APPENDIX B. EXAMPLES OF ECS DATA SETS AND REPORTS

B.1 NEAR-REAL-TIME COMMAND DATA EXAMPLE

B.1.1 BINARY FORMAT

```
X'03010023'          (4 binary bytes for message type and length)
X'1010'              (Request ID)
CDS                  (6-Char, padded with blanks)
BINARY 0x1203,0x2401,0x77AF,0xADB3; /* OBDH block with header, 2 data
                                       words and checksum */
```

B.1.2 MNEMONIC FORMAT

```
X'03010033'          (4 binary bytes for message type and length)
X'A001'       (Request ID)
LASCO         (6-Char, padded with blanks)
MNEMO1,0x1AB,0x1234;  /*command with 2 variable words in hex format */.
```

B.2 DELAYED COMMAND GROUP

This example contains commands in mnemonic format. The binary format could also have been used. The example also contains errors in the command data to illustrate the validation report format in section B.3.

```
DATATYPE=   DELAYED
FILENAME=   CDS0126001.DEL
INSTRUME=   CDS
ORIG_ID=    CDS_OPS_1
OBSERVER=   Ricky Ricardo
DATE_CRE=   1996/01/25 15:27:30
NUM_CMDS= 3
EARLIEST=   1996/01/26 18:00:00
LATEST=     1996/01/26 18:30:00
COMMENT=    In case of contingency, notify PI team by telephone
COMMENT=    This example contains errors as illustrated in the associated validation
report
END
CDSMNEMO1;  /* first command, no argument */
LASCOMNEMO, 10;  /* 2nd command, argument in decimal */
CDSMNEMO2,01AB,1234;  /* 3rd command, first argument in octal, second in decimal*/
```

B.3 DELAYED COMMAND VALIDATION REPORT

NOTE: This is an example of the report which is produced by CMS and is described in Reference 8.

```
DATATYPE=   COMMAND VALIDATION REPORT
FILENAME=   CDS0126001.DRP
INSTRUME=   CDS
ORIGFILE=   CDS0126001.DEL
DATE_CRE=   1996/01/26 15:37:53
NUM_CMDS=   3
COMMENT=    "Errors in input file"
END

SOHO CMS INPUT VALIDATION REPORT FOR CDS GROUP CDS0126001.DEL
  Started At Thu Jan 25 20:30:51 1996

Original Header:
INSTRUME=   CDS
FILENAME=   CDS0126001.DEL
ORIG_ID=    CDS_OPS_1
OBSERVER=   Ricky Ricardo
DATE_CRE=   1996/01/25 15:27:30
NUM_CMDS=   3
EARLIEST=   1996/01/26 18:00:00
LATEST=     1996/01/26 18:30:00
COMMENT=    "CDS Calibration"
END

CDSMNEMO1;  /* first command */

LASCOMNEMO, 10; /* 2nd command */

***  IV_MNEMON    Invalid mnemonic.

CDSMNEMO2,01AB,1234;  /* 3rd command */

***  MAX_ARGS    Improper number of arguments for a fixed length command.


***  Command Group Is Invalid  ***
```

B.4 BACKGROUND-QUEUE COMMAND GROUP

This example contains

```
DATATYPE=   BACKGROUND
FILENAME=   MDITBL0001.BCK
INSTRUME=   MDI
ORIG_ID=    MDI_IWS_2
OBSERVER=   C. Moi
DATE_CRE=   1996/01/25 15:27:30
NUM_CMDS=   8
EARLIEST=
LATEST=
COMMENT=    This will be uplinked by SMOCC as soon as possible.
END
BINARY 0x1000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x2000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x3000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x4000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x5000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x6000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x7000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
BINARY 0x8000,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0xF,
0x0,0x1,0x2,0x3,0x4,0x5,0x6,0x7,0x8,0x9,0xA,0xB,0xC,0xD,0xE,0x1234;
```

B.5 FORMAT FOR THE INSTRUMENTER INPUT TO THE ACTIVITY PLAN (IAP)

The IAP will be in the keyword format only. (Fixed format is no longer used)
Note that the keywords as listed below can be specified in any order. However, they must be used as described, and they are case sensitive.

