Application for Space Wire Protocol ID: CCSDS Space Packet Transfer

Objective:

To indicate that the Space Wire cargo contains a single standard CCSDS packet either telemetry or telecommand, according to:

      a) CCSDS 133.0-B-1 Blue Book (Space Packet Protocol)
      b) CCSDS 135-B-1 Blue Book (Space link Identifiers)

Note: Any error detection at CCSDS packet level is project dependant and covered under the CCSDS standards.

The protocol ID should be restricted to CCSDS Space Packet Version 000.

Any acknowledge or validation protocol shall be at project level and not covered at Space wire protocol level.

Usage:

The ID will be used for on-board communication between internal subsystems and payload units with limited communication to dedicated ground test equipment.

Layout

Logical Address	Protocol ID	Padding	CCSDS Packet
1 Octet	1 Octet	2 Octets	Variable
Enumerated	Enumerated	Zero	Variable

Logical Routing address: indicates the final unit destination

Protocol ID: indicates the cargo contains a single CCSDS packet

Padding: used to start the CCSDS packet at a 32 bit word boundary