APPENDIX D

Network Status Byte Definitions

Table D-1 describes the hexadecimal network status bytes (NSBs) encountered during the operation of the VCO/4K switch.

Table D-1 Network Status Bytes and Meanings

NSB	Meaning
$00	Message sourced due to autonomous event on sender. Correct byte value for commands to the system and reports to the host. No corrective action required.
$01	Command processing successful. Indicates command sent to the system has been processed successfully. Returned only when Return All is specified in the command's network control byte. No corrective action required.
$02	Invalid command function ID. Indicates the value specified in the command's function ID byte (byte offset 4) does not correspond to any system command. Check byte value in byte offset 4.
$03	Syntax error in command. Indicates one or more of the values specified in the command are invalid or that the command specifies no action or improper switching actions within the SAPR bit settings. For example, if a Request Resource Control ($80) command specifies to attach a resource, it must also specify switching. Specifying values in spacer bytes or bytes reserved for future development may also cause syntax errors. Check all byte values in command.
$04	Incorrect destination source virtual communications address (VCA) in command network header. Indicates the value specified in the destination VCA byte (byte offset 1) does not correspond to any known system VCA. Check byte value in byte offset 1.
$05	Reserved for call number/sequence number error.
$06	Incoming port specified in command is not idle. Indicates the circuit identified by the port address specified in the command is not in the CP_IDLE major state (MState) and the command cannot be processed. Refer to Appendix F, “Call Processing States,” for information about MStates. Change port address in command or select a port from appropriate resource group.
$07	Voice port specified in command is not idle. Indicates the circuit identified by the port address specified in the command is not in the CP_IDLE major state (MState) and the command cannot be processed. Refer to Appendix F, “Call Processing States,” for information about MStates. Change the port address in the command or select a port from an appropriate resource group.
$08	Command received was received by standby side but can only be processed on the active side.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$09	Invalid DVC or IPRC port address (not in valid range). Indicates the port address specified in the command is not within the range of system port addresses or if port address is specified without access code of $00. Check port address or select a port from appropriate resource group.
$0A	Receiver port specified in command is not idle. Indicates the circuit identified by the port address specified in the command is not in the CP_IDLE major state (MState) and the command cannot be processed. Refer to Appendix F, “Call Processing States,” for information about MStates. Change port address in command or select a port from appropriate resource group.
$0B	Unable to start/reserve conference because maximum number of conferences are already active. Indicates that there are already 128 simultaneous conferences in progress (active or reserved) on the system.
$0C	No active conference with conference number specified in command. Indicates the conference number byte value (offset 5) specified in the command does not correspond to any currently active conferences. Check conference number.
$0D	Invalid resource group number. Indicates the resource group specified in the command is 0 or greater than 63 ($20). Check resource group number.
$0E	Invalid controlling port address (not in valid range). Indicates the port address specified in the command is not within the range of system port addresses or that port address is not assigned. Check port address.
$0F	Call or conference is not controlled by this host. Indicates the host port from which this command was received does not correspond to the port controlling the call.
$10	Invalid incoming port address (not in valid range). Indicates the port address specified in the command is not within the range of system port addresses. Check port address or select a port from appropriate resource group.
$11	Port in command is idle but should not be. Indicates the circuit identified by the port address specified in the command (usually a controlling port or incoming port) is in the CP_IDLE major state (MState) and the command cannot be processed. Refer to Appendix F, “Call Processing States,” for information about MStates. Check for correct port address.
$12	Port address in command is not a line or trunk. Indicates the circuit identified by the port address specified in the command is not a network interface circuit. Change port address in command or select a port from appropriate resource group.
$13	Invalid dual tone multifrequency (DTMF) receiver port address—not in valid range. Indicates the port address specified in the command is not within the range of system port addresses. Check port address or select a port from appropriate resource group.
$14	Invalid multifrequency (MF) receiver port address—not in valid range. Indicates the port address specified in the command is not within the range of system port addresses. Check port address or select a port from appropriate resource group.
$15	Invalid outgoing port address—not in valid range. Indicates the port address specified in the command is not within the range of system port addresses. Check port address or select a port from appropriate resource group.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$16	No resource of this type/group in the call's resource chain. Indicates a Request Resource Control ($80) command specified to hunt without switching and the required resource was not already in the call's resource chain. Resources, such as dual tone multifrequency (DTMF) receivers, can remain linked into a chain for the duration of a call. Can also indicate that a previous attempt to attach the resource failed or the resource has already been detached.