SCIPLAN
The SCIPLAN entry specifies the first level of science planning information, i.e. the overall plan as developed during the weekly and daily science planning meetings. The xyz field which follows SCIPLAN_ should be descriptive of a specific science plan. It can be up to 10 alphanumeric characters long, no blanks embedded, but underscores are allowed. This field will be used to specify the occurence of Joint Operations Procedures (JOP). For example, SCIPLAN_JOP_3. All fields described as "strings" contain a maximum of 50 alphanumeric characters, blanks, commas and underscores being allowed.

SCIPLAN_xyz

STARTIME=	Start time of the special activity
ENDTIME=	End time of the special activity
INSTRUME=	Instrument or group implementing the planned activity
SCI_OBJ=	Scientific objective, e.g. "Bright Point Studies". (1)
SCI_SPEC=	(Optional). More specific scientific objective, e.g. "Density Profile". (1)
OBJECT=	Generic name for the object planned to be observed, from a limited list of possible objects, e.g., "Bright point". (1) (5)
OBJ_ID=	(Optional). Unique identifier for the object to be observed. Up to 6 alphanumeric characters, no blank embedded, e.g. BP. (5)
XCEN=	Center of the instrument field-of-view along the solar X-axis (2) (3) (4)
YCEN=	Center of the instrument field-of-view along the solar Y-axis (2) (3) (4)
NOTES=	(Optional). May include references to specific studies or rasters to be run. (1) (2)
PROG_ID=	(Optional). An ID number specifying that this observation is part of a continuing series. Up to 6 numeric characters.
CMP_NO=	(Optional). ID number of the coordinated observing program this observation supports. Up to 6 numeric characters.
DISTURB=	(Optional). Description of any possible disturbances. (1).
DATE_MOD=	(OPtional). Last date modified.

Notes :
(1) String.
(2) This field can be repeated if nercessary. The value can be an array of n elements: elements separated by a comma, no blanks embedded.
(3) Units are arc-seconds from Sun center for coordinates and degrees from Solar North for angles.
(4) Optional. Applies to coronal instruments only.
(5) The list of objects is provided at the end of this section.

PROGRAM
The PROGRAM entry is used to describe the specific programs that the instruments would run to satisfy the scientific objectives of the corresponding SCIPLAN activity: for each SCIPLAN entry, there will be a sequence of PROGRAM entries that represent the details of the SCIPLAN. The _xyz

which follows PROGRAM is the name of the activity that the instrumenter provides. It can be up to 10 alphanumeric characters long, with no embedded blanks, but underscores are allowed.

PROGRAM_xyz

STARTIME=	Start time of the special activity
ENDTIME=	End time of the special activity
INSTRUME=	Instrument or group implementing the planned activity
OBS_PROG=	The observing program that will be run
SCI_OBJ=	Scientific objective, e.g. "Bright Point Studies". (1)
SCI_SPEC=	(Optional). More specific scientific objective, e.g. "Density Profile". (1)
OBJECT=	Generic name for the object planned to be observed, from a limited list of possible objects. (5)
OBJ_ID=	(Optional). Unique identifier for the object to be observed. Up to 6 characters. (5)
XCEN=	Center of the instrument field-of-view along the solar X-axis. (2) (3) (4)
YCEN=	Center of the instrument field-of-view along the solar Y-axis. (2) (3) (4)
ANGLE=	Rotation angle of vertical axis of instrument field-of-view relative to solar north. (2) (3) (4)
IXWIDTH=	Maximum width of the instrument field-of-view in the instrument X axis, i.e. the direction perpendicular to the vertical axis as used in keyword ANGLE. (2) (3) (4)
IYWIDTH=	Maximum width of the instrument field-of-view in the instrument Y axis, i.e. the direction perpendicular to the vertical axis as used in keyword ANGLE. (2) (3) (4)
PROG_ID=	(Optional). ID number specifying that this observation is part of a continuing series
CMP_NO=	(Optional). ID number of the coordinated observing program that this observation supports
DISTURB=	(Optional). Description of any possible disturbances
JITTER_LIMIT=	(Optional). Maximum amount of jitter allowable for this program and this instrument (in 1/10 arc-seconds)
STATUS=	Acceptance status (6)

Notes :

(1) String. The list of objects is provided at the end of this section.

