;

a: BSC Number

b: Processor Name : CCP,NCP,SCP,ALP,SMP,VMP

c: Side : A,B

d: CLASS : HARDRST,ISOLAT,UNISOL

HARDRST : Function to RESET Processor on H/W Level (using Register Setting).

ISOLAT : Function to isolate Processor on H/W Level (RESET Status maintained)

UNISOL : Function to release isolation

Input : RMT-BSC-PRC:BSC=0,PROC=NCP,SIDE=A,CLS=ISOLAT;

Fig. 4.4-6 BSC Processor H/W Command Result

4.4.1.7. BTS Processor H/W RESET(ISOLATION) COMMAND

Function to BSC Processor H/W.

Command : RMT-BTS-PRC:BSC=a,BTS=b,PROC=c,[SIDE=d],CLS=e;

a: BSC Number

b: BTS Number

c: Processor Name : BSP,BPP,CRP,RCP(00~05)

d: Side : A,B

e: CLASS : HARDRST,ISOLAT,UNISOL

HARDRST : Function to RESET Processor on H/W Level (using Register Setting).

ISOLAT : Function to isolate Processor on H/W Level (RESET Status maintained)

UNISOL : Function to release isolation

Input : RMT-BTS-PRC:BSC=0,BTS=0,PROC=BSP,SIDE=A,CLS=ISOLAT;

Fig. 4.4-7 BTS Processor H/W RESET(ISOLATION) Command Display Result

4.4.1.8. Processor Switch Over(Switch) Command

Function to Switch over Processor.
Switching Over Command is executed for duplicated Processors and is performed only when both sides of Processors are in a normal status.
Command : SWT-PRC [:BSC=a] [,BTS=b] ,PROC=c;

a: BSC Number
b: BTS Number
c: Processor Name : CNP, PNP, PCP00, PCP01,PCP02, PMP00, PMP01,PMP02, CCP, NCP, SCP,ALP, BSP, CRP, RCP00, RCP01, RCP02, RCP03,RCP04, RCP05

Input : SWT-PRC :BSC=1 ,PROC=CCP;

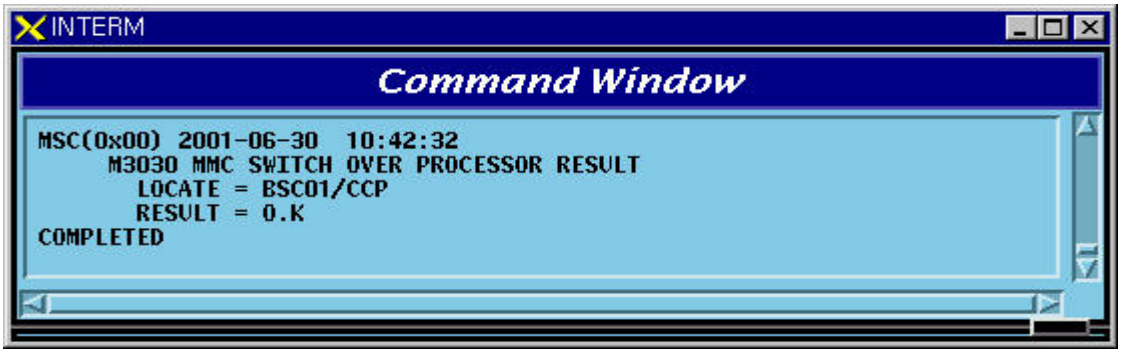


Fig. 4.4-8 Processor Switch Over(Switch) Command Display Result

4.4.2. Network Status Control

Table 4.4-2 Network Node Status LIST

Status Types	Definition	Description
NORM	Normal	Normal Operation
NOR_A	Normal Act	While normally operated, Act Status is maintained (Duplicated node)
NOR_S	Normal Standby	While normally operated, Standby Status is maintained (Duplicated node)

ABN_D	Abnormal Deletion	card is removed
ABN_F	Abnormal Fault	Local Fault occurred
ABN_M	Abnormal MMC Block	Blocked Status by User's MMC
INIT	Initial	Even equipped to PLD, a processor managing the corresponding device does not normally operate until now
AB_OB	Abnormal Online Block	Based on judgment that a normal call is impossible due to faults in other devices, the corresponding device is blocked
N_EQP	Not Equipped	Card Type is not defined in PLD

4.4.2.1. Network Status Display Command

Function to display the BSS Network status.

Command : DIS-NET-STS: [BSC=a],[BTS=b],SHELF=c,CARD=d,ID=e,[CHIP=f];

a : BSC Number

b : BTS Number

c : SHELF NAME(CAMU,CAMDU,ASMU,ALSU,BANU)

d : CARD NAME(ASCA,ASIA,AOTA,ATSA,ALMA,LICA)

e : CARD ID(0~3)

f : CHIP Number(0~1)

Input : DIS-NET-STS:BSC=0,BTS=0,SHELF=BANU,CARD=LICA,ID=0;

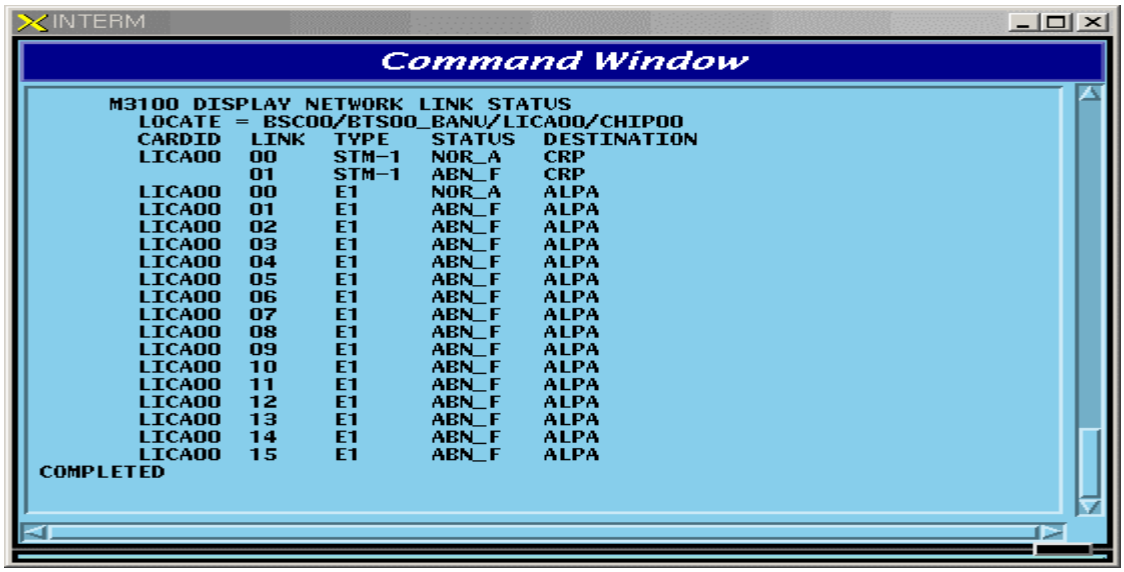


Fig. 4.4-9 Result of Network Status Display Command

4.4.2.2. ALPA Network Status Display

Function to display the ALPA Network status.

Command : DIS-ALPA-STS:BSC=a,ALMA=b,ALPA=c;

a : BSC Number(0~11)

b : ALMA ID(0~1)

c : ALPA ID(0~4)

Input : DIS-ALPA-STS:BSC=0,ALMA=0,ALPA=0;

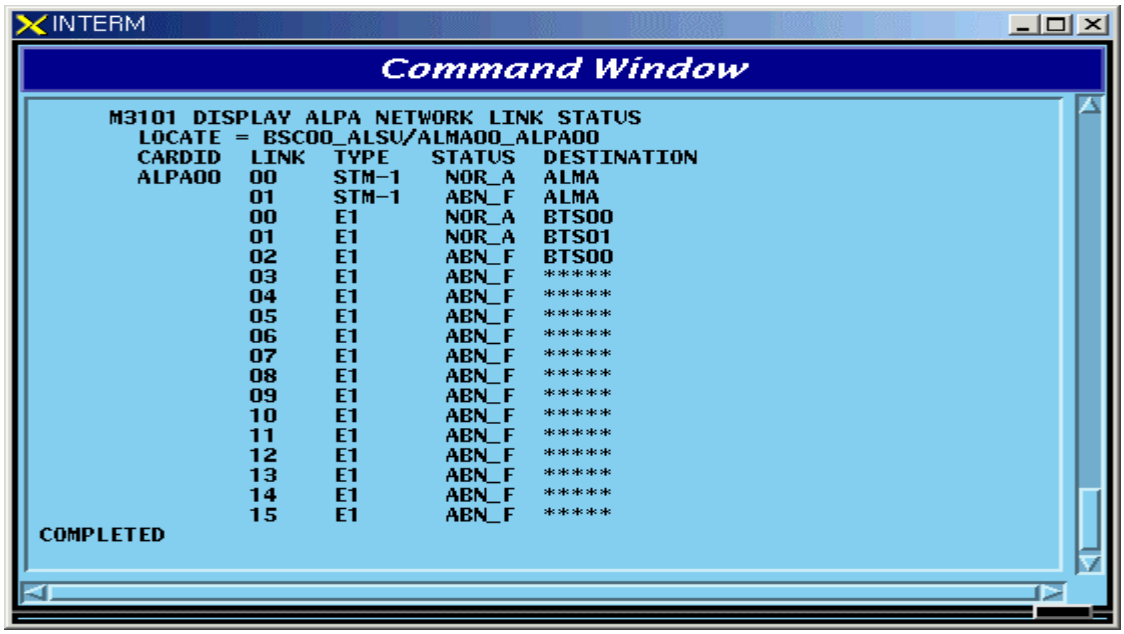


Fig. 4.4-10 Result of ALPA Network Status Display

4.4.2.3. PDSN NODE Status Display

Function to display the PDSN NODE Network status

Command : DIS-PDSN-STS:SHELF=a,PIP=b;

a: SHELF(PCP(00~02),PMP(00~02))

b: PIP(0~10)

Input : DIS-PDSN-STS:SHELF=PCP00,PIP=0;

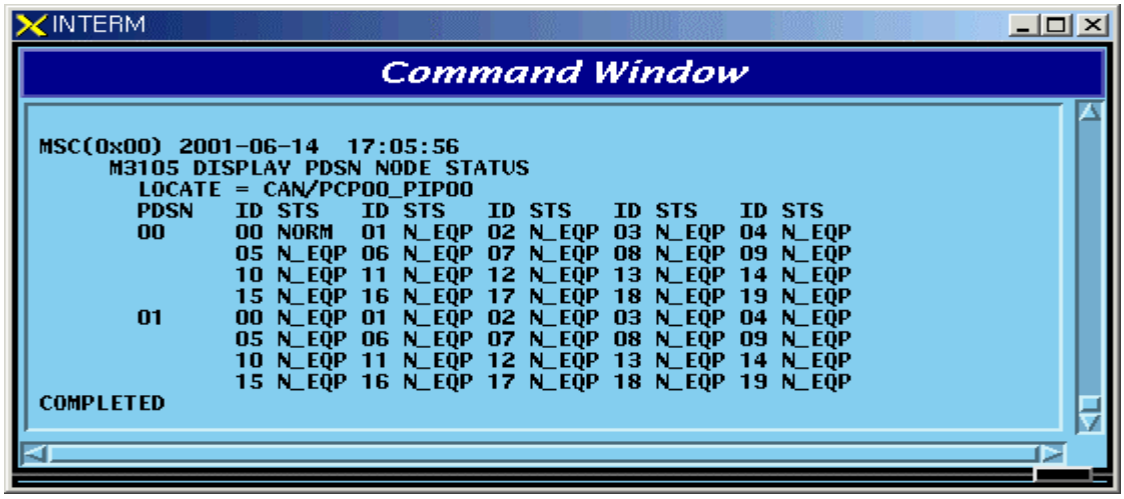


Fig. 4.4-11 Result of PDSN NODE Status Display

4.4.2.4. PCFU Network Status Display Command

Function to display the PCFU Network Status

Command : DIS-PCF-NET:PROC=a,TYPE=b;

a: PCP(00~02),PMP(00~02)

b: PIP_FERA,FETA_PDSN

Input : DIS-PCF-NET:PROC=PCP00,TYPE=PIP_FERA;

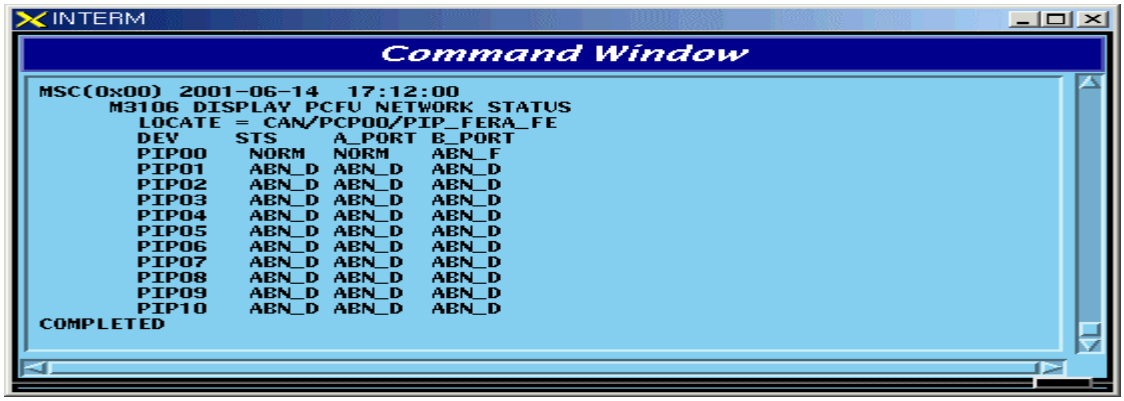


Fig. 4.4-12 Result of PCFU Network Status Display Command

4.4.2.5. ALPA Network Block Command

Function to block the ALPA Network.

Command : BLK-ALPA:BSC=a,ALMA=b,ALPA=c,[TYPE=d],[LINK=e];

a: BSC Number(00~11)

b: ALMA ID(0~1)

c: ALPA ID(0~4)

d: TYPE(STM_1,E1)

e: LINK(0~15)

Input : BLK-ALPA:BSC=0,ALMA=0,ALPA=0,TYPE=STM_1,LINK=0;

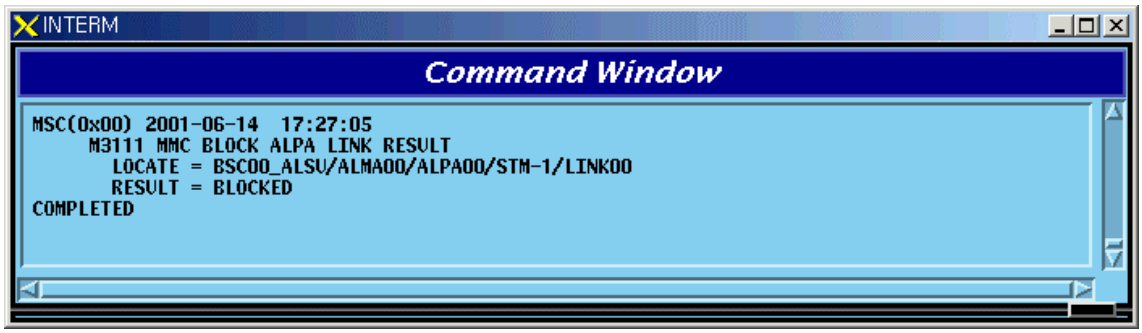


Fig. 4.4-13 Result of ALPA Network Block Command

4.4.2.6. UNBlock Command

Function to unblock the ALPA Network.

Command : UBLK-ALPA:BSC=a,ALMA=b,ALPA=c,[TYPE=d],[LINK=e];

a: BSC Number(00~11)

b: ALMA ID(0~1)

c: ALPA ID(0~4)

d: TYPE(STM_1,E1)

e: LINK(0~15)

Input : UBLK-ALPA:BSC=0,ALMA=0,ALPA=0,TYPE=STM_1,LINK=0;

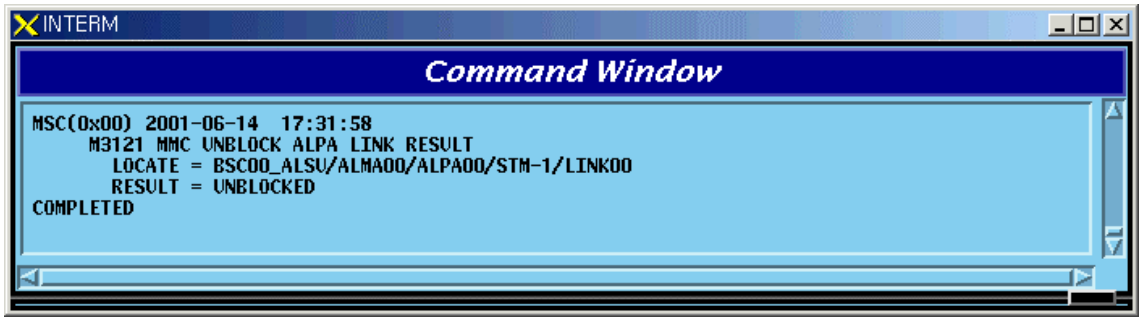


Fig. 4.4-14 Result of ALPA Network UNBlock Command

4.4.3. Can Device Status Control

Table 4.4-3 DEVICE Status List

Status Types	Definition
NORM	Normal
ABN_D	Abnormal Deletion (Even equipped to PLD, it is in the Status of Removal)
ABN_F	Abnormal Fault(Status that normal operation is impossible due to fault in Device) (Test: As a result of DSP Chip Hardware Test, NOK occurs)
ABN_M	Abnormal MMC Block
INIT	Initial (Even equipped to PLD, a processor managing the corresponding device does not operate normally until now)
AB_OB	Abnormal Online Block (Based on judgment that a normal call is impossible due to faults in other devices, the appropriate device is blocked)
IDLE	Even if it is normal, call resources are not allocated (CE, VCE)
BUSY	normal and call resources are allocated (CE, VCE)
N_EQP	Status defined as Not Equipped to PLD
READY	Even if not defined in PLD, Device is inserted
UNDEF	Status that un-defined status is inserted
ABN_I	Status being separated as H/W Reset
ABN_B	BER Test Status by User
NOR_PB	In case that call exists when CHC, Chip is blocked, it indicates the status that awaits until a call is terminated it indicates, the Status that waits for the call termination in order to perform

	the Vocoder test.
REDNCY	In duplicated Device, it indicates Redundancy Status of Standby side(FETA Only)
CB_OPN	For device that is managed only as fault, it is the case that is opened to Fault Cable
CLK_F	During Vocoder Channel test, as a result of Timing-Module test, NOK occurred (Test Only)
TSW_F	As a result of TSLU Loopback test, NOK is occurred (Test Only)
ABN_AT	Status in which Vocoder is put to Automatic(Online) test (Test Only)
ABN_MT	Status in which Vocoder Manual(Ondemand) is put to test (Test Only)
QAT0_F	As a result of QCELP Algorithm test during Vocoder channel test, NOK occurred in State 0 (Test Only)
QAT1_F	As a result of QCELP Algorithm test during Vocoder channel test, NOK occurred in State 1 (Test Only))
QAT2_F	As a result of QCELP Algorithm test during Vocoder channel test, NOK occurred in State 2 (Test Only)
QAT3_F	As a result of QCELP Algorithm test during Vocoder channel test, NOK occurred in State 3 (Test Only)
VPLB_F	As a result of VCPA Loopback test during Vocoder channel test, NOK occurred (Test Only)
VMLB_F	As a result of VCMA Loopback test during Vocoder channel test, NOK occurred (Test Only)
VLLB_F	As a result of VLIA Loopback test during Vocoder channel test, NOK occurred (Test Only)

4.4.3.1. CAN Device Status Display Command

Function to display Device(BOARD) Status mounted to CAN

Command : DIS-CAN-DEV:PROC=a;

a : CNP,PNP,PCP(00~02)

Input : DIS-CAN-DEV:PROC=CNP;

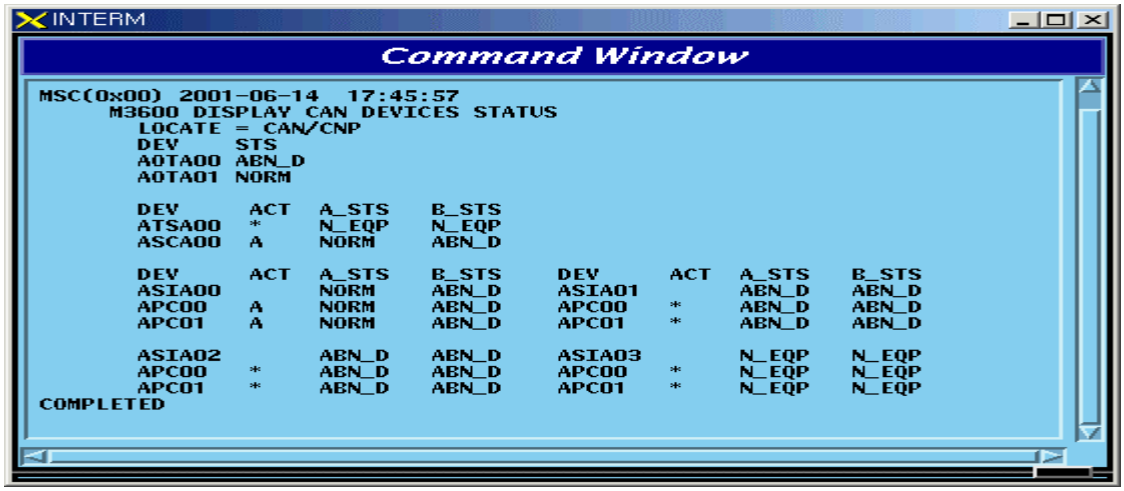


Fig. 4.4-15 Result of CAN Device Status Display Command

4.4.3.2. GPS(CAN) Status Display Command

Function to display Device and Information of CAN GPS.

Command : DIS-GPS-STS:TYPE=a;

a : ALL,GPS_DEV,GPS_INFO

Input : DIS-GPS-STS:TYPE=ALL;

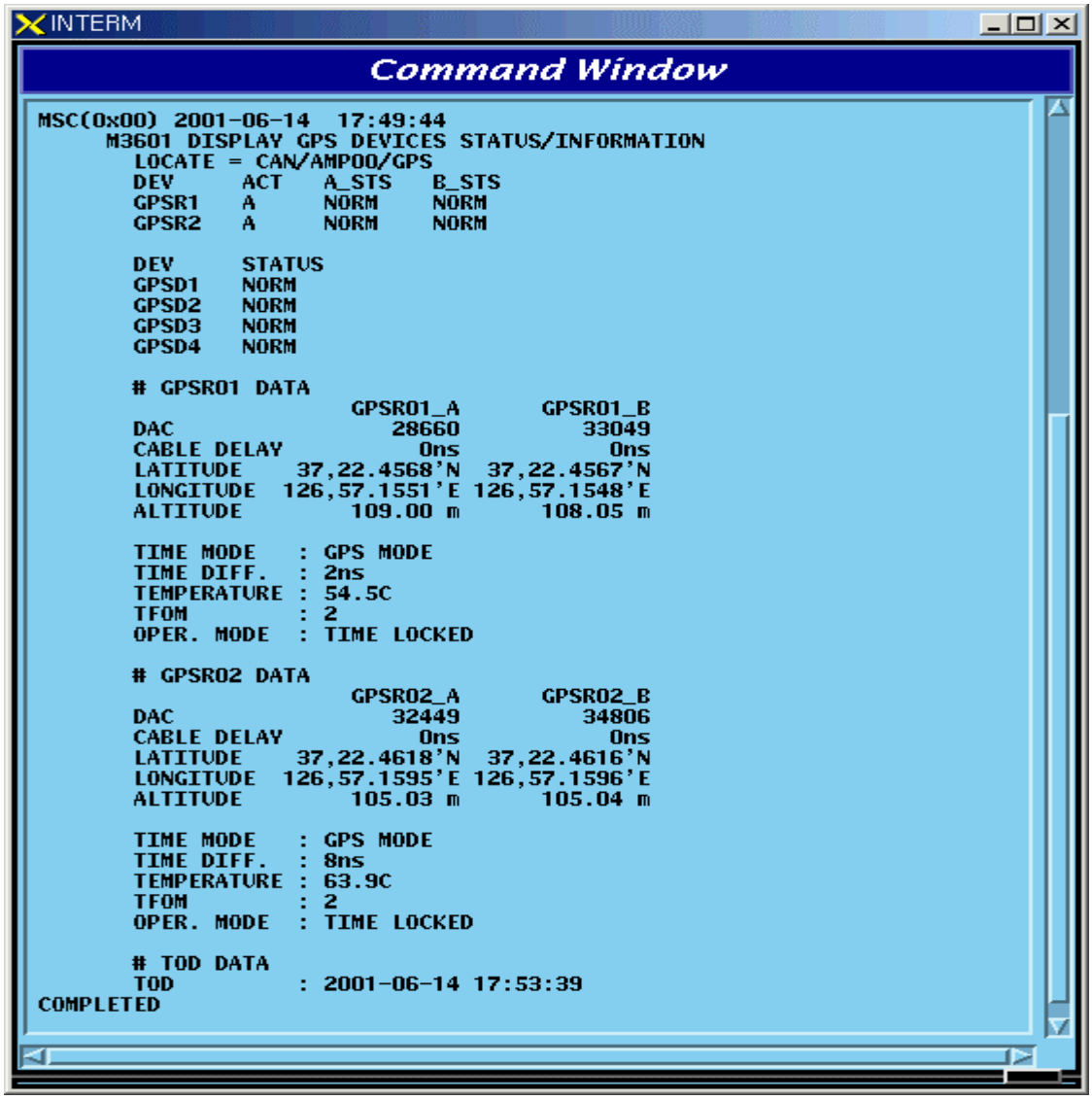


Fig. 4.4-16 Result of GPS(CAN) Status Display Command

4.4.3.3. H/W RESET CAN DEVICE Command

Function to reset CAN Device on H/W Level

Command : RMT-CAN-DEV:PROC=a,DEV=b,ID=c,[SIDE=d],CLS=e;

a: Processor :CNP,PNP,PCP(00~02),PMP(00~02)

b: Device Name: ASCA,ASIA,AOTA,ATSA,PIP,FERA,FETA,BCRA

c: Device ID : 0~10

d: SIDE:A_SIDE,B_SIDE

e: CLASS : HARDRST,ISOLAT,UNISOL

Input : RMT-CAN-DEV:PROC=PNP,DEV=ASCA,ID=0,SIDE=A_SIDE,CLS=HARDRST;

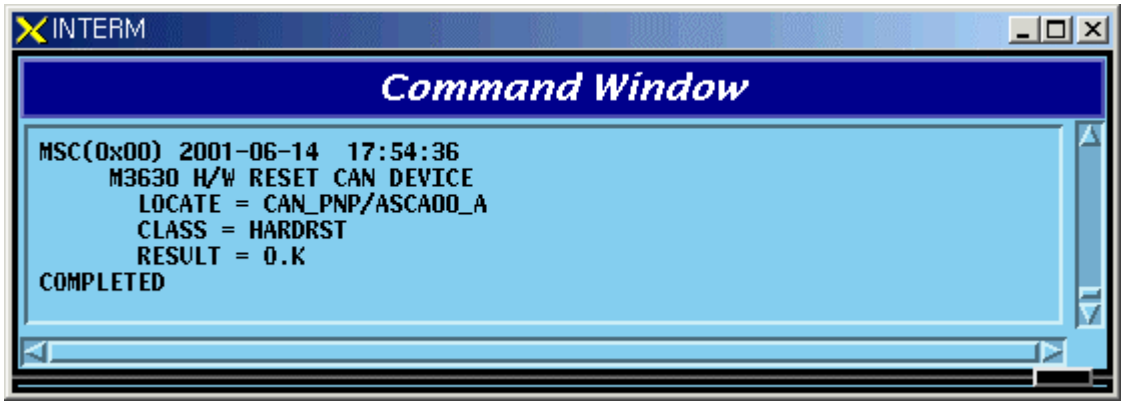


Fig. 4.4-17 Result of H/W RESET CAN DEVICE Command

4.4.4. BSC Device Status Control

4.4.4.1. BSC Device Status Display Command

Function to display Status of various Boards mounted to BSC

Command : DIS-BSC-DEV:BSC=a,PROC=b;

a : BSC Number(00~11)

b : PROC Name(NCP,SCP,ALP,SMP(00~04),VMP(00~08))

Input : DIS-BSC-DEV:BSC=1,PROC=NCP;

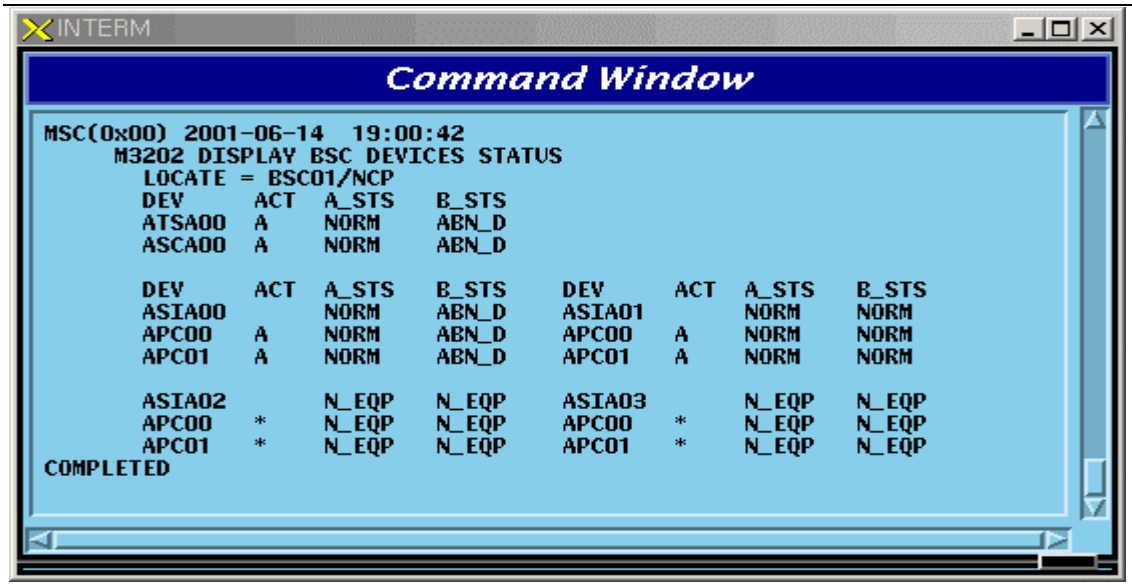


Fig. 4.4-18 Result of BSC Device Status Display

4.4.4.2. SLPA Status Display Command

Function to display the SLPA Status

Command : DIS-SLPA-STS:BSC=a,SMP=b,[SLPA=c];

a : BSC Number(00~11)

b : SMP Number(00~04)

c : SLPA Number(00~17)

Input : DIS-SLPA-STS:BSC=0,SMP=0,SLPA=0;

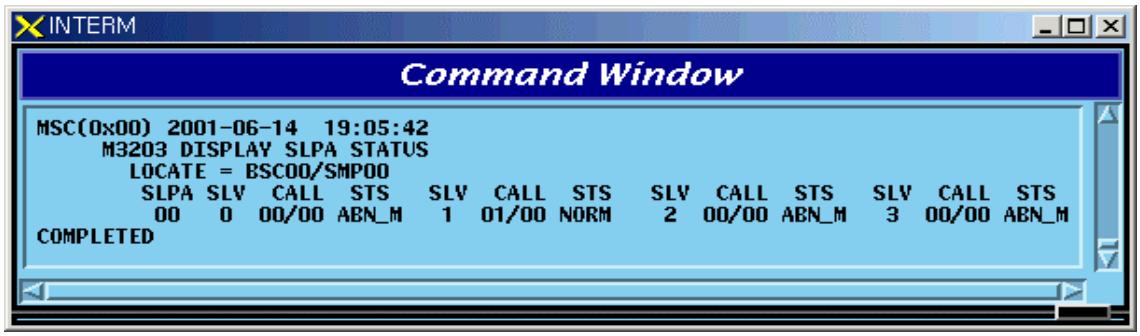


Fig. 4.4-19 Result of SLPA Status Display Command

4.4.4.3. VCPA Status Display Command

Function to display the VCPA Status

Command : DIS-VCPA-STS:BSC=a,VMP=b,[VCPA=c];

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VCPA Number(00~15)

Input : DIS-VCPA-STS:BSC=0,VMP=0,VCPA=0;

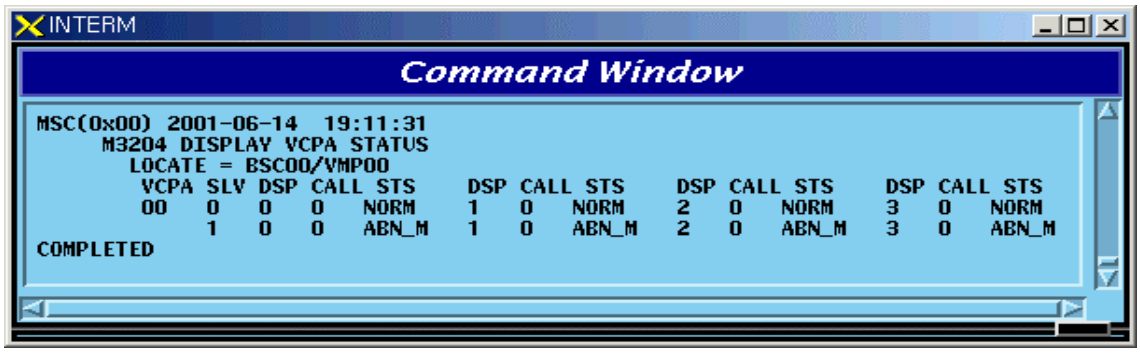


Fig. 4.4-20 Result of VCPA Status Display Command

4.4.4.4. E1 LINK Status Display Command

Function to display E1 Link Status of VLIA

Command : DIS-E1-STS:BSC=a,VMP=b,[VLIA=c];

a : BSC Number(00~11)

b: VMP Number(00~07)

c: VLIA Number(00~01)

Input : DIS-E1-STS:BSC=0,VMP=0,VLIA=0;

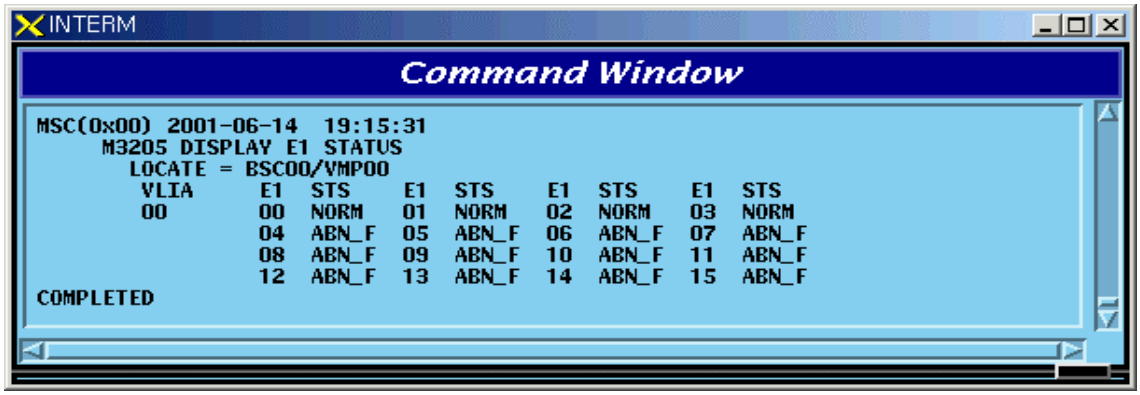


Fig. 4.4-21 Result of E1 LINK Status Display Command

4.4.4.5. TS Network LINK Status Display Command

Function to display the Status of TS Network Link of VLIA.