$17	Port address specified in command is not in this call's resource chain. Indicates the circuit identified by the port address specified in the command is not participating in this call. Either the port address is incorrect, the host previously attempted to attach a resource to this call and the attempt failed, or the resource has already been detached by a previous command.
$18	Port address specified in command is the wrong type, resource group, or class of service (COS). Indicates that the circuit identified by the port address specified in the command is not of the correct type for this command. Check port address.
$19	Port address specified in command is not on a T1 card. Indicates the circuit identified by the port address specified in the command is not a T1 channel. Returned only in response to an incorrect T1 Synchronization Control ($C0 02) command.
$1A	Invalid time/date specified. Indicates the byte values for hours/minutes/seconds is not within the appropriate range for the Configure VCA/Set System Clock ($C0 00) command. Check byte values.
$1B	This feature is not enabled. Indicates the Host Call Load Control ($C0 04) command has not been enabled.
$1C	Line/trunk port in conference. Indicates the circuit identified by the port address is participating in a conference
$1D	Line/trunk port not in this conference. Indicates the circuit identified by the port address specified to be removed or adjusted is not in this conference. Check the port address and conference number byte values.
$1E	Line/trunk port in wrong state to be added to conference. Indicates the circuit identified by the port address specified to be added to this conference is not in the CP_SETUP, CP_STAB, CP_IDLE (COS = A and off hook only) or CP_WANS (COS = O or U only) major state (MState) and the command cannot be processed. Refer to Appendix F, “Call Processing States,” for information about MStates. Check for correct port address.
$1F	Unable to find an available port in resource group specified in command or internal resource group implied by the command type. Returned to indicate a resource limitation condition exists, the resource hunt was unsuccessful, and the command cannot be processed. A Resource Limitation ($D6) report is sent to the host when this condition occurs.
$20	Outgoing port specified in command is not idle. Indicates the circuit identified by the port address specified in the command is not in the CP_IDLE major state (MState) and the command cannot be processed. Three methods are used to enable processing: • Change port address in command • Select a port from an appropriate resource group • Remove any resources attached to the port Refer to Appendix F, “Call Processing States,” for further information about MStates.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$21	Line/trunk port not off hook. Issued in response to the Conference Control ($6D) command to indicate that the circuit identified by the port address specified to be added to the conference is not off hook and the command cannot be processed. Also issued in response to the Incoming Port Control (Macro) ($6A) command if the port specified in the command is on hook. Check port address.
$22	Port of a particular type or group is already linked into this call's resource chain. Indicates which command was specified to attach a resource (usually a receiver port) into a call where that resource is already attached. Correct command to use existing resource.
$23	Invalid port address specified in command. Indicates the port address byte values do not fall within the range $00 00 through $07 FF, in 2K systems, or indicates the port address byte values do not fall within the range $00 00 through $0F FF, in 4K systems. Can be received in response to the following commands: Voice Path Control ($66), Port Supervision Control ($72), T1 Synchronization Control ($C0 02). Check port address.
$24	Port address specified in command is for a port or card that is not active. The circuit identified by the port address specified in the command is not active (P command in system administration card maintenance), out-of-service, or on a card that has been placed in maintenance or diagnostic mode. Refer to the *Cisco VCO/4K System Administrator's Guide* for more information. Change port address in command or select a port from appropriate resource group.
$25	All tone channels are busy. Returned in response to an Outgoing Port Control ($69) command segment or Incoming Port Control ($6A) command outpulsing segment to indicate a resource limitation condition exists and the outpulsing specified cannot be processed.
$26	Port is in an uncontrollable state (CP_MBUSY, CP_GARD, CP_RDR, CP_DISC). The circuit identified by the port address specified in the command is unavailable because of reorder processing, permanent signal processing, guard timing, or busied out. Change port address in command, or select a port from appropriate resource group.
$27	Either too many voice prompts were specified in Voice Port Control ($6C) command, or zero was specified. Check values for prompt control byte (byte offset 9) and phrase bytes (byte offsets 10 to n).
$28	Cannot begin new statistics reporting period.
$29	Internal error—command cannot be completed. Indicates a system processing error. Resend command.
$2A	Primary and secondary T1 synchronization values on same T1 card. Indicates that a T1 Synchronization Control ($C0 02) command has specified primary and secondary port addresses that reside on the same card. Check values and resend command with correct values.
$2B	The inpulse or outpulse rule number specified in the command is out of the range for a rule (1 to 20). Check value and resend command with correct value.
$2C	An invalid number of digits was specified, either too few or too many, for collection in a DTMF Digit Collection ($67) (Enhanced) command. Check value and resend command with correct value.
$2D	This network status byte is not enabled for the current software package.
$2E	Value entered for the timer in the DTMF Collection Control ($67) (Enhanced) command is outside the valid range.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$2F	An invalid enabling parameter was specified in the DTMF Collection Control ($67) (Enhanced) command.