(2) This field can be repeated if nercessary. The value can be an array of n elements: elements separated by a comma, no blanks embedded.

(3) Units are arc-seconds from Sun center for coordinates and degrees from Solar North for angles.

(4) Optional. Applies to coronal instruments only.

(5) The list of objects is provided at the end of this section.

(6) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

ACTIVITY

The ACTIVITY entry is used to specify predefined activities that the ECS planning system knows about, that is that have been entered in the knowledge base. These activities typically have constraints associated with them that are checked by the scheduling system. The xyz which follows ACTIVITY is the name of the predefined activity.

ACTIVITY_xyz (1)

STARTIME=	Start time of the special activity
ENDTIME=	End time of the special activity
INSTRUME=	Instrument or group implementing the planned activity
AMOUNT=	(Optional). Should be specified for certain activities such as jitter (1)
STATUS=	Acceptance status (2)

Notes :

(1) Example: specify the amount of jitter generated by this activity estimated in 1/10 arc-seconds.

(2) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

INST_IIE_MASTER and INST_IIE_RECEIVER

These entries are used to plan the role individual instruments in the Inter-Instrument Exchange (IIE). They are first included in the IAP for planning and coordination. The INST_IIE_MASTER entry is used by a given instrument to indicate that this instrument will be master for the specified period of time. The INST_IIE_RECEIVER entry is used to specify that an instrument will be receiver for the specified period of time.

INST_IIE_MASTER

MSTR_TYPE=	Type of flag
INSTRUME=	Name of the master intrument
MSTR_START=	The start time for the instrument being the master
MSTR_STOP=	The stop time for the instrument being the master
STATUS=	Acceptance status (1)

INST_IIE_RECEIVER

INSTRUME=	Name of a receiving intrument
RCVR_START=	The start time for the instrument being a receiver
RCVR_STOP=	The stop time for the instrument being a receiver
STATUS=	Acceptance status (1)

Notes :

(1) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

INST_NRT_SESSION

The INST_NRT_SESSION entry is used to specify that an instrumenter is going to be doing near-real-time commanding during a specified period of time.

INST_NRT_SESSION

STARTIME=	Start time of the requested near-real-time commanding activity
ENDTIME=	End time of the requested near-real-time commanding activity
INSTRUME=	Instrument which will have near-real-time privileges
IWS_ID=	Identification of the IWS from which the NRT commanding activity will be performed
CMD_RATE=	Expected average number of commands per minute between start time and end time
STATUS=	Acceptance status for this activity (1)

Notes :

(1) This keyword will only be present in the KAP. The possible values are REQUESTED, CONFIRMED, DENIED. If present in the IAP, it will be ignored by the ECS.

INST_NRT_RESERVED

The INST_NRT_RESERVED entry is used to request a reserved time slot for some special near-real-time commanding activities. This time is reserved for that instrument and no other instrument can request time during that period.

INST_NRT_RESERVED

STARTIME=	Start time of the reserved time NRT commanding activity
ENDTIME=	End time of the reserved time NRT commanding activity
INSTRUME=	Instrument which will have reserved time
CMD_RATE=	Expected average number of OBDH block commands per minute between the start time and end time
STATUS=	Acceptance status for this activity (1)

Notes :

(1) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

INST_DELAYED_CMD

The INST_DELAYED_CMD entry is used to specify a time window during which a group of delayed commands must be uplinked.