Command : DIS-TS-STS:BSC=a,VMP=b,VLIA=c,E1=d;

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VLIA Number(00~15)

d : E1 Number(00~15)

Input : DIS-TS-STS:BSC=0,VMP=0,VLIA=0,E1=0;

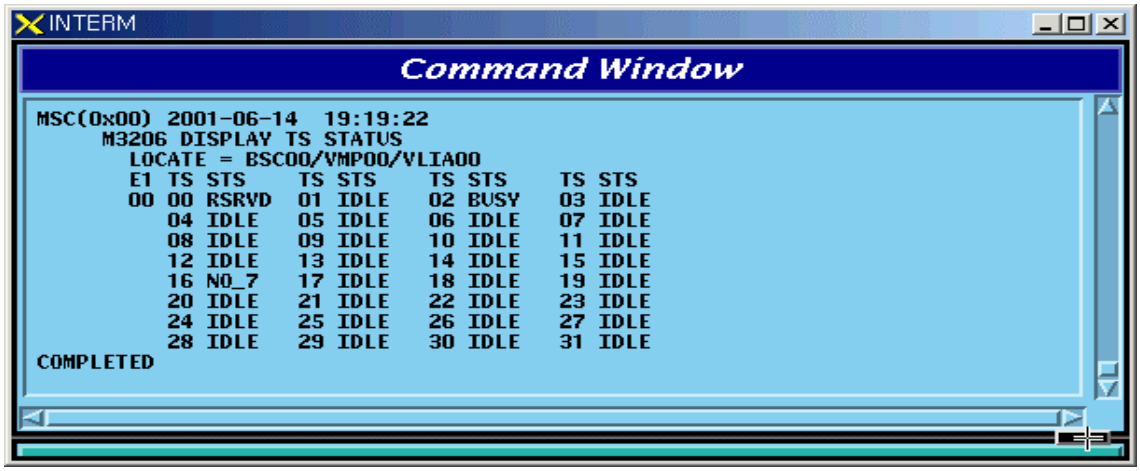


Fig. 4.4-22 Result of TS Network LINK Status Display Command

4.4.4.6. VCE(Vocoder Channel Element) Status Display Command

Table 4.4-4 Vocoder Channel Element Status LIST

Status Types	Definition	Description
IDLE	Idle	Normal status without a Call
8K_Qcelp	8k Qcelp Call	8k QCELP Call Seized Status
8K_EVRC	8k EVRC Call	8k EVRC Call Seized Status

13K_Qcelp	13k Qcelp Call	13k QCELP Call Seized Status
13K_EVRC	13k EVRC Call	13k EVRC Call Seized Status
ABN_M	Abnormal MMC Block	Blocked Status by user's MMC
UNDEF	Undefined Status	Status with Input of undefined Status

Function to display the Channel Element Status of VCE.

Command : DIS-VCE-STS:BSC=a,VMP=b,[VCPA=c];

a : BSC Number(00~11)

b : VMP Number(00~07)

c: VCPA Number(00~15)

Input : DIS-VCE-STS:BSC=0,VMP=0,VCPA=0;

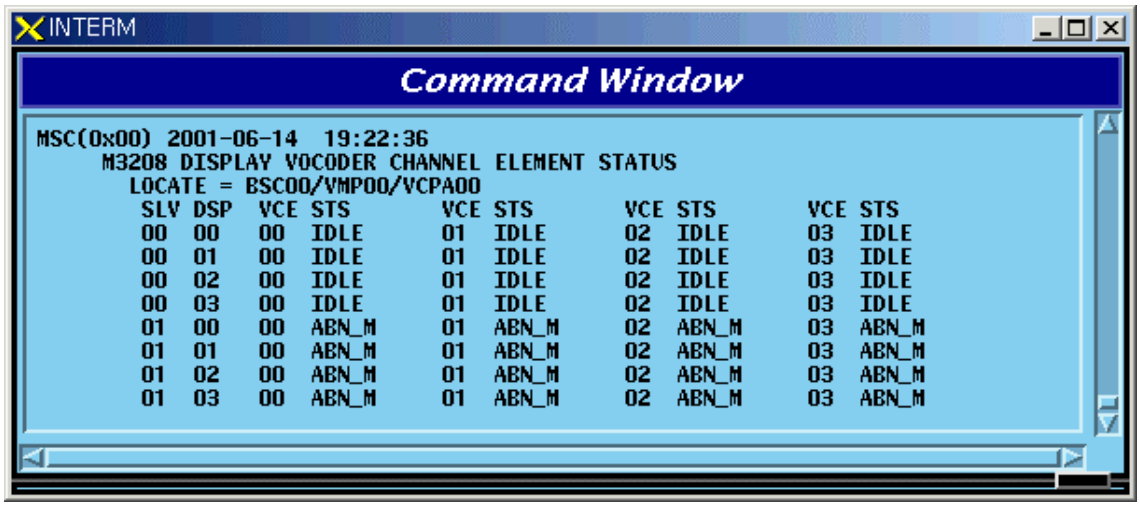


Fig. 4.4-23 Result of VCE(Vocoder Channel Element) Status Display Command

4.4.4.7. SLPA BLOCK Command

Function to block SLPA.

Command : BLK-SLPA:BSC=a,SMP=b,SLPA=c,[SLV=d];

a : BSC Number(00~11)

b : SMP Number(00~04)

c : SLPA Number(00~17)

d : SLV Number(00~03)

Input : BLK-SLPA:BSC=0,SMP=0,SLPA=0,SLV=0;

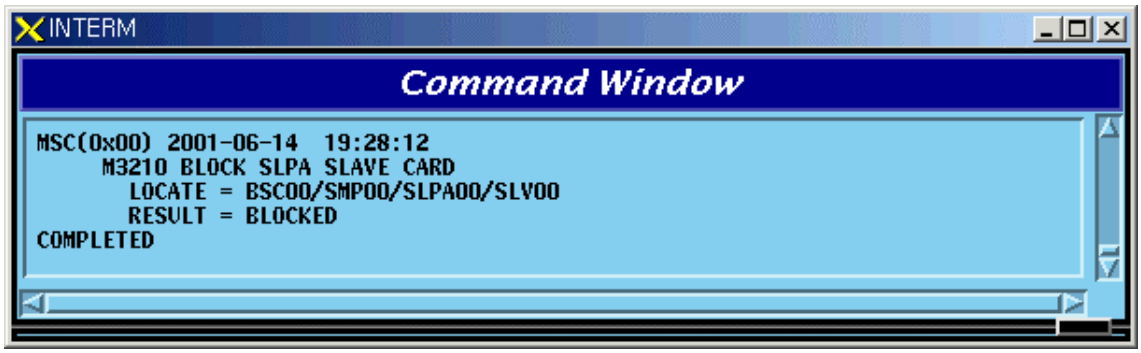


Fig. 4.4-24 Result of SLPA BLOCK Command

4.4.4.8. SLPA UNBLOCK Command

Function to unblock SLPA.

Command : UBLK-SLPA:BSC=a,SMP=b,SLPA=c,[SLV=d];

a : BSC Number(00~11)

b : SMP Number(00~04)

c : SLPA Number(00~17)

d : SLV Number(00~03)

Input : UBLK-SLPA:BSC=0,SMP=0,SLPA=0,SLV=0;

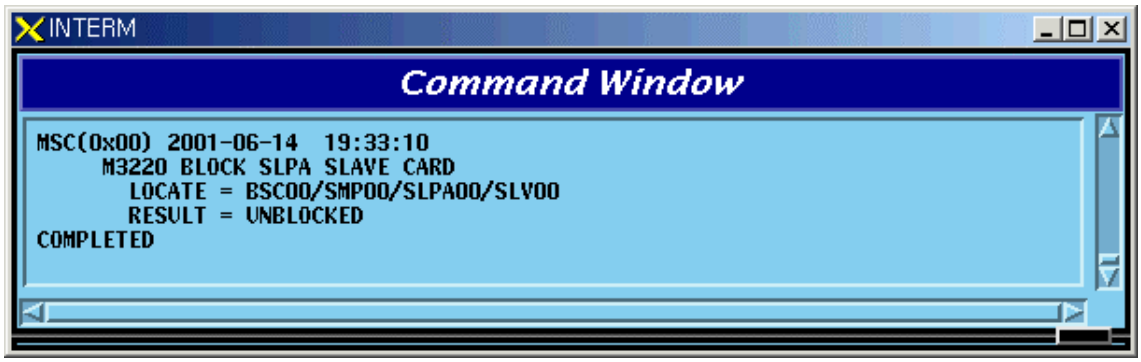


Fig. 4.4-25 Result of SLPA UNBLOCK Command

4.4.4.9. VCPA BLOCK Command

Function to block VCPA.

Command : BLK-VCPA:BSC=a,VMP=b,VCPA=c,[SLV=d],[DSP=e];

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VCPA Number(00~15)

d : SLV Number(00~01)

e : DSP Number(00~03)

Input : BLK-VCPA:BSC=0,VMP=0,VCPA=0,SLV=0,DSP=0;

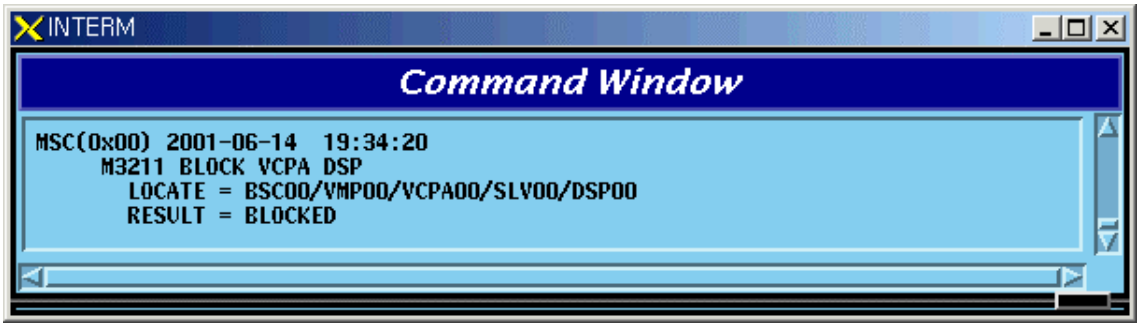


Fig. 4.4-26 Result of VCPA BLOCK Command

4.4.4.10. VCPA UNBLOCK Command

Function to unblock VCPA

Command : UBLK-VCPA:BSC=a,VMP=b,VCPA=c,[SLV=d],[DSP=e];

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VCPA Number(00~15)

d : SLV Number(00~01)

e : DSP Number(00~03)

Input : UBLK-VCPA:BSC=0,VMP=0,VCPA=0,SLV=0,DSP=0;

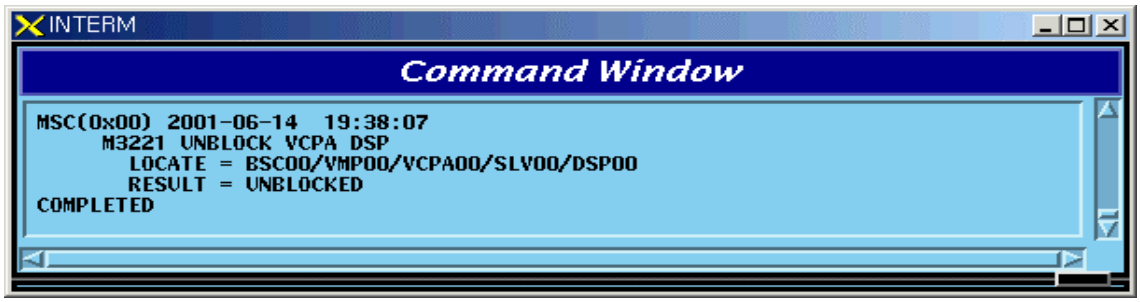


Fig. 4.4-27 Result of VCPA UNBLOCK Command

4.4.4.11. VLIA BLOCK Command

Function to block VLIA.

Command : BLK-VLIA:BSC=0,VMP=0,VLIA=0,[E1=0],[TS=1];

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VLIA Number(0~1)

d : E1 Number(00~15)

e : TS Number(00~31)

Input : BLK-VLIA:BSC=0,VMP=0,VLIA=0,E1=0,TS=1;

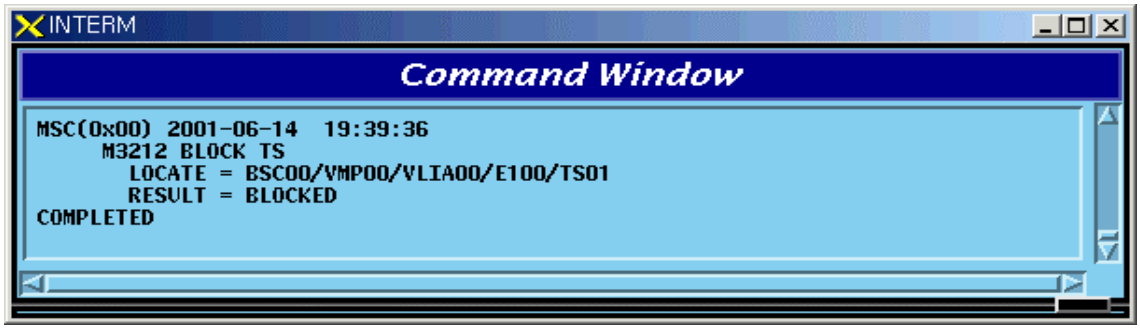


Fig. 4.4-28 Result of VLIA BLOCK Command

4.4.4.12. VLIA UNBLOCK Command

Function to unblock VLIA

Command : UBLK-VLIA:BSC=0,VMP=0,VLIA=0,[E1=0],[TS=1];

a : BSC Number(00~11)

b : VMP Number(00~07)

c : VLIA Number(0~1)

d : E1 Number(00~15)

e : TS Number(00~31)

Input : UBLK-VLIA:BSC=0,VMP=0,VLIA=0,E1=0,TS=1;

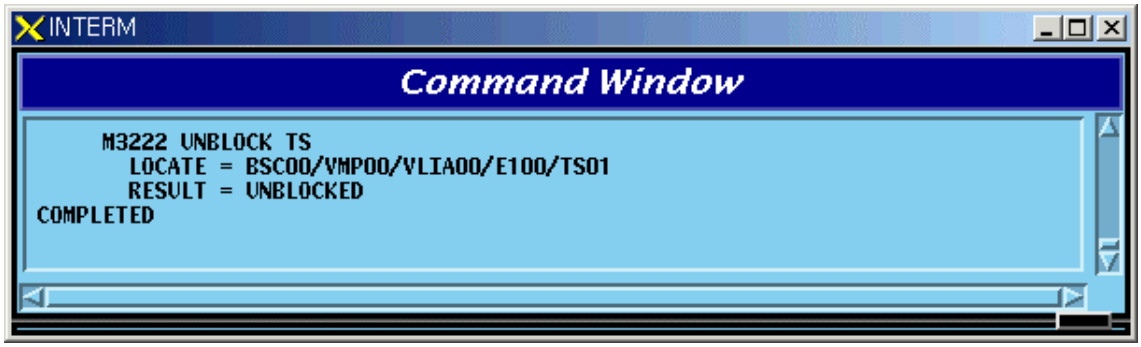


Fig. 4.4-29 Result of VLIA UNBLOCK Command

4.4.4.13. H/W RESET BSC Device Command

Function to reset BSC Device on H/W Level.

Command : RMT-BSC-DEV:BSC=a,PROC=b,DEV=c,ID=d,[SUBID=e],CLS=f;

a : BSC Number(00~11)

b : Processor Name(NCP,SCP,ALP,SMP(00~05),VMP(00~07))

c : Device Name(SLPA,VCPA,VLIA,STIA,ASCA,ASIA,AOTA,ATSA,ALMA)

d : Device ID(00~17)

e : Sub_id(A_SIDE,B_SIDE)

f : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-BSC-DEV:BSC=0,PROC=SMP00,DEV=SLPA,ID=0,CLS=HARDRST;

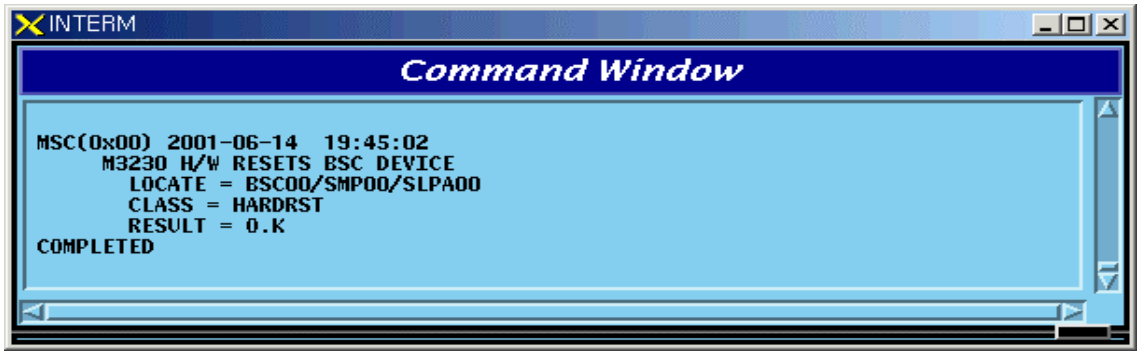


Fig. 4.4-30 Result of BSC Device H/W Reset Command

4.4.4.14. H/W RESET ALPA Command

Function to reset ALPA on H/W Level.

Command : RMT-ALPA:BSC=0,ALMA=0,ALPA=0,CLS=HARDRST;

a : BSC Number(00~11)

b : ALMA ID(0~1)

c : ALPA ID(0~4)

d : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-ALPA:BSC=0,ALMA=0,ALPA=0,CLS=HARDRST;

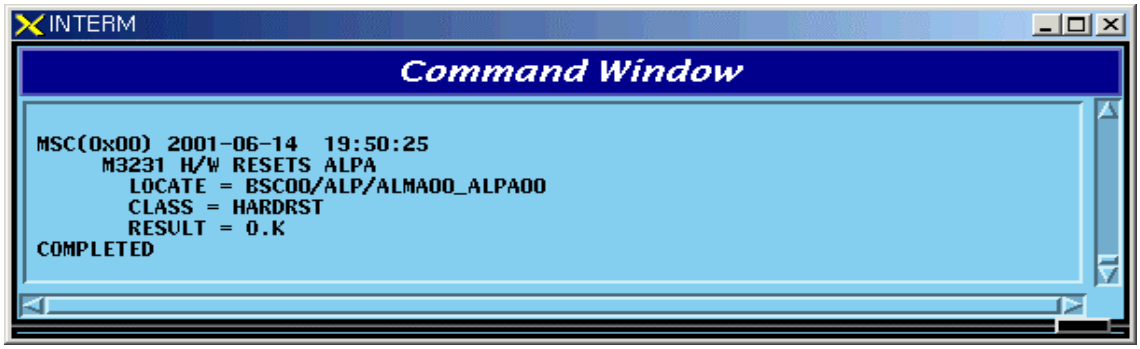


Fig. 4.4-31 Result of H/W RESET ALPA Command

4.4.5. Bts Device Status Control

4.4.5.1. BTS Device Status Display Command

Function to display the BTS Device status

Command : DIS-BTS-DEV:BSC=a,BTS=b,PROC=c;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : Processor Name(BSP,BPP,CRP,RCP(00~06)

Input : DIS-BTS-DEV:BSC=0,BTS=0,PROC=CRP;

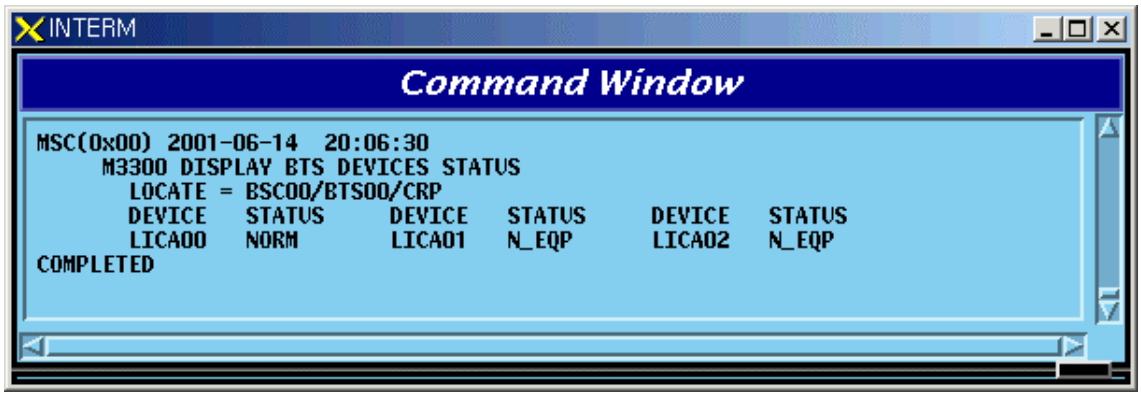


Fig. 4.4-32 Result of BTS Device Status Display Command

4.4.5.2. FA Status Display Command

Function to display FA Status.

Command : DIS-FA-STS:BSC=a,BTS=bFA=c;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : FA Number(0~7)

Input : DIS-FA-STS:BSC=0,BTS=0,FA=0;

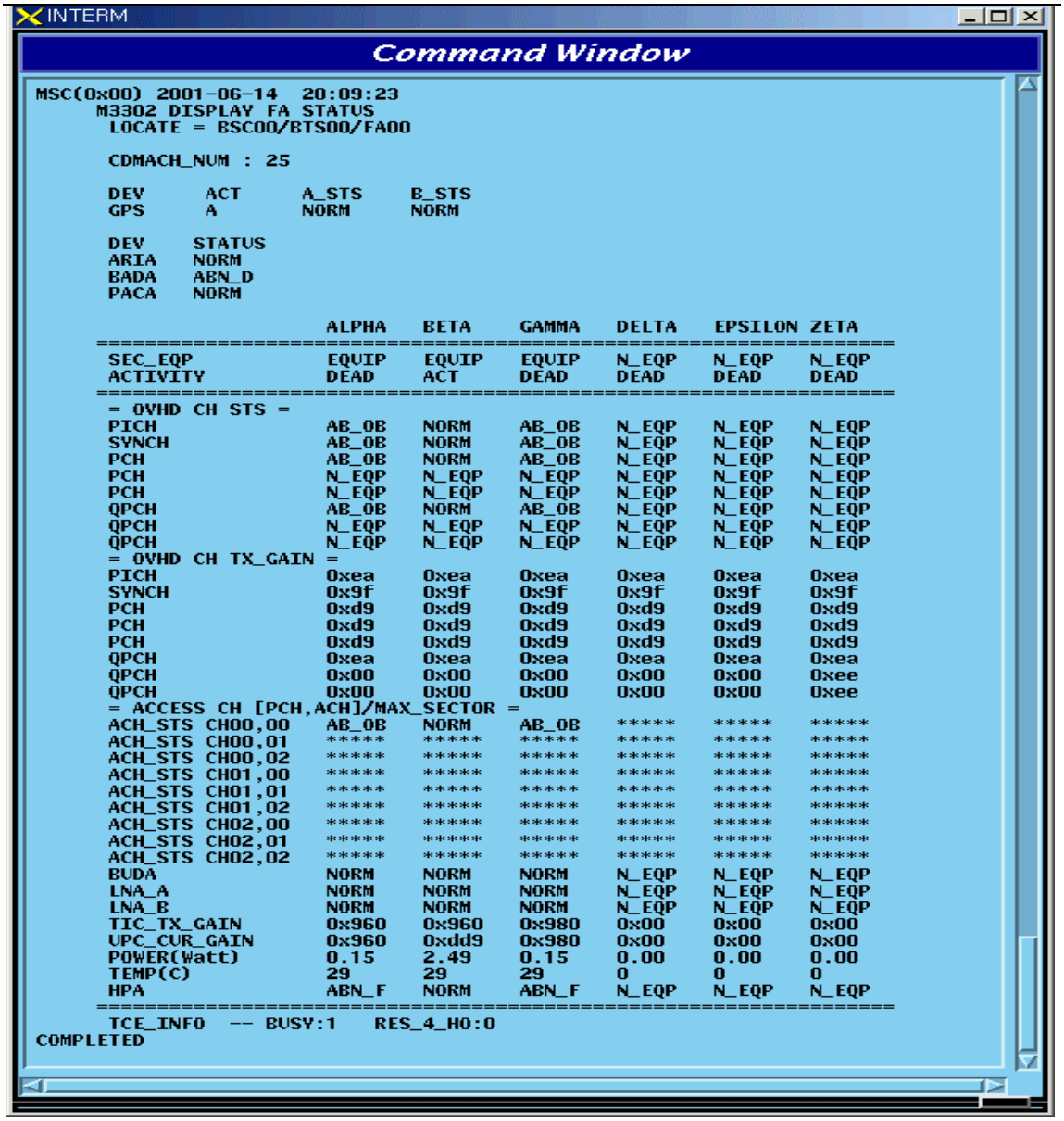


Fig. 4.4-33 Result of FA Status Display Command

4.4.5.3. BLOCK DBPA Command

Function to block DBPA.

Command : BLK-DBPA:BSC=a,BTS=b,RCP=c,DBPA=d,[CHIP=e],[CONDITION=f];

a : BSC Number(00~11)

b : BTS Number(00~47)

c : RCP Number(0~5)

d : DBPA Number(0~9)
e : CHIP Number(0~1)
f : Select Option(conditional, unconditional)

Conditional : If there is call connected, wait until it is disconnected during timeout and then block it. If it is not disconnected until timeout, do not block it.
Unconditional : block a call regardless of their presence unconditionally. (The existing call is disconnected)

Reference : If an OverHead Channel is allocated, do not block a call unconditionally.

Input : BLK-DBPA:BSC=0,BTS=0,RCP=0,DBPA=1,CHIP=1,CONDITION=CONDITION;

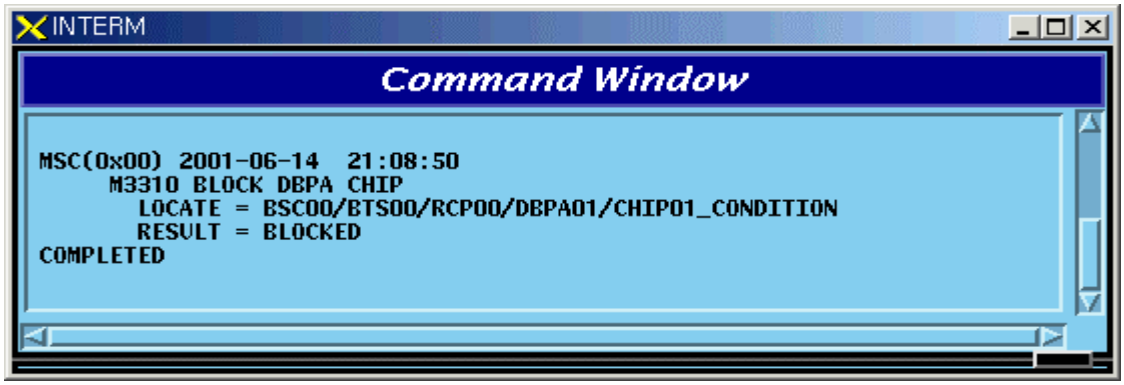


Fig. 4.4-34 Result of BLOCK DBPA Command

4.4.5.4. UNBLOCK DBPA Command

Function to unblock DBPA
Command : UBLK-DBPA:BSC=a,BTS=b,RCP=c,DBPA=d,[CHIP=e],[CONDITION=f];
a : BSC Number(00~11)
b : BTS Number(00~47)
c : RCP Number(0~5)
d : DBPA Number(0~9)
e : CHIP Number(0~1)

Input : UBLK-DBPA:BSC=0,BTS=0,RCP=0,DBPA=1,CHIP=1;

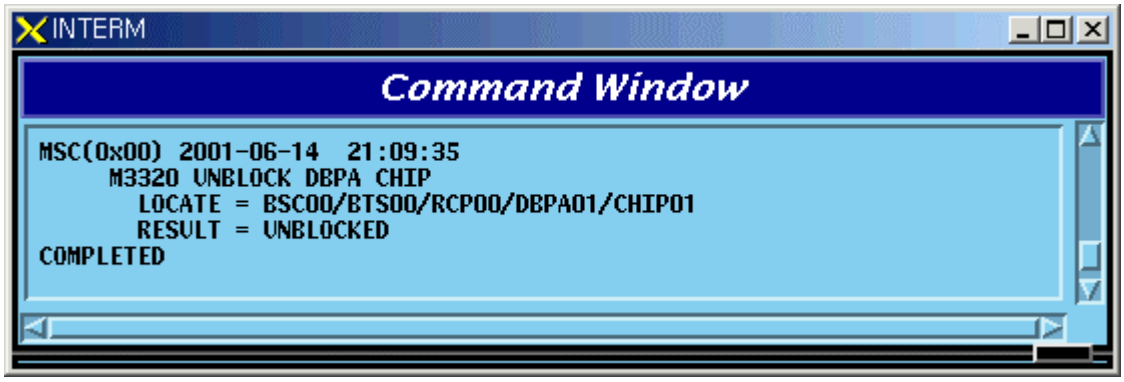


Fig. 4.4-35 Result of UNBLOCK DBPA Command

4.4.5.5. BLOCK OverHead Channel Element Display Command

Function to block OverHead Channel Element

Command : BLK-OVHD-CE:BSC=a,BTS=b,SECTOR=c,FA=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : SECTOR(ALPHA,BETA,GAMMA,DELTA,EPSILON,ZETA)

d : FA Number(0~5)

Input : BLK-OVHD-CE:BSC=0,BTS=0,SECTOR=ALPHA,FA=0;

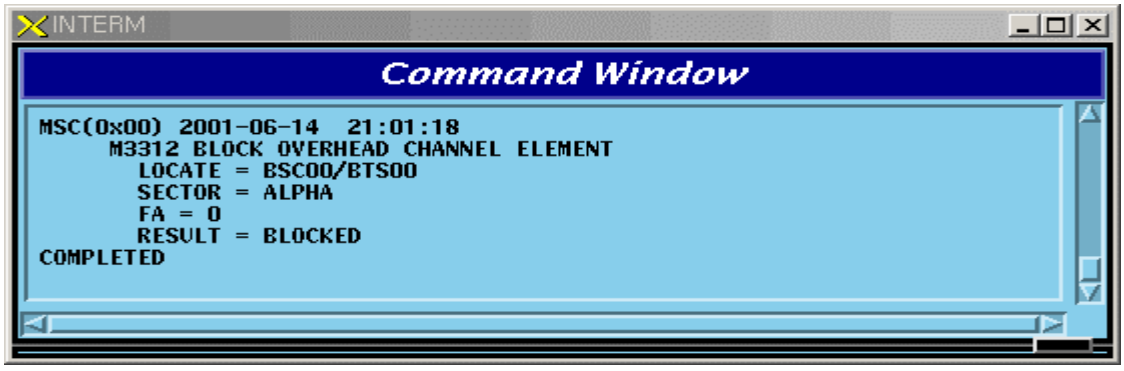


Fig. 4.4-36 Result of BLOCK OverHead Channel Element Display

4.4.5.6. UNBLOCK OverHead Channel Element

Function to unblock OverHead Channel Element

Command : UBLK-OVHD-CE:BSC=a,BTS=b,SECTOR=c,FA=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : SECTOR(ALPHA,BETA,GAMMA,DELTA,EPSILON,ZETA)

d : FA Number(0~5)

Input : UBLK-OVHD-CE:BSC=0,BTS=0,SECTOR=ALPHA,FA=0;

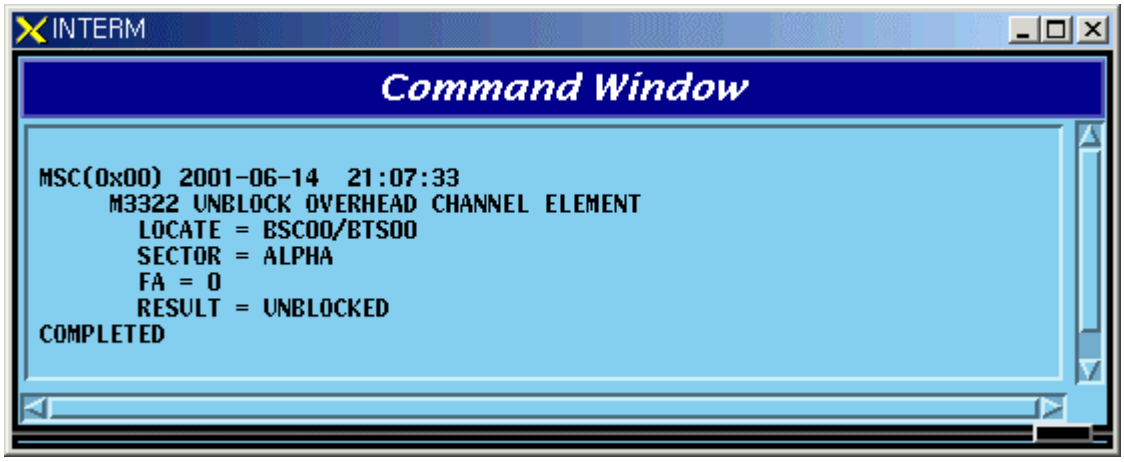


Fig. 4.4-37 Result of UNBLOCK OverHead Channel Element

4.4.5.7. H/W RESET BTS Device Command

Function to reset BTS Device on H/W.Level

Command : RMT-BTS-DEV:BSC=a,BTS=b,PROC=c,DEV=d,[ID=e],CLS=f;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : Processor Name(BSP,BPP,CRP,RCP(00~05)

d : Device Name(ARIA,DBPA,BUDA,HPA,PACA,BADA,RISA,BOTA,LICA)

e : Device ID(0~9)

f : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-BTS-DEV:BSC=0,BTS=0,PROC=CRP,DEV=LICA,ID=0,CLS=HARDRST;