$30	An error has occurred in the DTMF Collection Control ($67) (Enhanced) command processing; the call is not stable.
$33	Required resources could not be allocated to the DTMF Collection Control ($67) (Enhanced) command. One of the resource types required to process the command (IPRC port, etc.) was not available.
$34	Invalid digit storage control byte in the DTMF Collection Control ($67) (Enhanced) command. Both store and append, or an invalid field number, was specified in the digit storage control byte.
$35	The virtual port specified in the command is in the wrong state for the action specified in the following commands: Outgoing Port Control ($69), Incoming Port Control (Macro) ($6A), or Change Incoming Port ($6B). Refer to the appropriate command description for valid virtual port states.
$36	System switchover ordered by the Change Active Controllers ($C0 01) command has been queued until file synchronization processing has been completed. The $C0 01 command is also queued when the standby system cannot communicate with the active system.
$37	Indicates that both an inpulse and outpulse rule were specified for execution in an Outgoing Port Control ($69) command, or an Incoming Port Control (Macro) ($6A) command. Only one type of rule can be specified in a single command.
$38	A command has been received for an incoming port for which the current call has not yet been reported to the host. Could indicate the host considers a previously active call for this port to still be connected. No processing can take place for the new call until it has been reported to the host.
$39	Resource group specified for hunting is of the wrong resource type.
$3A	Call Progress Analyzer (CPA) card ports are not available to process the command.
$3B	The Change Port Status ($90) command could not be processed because maintenance is currently being performed on the card the ports reside on (from the system administration console).
$3C	One of the eleven resource control commands ($6x), or the Port Supervision Control ($72) command was received before the host issued a Host Call Load Control ($C0 04) command to begin call processing. The $C0 04 command is used when the enable host control of call load feature is set to Y. Refer to the *Cisco VCO/4K System Administrator's Guide* for step-by-step instructions to set this feature.
$3D	The D-channel is currently switching over.
$3E	Invalid hook state is in the Port Hook State Control command ($70).
$3F	An invalid class-of-service (COS) is specified in the Port Hook State Control command ($70).
$40	An invalid rule control byte is specified in Port Hook State Control ($70) command.
$41	The host command length is invalid.
$42	The specified port is not in a valid state to execute an inpulse or outpulse rule.
$43	Invalid prompt control. Generated if the prompt control byte is not valid.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$44	Invalid control code. Generated if the playback or record control code byte is not valid.
$45	Invalid library ID. Generated if the library code is not valid.
$46	Invalid prompt ID. Generated if any of the prompt ID values are not valid.
$47	Invalid maximum record time byte. Generated if the maximum record time value specified in the command is invalid.
$48	Unsupported library. Generated if the command specifies an explicit IPRC port which does not support the specified prompt library, or the command specified an IPRC resource already in the call chain which does not support the specified library.
$49	Invalid access code. Generated if the access code byte is not valid.
$4A	Invalid rack-level-slot (RLS) code. Generated if the RLS code byte does not correspond to a valid IPRC card, or if the RLS code is specified without access code of $01.
$4B	Voice Prompt Maintenance Control ($91) command processing completed successfully.
$4C	Voice Prompt Maintenance Control ($91) command processing error encountered.
$4D	The conference specified in a start or reserve command is already allocated.
$4E	An invalid release complete message has been created for the call's current state.
$4F	Digit collection for fourth column dual tone multifrequency (DTMF) is requested but the system feature is not enabled. Refer to the *Cisco VCO/4K System Administrator's Guide* for information on setting system features.
$50	In the DTMF Collection Control Enhanced ($67) (Enhanced) command, fourth column dual tone multifrequency (DTMF) digits were found but the D bit is not set.
$51	The dual tone multifrequency (DTMF) receiver does not support fourth column DTMF digit collection.
$52	An invalid rack-level-slot (RLS) range was specified in the Card Status ($82) command. This could be because the ending RLS is sequentially lower than the starting RLS.
$53	An invalid span was specified in the Card Status ($82) command, or the Port Status ($83) command. This is the return code for single-span cards with a span specifier greater than one, or for multispan cards with a span specifier greater than four.
$54	An invalid count was specified in the Conference Control ($6D) command.
$55	Duplicate ports were specified in the Conference Control ($6D) command.
$56	Bearer channel not attached to subrate switch card (received only when command specifies to detach bearer channel).
$57	Bearer channel cannot be attached to subrate switch card due to timeslot exhaustion.
$58	Connection request rejected, no subrate switch card in service.
$59	Connection request rejected, card redundancy switch-over in process.
$5A	Connection request rejected, subrate switch card source and destination bearer subchannel overlap.
$5B	Path removal failed, no such path exists.
$5C	The previous dual tone multifrequency (DTMF) was not completed.
$5D	Path removal failed, path is one-way when the host specified two-way, or two-way when the host specified one-way.

Table D-1 Network Status Bytes and Meanings (continued)

NSB	Meaning
$5E	Returned from a Change Active Controllers ($C0 01) command to indicate that a host-initiated switchover request was denied due to a live upgrade in progress.
$5F	Subrate channel width must be greater than zero and less than or equal to eight.
$60	Subrate channel crosses bearer channel boundary.
$61	The D+I port specified in the Voice Path Control ($66) command was busy.