INST_DELAYED_CMD

EARLIEST=	Earliest uplink time
LATEST=	Latest uplink time
INSTRUME=	Instrument which will performed the delayed commanding
NUM_CMDS=	Number of obdh block commands to be uplinked
STATUS=	Acceptance status (1)

Notes :

(1) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

INST_TSTOL_EXECUTION

The INST_TSTOL_EXECUTION entry is used to specify a time window during which FOT will be required to execute a given TSTOL procedure.

INST_TSTOL_EXECUTION

PROC_NAME=	Name of procedure to be executed by the FOT
EARLIEST=	Earliest execution time
LATEST=	Latest execution time
INSTRUME=	Instrument to which the procedure applies
DURATION=	Approximate duration for execution of the procedure (minutes)
STATUS=	Acceptance status (1)

Notes :

(1) This keyword will only be present in the KAP. If present in the IAP, it will be ignored by the ECS. The possible values are REQUESTED, CONFIRMED, DENIED.

LIST OF POSSIBLE OBJECTS

This list applies to the keywords OBJECT and OBJ_ID .

ARC	arcade	LE	loop evacuation
AFS	arch filament system	LMB	solar limb
ANE	anemone	LO	loop
AR	active region	CME	coronal mass ejection
BP	bright point	MHR	MDI high resolution field
CR	coronal rain	MS	magnetic shear
CH	coronal hole	MT	mercury transition
COM	comet	MW	moreton wave
COR	corona	NET	network
CHR	chromosphere	NL	neutral line
CS	coronal streamer	PC	polar crown
CT	coronal transient	PCH	polar coronal hole
CUS	cusp	PEN	sunspot penumbra
DB	disparation brusque	PFL	postflare loops
DC	disk center	PHO	photosphere
DFL	disappearing filament	PLG	plage
DFX	disapppearing flux	POR	pore
DF	downflow	PP	polar plume
EFL	emerging flux	PR	prominence
EPR	eruptive prominence	PLT	planet
EFI	erupting filament	QS	quiet sun
EVF	evershed flow	RIB	two-ribbon flare
FAC	faculae	SPR	spray
FC	filament channel	SG	supergranulation
FLC	flux cancellation	SPI	spicule
FLG	filigree	SR	surge
FIL	filament	SS	sunspot
FLR	flare	ST	star
FP	footpoint	SW	solar wind
FS	full sun / full disk	SYN	synoptic observation
FL	flow	TR	transition region
GR	granulation	UF	upflow
HR	hedge row	UMB	sunspot umbra
JET	jet	VT	Venus transition
LB	loop brightening	WAV	wave
		WLF	white light flare

B.6 <u>FORMAT FOR THE ECS ACTIVITY PLAN</u>

The ECS Activity Plan will be available in two formats:

1) the keyword format, providing more flexibility (KAP)
2) the fixed format, providing more readability (EAP)

In addition to the keywords found in the IAP, the following keywords will be used in the KAP. These keywords originate from CMS/FOT and could be modified by operations personnel.

DSN_Contact_xyz
The DSN_Contact_xyz entry provides information on a given DSN contact. The _xyz field represents the ground station name, for example, _CAN or _MAD.

DSN_Contact_xyz

STARTIME=	Start time of contact for this station
ENDTIME=	End time of contact for this station

SVM_Reserved
The SVM_Reserved entry is used to indicate time periods that are reserved by the FOT to perform activities exclusively related to the service module. During these time periods, all instrument-related activities are excluded: near-real-time commanding, uplink of delayed commands and execution of TSTOL procedures for instrument operations.

SVM_Reserved

STARTIME=	Start time
ENDTIME=	End time

Payload_Reserved
The Payload_Reserved entry is used to indicate time periods that are reserved by the FOT but during which some payload operations activities can be performed. These include uplink of instrument delayed commands and execution of TSTOL procedures for instrument operations

Payload_Reserved

STARTIME=	Start time
ENDTIME=	End time

Throughput_RCR
The Throughput_RCR entry is used to specify time periods during which the throughput channel will be opened, the instrument teams will be allowed to command in near-real-time and send RCRs.