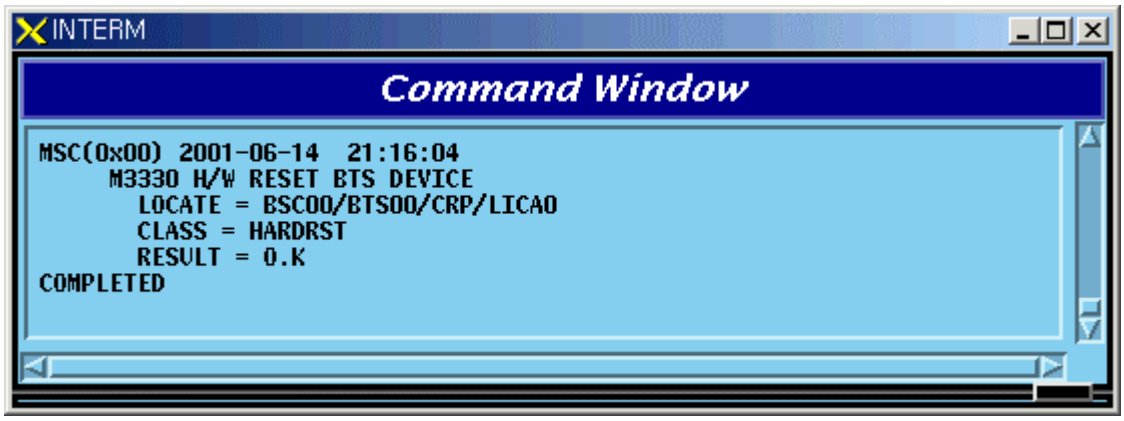


Fig. 4.4-38 Result of H/W RESET BTS Device Command

4.4.5.8. H/W RESET LPA Device Command

Function to reset LPA Device on H/W.Level

Command : RMT-LPA:BSC=a,BTS=b,SECTOR=c,LPA=d,CLS=e;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : SECTOR(ALPHA,BETA,GAMMA,DELTA,EPSILON,ZETA)

d : LPA Number(0~5)

e : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-LPA:BSC=0,BTS=0,SECTOR=ALPHA,LPA=0,CLS=HARDRST;

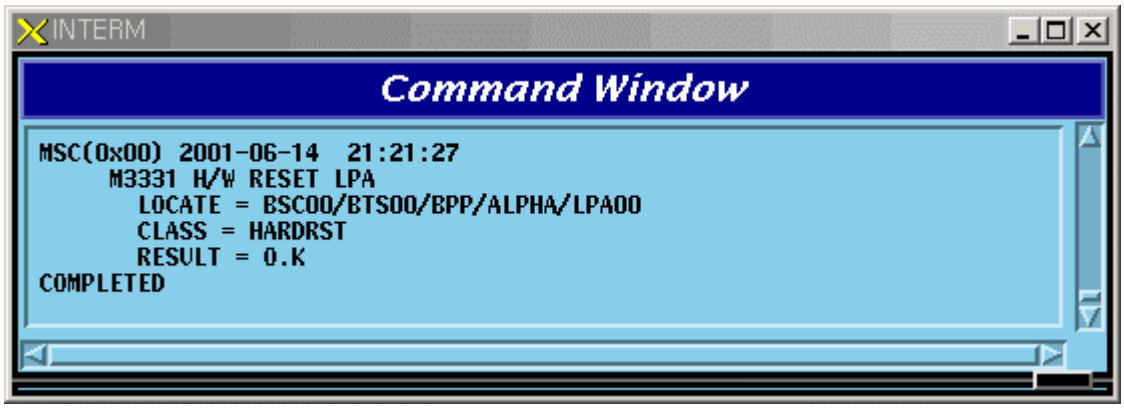


Fig. 4.4-39 Result of H/W RESET LPA Device Command

4.4.5.9. H/W RESET LPA Combiner Command

Function to reset the LPA Combiner on H/W Level

Command : RMT-LPA-COM:BSC=a,BTS=b,SHELF=c,COM=d,CLS=e;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : SHELF Number(0~5)

d : Combiner Number(0~2)

e : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-LPA-COM:BSC=0,BTS=0,SHELF=0,COM=0,CLS=HARDRST;

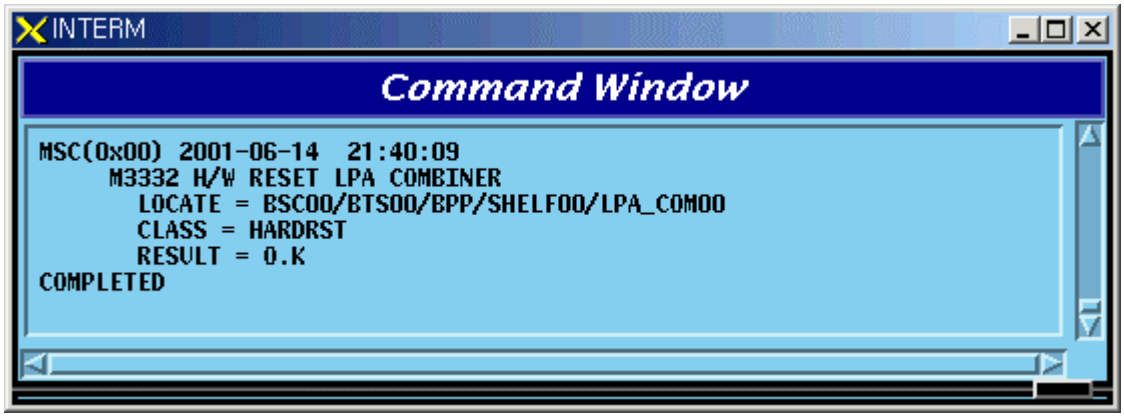


Fig. 4.4-40 Result of LPA Combiner H/W RESET Command

4.4.5.10. BTS SHELF POWER H/W RESET Command

Function to reset BTS SHELF POWER on H/W Level

Command : RMT-BTS-SHF:BSC=a,BTS=b,SHF=c,CLS=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : SHELF Name(BANU,RCBU(00~05)

d : Class(HARDRST,ISOLAT,UNISOL)

Input : RMT-BTS-SHF:BSC=0,BTS=0,SHF=RCBU00,CLS=HARDRST;

Fig. 4.4-41 Result of BTS SHELF POWER H/W RESET Command

4.4.6. Status Message Control

Table 4.4-5 Status Message LIST

Codes	Definition	Description
S3002	CAN CNP/PNP Status Change Display	When Processor Status changes, it occurs.
S3003	AMP Status Change Display	When Processor Status changes, it occurs.
S3004	ALP Status Change Display	When Processor Status changes, it occurs.
S3005	CCP Status Change Display	When Processor Status changes, it occurs.
S3006	SMP Status Change Display	When Processor Status changes, it occurs.
S3007	VMP Status Change Display	When Processor Status changes, it occurs.
S3008	PCP Status Change Display	When Processor Status changes, it occurs.
S3009	BSC-NCP Status Change Display	When Processor Status changes, it occurs.
S3010	BSP Status Change Display	When Processor Status changes, it occurs.
S3011	SCP Status Change Display	When Processor Status changes, it occurs.
S3012	BPP Status Change Display	When Processor Status changes, it occurs.
S3013	RCP Status Change Display	When Processor Status changes, it occurs.
S3017	CRP Status Change Display	When Processor Status changes, it occurs.
S3020	PMP Status Change Display	When Processor Status changes, it occurs.
S3201	CNP ASIA Status Change Display	Displayed upon device status change
S3202	CNP ASCA Status Change Display	Displayed upon device status change
S3205	PNP ASIA Status Change Display	Displayed upon device status change
S3206	PNP ASCA Status Change Display	Displayed upon device status change

S3209	PCP BCRA Status Change Display	Displayed upon device status change
S3210	PMP BCRA Status Change Display	Displayed upon device status change
S3211	AMP GPSR Status Change Display	Displayed upon device status change
S3220	NCP ASIA Status Change Display	Displayed upon device status change
S3221	NCP ASCA Status Change Display	Displayed upon device status change
S3222	NCP ATSA Status Change Display	Displayed upon device status change
S3224	ALP ALMA Status Change Display	Displayed upon device status change
S3230	BSP GPS Status Change Display	Displayed upon device status change
S3501	CCP Overload State Change Display	Displayed when overload status is generated, released and changed owing to load change in CCP
S3502	BSP Overload State Change Display	Displayed when overload status is generated, released and changed owing to load change in BSP

4.4.6.1. Inhibited Status Message Display Command

Function to display Status Message whose display to Outterm is inhibited

Command : DIS-INH-STS;

Input : DIS-INH-STS;

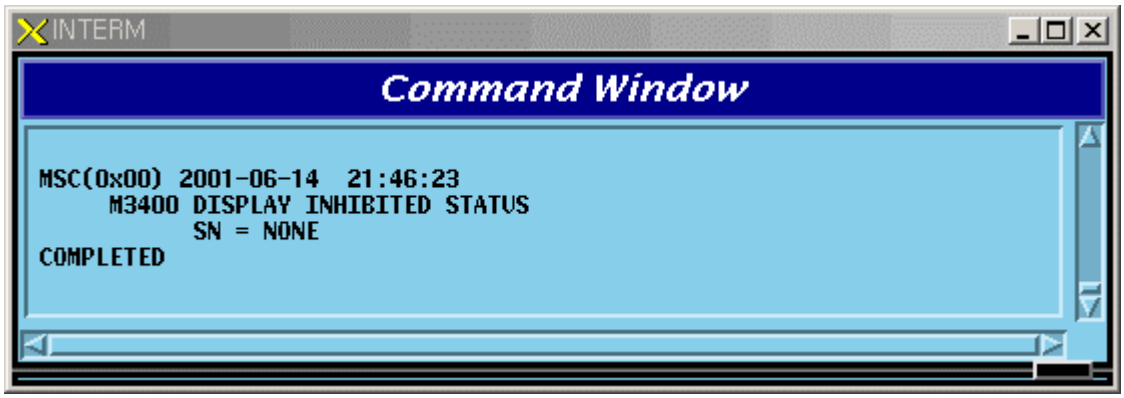


Fig. 4.4-42 Result Inhibited Status Message Display Command

4.4.6.2. Status Message Display Inhibition Command

Function to inhibit Status Message display

Command : INH-STS-MSG:SN=a;

a: SN Number(ALL,S3002~S3020,S3201~S3230, S3501,S3502)

Input : INH-STS-MSG:SN=S3002;

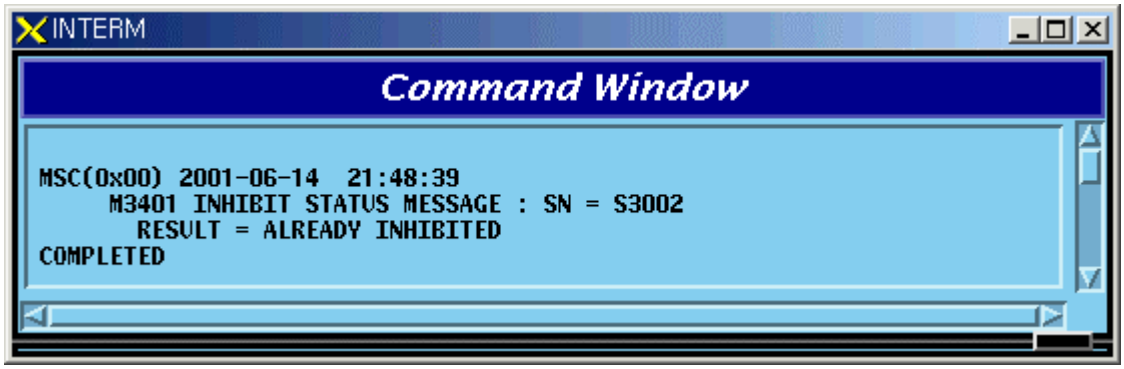


Fig. 4.4-43 Result of Status Message Display Inhibition Command

4.4.6.3. Allow Inhibited Message Command

Function to allow display of Status Message whose display to Outterm is inhibited

Command : ALW-STS-MSG:SN=a;

a: SN Number(ALL,S3002~S3020, S3201~S3230, S3501,S3502)

Input : ALW-STS-MSG:SN=S3002;

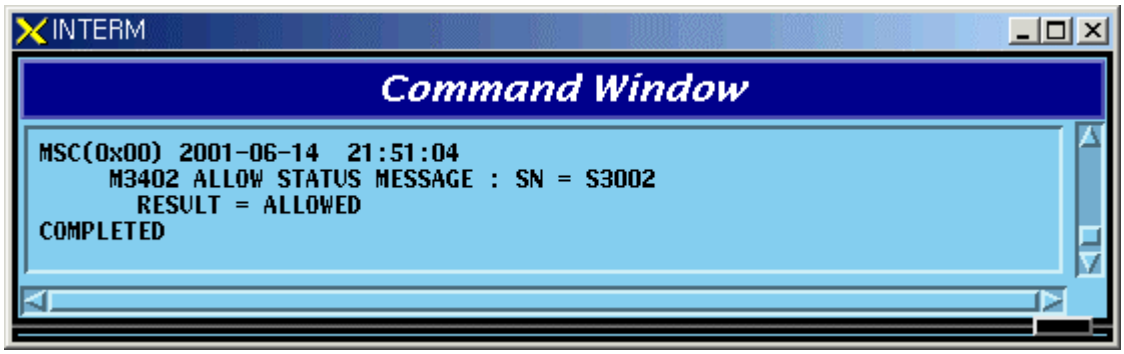


Fig. 4.4-44 Result of Inhibited Message Display Allow Command

4.4.7. Overload Status Control

4.4.7.1. Processor Overload Status Display Command

Function to display processor Overload Status

Command : DIS-OVLD-STS:[BSC=a],[BTS=b],PROC=c;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : Processor Name(CCP,BSP)

Input : DIS-OVLD-STS:BSC=0,BTS=0,PROC=BSP;

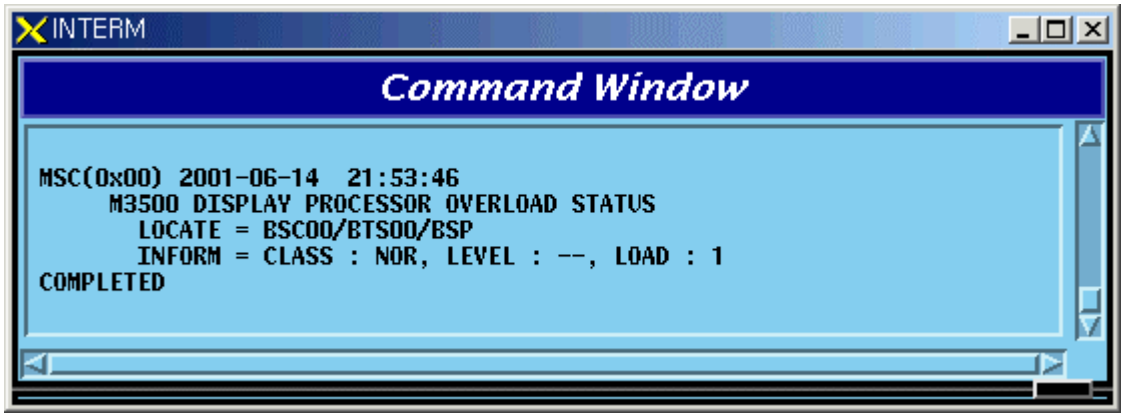


Fig. 4.4-45 Result of Processor Overload Status Display Command

4.4.7.2. Overload Threshold Value Display Command

Function to display Overload Threshold Value

Command : DIS-OVLD-THR:BSC=a,[BTS=b],PROC=c;

a : BSC Number(00~11)

b : BTS Number(00~47)

c : Processor Name(CCP,BSP)

Input : DIS-OVLD-THR:BSC=0,BTS=0,PROC=BSP;

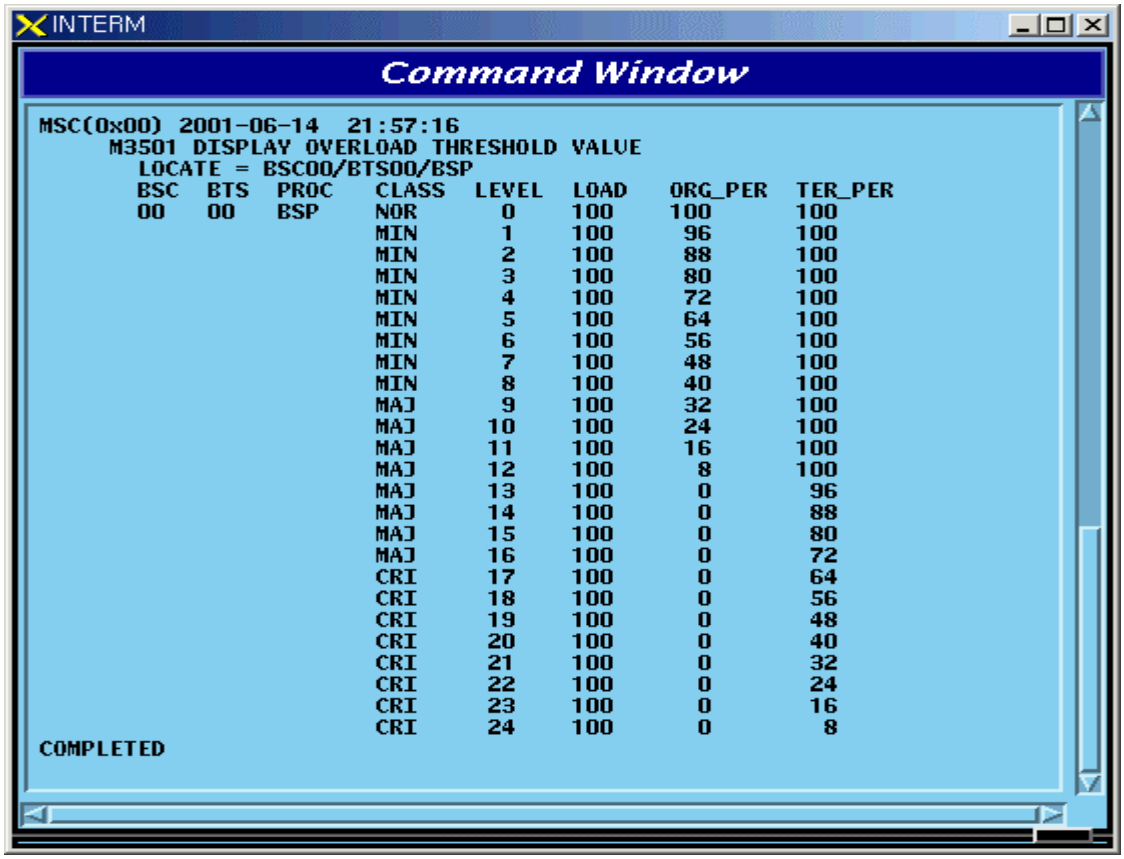


Fig. 4.4-46 Result of Overload Threshold Value Display Command

4.4.7.3. Overload Threshold Value Change Command

Function to change Overload Threshold Value.

Command:

CHG-OVLD-THR:BSC:a,[BTS=b],LEVEL=c,[LOAD=d], [ORG_PER=e],[TER_PER=f];

a : BSC Number(00~11)

b : BTS Number(00~47)

c : LEVEL(0~100)

d : LOAD(0~100)

e : ORG_PER(0~100)

f : TER_PER(0~100)

Input :

CHG-OVLD-THR:BSC:0,BTS=0,LEVEL=0,LOAD=100, ORG_PER=97,TER_PER=100;

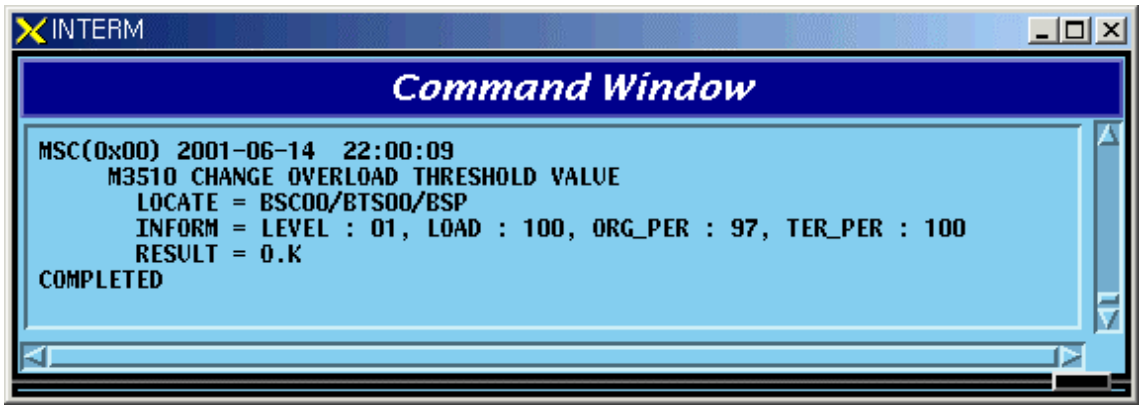


Fig. 4.4-47 Result of Overload Threshold Value Change Command

4.4.7.4. Overload Generation Test Command

Function to generate Overload threshold value

Command : STRT-OVLD-GEN:BSC=a,[BTS=b],PROC=c,LEVEL=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c: Processor Name(CCP,BSP)

d: LEVEL(0~24)

Input : STRT-OVLD-GEN:BSC=0,BTS=0,PROC=BSP,LEVEL=0;

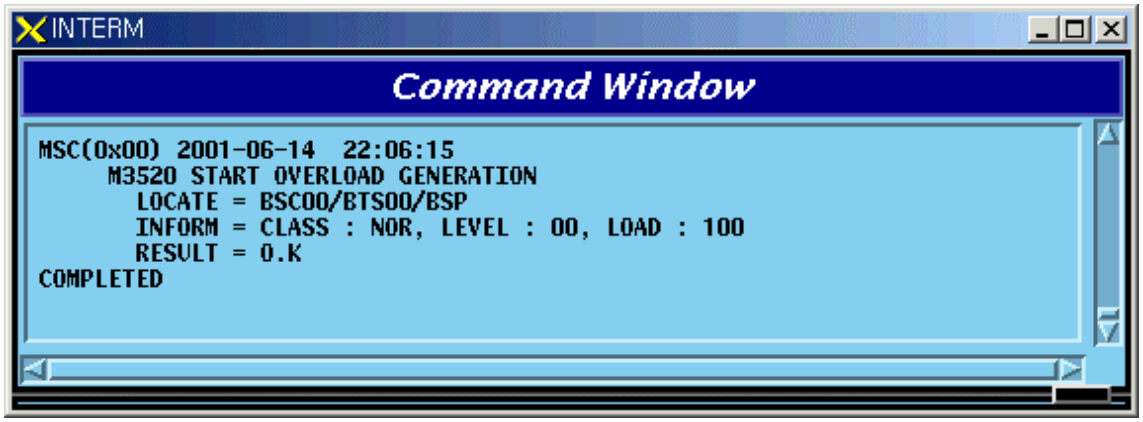


Fig. 4.4-48 Result of Overload Generation Test Command

4.4.7.5. Overload Generation Test STOP Command

Function to stop the Overload Generation Test

Command : STOP-OVLD-GEN:BSC=a,[BTS=b],PROC=c,LEVEL=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c: Processor Name(CCP,BSP)

d: LEVEL(0~24)

Input : STOP-OVLD-GEN:BSC=0,BTS=0,PROC=BSP,LEVEL=0;

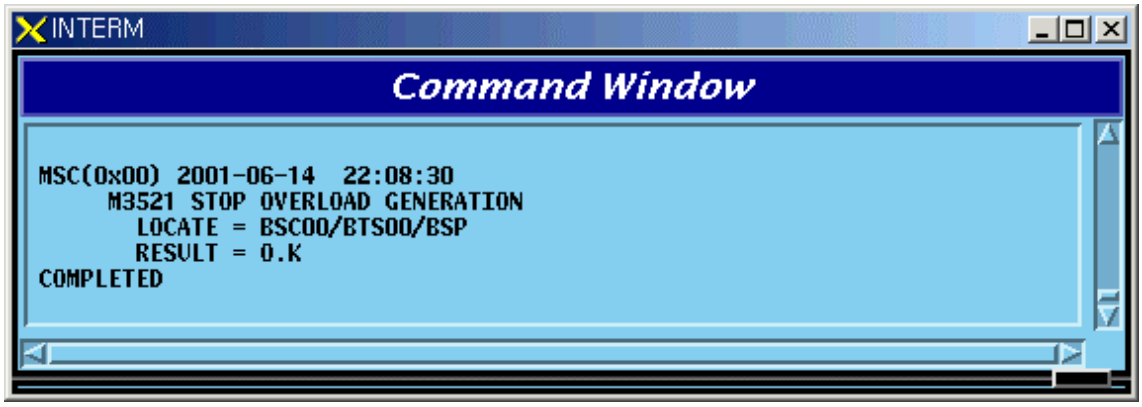


Fig. 4.4-49 Result of Overload Generation Test STOP Command

4.4.7.6. Command to Display Whether or not the Overload Generation Test is performed

Function to find out whether the Overload Display Test is performed

Command : DIS-OVLD-GEN:BSC=a,[BTS=b],PROC=c,LEVEL=d;

a : BSC Number(00~11)

b : BTS Number(00~47)

c: Processor Name(CCP,BSP)

d: LEVEL(0~24)

Input : DIS-OVLD-GEN:BSC=0,BTS=0,PROC=BSP,LEVEL=0;

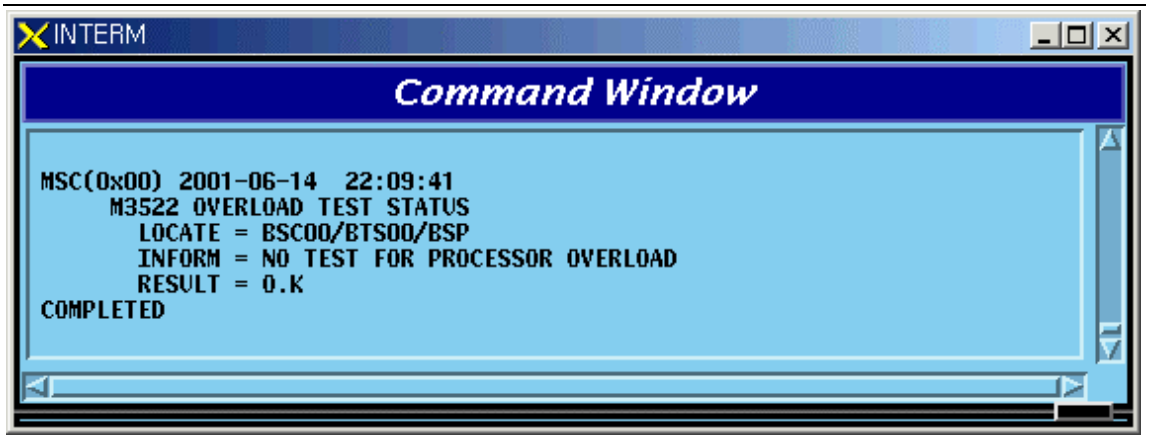


Fig. 4.4-50 Command to Determine Whether to Perform the Overload Generation Test

4.5. Test Command

4.5.1. On-Line Test-related Command

On-Line Test is a function that allows a test to be performed automatically at a specific time on a specific day and includes the following: Vocoder, CE, BTS Markov test and VSWR test. The tests of CE, BTS Markov and VSWR find out presence of faults in hardware of Channel Elements in BTS and the test function for radio environment, and the Vocoder test finds out presence of faults in hardware of Vocoder in BSC. Because the tests of CE, Vocoder, BTS Markov, and VSWR seize call resources, the user designates the specific time (idlest time) during the time that only a test is allowed. The tests of CE, BTS Markov, and VSWR are conducted under the supervision of BSP while the Vocoder test is conducted under the supervision of CCP. If the user designates the day and start/ending time for the Online test, and the ID scope of the board to be tested, BSM becomes the designated time of the designated day and if the test is in the ALLOW status, it commands the corresponding Processor to start/end the test.

The performance of the On-Line test is decided by Command INH-ONL-TEST (Inhibit Test), ALW-ONL-TEST(Allow Test). Only when the status is designated as "ALLOW" by ALW-ONL-TEST Command, On-Line test is performed. The Command of INH-ONL-TEST inhibits the test. Besides these two Commands, there is a command to stop the test by each Test(CE : STS-CE-ONL, Vocoder : STS-VCE-ONL, BTS Markov : STS-MKV-ONL, VSWR : STS-VSWR-ONL). If the test was stopped by INHIBIT Command, the On-Line Test is not performed even if the designated time of the designated day of the week arrives because inhibit/allow status is changed to "INHIBIT". ,. However, if the Test was stopped by the above listed STOP Command, the On-Line Test that was performed on that day only comes to a halt and at the designated time of the next designated day of the week the On-Line Test is to be performed normally because DB Flag that indicates the status of INHIBIT/ALLOW is not changed

.

4.5.1.1. On-Line Test Inhibit Command

It is the function that inhibits On Line Test for CE, Vocoder, BTS Markov, and VSWR test. In the cases of CE, BTS Markov, and VSWR test, input the corresponding BTS number and in the case of Vocoder test, input the corresponding BSC number.

- Command INH-ONL-TEST:EXE=a, BSC=b,[BTS=c];

  a: VCE/CE/MKV/VSWR

b: BSC number (0~11)

c: BTS number (0~47)

• Input/Output

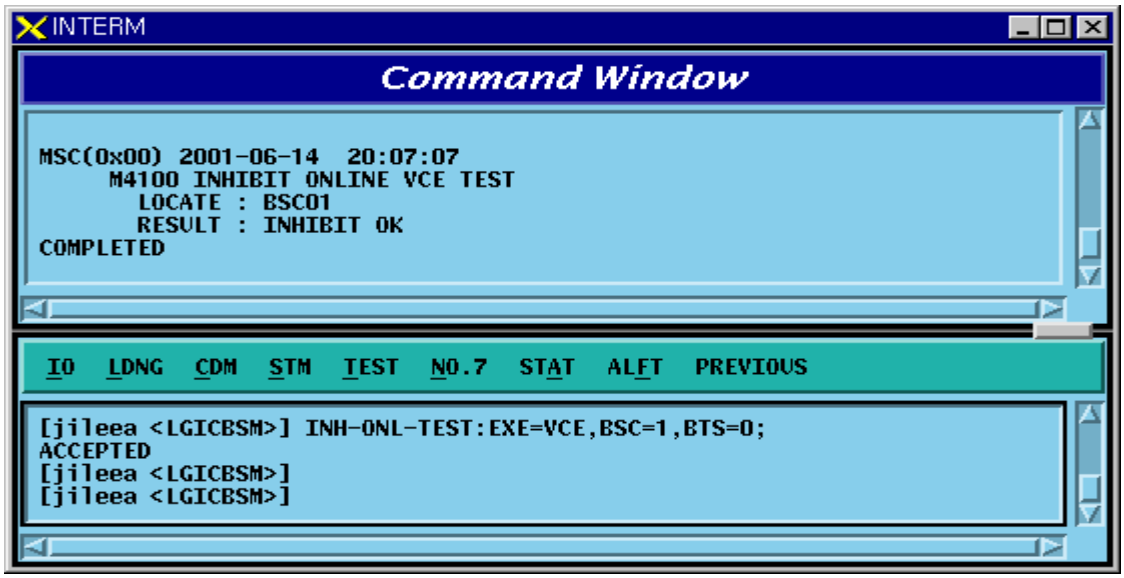


Fig. 4.5-1 Result of Test Inhibit Command Execution

4.5.1.2. On-Line Test Allow Command

Function that allows Online Test for CE, Vocoder, BTS Markov, and VSWR test

For CE, BTS Markov and VSWR test, input the corresponding BTS number and for Vocoder test, input corresponding BSC number.

• Command ALW-ONL-TEST:EXE=a,BSC=b[BTS=c];

a: VCE/CE/MKV/VSWR

b: BSC number (0~11)

c: BTS number (0~47)

• Input/Output

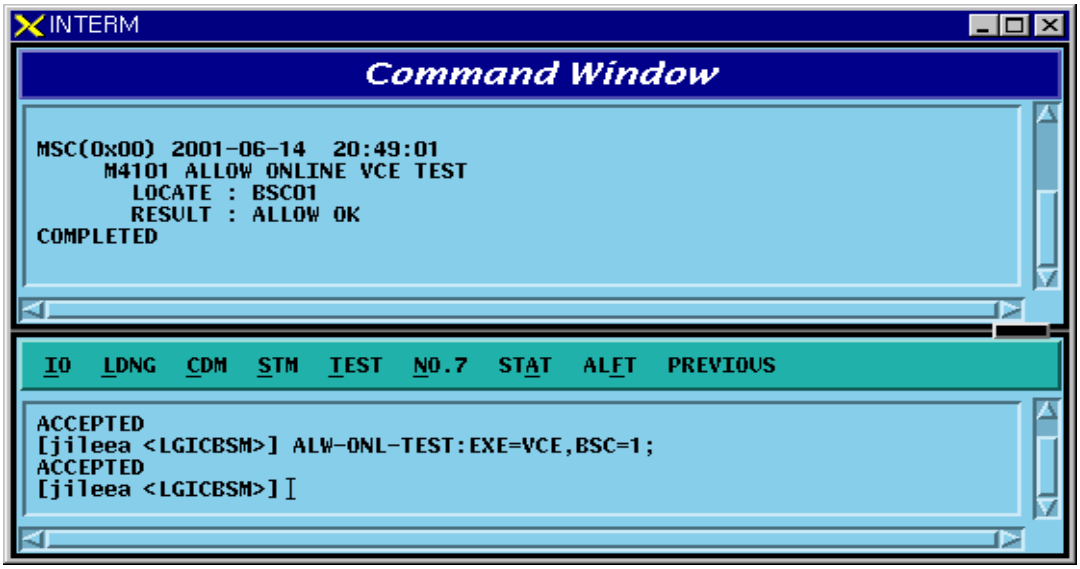


Fig. 4.5-2 Result of Test Allow Command Execution

4.5.1.3. On-Line Test Inhibit Item Display Function

Function to display the inhibit of the on line test for the specific tests among the on-line tests by BSC and BTS. For Vocoder test, it displays Inhibit status. In case of CE, BTS Markov and in case of the VSWR test, it displays the status by BTS.

- Command DIS-INH-ONL:EXE=a,BSC=b[BTS=c];
  - a: VCE/CE/MKV/VSWR
  - b: BSC number (0~11)
  - c: BTS number (0~47)
- Input/Output

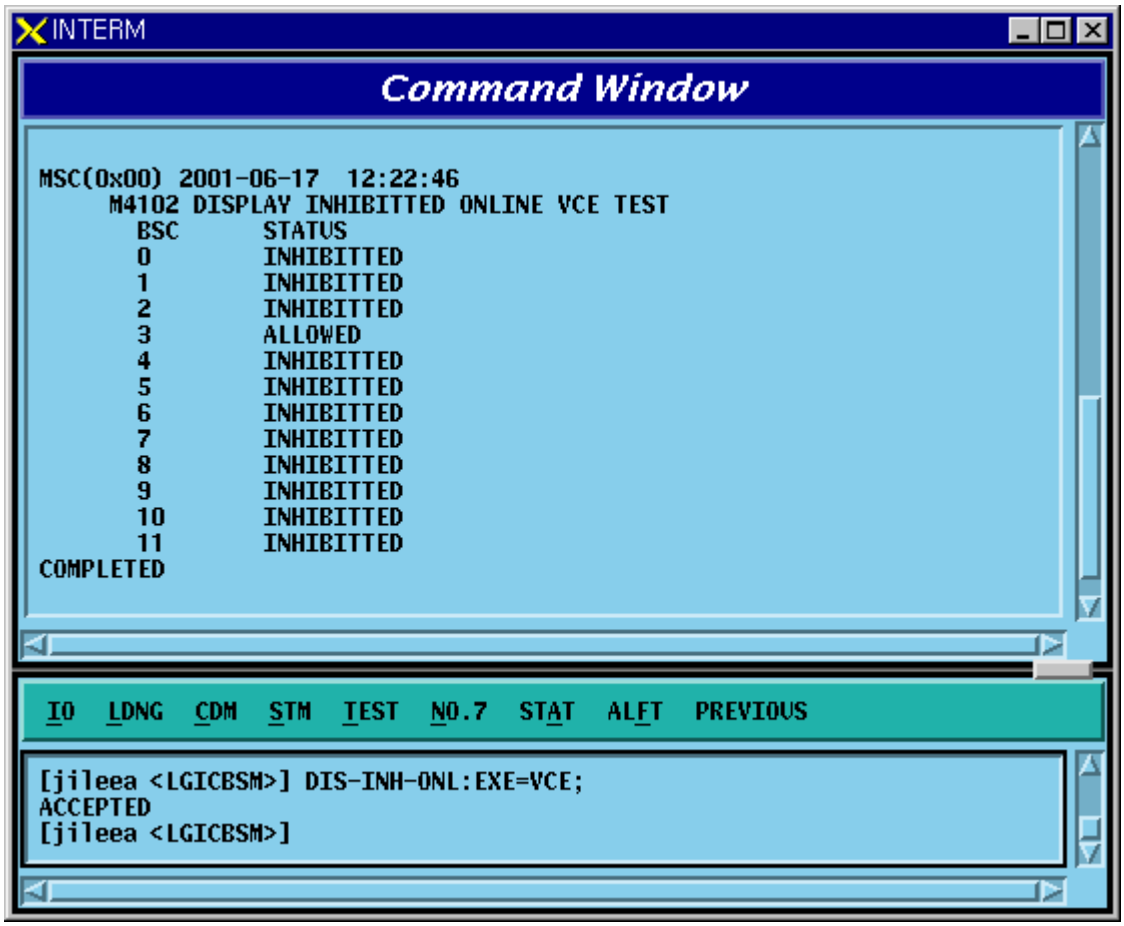


Fig. 4.5-3 Result of Test Inhibit/Allow List Display Command Execution

4.5.2. Test-related to Channel Element

Channel Element Test is performed in BIT(Built In Test) for each chip. The types of BIT Test are as follows:

- Bus Interrupt Test
- ChipX16 Test
- PP2S Test
- PCG Test

This BIT Test is normally performed on Chip with OVHD channel and Chip seized with a call and the result is reported to BSM.

Table 4.5-1CE Test Result Message

On-Demand	DESCRIPTION
BIT_OK	NORMAL
BIT_BUS_FAIL	BUS INTERFACE TEST FAIL
BIT_INT_FAIL	INTERNAL INTERRUPT TEST FAIL
BIT_CHIPX16_FAIL BIT_PP2S_FAIL	CHIPX16 TEST FAIL
BIT_PCG_FAIL	PCG TEST FAIL
BIT_RAM_FAIL	MEMORY TEST FAIL
BIT_PROGRESS_FAIL	TEST PERFORMING FAIL

4.5.2.1. Channel Element Test Function

Function to perform BIT test by CHC and CHIP unit.

- Command TEST-CE :BSC=a ,BTS=b ,PROC=c [,CHC=d] [,CHIP=e];
  - a: BSC number (0~11)
  - b: BTS number (0~47)
  - c: RCP number (0~9)
  - d: Channel Card Number (0~9)
  - e: Chip Number (0~1)
- Input/Output

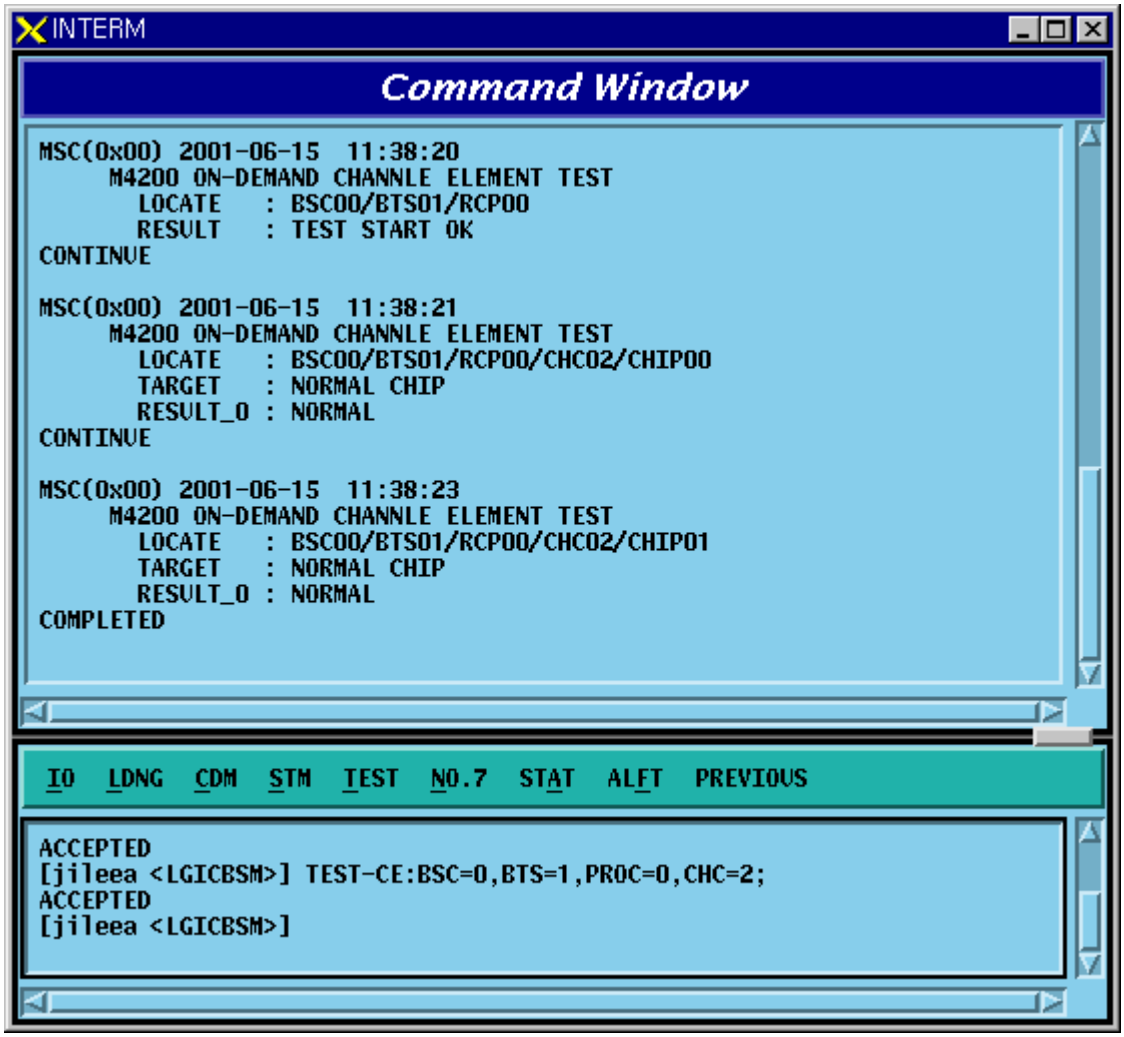


Fig. 4.5-4 Result of CE BIT Test Execution

4.5.3. Vocoder Test Function

The types of Vocoder Tests are as follows:

o DSP H/W Test

- Determines the presence of problems in ROM, RAM, ALU of DSP in Vocoder
- Diagnosis the presence of problems by checking Checksum, Read/Write, Flag Set, etc.
- Caused by defective DSP Chip

o Timing Module Test (Channel Test)

- VCP generates Vocoder and Tx.Rx Timing by using MFP(Multiple-Function Processor) in order to exchange voice data with SLP every 20ms.
- It judges the presence of problems in Vocoder counter by checking the generated Rx.Tx timing.

o Loopback Test (Channel Test)

- It is a test to decide whether or not the status of Loop used in Qcelp Algorithm test is normal and its Loop section has VLIA, VCMA and VCPA. All of them should be normal to execute the Qcelp Algorithm test. VCP generates Test Pattern and by checking the Loopbacked result, it decides an absence of failure.

o QCELP Algorithm Test (Channel Test)

- Due to intermittent problems in Vocoder and VCPA Card H/W, a phenomenon that a call is not heard bi-directionally occurs. In order to prevent this from happening, Qcelp Algorithm is tested. This test determines whether Vocoder is normal by testing whether status transition of Qcelp Algorithm is normally performed by the state. .

Table 4.5-2 Vocoder Test Result

On-Demand / On-Line Message	Description

FLT_DSP_HW	DSP HW test Fault
FLT_CLK	Timing Module test Fault
FLT_VCPA_LOOPBACK	Vocoder Processor Loopback test Fault
FLT_VCMA_LOOPBACK	Vocoder Master board Loopback test Fault
FLT_VLIA_LOOPBACK	Vocoder Line interface Loopback test Fault
FLT_QCELP_ST0	Qcelp Algorithm test Fault state0
FLT_QCELP_ST1	Qcelp Algorithm test Fault state1
FLT_QCELP_ST2	Qcelp Algorithm test Fault state2
FLT_QCELP_ST3	Qcelp Algorithm test Fault state3

4.5.3.1. On-Demand Vocoder Test Function

Function to test Vocoder DSP or Channel by VCP/SLAVE/CHIP unit.

• Command TEST-VCE: BSC=a ,VMP=b ,S_VCP=c [,E_VCP=d] [,SLAVE=e] [,CHIP=f] [,VCE=g] ,TYPE=h [,OPTION=i] [,WAIT_T=j]

a: BSC number (0~11)

b: VMP number (0~7)

c, d: VCP number (0~15)

e: SLAVE number (0~1)

f : CHIP number (0 ~ 3)

h: Test Type(DSP, Channel)

i: Test Option(SKIP, RELEASE, WAIT_THEN) => These are options used to test channels when a call is seized, and SKIP does not perform a test when a call is seized but skips. With option RELEASE, it disconnects a call when a call is seized and then performs a test. With option WAIT_THEN, it waits as long as j time is allowed and if a call is released within the designated time, then it goes on with a test. However, if a call is not released, it skips.

J: Wait Time(5~300 sec)

• Input/Output

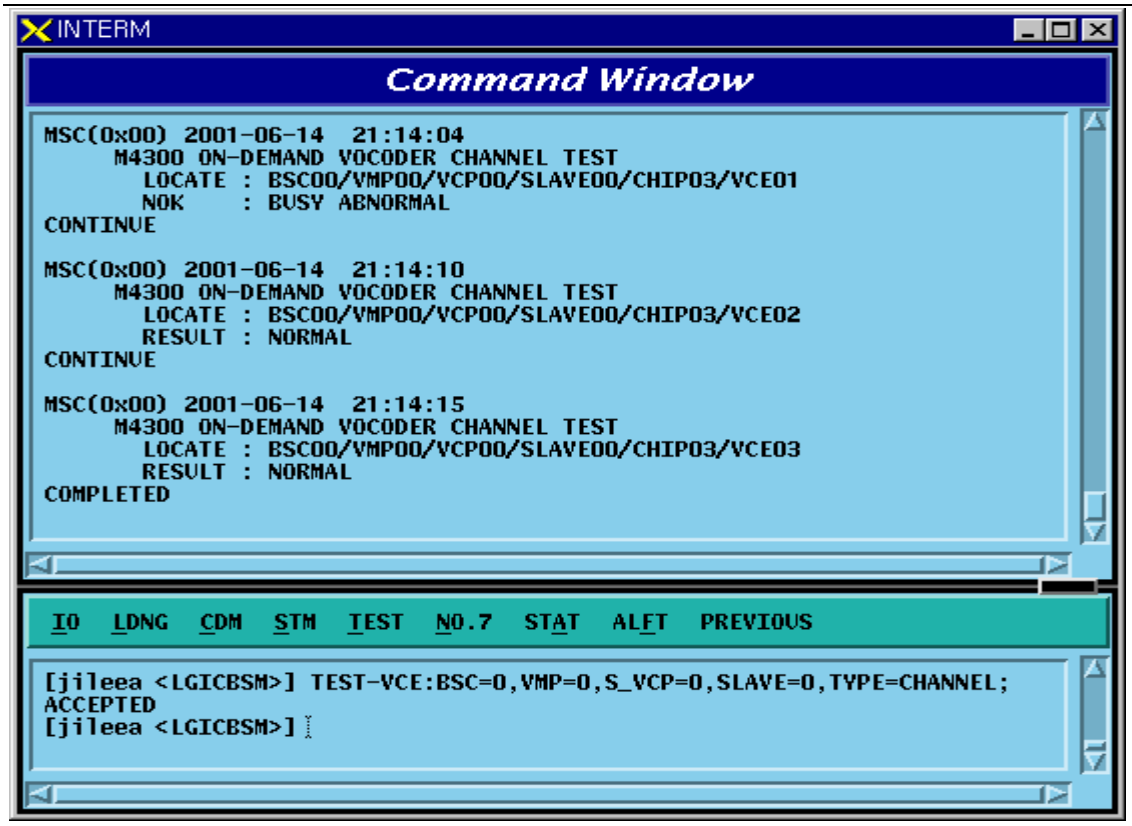


Fig. 4.5-5 Result of On-Demand Vocoder Test(Channel Type) Execution

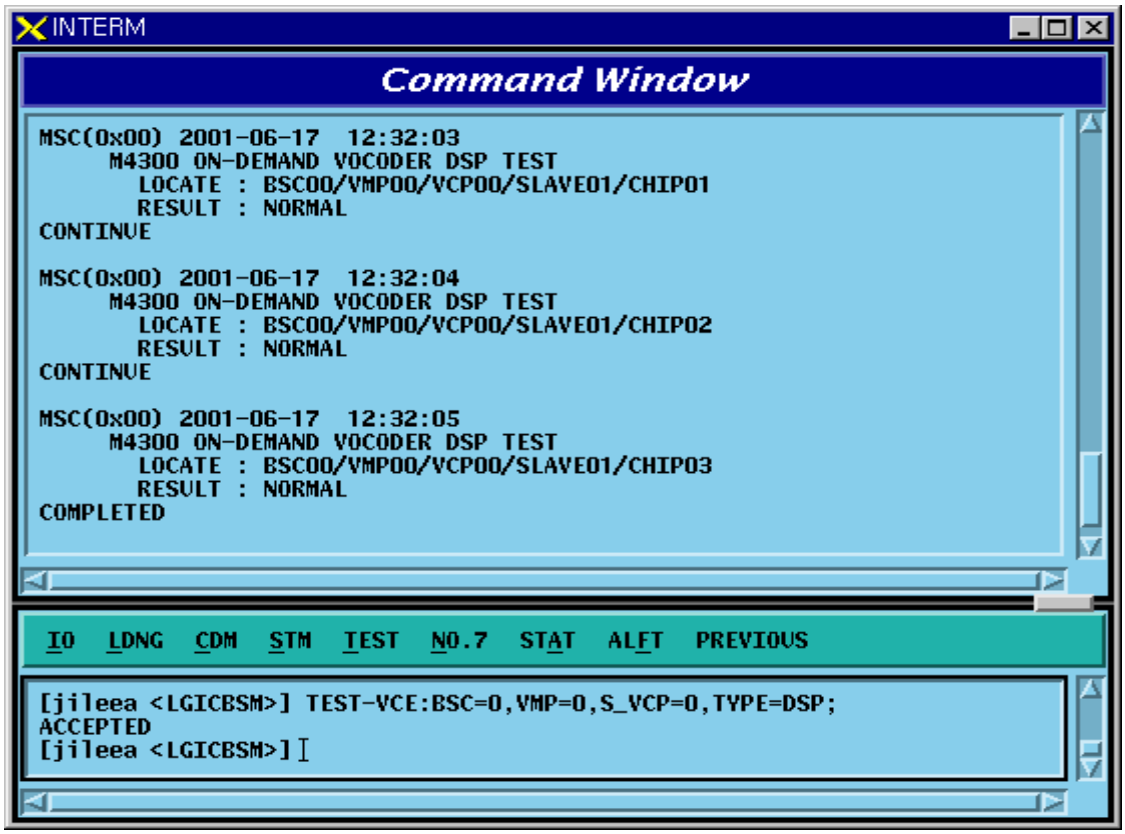


Fig. 4.5-6 Result of On-Demand Vocoder Test(DSP Type) Execution

4.5.3.2. Parameter Change Command Related to On-Line Vocoder Test

Function to change On-Line Vocoder test start/ending time, test day and the scope of VMP/VCP to be tested.

• Command CHG-VCE-PARA :BSC=a ,S_VMP=b [,E_VMP=c] ,S_VCP=d [,E_VCP=e] [,STI ME=f] [,ETIME=g] ,WDAY=h;

a: BSC number (0~11)

b,c: VMP number(0~7)

d,e: VCP number(0~15)

f: On-Line test Start Time (0~23 Hour)

g: On-Line test End Time (1~24 Hour)

h: Test Day(Month ~ Day, Daily)

• Input/Output

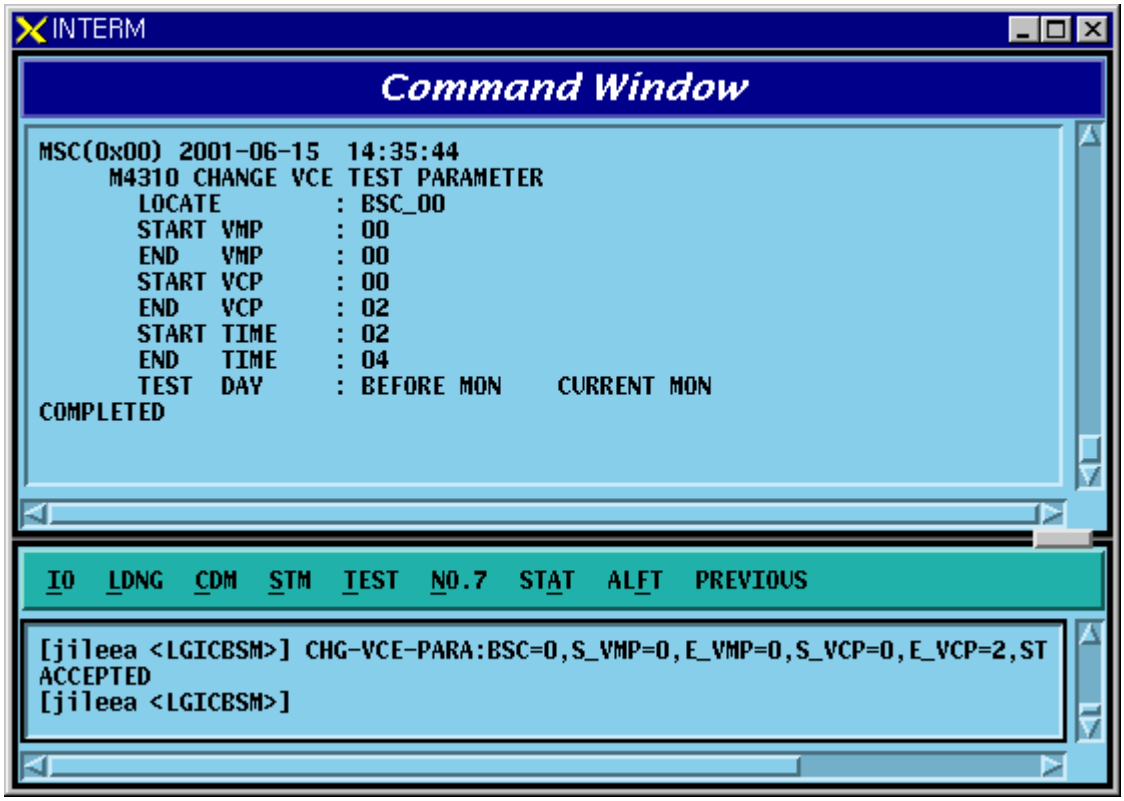


Fig. 4.5-7 Result of On-Line Vocoder Test parameter Change Command Execution

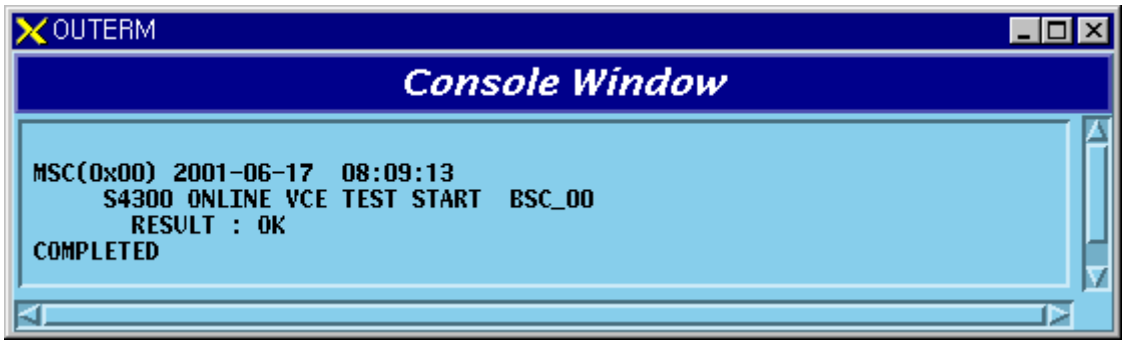


Fig. 4.5-8 Result of On-Line Test at the time of On-Line Vocoder Test Execution

4.5.3.3. Parameter Display Command related to On-Line Vocoder Test

Function to display On-Line Vocoder test start/ending time, test day, and the scope of VMP/VCPto be tested.

- Command DIS-VCE-PARA:BSC=a;

  a: BSC number (0~11)

- Input/Output

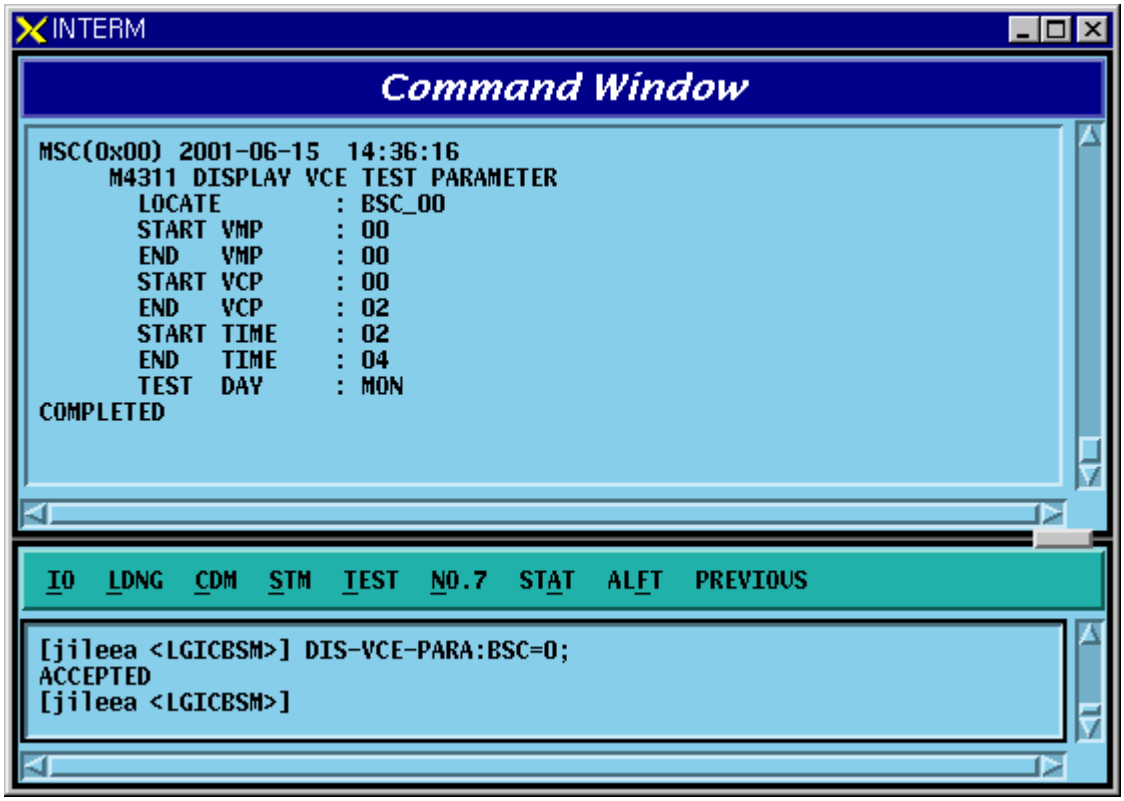


Fig. 4.5-9 Result of On-Line Vocoder Test Parameter Display Command Execution

4.5.3.4. Display Command of On-Line Vocoder Test Result

Function to display the On-Line Vocoder Test Results which are stored in CCP to BSM by the VMP unit

- Command DIS-VCE-RSLT:BSC=a,VMP=b;

  a: BSC number (0~11)

  b: VMP number (0~7)

• Input/Output

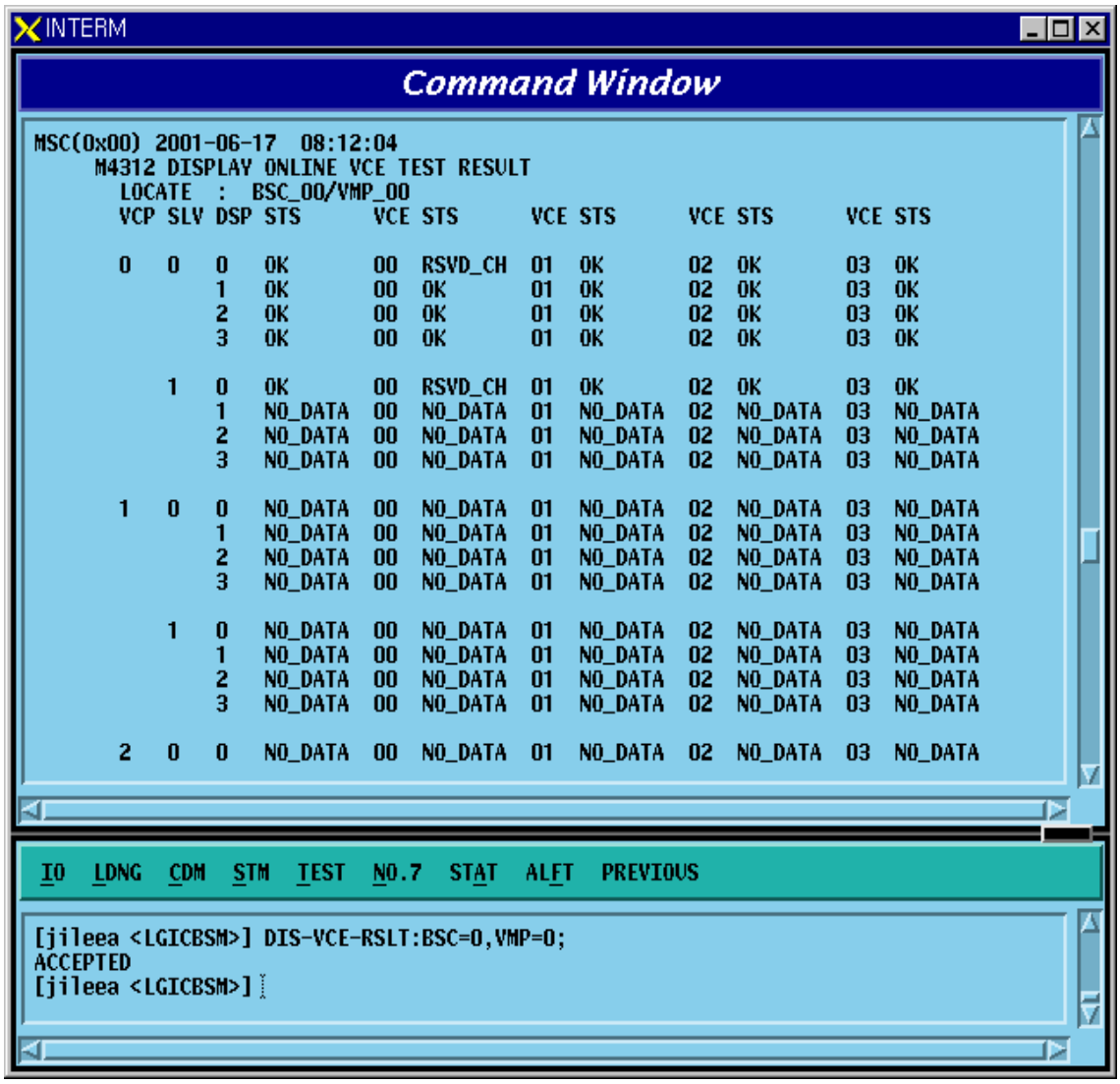


Fig. 4.5-10 On-Line Vocoder Test Result Display Command

4.5.3.5. Display Command of On-Line Vocoder Test Status

Function to display the On-Line Vocoder Test performance status and to stop the test. If Item Field is designated as “DISPLAY”, it displays On-Line Vocoder test status of the present corresponding BSC, and if it is designated as "END_ONL", it stops current On-Line test.

• Command STS-VCE-ONL:BSC=a,ITEM=b;

a: BSC number (0~11)

b: Execution ITEM (DISPLAY/END-ONL)

• Input/Output

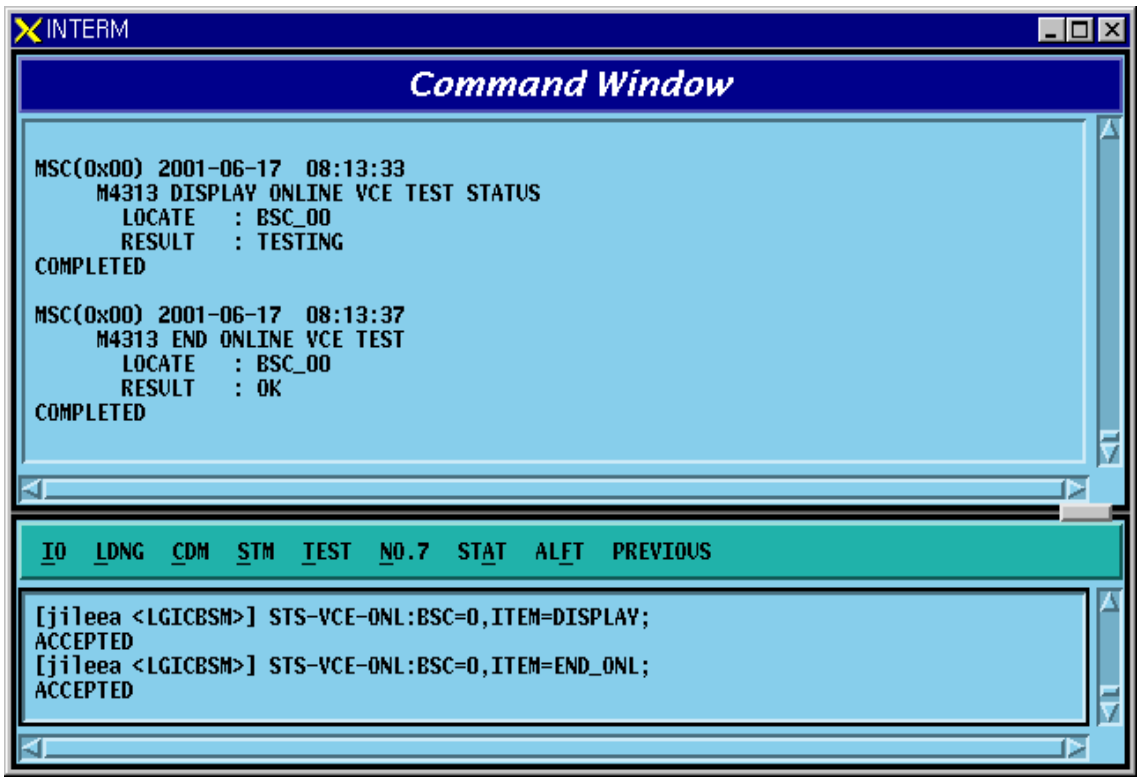


Fig. 4.5-11 On-Line Vocoder Test End Command, Status Display Command Execution Result

4.5.4. Link Test Function

Link test is divided into PING test, IPC test, ATM Path test, and Trunk BER test. PING test checks the Link status of Application Level by using Ping command from Master Processor to each Target Processor. IPC test checks the presence of problems in LINK by conducting IPC Test to the mounted processors/devices. ATM Path test checks presence of faults in ATM LINK Level by conducting ATM Layer Test on the mounted Processor/Devices. Trunk BER test sends/receives the designated number of ATM Cells to the operator designated BTS Link to get Error Rate.

4.5.4.1. Trunk BER Test Function

Function to check the presence of problems in Trunk(16 E1) Link between BTS and BSC. Trunk BER Test analyzes performance per Link of each ALPA and LICA and the analyzed result is displayed in a certain format to BMS. One link is selected and while exchanging as many as the designated number of ATM Cells, test is conducted and Data Error Rate is displayed.

- Command TEST-LINK :BSC=a ,ALPA=b [,CNT=c] [,RATE=d];
  - a: BSC number (0~11)
  - b: ALPA number(0~9)
  - c: Send Cell Count(1 ~ 1,000,000)
  - d: Data Rate(1 ~ 90: Number of Cells transferred per a second)
- Input/Output

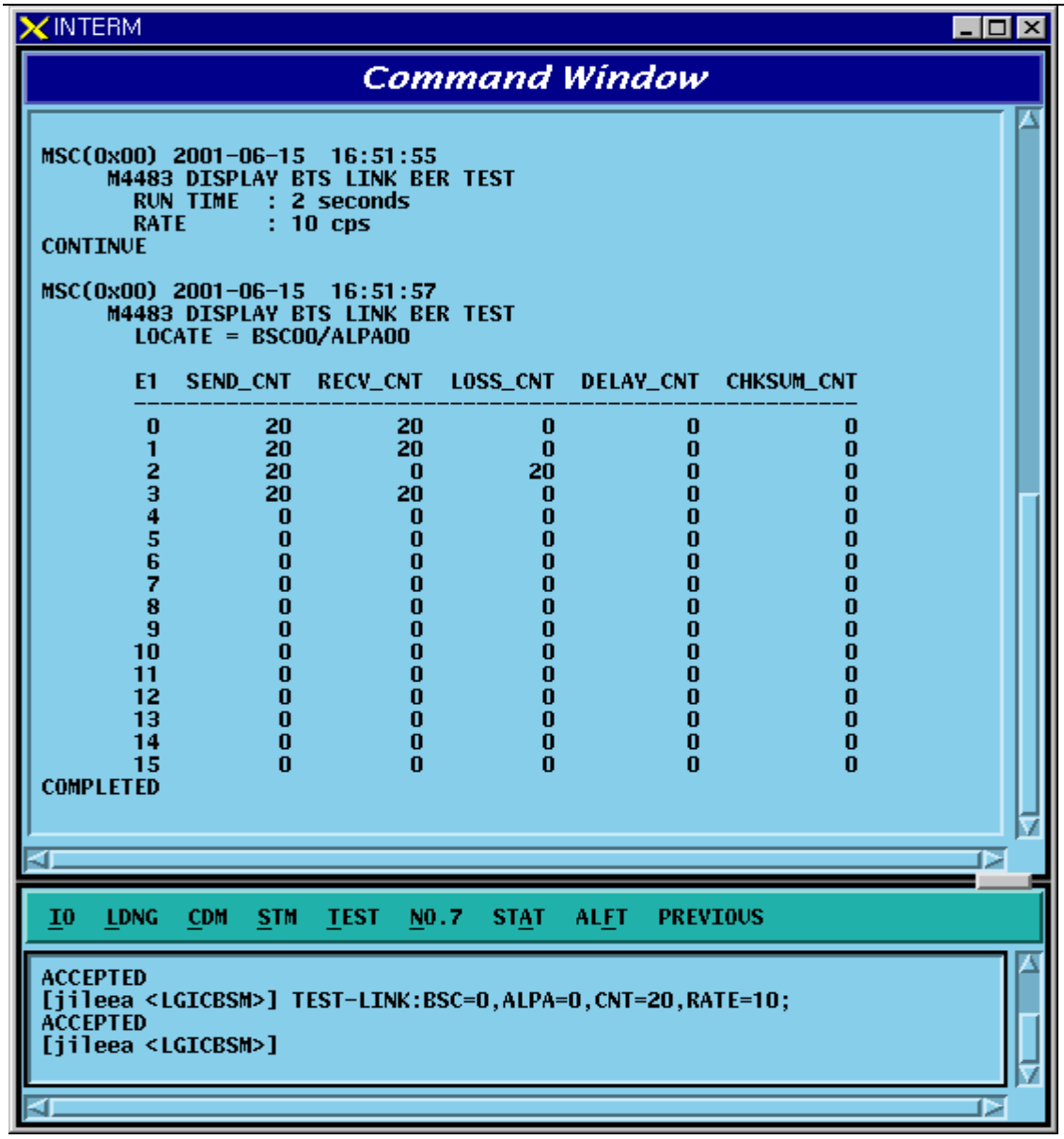


Fig. 4.5-12 Result of Trunk BER Test Performance

4.5.4.2. PING Test Function

Function to check Link Status for the Target Processor by the Master Processor that was input to MMI of BSM by using the Ping command

Ping test is divided into Point To Point Test and Point To Multi Test.