Throughput_RCR

STARTIME=	Start time of throughput mode with RCR allowed
ENDTIME=	End time of throughput mode with RCR allowed

Throughput_NoRCR
The Throughput_NoRCR entry is used to specify time periods during which the throughput channel will be opened, the instrument teams will be allowed to command in near-real-time and but RCRs will not be permitted.

Throughput_NoRCR

STARTIME=	Start time of throughput mode with RCR not allowed
ENDTIME=	End time of throughput mode with RCR not allowed

Spacecraft_Maneuver

The Spacecraft_Maneuver entry is provided by the FOT for informational purpose. This will allow the instrument teams to be aware of the occurrence of spacecraft maneuvers that may affect the operations of the instruments.

Spacecraft_Maneuver
  STARTIME= Start time of maneuver
  ENDTIME= End time of maneuver
  NOTES= Description of maneuver

Clock_Adjust
The Clock_Adjust entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of upcoming OBT clock adjusts.

Clock_Adjust
  STARTIME= Start time/occurence of clock adjust
  TYPE= Description of adjust/reset

TLM_Tape_Dump
The TLM_Tape_Dump entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of planned times for tape recorder dumps.

TLM_Tape_Dump
  STARTIME= Start time
  ENDTIME= End time

TLM_MDI_M
The TLM_MDI_M entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of planned times for MDI-M downlink.

TLM_MDI_M
  STARTIME= Start time
  ENDTIME= End time

TLM_MDI_H
The TLM_MDI_H entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of planned times for MDI-H downlink.

TLM_MDI_H
  STARTIME= Start time
  ENDTIME= End time

TLM_HR_Idle
The TLM_HR_Idle entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of planned times for idle high rate telemetry.

TLM_MDI_Idle
  STARTIME= Start time

ENDTIME=	End time

TLM_Mode

The TLM_Mode entry is provided by the FOT for informational purpose. It will allow the instrument teams to be aware of planned times for switching telemetry mode to low rate, medium rate, high rate or idle. The telemetry mode remains set to the current value until a new TLM_Mode entry changes it.

TLM_Mode

MODE=	LR, MR HR or IDLE
STARTIME=	The start time for this mode.

TLM_Submode

There are four TLM_Submode keywords that defines the start time for a given telemetry submode. This submode will remain in effect until it is modified by another TLM_Submode entry. The TLM-Sumode entries are input by the ECS operator once the weekly plan has been finalized. Since the FOT will be in attendance at the weekly and daily meetings, modifications to these entries by the FOT are not expected. There are four different telemetry submodes (1 to 4) applying to the medium and high rate telemtry modes.

TLM_Submode_1

STARTIME=	The start of mode 1

TLM_Submode_2

STARTIME=	The start of mode 2

TLM_Submode_3

STARTIME=	The start of mode 3

TLM_Submode_4

STARTIME=	The start of mode 4.

Other_Obs_xyz

The Other_Obs_xyz entry is used to describe other science programs and events which are of interest to the SOHO team. These activities will be input by the ECS operator interactively from the timeline editor. The possible keywords listed for this entry are similar to the SCIPLAN entry, and they will most likely not apply in many cases. The xyz field is descriptive of a specific event: it can be up to 10 alphanumeric characters, with no blanks embedded, but possible underscores. The Other_Obs_xyz entries may not be included in the IAP.

Other_Obs_xyz

STARTIME=	Start time of the support activity
ENDTIME=	End time of the support activity
TELESCOP=	Spacecraft or observatory implementing the activity
SCI_OBJ=	Scientific objective (1)
SCI_SPEC=	(Optional). More specific scientific objective (1)
OBJECT=	(Optional). Name of the object planned to be observed
OBJ_ID=	(Optional). Unique identifier for the object to be observed. Up to 6 alphanumeric characters, no blank embedded
NOTES=	(Optional). May include references to specific studies or rasters to be run. (1)

PROG_ID=	(Optional). An ID number specifying that this observation is part of a continuing series. Up to 6 numeric characters.
CMP_NO=	(Optional). ID number of the coordinated observing program this observation supports. Up to 6 numeric characters.
DISTURB=	(Optional). Description of any possible disturbances. (1).
DATE_MOD=	(Optional). Last date modified.