- Command TEST-PING:SRC=a,DST=b[,BSC=c][,BTS=d][,SMP=e][,VMP=f][,PCF=g];

  a: Source Processor

  b: Destination Processor(If there is input, it is PTP, if not, it is PTM)

  c: BSC number(0~11)

  d: BTS number(0~47)

e: SMP number(0~5)

f: VMP number(0~7)

g: PCF number(0~2)

• Input/Output

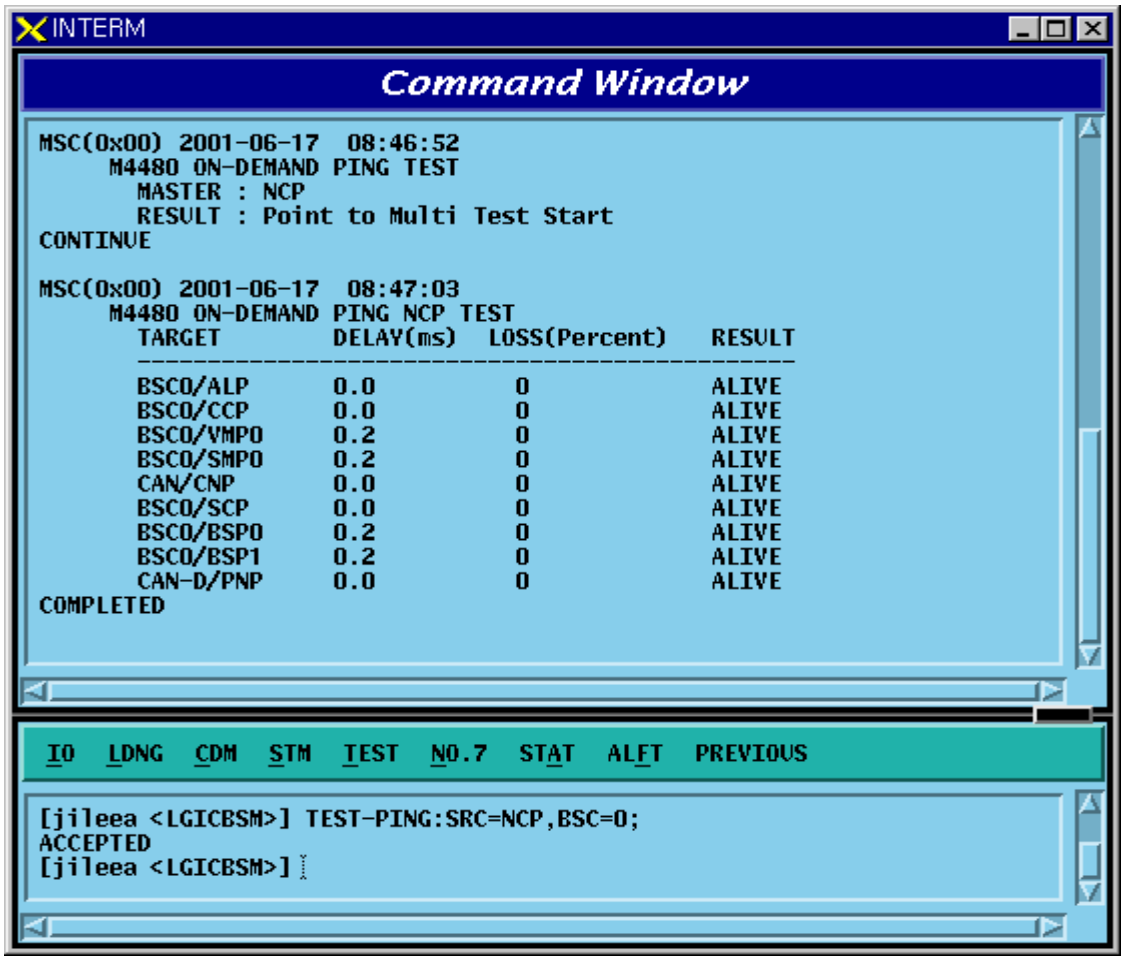


Fig. 4.5-13 Result of PING Test Performance

4.5.4.3. IPC Test Function

Function to check the presence of problems in the Link status between Processor/Device by executing IPC command of Application Level .

IPC Test is divided into PTP test and PTM test.

• Command TEST-IPC :SRC=a [,DST=b] [,BSC=c] [,BTS=d] [,SMP=e] [,VMP=f] [,PCF=g];

a: Source Processor

b: Destination Processor(If input does exist, it is PTP and if not, it is PTM)

c: BSC number(0~11)

d: BTS number(0~47)

e: SMP number(0~5)

f: VMP number(0~7)

g: PCF number(0~2)

• Input/Output

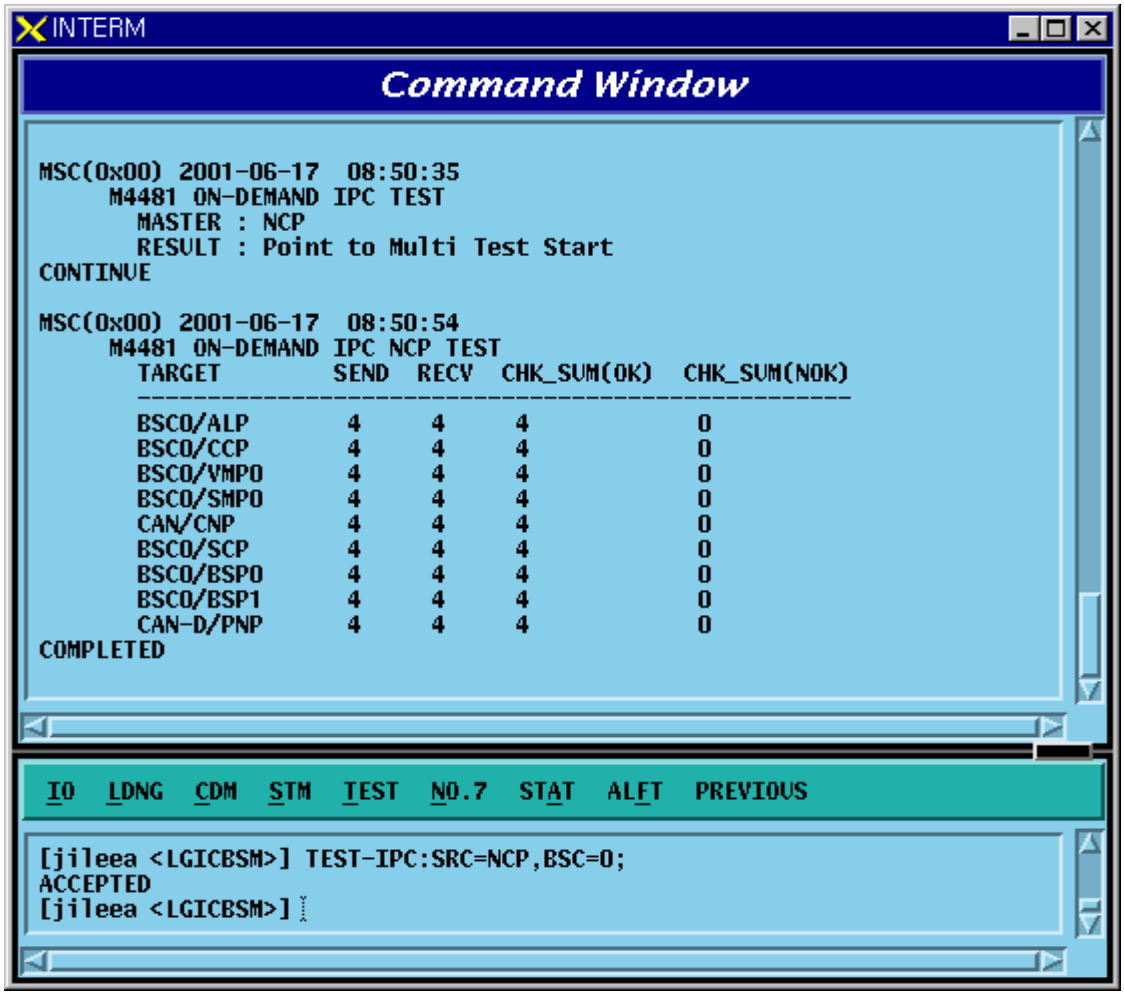


Fig. 4.5-14 Result of IPC Test Performance

4.5.4.4. ATM Path Test Function

Function to check presence of problems in Link Status between Processor and Device by executing ATM CC, LB, PM command.

It is divided into PTP Test and PTM Test.

• Command TEST-TM:SRC=a[,DST=b],CLASS=c,LEVEL=d[,BSC=e][,BTS=f][,SMP=g] [,VMP=h] [,PCF=i];

a: Source Processor

b: Destination Processor(If input does exist, it is PTP, and if not, it is PTM)

c: Test class(CC: Continuity Check, LB: Loop Back, PM: Execution Monitor)

d: Test Level(F4: VPC, F5: VCC)

e: BSC number(0~11)

f: BTS number(0~47)

g: SMP number(0~5)

h: VMP number(0~7)

i: PCF number(0~2)

• Input/Output

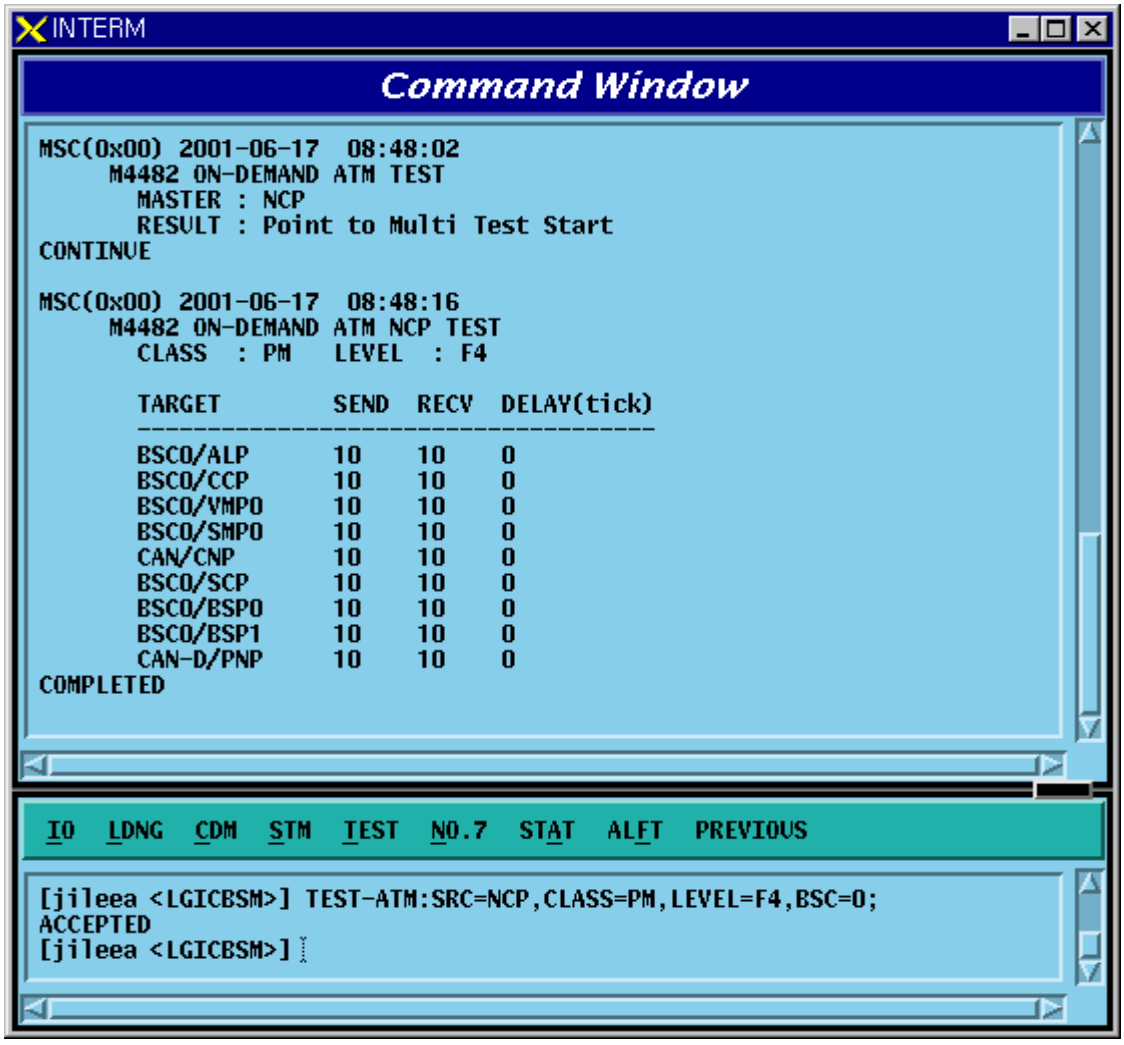


Fig. 4.5-15 Result of ATM Path(PM) Test Performance

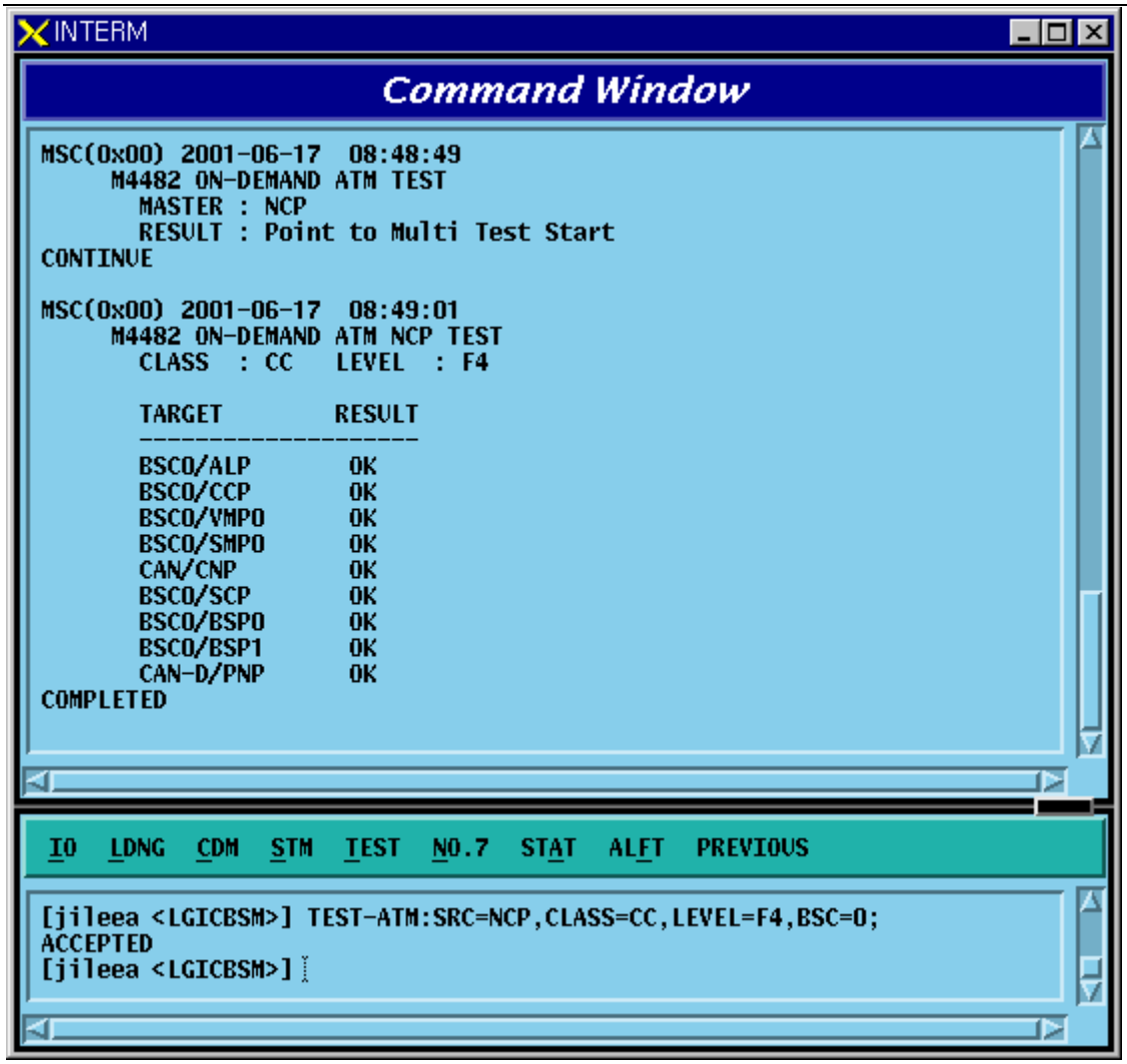


Fig. 4.5-16 Result of ATM Path(CC) Test Performance

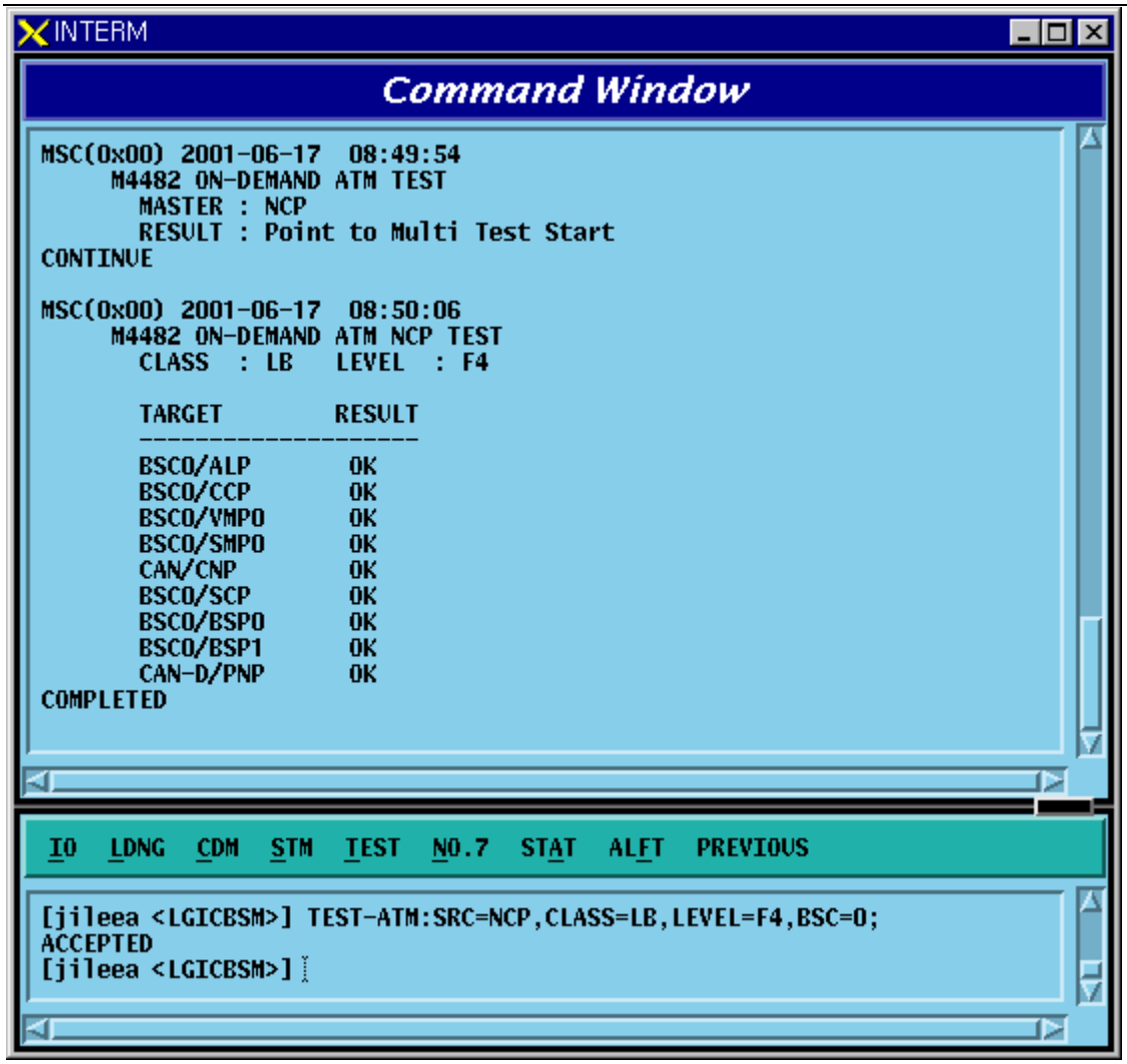


Fig. 4.5-17 Result of ATM Path(LB) Test Execution

4.5.5. Command related to BSC Virtual Call Test

General mobile call is —made by MS, BSS(BSC, BTS), switching system interworking. Because the section between MS and BSS is the place where call environment setup function and modulation and demodulation of voice data are made including allocation of call resource necessary for radio communication, it is responsible for essential function in the mobile communication system. Testing call is the function to check the following: 1) the presence of faults in call processing made between BSS and MS that excludes the MSC function in the course of mobile call processing, and 2) the quality of voice. Since it excludes the MS function to, mutual calls such as M2L, L2M, or M2M cannot be made; however, , but cantest can be perfomed by selecting one between originating and terminating call. When a testing call was set up, BSS and MS generate markov data and exchange them and by checking if there is any loss of markov data, they calculate quality of voice. Terminating call inputs IMSI value of MS to be tested in BSM and trys paging to set up a call. And Originating call sets up a call by selecting testing call function of MS. (Originating call is not related to BSM function.)

• BSC Testing Call

It checks the following: 1) if there is any faults in call processing that is carried out between BSC(SLP) – BTS(CE) - MSs and 2) the quality of voice. If a Call is attempted in BSM by inputting the the information (i.e., the number of MS, BSC number, BTS number, sector, frequency resource, MS call setup data (Station Class Mark, Slot Cycle Index), Service Option(13K Markov, 8K Markov, 13K LoopBack, 8K LoopBack), and voice packet data rate(Full, half, Quarter, Eighth , Variable rate)), then Call Link between SLP-CE-MS is set up (setup of testing call) according to the data input. Once a Call is set up, SLP and MS calculate Frame Error Rate while exchanging markov data. When a Call is set up and a Call is released, BSM displays data of call resource, FER, and reason for release.

• Service Option

Service Options of present use for Testing call at BSC include 8K Markov, 13K Markov, 8K loopback, 13K loopback .

• Markov

Once Testing Call is set up, SLP and MS synchronizes their time, and generate identical data in sequence by Markov Algorithm. SLP and MS receive each other's data and compare them with their own to detect errors in the data frame. It can obtain Forward FER(measured at MS) and Reverse FER(measured at SLP).

LoopBack: When Testing Call is set up, SLP generates voice data and sends them to MS. MS performs lookback on this data as it is and SLP compares returned data with

the original data to validate the quality of voice. (FER measured at SLP)

• Data Rate

User can designate voice data rate to be used for testing call. The data rate is divided into the following: Full rate, Half rate, Quarter rate, Eighth rate, and Variable rate.

4.5.5.1. BSC Virtual Call Setup Function

Function to designate various options and setting up Call to a specific MS or all the MSs MS to be tested should be entered to BSM DB with INS-TEST-MS command.

When TEST_KEY is not input, testing calls are set up for all the MSs stored in DB. Testing Call is attempted for 60 minutes at a maximum. Once a Call is set up, it is maintained for 60 minutes. If a call is disconnected due to the occurrence of faults, or when a user released the call at random, a message for the reason of call release is displayed.

• Command SET-TEST-CALL :BSC=a ,BTS=b ,SECTOR=c ,CDMA=d ,SCI=e ,SCM=f , OPTI=g ,DTYPE=h ,TIME=i [,TEST_KEY=j];

a: BSC number (0~11)

b: BTS number (0~47)

c: sector (ALPHA/BETA/GAMMA/DELTA/ZETA/EPSILON)

d: CDMA number (0~11)

e: SLOT CYCLE Index (0~7)

f: SLOT mode (SLOT_M, NON_SLT_M)

g: option (MKV_13K/MKV_8K/LB_13K/LB_8K)

h: Data Rate (VARIABLE/FULL/HALF/QUART/EIGHT)

i: TIME(1~60min)

j: Test Key(1 ~ 100)

• Input/Output

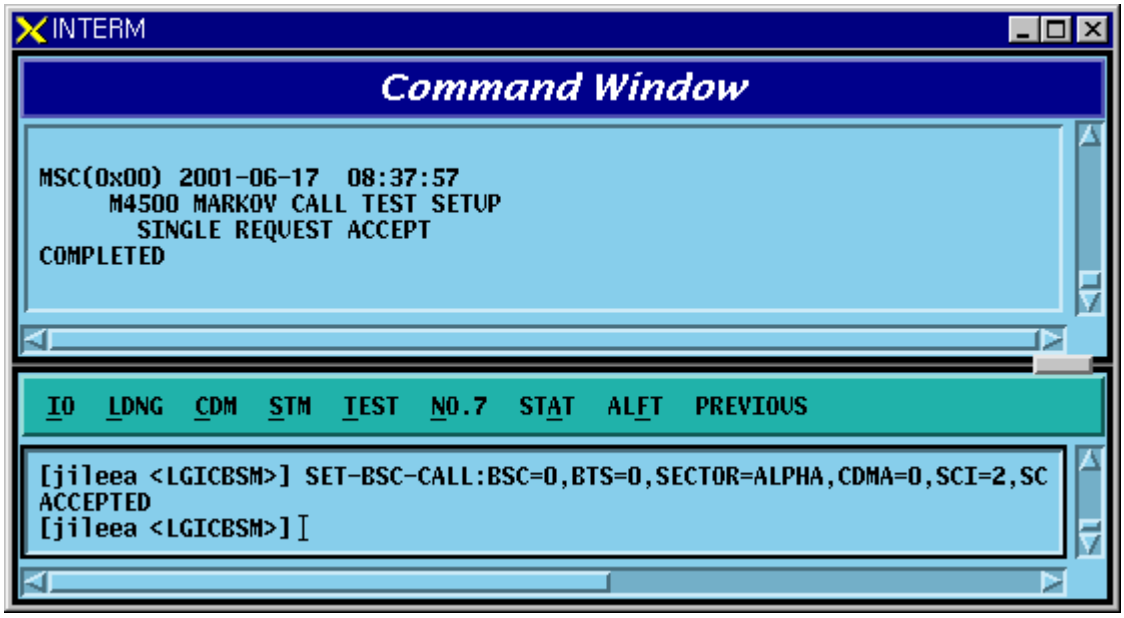


Fig. 4.5-18 BSC Virtual Call Setup Command INTERM Display

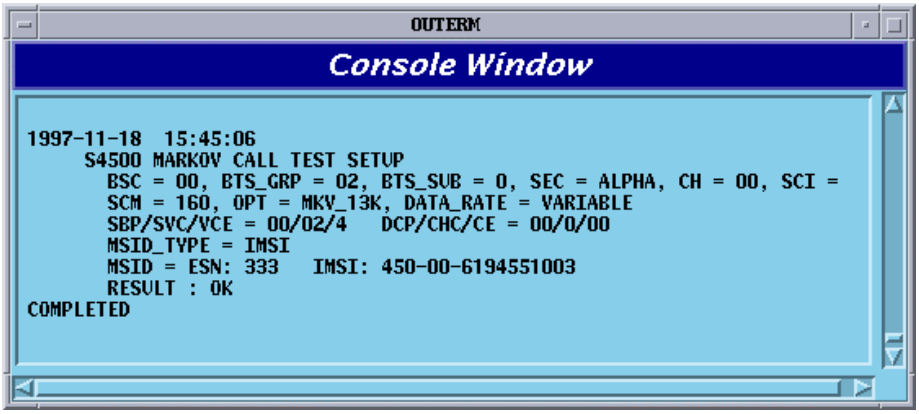


Fig. 4.5-19 Console Window Display at the setup of BSC Virtual Call

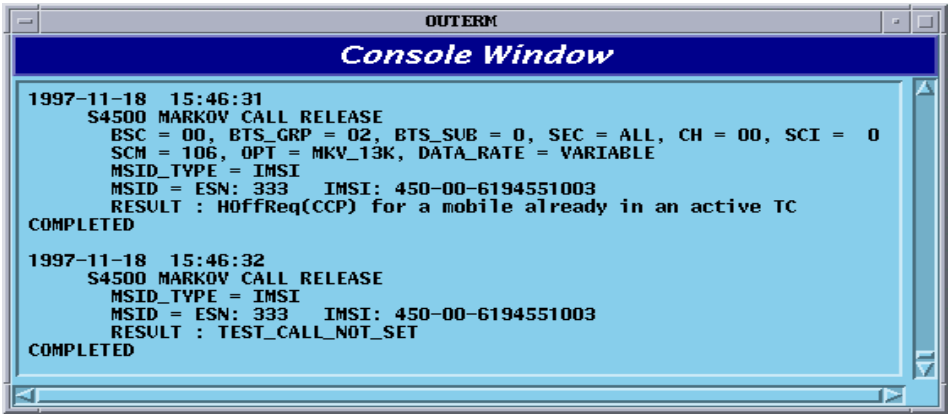


Fig. 4.5-20 Display at the Termination of BSC Virtual Call

4.5.5.2. Virtual Call Release Function

Function to release a call for a specific MS or all the MSs where a virtual call set up.

The output resulting from virtual call release is displayed by "Release by MMC".

- Command REL-TEST-CALL :BSC=a ,BTS=b [,TEST_KEY=c];

  a: BSC number (0~11)

  b: BTS number (0~15)

  c: TEST KEY(1~100)

- Input/Output

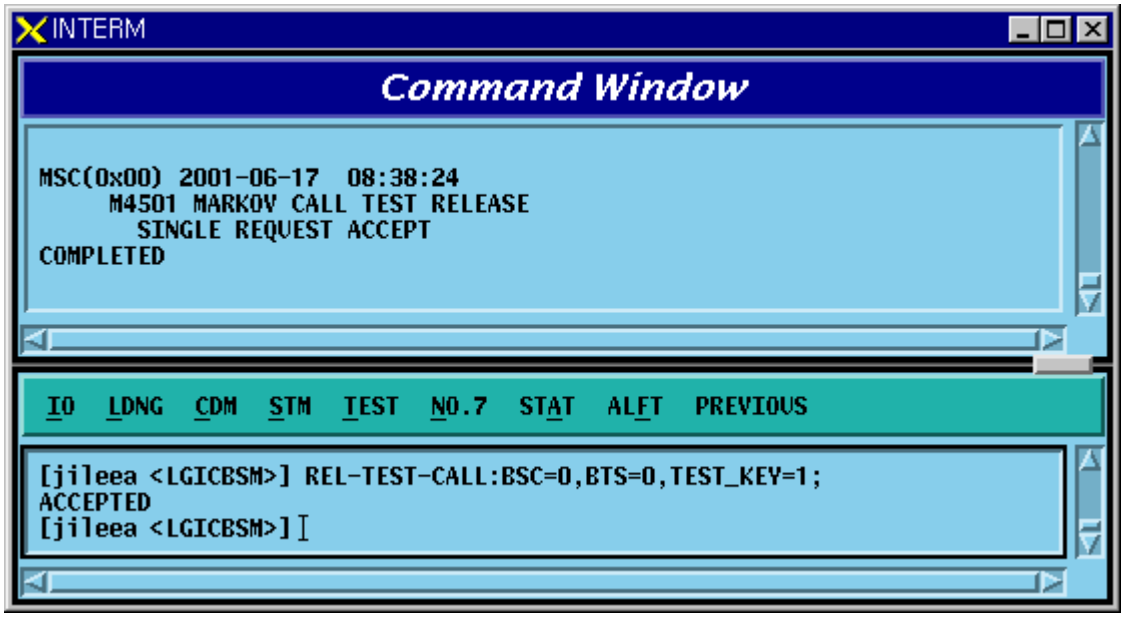


Fig. 4.5-21 Result of BSC Virtual Call Release Command Execution

4.5.5.3. Testing MS Display Function

Function to display MSs to be used for the BSC Virtual Call test.

- Command DIS-TEST-MS :BSC=a ,BTS=b;

  a: BSC number (0~11)

  b: BTS number (0~47)

- Input/Output

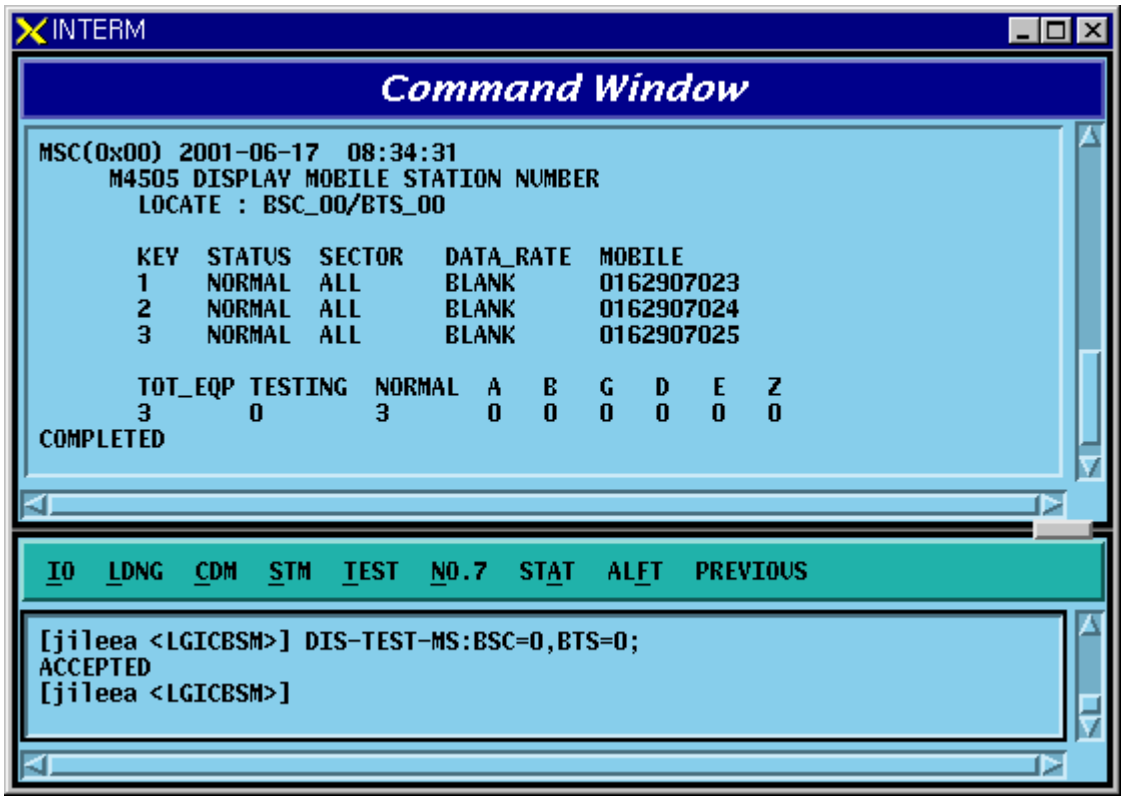


Fig. 4.5-22 Presently registered Testing MS Display

4.5.5.4. MS Supplementary Function

Function to register MS to be used for the BSC Virtual test.

For a test of virtual call, first register MS.

• Command INS-TEST-MS :BSC=a ,BTS=b ,TEST_KEY=c [,MSIN=d];

a: BSC number (0~11)

b: BTS number (0~47)

c: TEST KEY(1~100)

d: IMSI of MS

• Input/Output

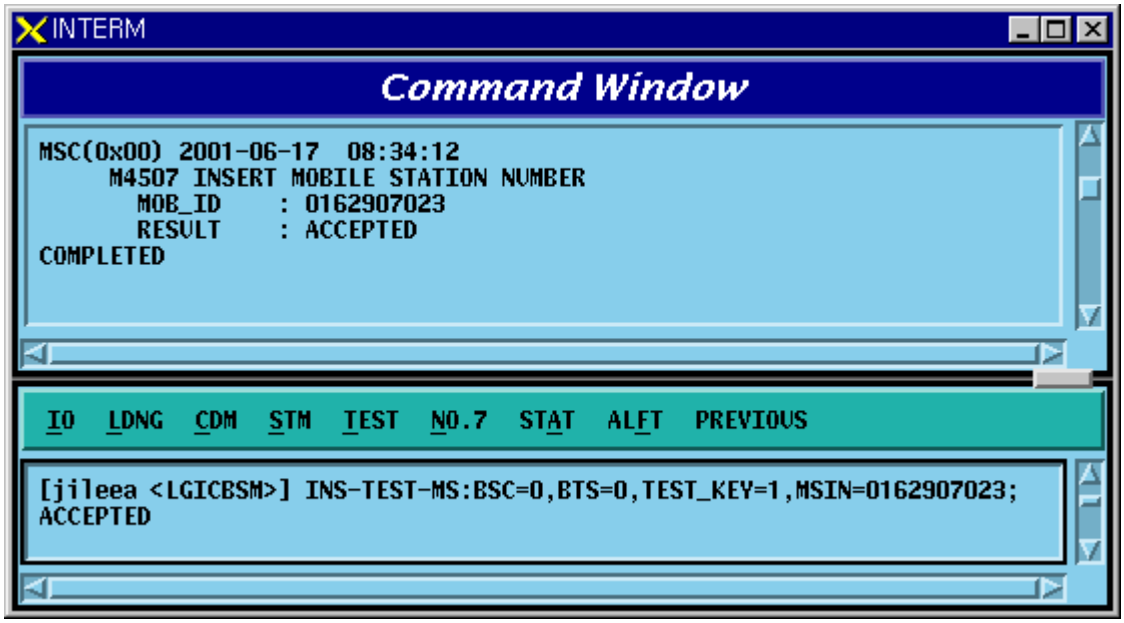


Fig. 4.5-23 Testing MS Insert Result Display

4.5.5.5. MS Delete Function

Function to delete MS registered on the test list of BSC Virtual Call

- Command DEL-TEST-MS :TEST_KEY=a;

  a: TEST_KEY of Mobile to be deleted

- Insert/Output

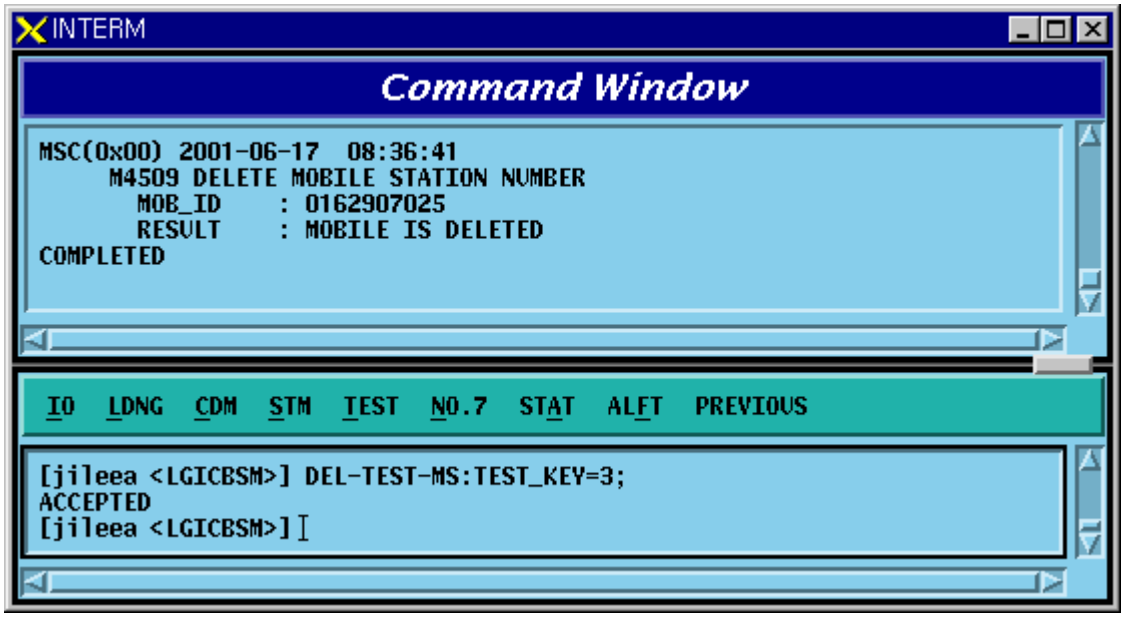


Fig. 4.5-24 Delete MS Execution Result

4.5.6. TRAFFIC PATH TESTING FUNCTION

it is a test enabling to decide if there is presence of failure with designated traffic path by setting a traffic path for BSC virtual call for a specific MS with the designated call resources and then measuring PER.. The kinds of virtual call include Markov and Loop Back., There are 8K and 13K respectively by service option. Call resources that the user can designate are as follows: Selector Slave Processor, Trunk, and BTS channel Chip. In one BSC, 100 virtual calls can be set up simultaneously separated from testing function of virtual call. Once a call is set up, a message type which is identical to the message type coming from BSC virtual call setup process is displayed.

4.5.6.1. Traffic Path Testing Setup Function

Function to set up a Call for the designated Traffic Path

- Command SET-PATH-CALL : IMSI=a , BSC=b , SMP=c , SLP=d , SLPSLV = e [,TRK = f], BTS= g ,SECTOR = h ,CDMA = i ,RCP= j , MCPA=k , CHIP=l , SCI=m , SCM=n , OPTI=o , DTYPE=p [,TIME=q];

  a : IMSI

  b : BSC_Number(0~11)

  c : SMP_Number(0~4)

  d : SLP_Number(0~19)

  e : SLP_Slave_Number(0~3)

  f : Trunk_Number(0~19)

  g : BTS_Number(0~47)

  h : Sector_Id(0~5)

  i : CDMA_Channel_Number(0~11)

  j : RCP_Number(0~9)

  k : MCPA_Number(0~9)

  l : CHIP_Number(0~1)

  m : Slot_Cycle_Index(0~7)

  n : Station_Class_Mark(SLOT_M, NON_SLT_M)

  o : Service_Option(MKV_13K, MKV_8K, LB_13k, LB_8K)

  p : Test_data_Type(VARIABLE, RATE_FULL, RATE_HALF, RATE_QUAR, RATE_EIGHT)

  q : TRACE_TIME(1~60min)

- Input/Output

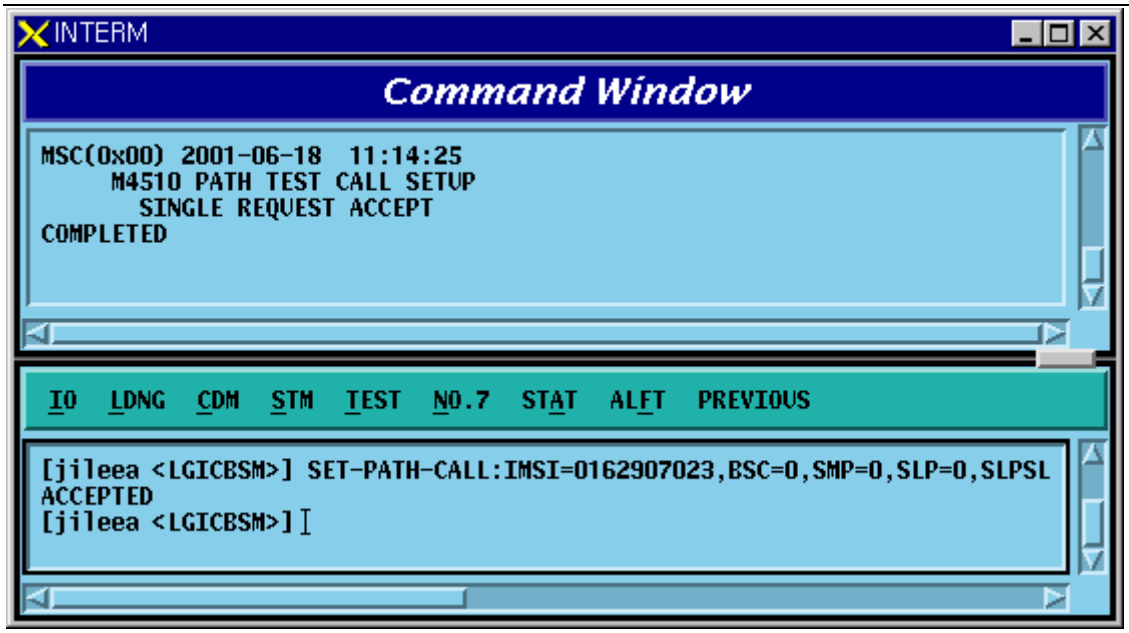


Fig. 4.5-25 Traffic Path Setup Command Execution Result Display(Interm Window)

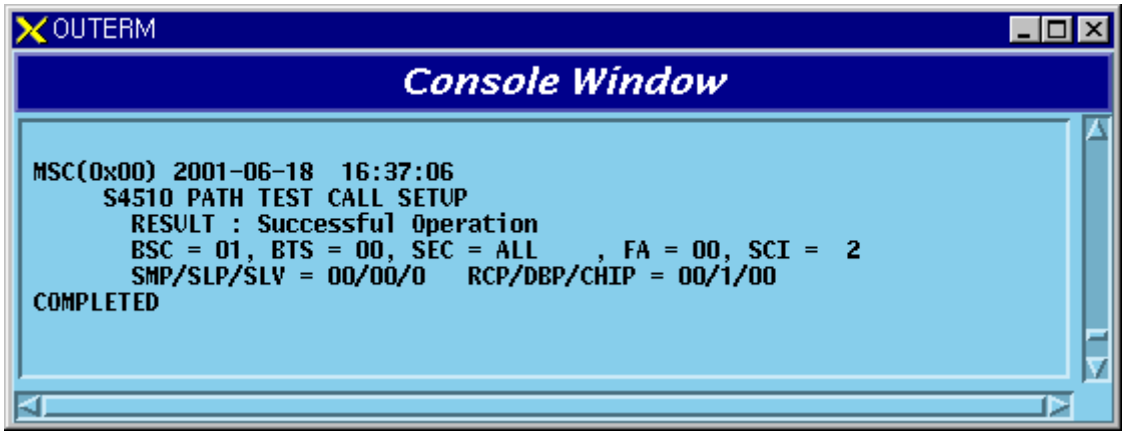


Fig. 4.5-26 Traffic Path Setup Command Execution Result Display(Console Window)

4.5.6.2. Traffic Path Release Function

Function to release a Call to MS of a specific BSC, BTS where a virtual call is set up.

- Command REL-PATH-CALL :BSC=a ,BTS=b;

  a: BSC number (0~11)

  b: BTS number (0~15)

- Input/Output

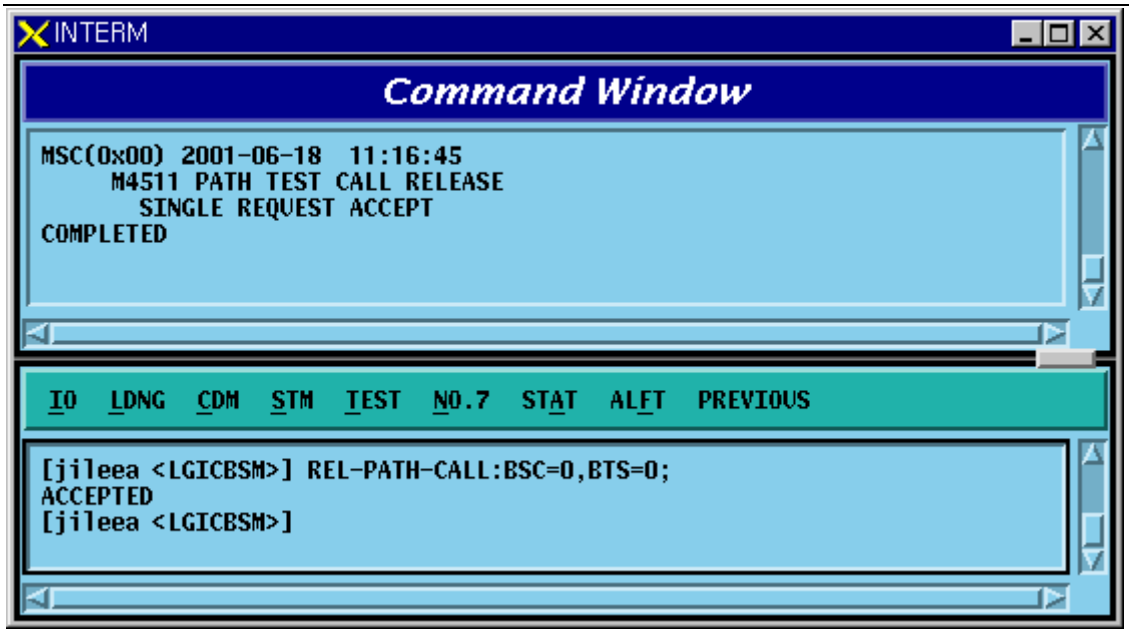


Fig. 4.5-27 Traffic Path Release Command Execution Result Display(Interm Window)

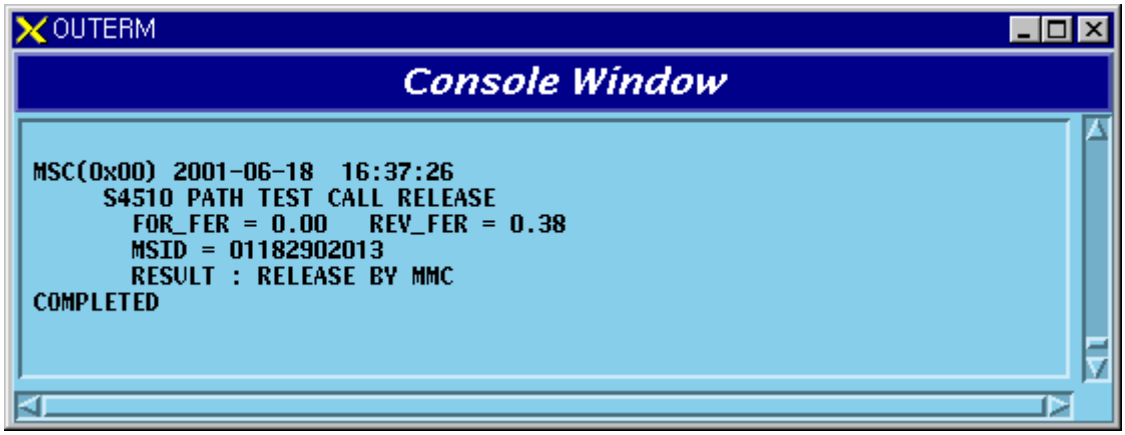


Fig. 4.5-28 Traffic Path Release Command Execution Result Display(Console Window)

4.5.7. Call Trace Testing Function

Mobile Call Trace Function traces the process of call setup for the MS, surveillance of the status after the call setup, the process of call release, and displays the content visibly to BSM after BSM of User's terminal designates a Mobile Station(MS) at random by using a value of MSIN(Mobile Station Identification Number). . The designated Mobile Station(MS) can trace the originating call or terminating call that was set up by the user and if necessary, it sets up Markov call(i.e., a terminating Markov call by paging) for tracing. Mobile call tracing can be performed to all kinds of calls(Voice Call, Data Call, HandOff Call) and can designate maximum two calls simultaneously for tracing. Information provided upon call tracing is as follows:

Tracing Information when Call is set

Resource of Call to be set

System Resource: BSC No, BTS No, Sector No, PN Offset

Attributes of Call: IMSI, ESN, Service Option, Call Type(Voice Call originating, Voice Call terminating, DATA Call initial set, DATA Call Reactivation by MS, DATA Call Reactivation by Network), Terminating number

BTS Resource: CDMA CH(Frequency) No, TC No(RCP#, MCPA#, CE#),
Code CH(Walsh code), Frame Offset

BSC Resource: SLP, VCE Number, CIC(Circuit Identifier Code)

Setup Process

Message display between processors during Call Setup: Visible Display of Call Flow

During Call Setup, display RTD(Round Trip Delay) value and calculated distance by using this.

When Call Failure occurs, display reason value and its meaning

Call Set Time by section

Tracing Information at the phase of calling after Call Setup: Tracing and Display at intervals of 1 ~ 5 seconds.

Elements of Communication Quality

Forward FER(Frame Error Rate): Present FER, Total FER

Backward FER(Frame Error Rate): Present FER, Total FER

Power Control Parameter: TC Gain, Reverse Power Control Threshold

Location Estimate Elements

Present Active PN Offsets Aggregation : BSC No, BTS No, Sector, Cdma Ch, Walsh_ch, TC Id, RTD

Present RTD Value and calculated distance by using this

Tracing Information at the phase of Call Release: Tracing it every time at the normal release or abnormal release

Reason for Call Release

Reason for Call Release and its content: Display reason value and its meaning

Quality Elements of Call

Forward Total FER(Frame Error Rate)

Backward Total FER(Frame Error Rate)

4.5.7.1. Call Trace Start/End Function

Function that starts/ends Call Trace with MS designated at random.

- Command TRC-CALL : IMSI=a, ITEM=b,BSC=c;
  - a: IMSI Number
  - b: Start / Stop
  - c: BSC ID
- Input/Output

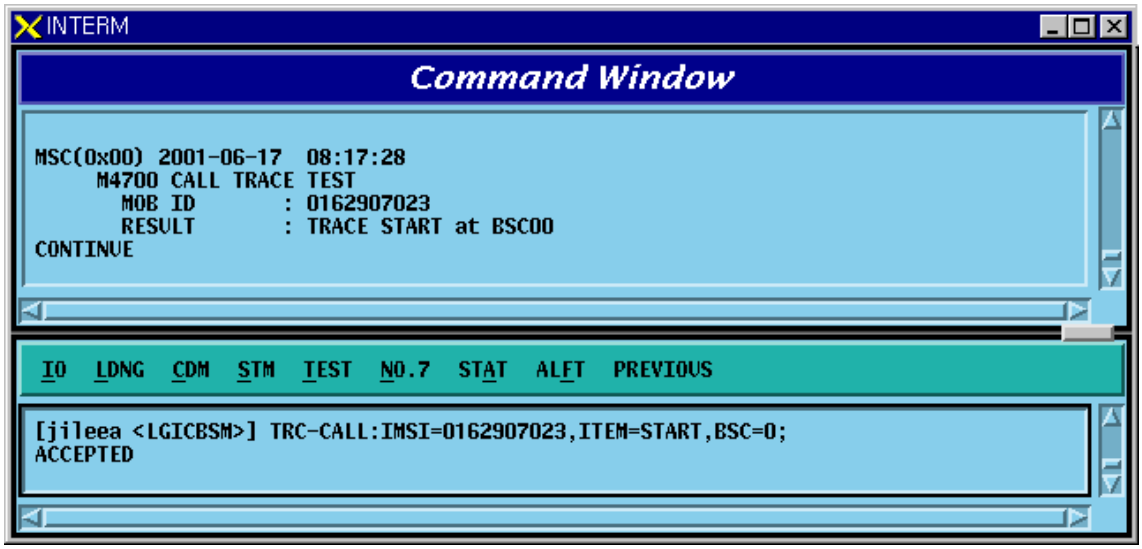


Fig. 4.5-29 Call Trace Start Command Input Screen

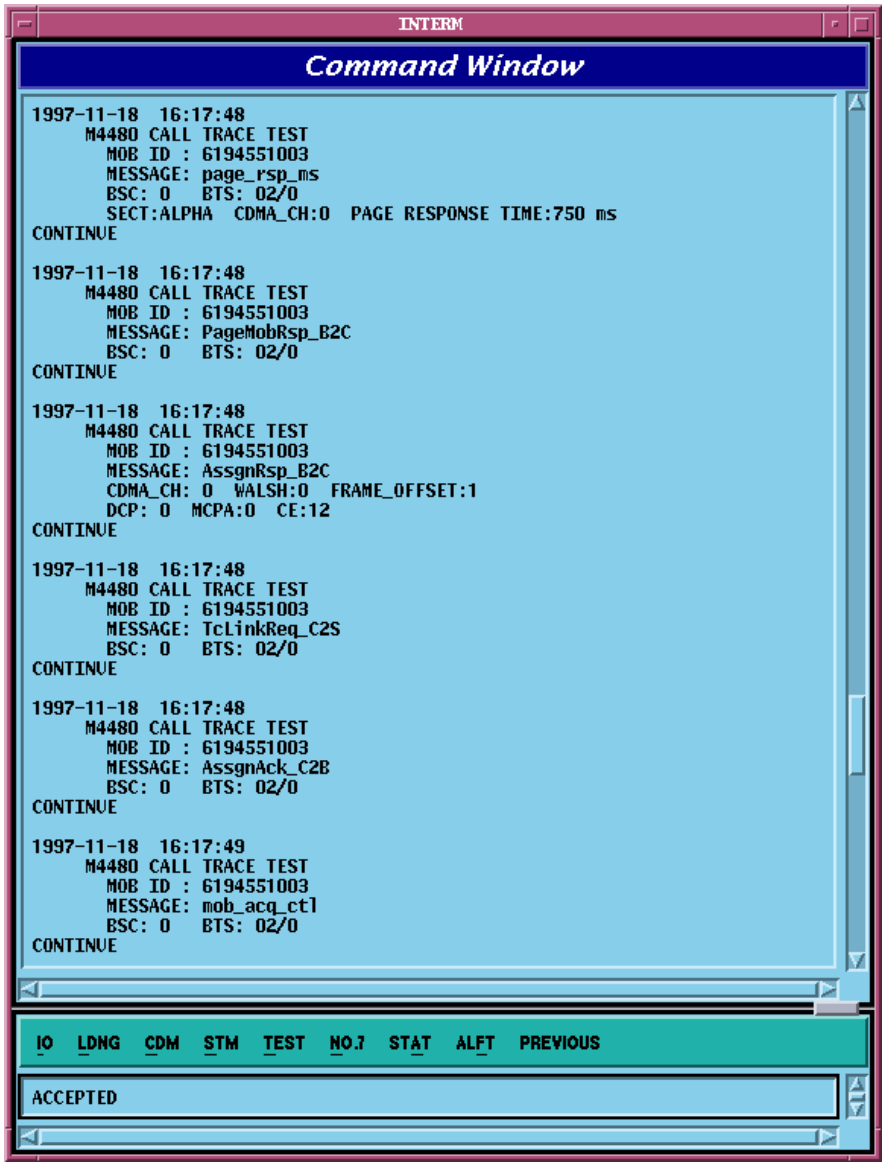


Fig. 4.5-30 Call Trace Display in the Process of Call Set

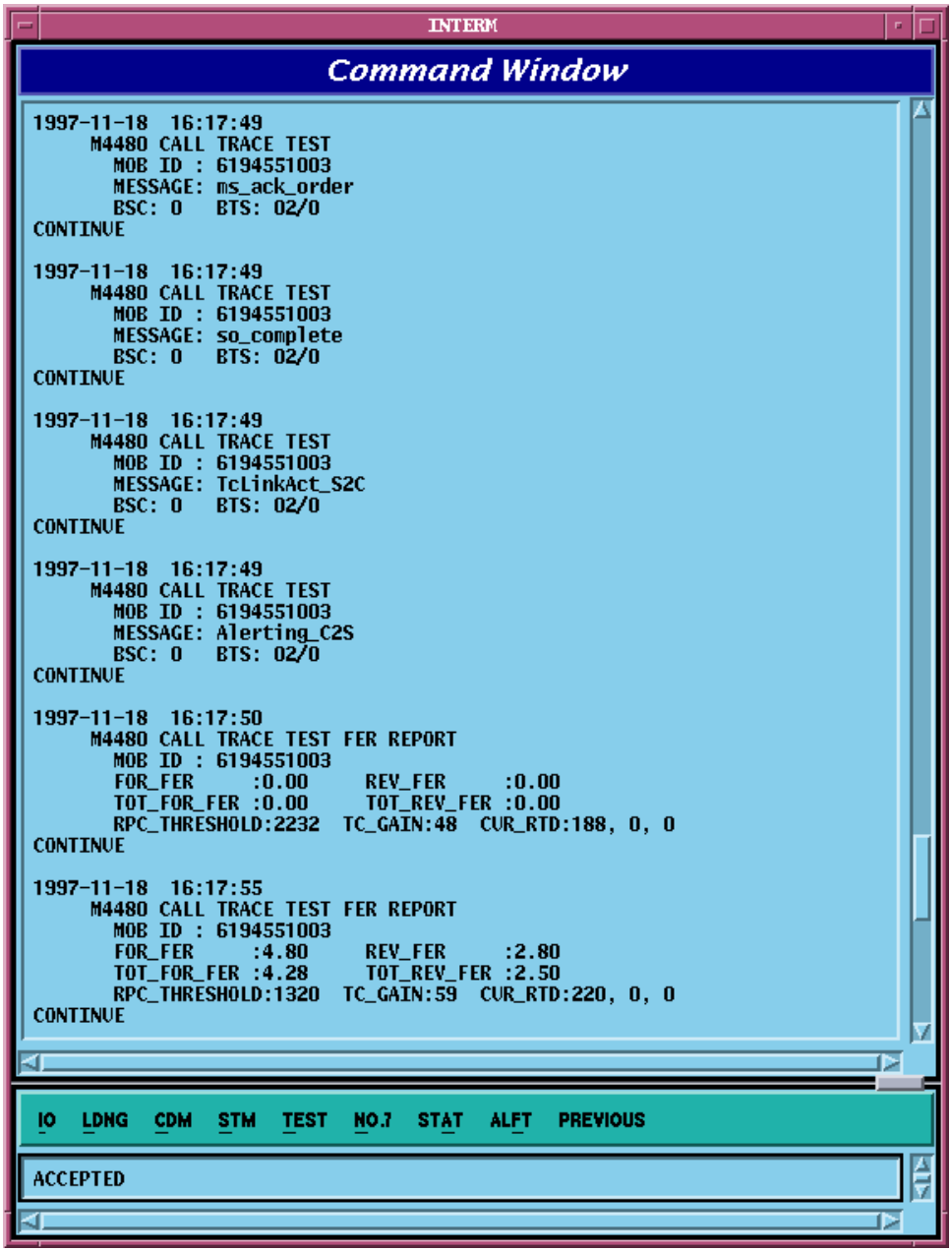


Fig. 4.5-31 Display of Call Set Process and Elements of Communication Quality

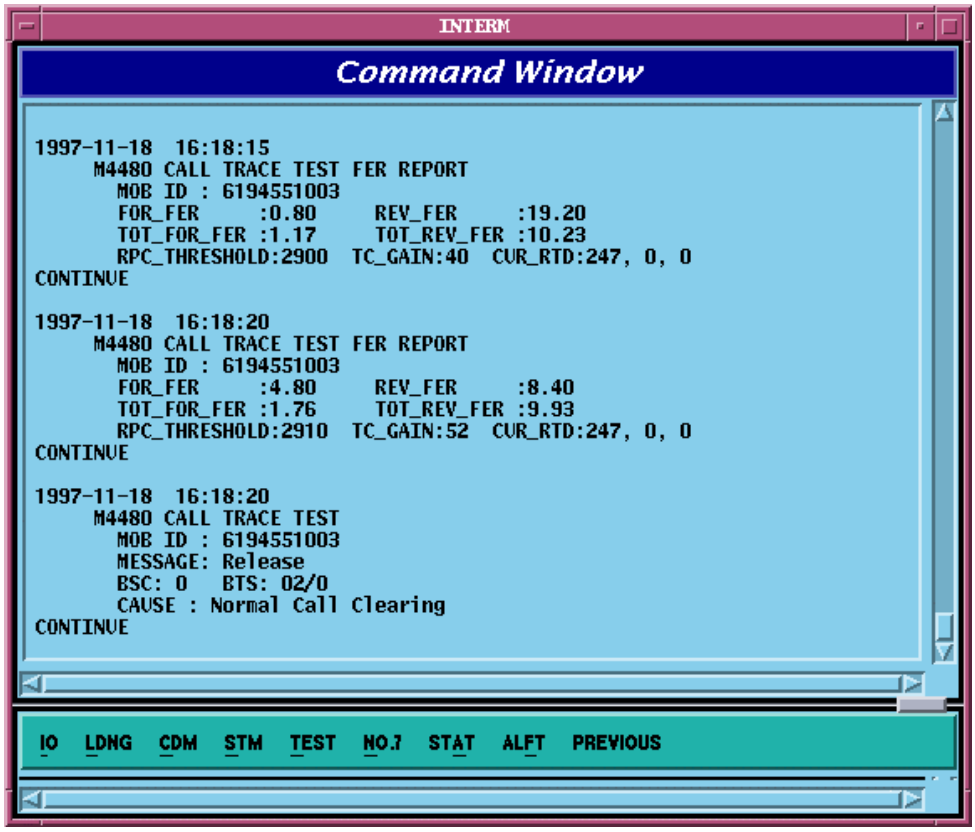


Fig. 4.5-32 Display of Communication Quality and Release Reason

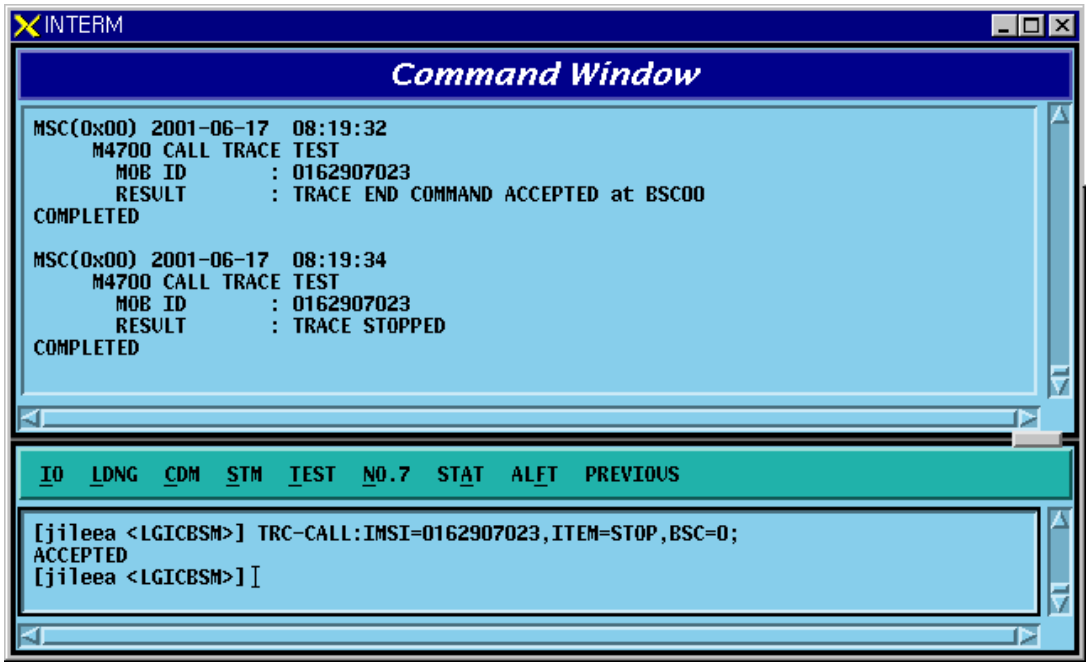


Fig. 4.5-33 Call Trace Stop Result

4.5.7.2. Call Trace MS Display Function

Function to display MS that currently uses the mobile call tracing function.