Notes : (1) Strings.

B.7 ECS COMBINED ACTIVITY PLAN FILE FORMAT

The Combined Activity Plan (CAP) is the file that ECS receives from the IDL planning tool. The IDL Planning tool will be used to support the weekly and daily science planning meetings. It generates the CAP file which allows to input the results of the science planning meetings into the ECS planning system. The CAP contains the SCIPLAN entries for certain instrumenters.
The CAP does not apply to the interface between ECS and the Instrumenters and its description is included for reference only.

The CAP file header is as follows:

KEYWORD	DESCRIPTION
DATATYPE	"COMBINED ACTIVITY PLAN"
FILENAME	Name of this file: (see Appendix A) ECScccccccccccc.CAP
INSTRUME	"ECS"
ORIG_ID	E-mail address where a validation report on the CAP will be sent.
OBSERVER	Person who generated this file
DATE_CRE	Date file was created YYYY/MM/DD HH:MM:SS (GMT)
STARTIME	Start time of period covered YYYY/MM/DD HH:MM:SS (GMT) where HH:MM:SS is 00:00:00 for a given day DD
ENDTIME	End time of period covered YYYY/MM/DD HH:MM:SS (GMT) where HH:MM:SS is 00:00:00 for day DD+1
COMMENT	Free text. This keyword may be repeated to allow several comment lines
END	

The CAP file body is in the keyword format and is identical to the format of the IAP described in section 3.5.1. However, the CAP only contains SCIPLAN entries.

The ECS planning system receives the CAP and merges its content with existing IAPs that may have been received from the instrumenters. For all the IAPs older than the CAP, all the SCIPLAN entries in the appropriate IAPs are replaced by the SCIPLAN entries in the CAP. Later, if ECS receives updated IAPs, ECS replaces the SCIPLAN entries from the CAP by the SCIPLAN entries from the new the IAPs.

B.8 COMMAND HISTORY REPORT EXAMPLE

NOTE: This is an example of the report which is produced by CMS and is described in Reference 8.

***** COMMAND HISTORY REPORT *****

95-265-16:34:19.3	6400	CMS MSG SENT: 0604 11ENABLE
95-265-16:34:41.2	6382	/NRT: remote command request processing has been enabled
95-265-16:37:25.0	6400	CMS MSG SENT: 0604 11RCREN
95-265-16:37:25.0	6415	CPAGE LINE: 0002 16:37:29 NRT 201 018 01 001 001 N N
95-265-16:37:48.0	6354	/SEND: command block successfully transmitted
95-265-16:37:48.0	6372	nrt group uplinked with verification on: CDS 14307
95-265-16:37:49.0	6400	CMS MSG SENT: 0601 59CDS 140370501-7Uplink begun with verification
95-265-16:38:10.0	6303	BARM: TCB #201,1st mnem: CDS 14307, 1st tcm seq:1, 1st tcmseq:1 VERIFIED
95-265-16:38:10.0	6400	CMS MSG SENT: 0601 59CDS 1403705010Uplink verified

.
.
.