- Command DIS-TRC-MS;
- Input/Output

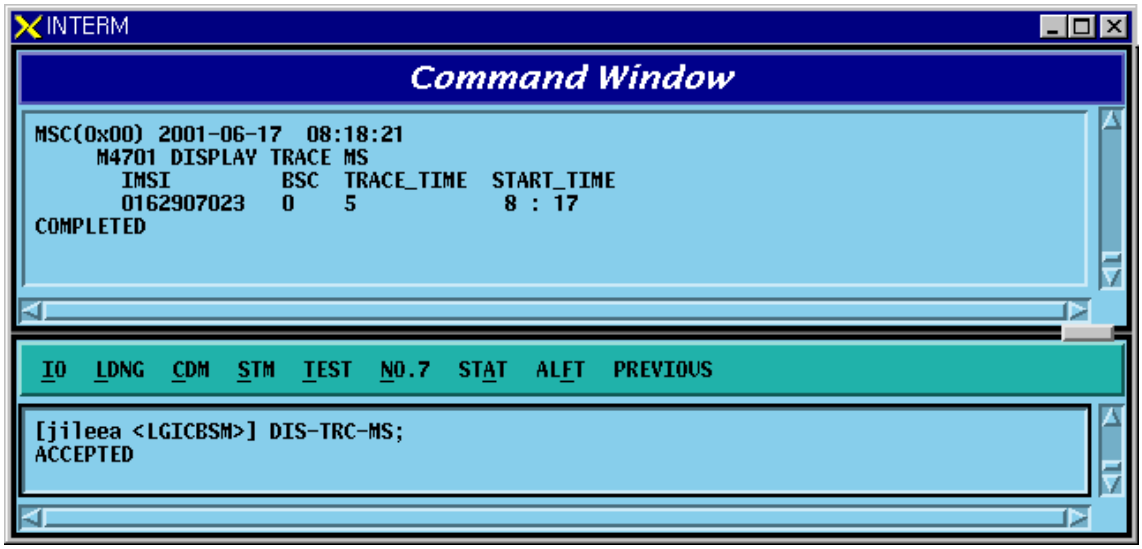


Fig. 4.5-34 Terminal Display in use of Call Trace

4.5.8. Number of Data Call User Display Function (Active/Dormant)

Function to display Number of Data Call by Active/Dormant

- Command DIS-DATA-CALL:PCP=a;

  a: PCP Number(0~2)

- Input/Output

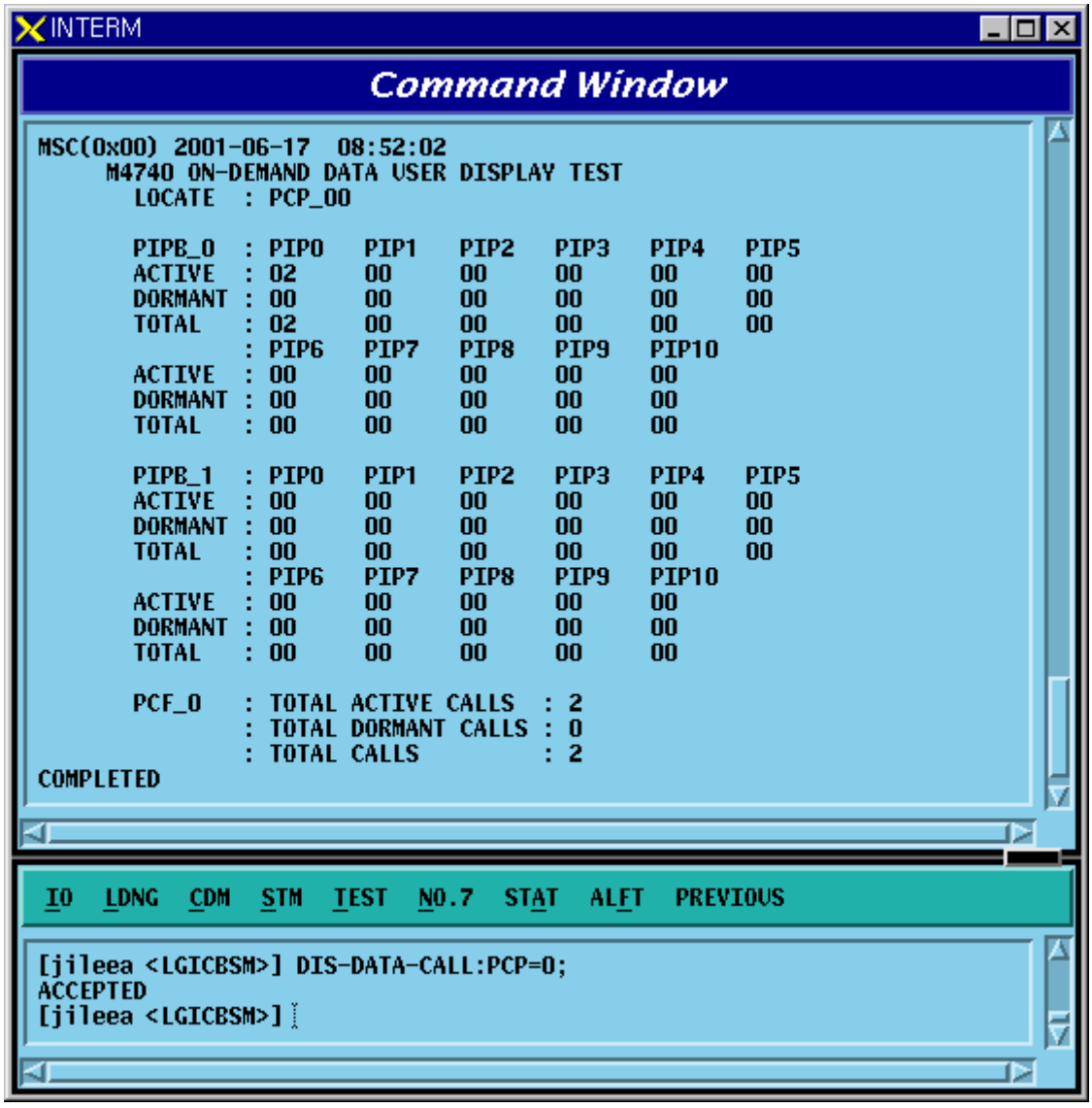


Fig. 4.5-35 Result of the Number of DATA Call User Display

4.5.9. DATA Call User Status Display Function by IMSI

Command DIS-DATA-STS:PCP=a,IMSI=b;

a: PCP Number(0~2)

b: IMSI of MS

- Input/Output

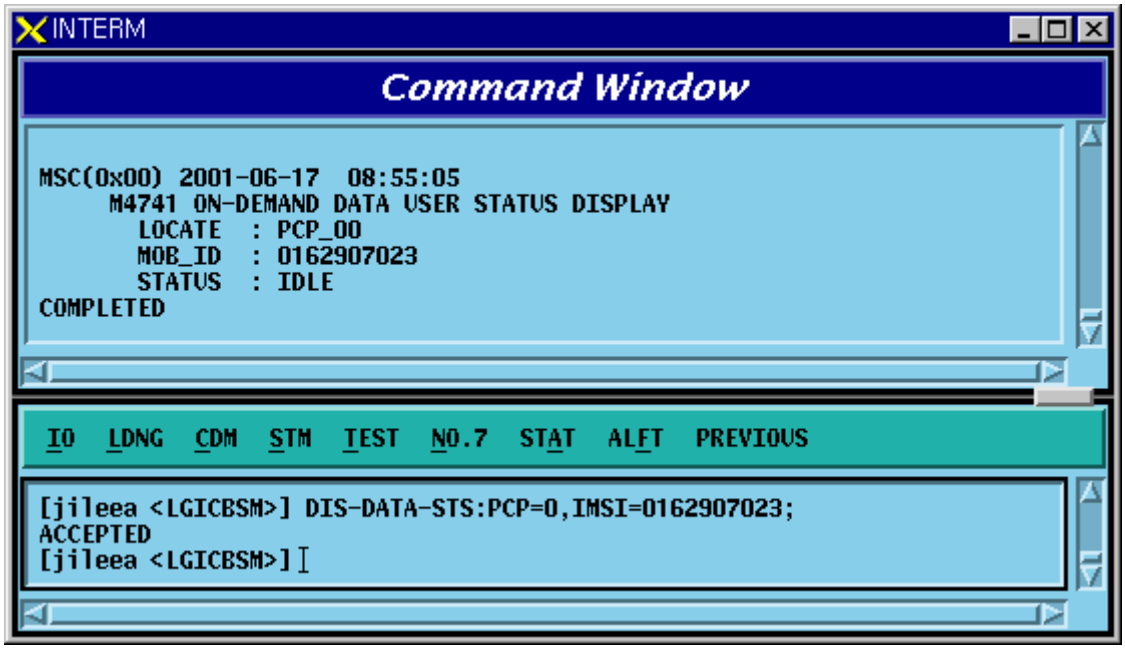


Fig. 4.5-36 Result of DATA Call User Status Display by IMSI

4.5.10. IOS Message Display Function

This function is operated by inputting the IMSI of MS to trace, duration, etc in BSM and displays IOS trace information for all kinds of calls that MS attempts as visible information in text format in the BSM.

- Command TRC-IOS : MS=a, BSC=b, FLAG=c, DURATION=d
  - a: MS Number
  - b: BSC ID(0~11)
  - c: Start/Stop
  - d: Trace Duration Time
- Input/Output

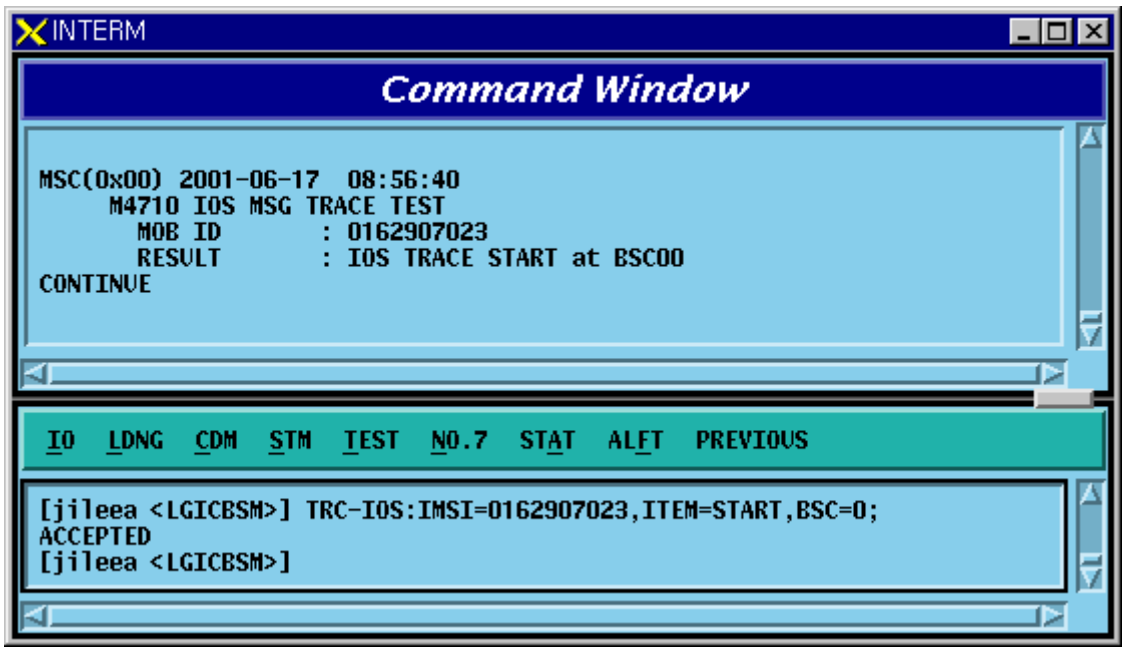


Fig. 4.5-37 IOS Message Display START Result

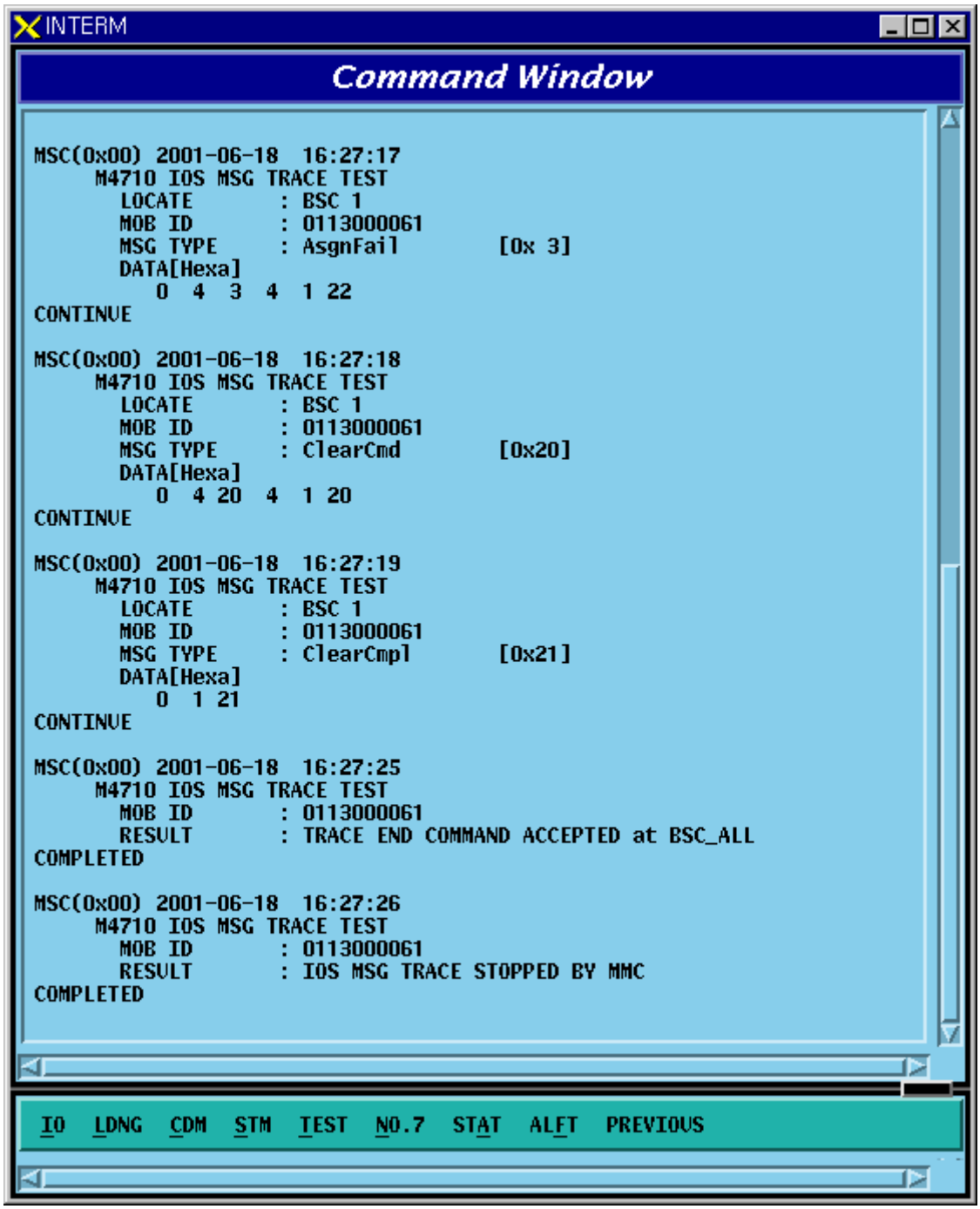


Fig. 4.5-38 IOS Display Message

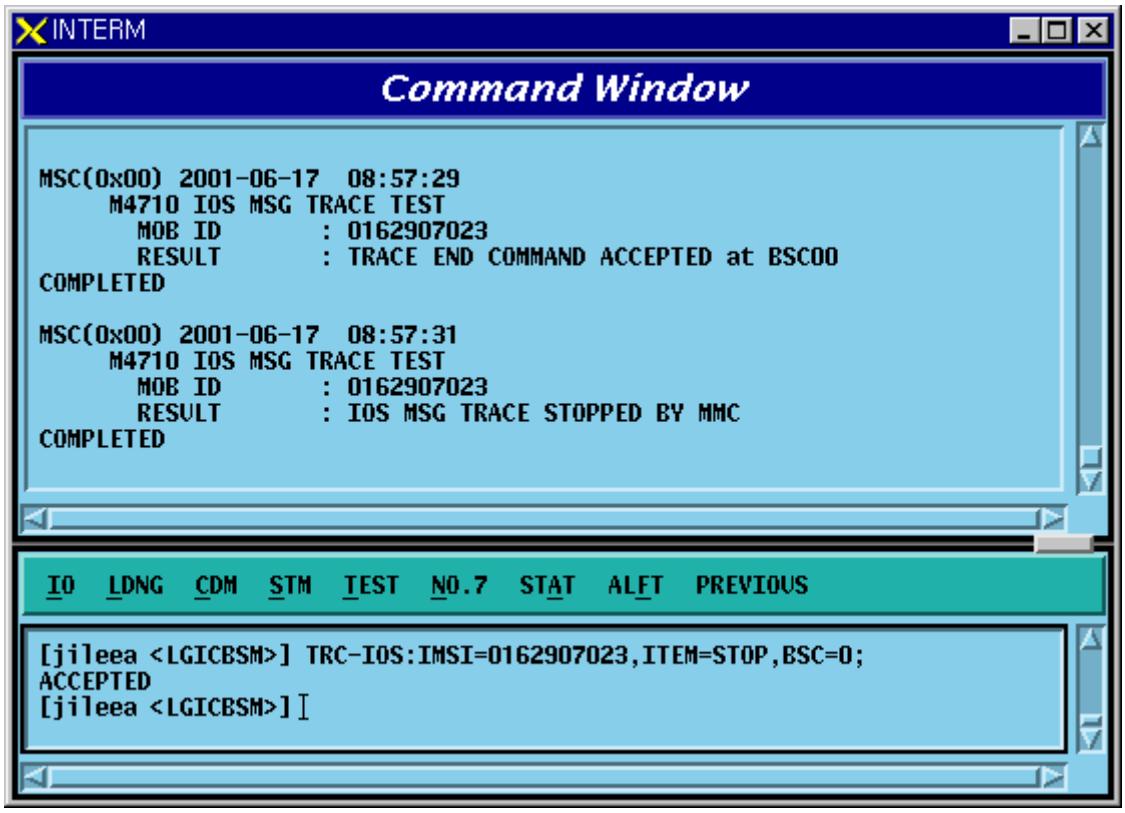


Fig. 4.5-39 STOP Result of IOS Message Display Function

4.5.11. POWER MONITORING Function

Function to check the BTS power control in BSM

- Command DIS-BTS-PWR:BSC=a,BTS=b,ITEM=c,[TIME=d]:

  a: BSC ID(0~11)

  b: BTS ID(0~47)

  c: Stop/Start

  d: Duration Time(1~100 min)

- Input/Ouput

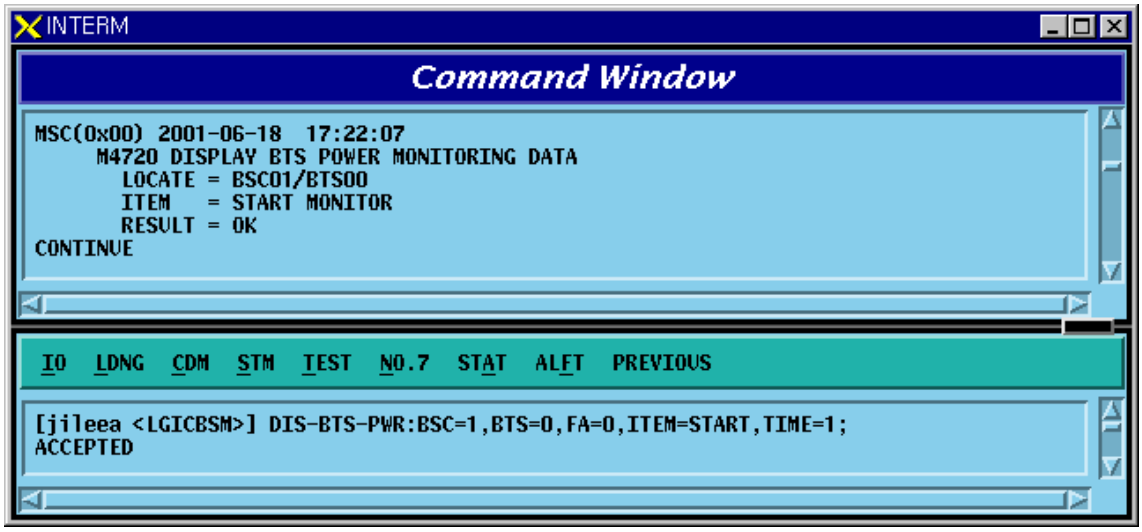


Fig. 4.5-40 Power Monitoring START Result

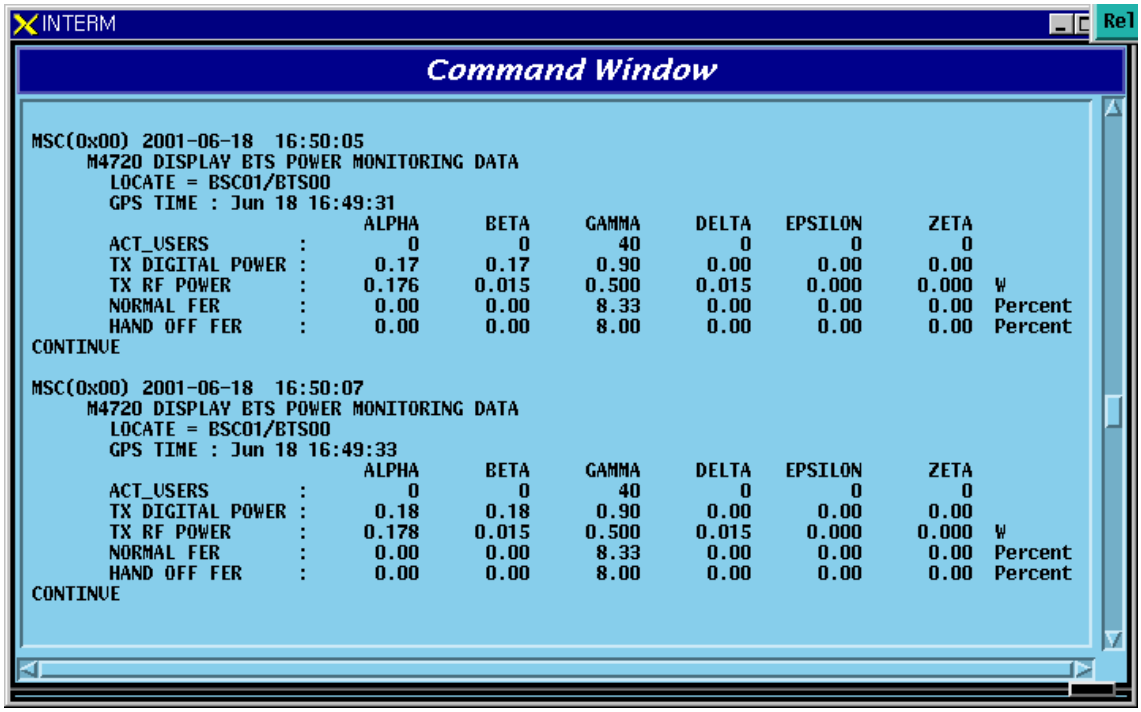


Fig. 4.5-41 Power Monitoring Result

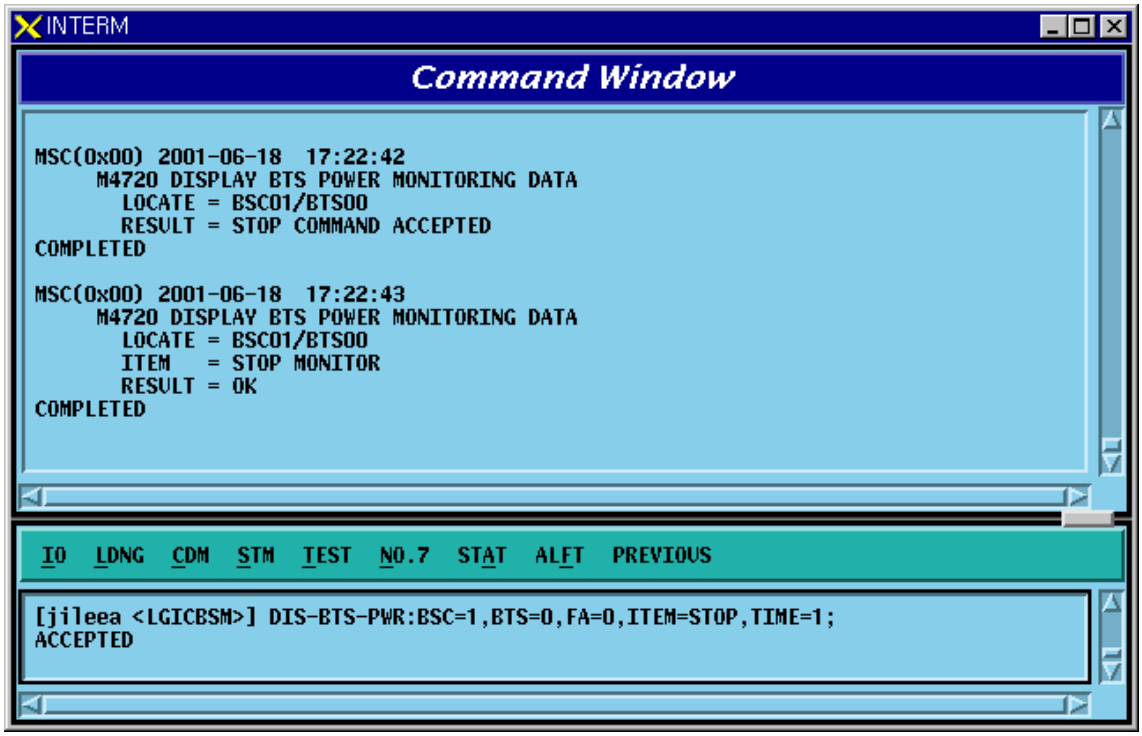


Fig. 4.5-42 Power Monitoring STOP Result

4.6. No.7 Command

The function of BSM No.7 is to manage parameter information necessary for the operator to operate No.7. It is divided into the following function: 1) signaling link operation management and 2) the signaling link maintenance. The former is composed of the following: signaling point management function, signaling link set management function, signaling link management function, signaling terminal management function, signaling data management function, and SCCP management function. The latter is composed of signaling link and signaling terminal test, and signal link inhibit.

4.6.1. Related Command

4.6.1.1. Commands for Signaling Link Operation and Management Function

Table 4.6-1 Commands related to Signaling Point Management

Commands	Description
DIS-SP-INFO	Signaling Point Information Display
CHG-OSP	Change of Intra-Switching Office Signaling Point
CHG-SP	Change of Signaling Point

Table 4.6-2 Commands related to Signaling Link Set

Commands	Description
ACT-LKS	Signaling Link Set Activation
DACT-LKS	Signaling Link Set Deactivation

Table 4.6-3 Commands related to Signaling Link

Commands	Description
CRET-SLK	Signaling Link Create
DEL-SLK	Signaling Link Deletion
ACT-SLK	Signaling Link Activation
DACT-SLK	Signaling Link Deactivation

DIS-SLK-INFO	Signaling Link Information Display
INH-SLK	Signaling Link Barring
ALW-SLK	Signaling Link Barring Release

Table 4.6-4 Commands related to Signaling Terminal

Commands	Description
CRTE-ST	Signaling Terminal Definition(Create)
DEL-ST	Signaling Terminal Deletion
DIS-ST-INFO	Signaling Terminal Information Display

Table 4.6-5 Commands related to Signaling Data Link

Commands	Description
CRTE-SDLK	Signaling Data Link Definition(Create)
DEL-SDLK	Signaling Data Link Deletion
DIS-SDLK-INFO	Signaling Data Link Information Display

Table 4.6-6 Display Commands for SCCP Data

Commands	Description
DIS-SCCP-NET	SCCP Network Configuration Data Display
DIS-SCCP-LSS	SCCP Intra-Switching Office Sub-system Status Data Display

Table 4.6-7 Signaling Link Status Display Commands

Commands	Description
DIS-SLK-STS	Signaling Link Status Display
DIS-ST-STS	Signaling Terminal Status Display
DIS-LKS-STS	Signaling Link Set Status Display

Table 4.6-8 Commands related to Timer

Commands	Description
DIS-MTP2-TMR	MTP L2 Timer Display
CHG-MTP2-TMR	MTP L2 Timer Change
DIS-MTP3-TMR	MTP L3 Timer Display
CHG-MTP3-TMR	MTP L3 Timer Change
DIS-SCCP-TMR	SCCP Timer Change
CHG-SCCP-TMR	SCCP Timer Change

4.6.1.2. Commands for Signaling Link Maintenance Function

Table 4.6-9 Test Related Commands

Commands	Description
TEST-SLK	Signaling Link Test
TEST-ST	Signaling Terminal Test
DIS-No7-CYC	Test Cycle Display
CHG-No7-CYC	Test Cycle Change

Table 4.6-10 Status Suppression Related Commands

Commands	Description
DIS-INH-NO7	Displayable Status Message Display
ALW-N07-MSG	Status Message Display Possible
INH-NO7-MSG	Status Message Display Suppression

4.6.2. Signaling Link Operation Management Function

4.6.2.1. Signaling Point Information Display

Display the Status of Signaling Point of local Switching Office and that of Intra-Switching Office.

Command DIS-SP-INFO:BSC_ID=a

a = BSC Number (00 ~ 11)

Input DIS-SP-INFO:BSC_ID=0;

Output

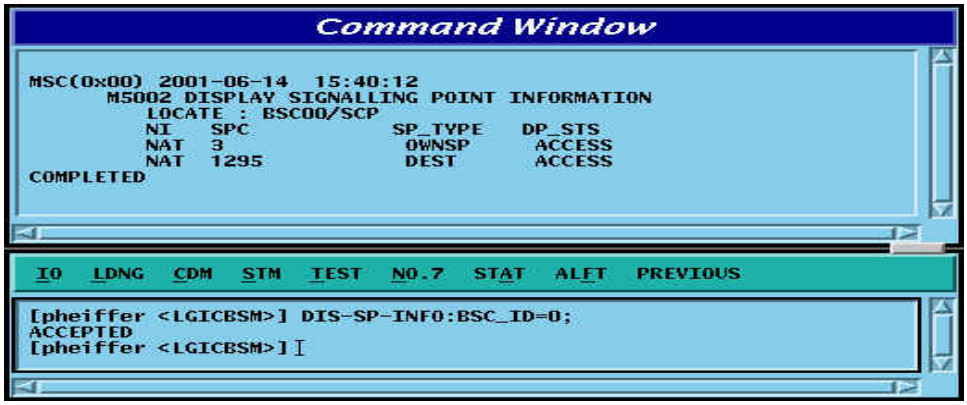


Fig. 4.6-1 Signaling Point Information Display

4.6.2.2. Change of Intra-Switching Office Signaling Point

It changes Information for Intra-Switching Office Signaling Point.

Command CHG-OSP:BSC=a,OSP_NUM=b;

a = BSC Number(00 ~ 11)

b= OSP Number (00 ~ 65535)

Input CHG-OSP:BSC_ID=0,OSP_NUM=5;

Output

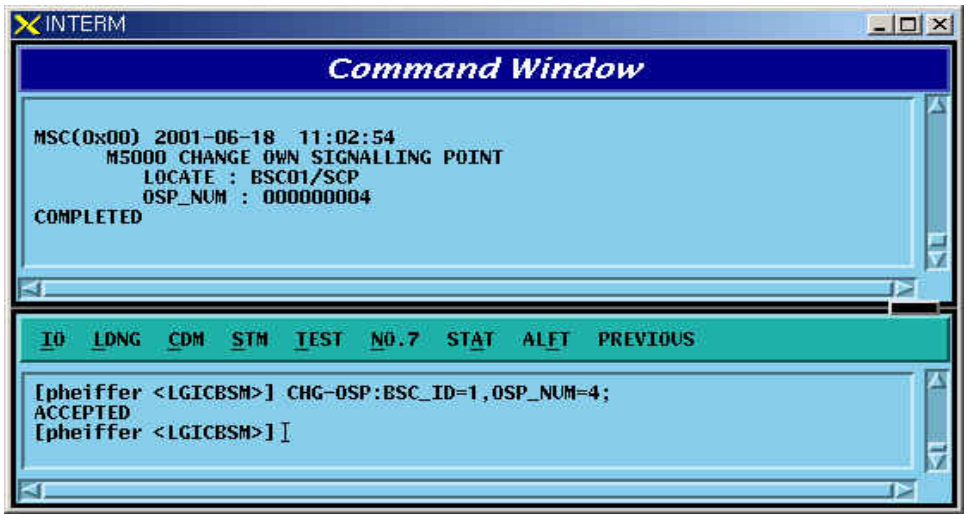


Fig. 4.6-2 Change of Intra-Switching Office Signaling Point

4.6.2.3. Change of Local Switching Office Signaling Point

It changes Signaling Point of Local Switching Office.

Command CHG-SP-INFO:BSC_ID=a, SP_NUM=b

b = SP Number (00 ~ 65535)

Input CHG-SP-INFO:BSC_ID=0,SP_NUM=1038

Output

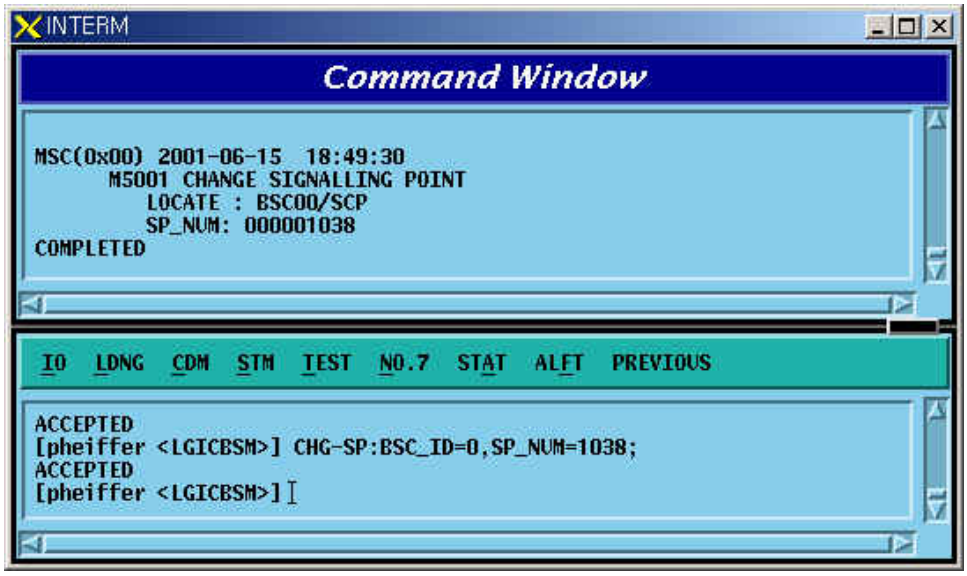


Fig. 4.6-3 Change of Remote Switching Office Signaling Point

4.6.2.4. Activation of Signaling Link Set

Signaling Link Set indicates an aggregation of signaling links(Max 16 units). Activation of Signaling Link Set is to put all the defined Signaling Links in a in-service status.

Command ACT-LKS:BSC_ID=a

a = BSC Number (00 ~ 11)

Input ACT-LKS:BSC_ID=0;

Output

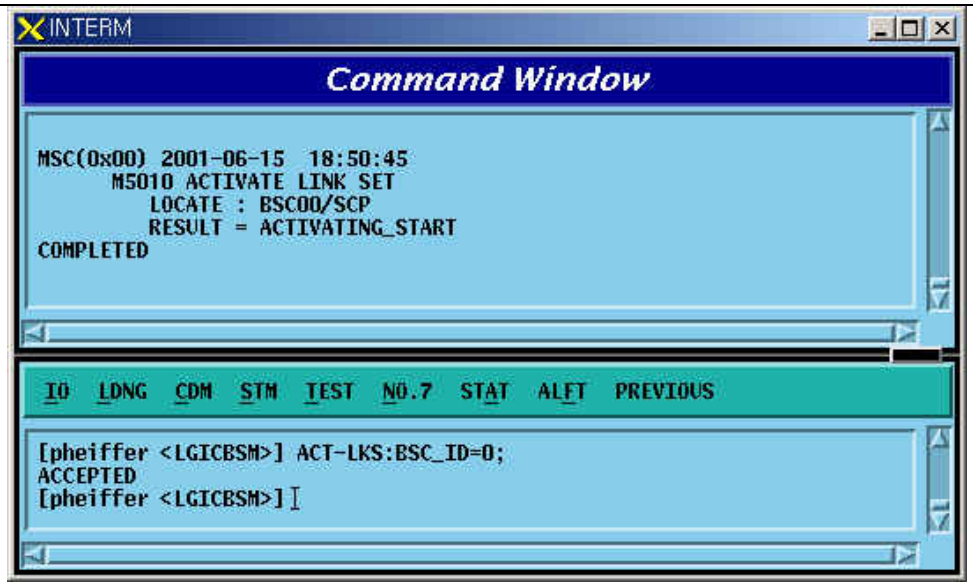


Fig. 4.6-4 Activation of Signaling Link Set

4.6.2.5. Deactivation of Signaling Link Set

Function that puts all the defined Signaling Links in out-of-service status

Command DACT-LKS:BSC_ID=a;

a = BSC Number (00 ~ 01)

Input DACT-LKS:BSC_ID= a;

Output

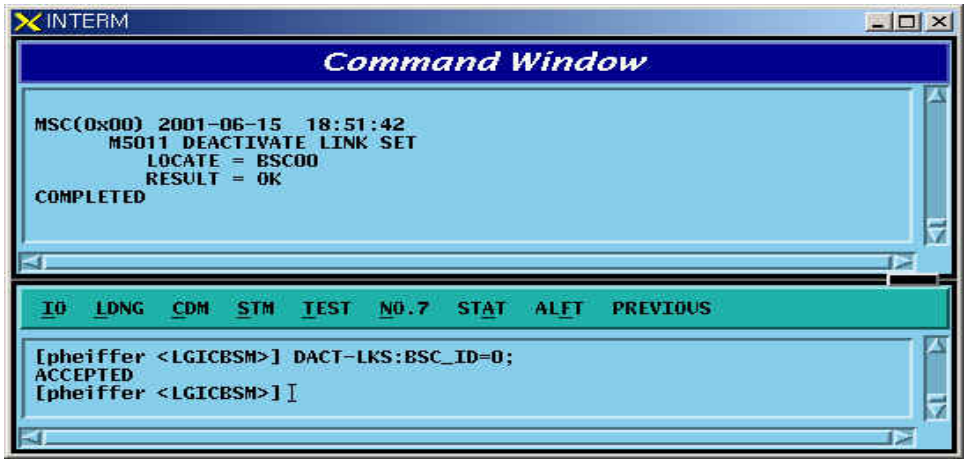


Fig. 4.6-5 Deactivation of Signaling Link Set

4.6.2.6. Signaling Link Generation

Signaling Link is the concept combing Signaling Data Link with Signaling Terminal. It connects Intra-Switching Office Signaling Point to local switching Office Signaling Point, and can define 16 units of Signaling Link. The definition of Signaling Link is used to expand the number of Signaling Links. Before Signaling Link is defined, first of all, Signaling Terminal and Signaling Data Link to be defined as Signaling Link should have been defined.

Command CRTE-SLK:BSC=a, SLK=b, VMP=c, TRK=d, TS_NO = e, ST_ID =f;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

c = VMP (00 ~ 07)

d = Trunk Number (00 ~ 16)

e = Time Slot Number (00 ~ 31)

f = Signalling Terminal (1 ~ 16)

Input CRTE-SLK:BSC=0, SLK =5, VMP = 00, TRK = 5 TS_NO=16, ST_ID = 5;

Output

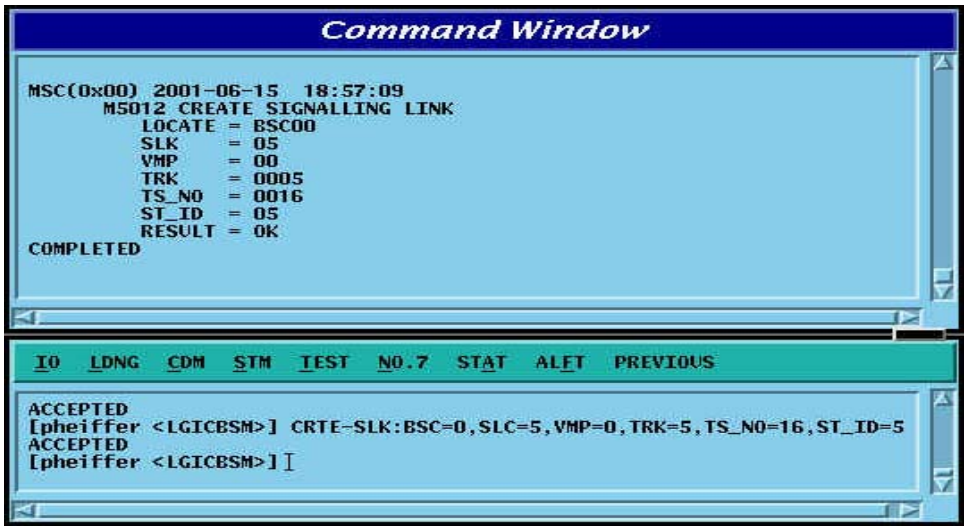


Fig. 4.6-6 Signaling Link Create

4.6.2.7. Signaling Link Deletion

Function to delete the defined Signaling Link.Before the Signaling Link is deleted, the corresponding Signaling Link should have been successfully deactivated.

Command DEL-SLK:BSC_ID=a, SLC =b;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

Input DEL-SLK:BSC=0, SLC =3;

Output

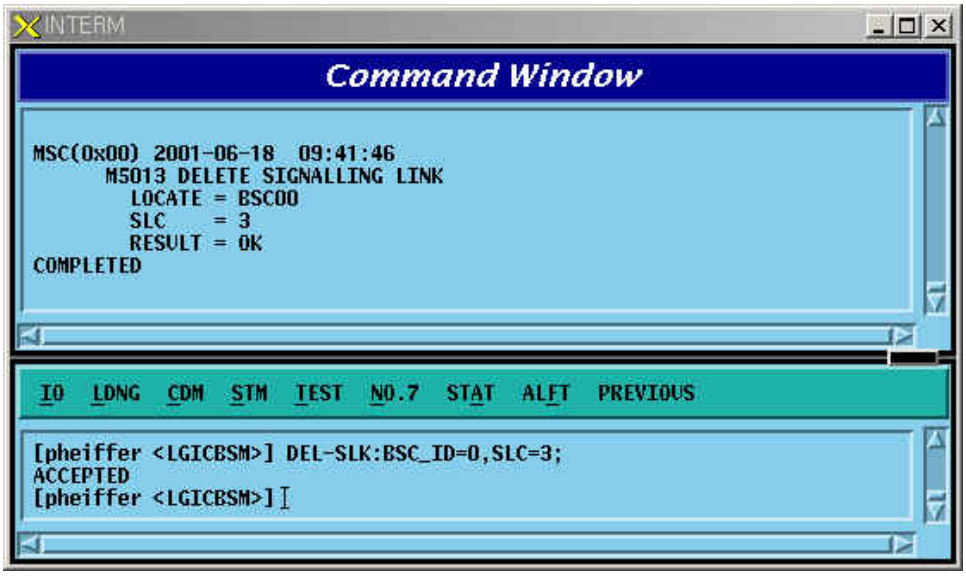


Fig. 4.6-7 Deletion of Signaling Link

4.6.2.8. Signaling Link Activation

Function to activate a defined Signaling Link. Before activated, the corresponding Signaling Link should have been successfully defined.

Command ACT-SLK:BSC_ID=a, SLC;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

Input ACT-SLK:BSC_ID=0, SLC=2;

Display

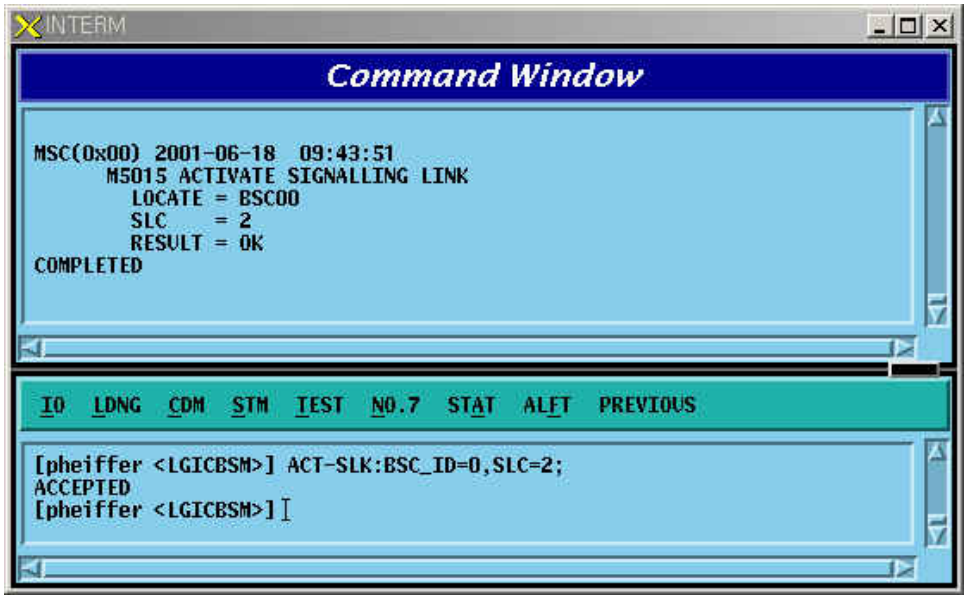


Fig. 4.6-8 Activation of Signaling Link

4.6.2.9. Signaling Link Deactivation

Function to deactivate the activated Signaling Link.

Command DACT-SLK:BSC=a, SLC=b;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

Input DACT-SLK:BSC_ID=0, SLC = 2;

Output

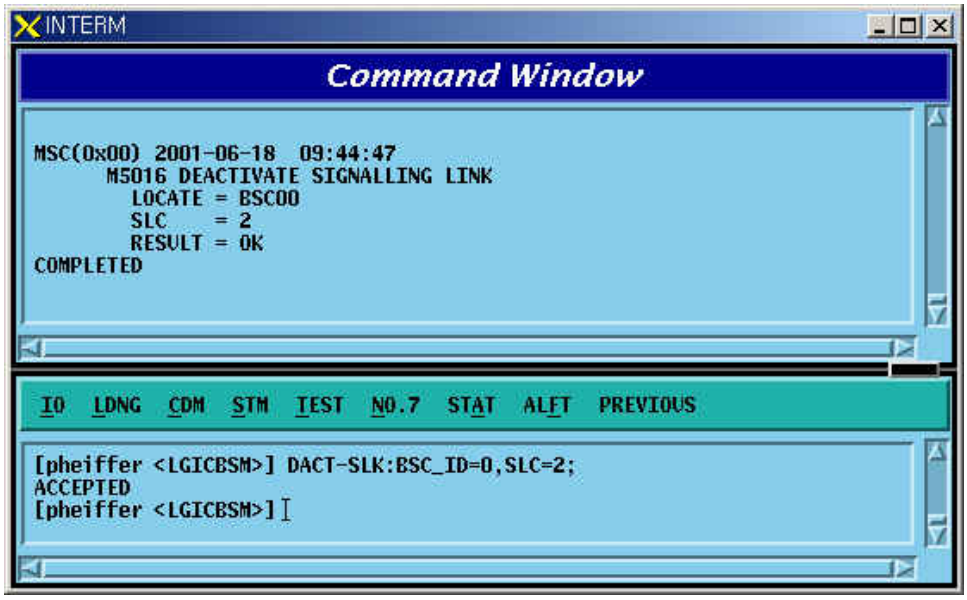


Fig. 4.6-9 Deactivation of Signaling Link

4.6.2.10. Signaling Link Information Display

Function to display information on Signaling Terminal, Signaling Data Link and Bit_Rate connected to Signaling Link. It can display information on entire Signaling Links and on Signaling Link designated.

Command DIS-SLK-INFO:BSC_ID=a;

a = BSC Number (00 ~ 15)

Input DIS-SLK-INFO:BSC_ID = 0;

Output

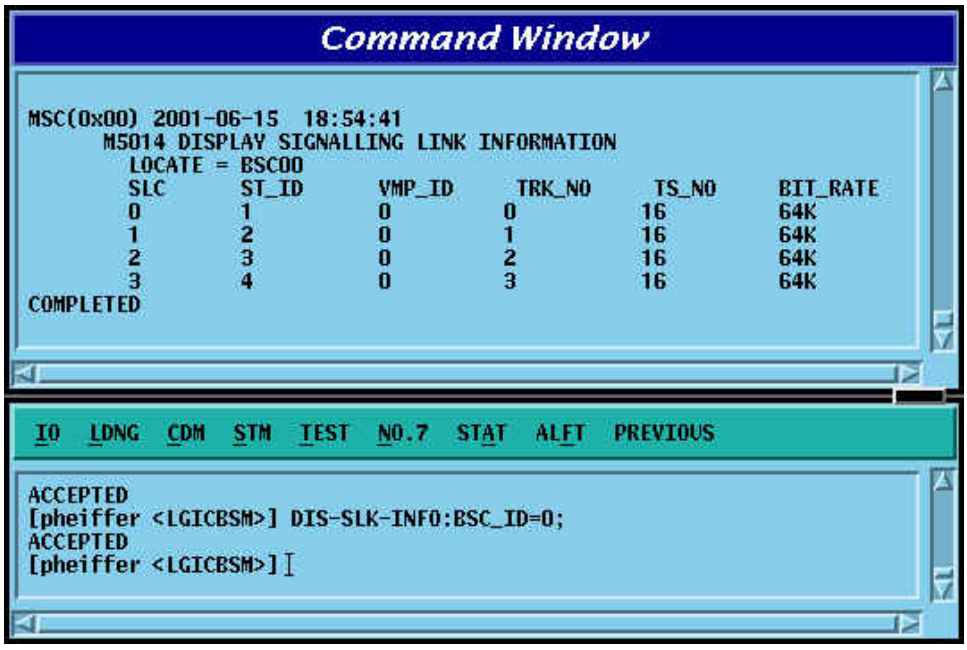


Fig. 4.6-10 Signaling Link Information Display

4.6.2.11. Signaling Link Inhibition

It inhibits the use of presently defined Signaling Link.

Command INH-SLK:BSC_ID=0, SLC =0;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

Input INH-SLK:BSC_ID=0, SLC=0;

Output

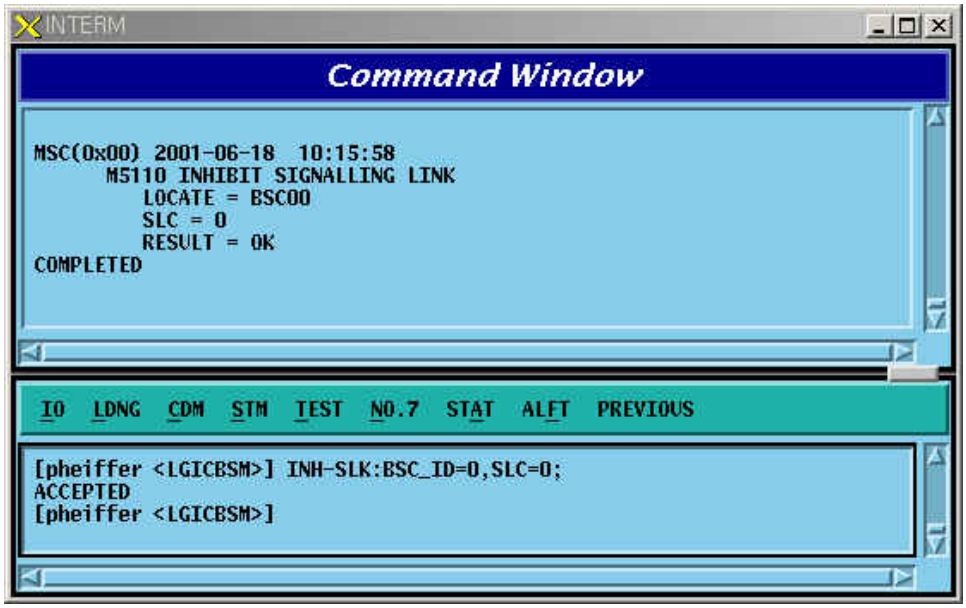


Fig. 4.6-11 Signaling Link Inhibit

4.6.2.12. Signaling Link Allow

Signaling Link Allow is a function that allows the management of Signaling Link Status inhibited in the management of Signaling Link and then change to the status of availability.

Command ALW-SLK:BSC_ID=0, SLC =0;

a = BSC Number (00 ~ 11)

b = Signalling Link Code (00 ~ 15)

Input ALW-SLK:BSC_ID = 0, SLC = 0;

Output

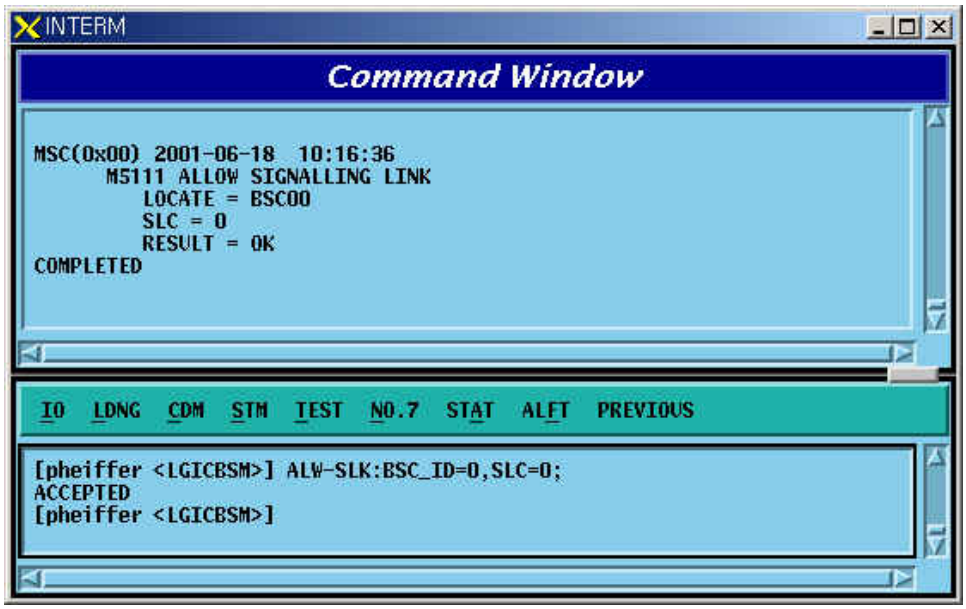


Fig. 4.6-12 Signal Link Allow

4.6.2.13. Signal Terminal Addition

Signal Terminal indicates physical name of a Channel of STPA and can define 16 units of Signaling Terminal at a maximum. It is used to expand Signaling Terminal.

Command CRTE-ST:BSC=a, ST_ID=b;

a = BSC Number (00 ~ 15)

b = Signalling Terminal (01 ~ 16)

Input CRTE-ST:BSC_ID=0,ST_ID = 4;

Output

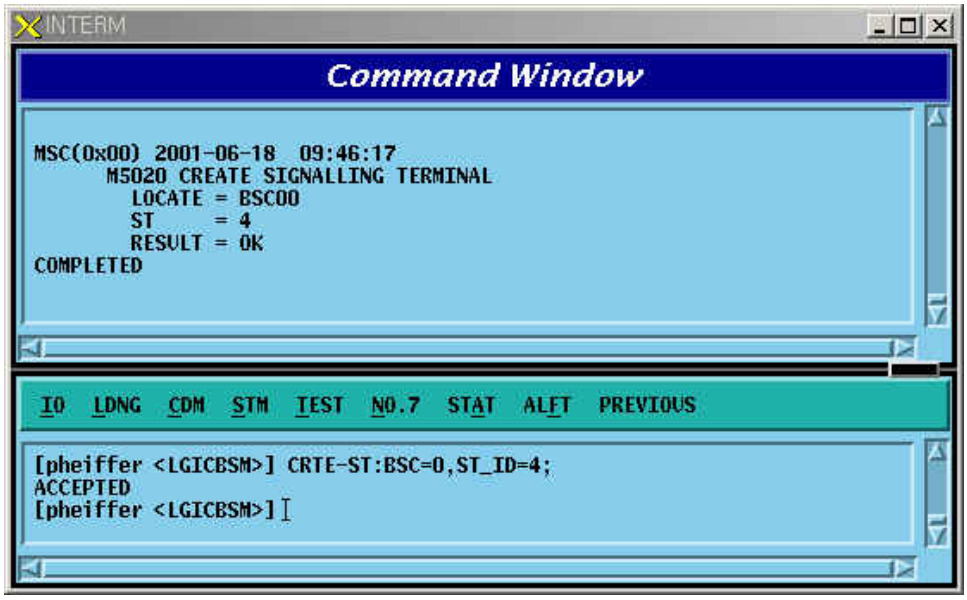


Fig. 4.6-13 Signaling Terminal Generation

4.6.2.14. Signaling Terminal Deletion

It is used when Signaling Terminal H/W has problems or other faults occur. Before Signaling Terminal is deleted, make sure that the corresponding Signaling Terminal is connected to Signaling Link.

Command DEL-ST:BSC=a, ST_ID =b;

a = BSC Number (00 ~ 11)

b = Signalling Terminal (01 ~ 16)

Input DEL-ST:BSC_ID=0,ST_ID = 5;

Output

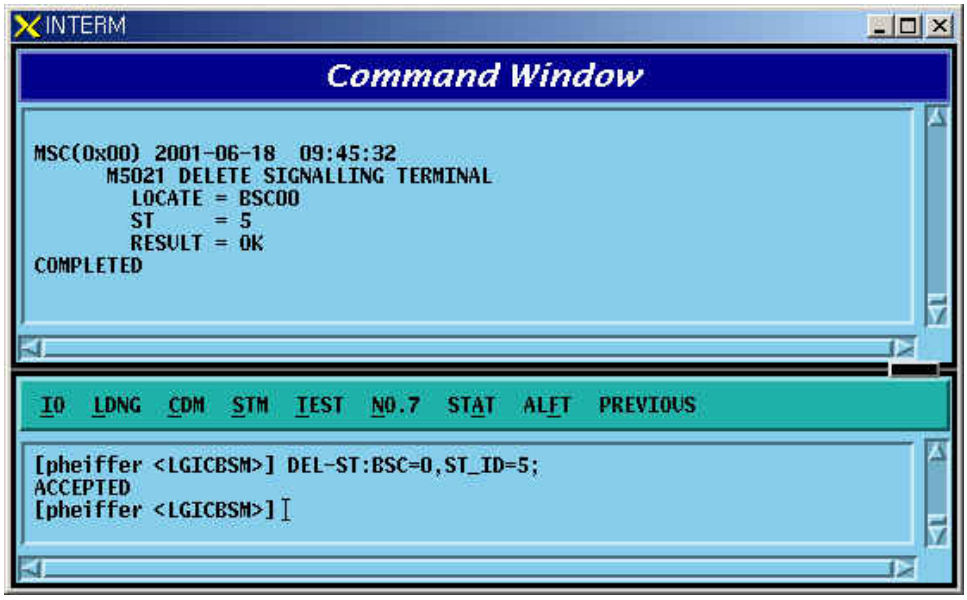


Fig. 4.6-14 Signaling Terminal Deletion

4.6.2.15. Signaling Terminal Information Display

Function to display information about if it is linked with signaling link to a specific Signaling Terminal or all the Signaling Terminals.

Command DIS-ST-INFO:BSC_ID =a;

a = BSC Number (00 ~ 11)

Input DIS-ST-INFO:BSC_ID = 0;

Output

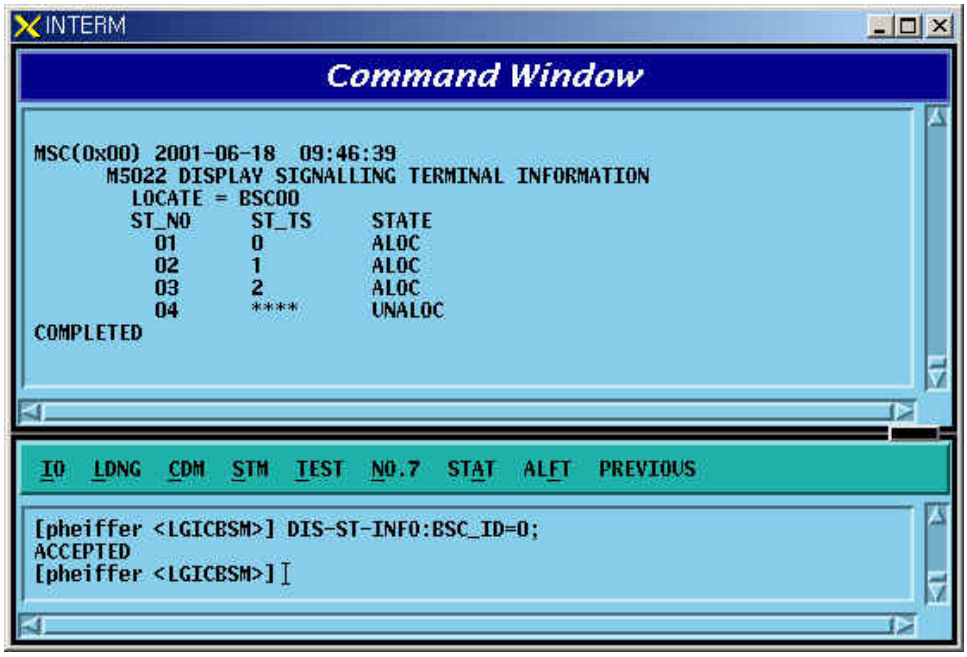


Fig. 4.6-15 Display of Signaling Terminal Information

4.6.2.16. Signaling Data Link Addition

Signaling Data Link indicates Trunk Number to allocate as Signaling Link and is used to expand Signaling Data Link.

Command CRTE-SDLK: BSC =a, VMP_ID=b, TRK= c ,TS_NO=d;

a = BSC Number (00 ~ 11)

b = VMP Number(00 ~ 07)

c = TRUNK Number(00 ~ 16)

d = Time Slot Number(00 ~ 31)

Input CRTE-SDLK: BSC_ID=0, VMP_ID=1, TRK=0 , TS_NO=16;

Output

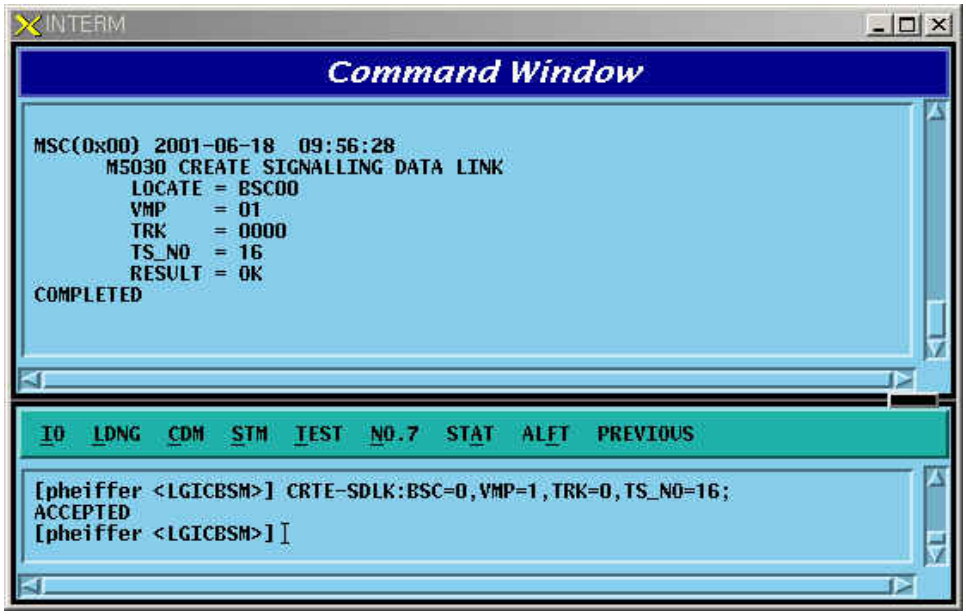


Fig. 4.6-16 Signaling Data Link Generation

4.6.2.17. Signaling Data Link Deletion

It is used when Signaling Data Link H/W is defective or other problems occur.Before deleting the Signaling Data Link, make sure that corresponding Signaling Data Link is allocated to Signal Link and then delete.

Command DEL-SDLK;BSC=a, VMP=b, TRK=c, TS_NO=d;

a = BSC Number (00 ~ 11)

b = VMP Number(00 ~ 07)

c = TRUNK Number(00 ~ 16)

d = Timer Slot Number(00 ~ 31)

Input DEL-SDLK:BSC=0, VMP=0, TRK= 5, TS_NO = 16;

Output

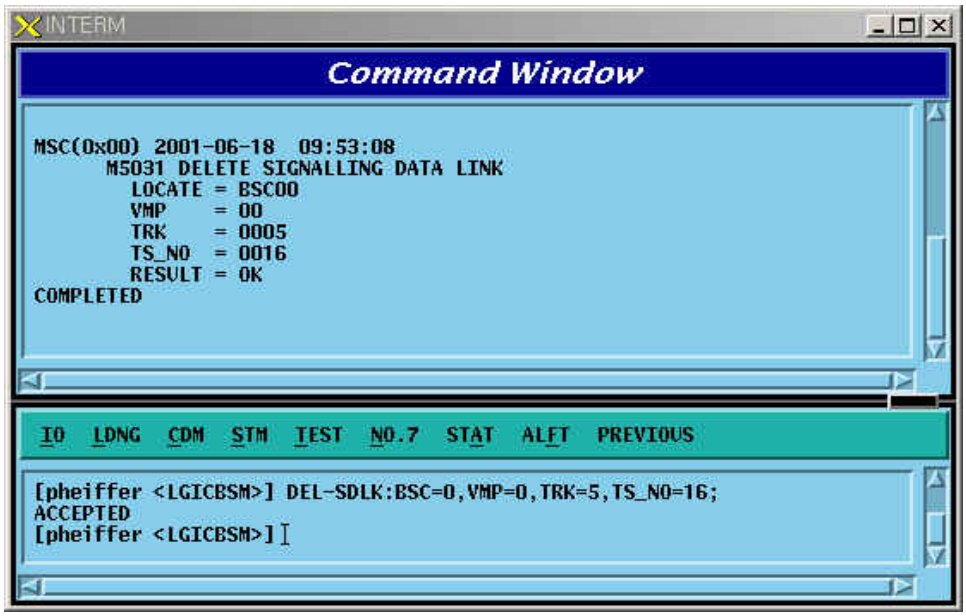


Fig. 4.6-17 Signaling Data Link Deletion

4.6.2.18. Signaling Data Link Information Display

Function to display information on the defined Signaling Data Link and the status connected to Signaling Link.

Command DIS-SDLK-INFO: BSC_ID = a;

a = BSC Number (00 ~ 11)

Input DIS-SDLK-INFO: BSC_ID=0;

Output

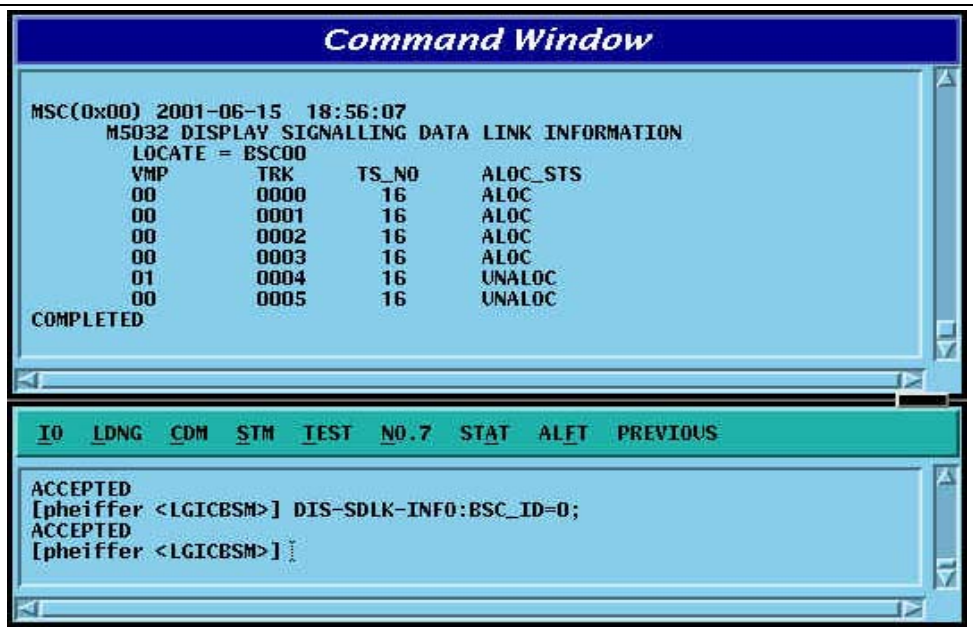


Fig. 4.6-18 Signaling Data Link Information Display

4.6.2.19. SCCP Network Configuration Data Display

Function to display SCCP Network Configuration Data for Intra-Switching Office Signaling Point, local Switching Office Signaling Point, and each sub-system.

Command DIS-SCCP-NET:BSC_ID=a;

a = BSC Number (00 ~ 11)

Input DIS-SCCP-NET:BSC_ID=0;

Output

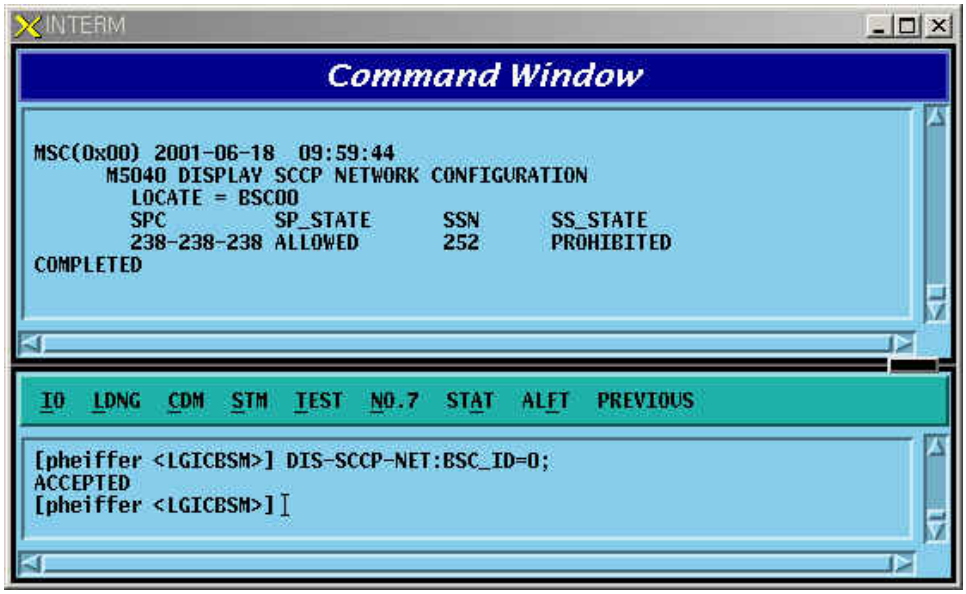


Fig. 4.6-19 SCCP Network Configuration Data Display