***** BACKGROUND QUEUE STATUS REPORT *****

Instr File	Time Received	Time to POCC	Status
MDITBL0001.BCK	1995/11/11 17:00:39	1995/11/12 03:10:10	Uplink Verified
MDITBL0002.BCK	1995/11/11 17:01:00	1995/11/12 03:10:12	Uplink Verified
MDITBL0003.BCK	1995/11/11 17:02:00	1995/11/12 03:10:14	Uplink Verified
MDITBL0004.BCK	1995/11/11 17:03:00	1995/11/12 03:10:15	Uplink Failed - BARM

B.9 TELEMETRY GAP REPORT EXAMPLE

***** TELEMETRY GAP REPORT *****

MISSION: SOHO
TIME RANGE: (START) 1995/08/22 00:00:00 (STOP) 1995/08/22 23:59:59

PACKET NAME	APID	MISSING SEQNUMS	START TIME	STOP TIME
SWACC	88CA	11 11	1995/08/22 14:06:10	1995/08/22 14:06:22

SWACC	88CA	26 28	1995/08/22 14:08:31	1995/08/22 14:08:50
MDISC	88C5	150 155	1995/08/22 14:42:10	1995/08/22 14:43:22
MDISC	88C5	226 228	1995/08/22 14:44:31	1995/08/22 14:44:50

B.10 ECS COMMANDING STATUS WINDOW

B.11 ECS TELEMETRY DISTRIBUTION MONITORING WINDOW

B.12 ECS DIRECTORIES

Data	**Directory Name**	**Access by Insts**	
Delayed commanding data	/iws_files/delcmd	Write SecureID	One directory for all instruments
Background-queue commanding data	/iws_files/bckque	Write SecureID	One directory for all instruments
Command validation reports	/cms_files/inputval	Read	One directory to store the validation reports generated by CMS for both delayed and background-queue commanding.
Science Activity plan	/iws_files/output_actplan	Read	Contains the ECS science activity plan for retrieval by the instrumenters.
Input to the Activity plan	/iws_files/input_actplan	Write	One directory is used by the instrumenters to deposit their input to the activity plan.

Archived telemetry data	/tlm_files/SVMHK1 /tlm_files/SVMHK2 /tlm_files/SVMHK3 /tlm_files/SVMHK4 /tlm_files/AOCHK1 /tlm_files/AOCHK2 /tlm_files/ATTIT1 /tlm_files/ATTIT2 /tlm_files/CDSHK /tlm_files/CDSSCH /tlm_files/CDSSCL /tlm_files/CDSSCM /tlm_files/CELHK /tlm_files/CELSC1 /tlm_files/CEPHK /tlm_files/CEPSC /tlm_files/ELAHK1 /tlm_files/ELAHK2 /tlm_files/ELAHK3 /tlm_files/ELASCH /tlm_files/ELASCL /tlm_files/EXPHK /tlm_files/GOLHK /tlm_files/GOLSC /tlm_files/MDIHK1 /tlm_files/MDIHK2 /tlm_files/MDIHR /tlm_files/MDISC /tlm_files/OBT /tlm_files/SUMHK /tlm_files/SUMSCH /tlm_files/SUMSCL /tlm_files/SW /tlm_files/SWAHK /tlm_files/SWASC /tlm_files/UVCHK /tlm_files/UVCSSC /tlm_files/VIRHK /tlm_files/VIRSC	Read	One directory for each APID ECS will automatically send files to a list of "default destinations". Instrumenters may also read data when needed.

Data	**Directory Name**	**Access by Insts**	
Telemetry Quicklook	/tlm_files/quicklook	Read	Contains telemetry quicklook files.
Telemetry Reports	/tlm_files/reports	Read	Contains the telemetry gap reports.
Summary data	/iws_files/sum_data	Write Read	One directory that contains all summary data (as deposited by instrumenters and as prepared for CDHF). All summary data files may be read by the instrumenters.
Orbit data	/cdhf_files/orbit_data	Read	Contains predictive and definitive orbit data.
Attitude data	/cdhf_files/attitude_data	Read	Contains the definitive attitude data.
Command history	/ancillary_data/chr	Read	One directory can be accessed by the instrumenters for file retrieval
Time correlation log	/ancillary_data/tcf	Read	One directory can be accessed by the instrumenters for file retrieval
SOHO Daily Report	/ancillary_data/sdr	Read	One directory can be accessed by the instrumenters for file retrieval
Project Data Base	/pdb_files	Read	Approximately 30 project data base files