VCM is a protocol that is compatible with a wide variety of channel codes and modulations. Given a numbered list of coded modulations, a VCM protocol provides a mechanism to transition between them in a way that is understandable to the receiver.

CCSDS has three Recommended Standards that define channel codes, and one Recommended Standard that defines modulations for use on the space-to-Earth link. The first of the existing coding standards includes convolutional codes, Reed-Solomon codes, concatenated convolutional and Reed-Solomon codes, turbo codes, and Low-Density Parity-Check (LDPC) codes (reference [1]), to be used with recommended modulations (reference [5]). No VCM protocol is specified in references [1] and [5]. A second Recommended Standard specifies a set of Serially Concatenated Convolutional Codes (SCCCs), together with a set of modulations and a VCM protocol (reference [2]). A third Recommended Standard specifies a mechanism to communicate CCSDS Transfer Frames using an existing ETSI standard for Digital Video Broadcasting by Satellites (DVB-S2), which uses BCH codes concatenated with LDPC codes (references [3] and [4]). The DVB-S2 standard (reference [4]), and consequently the CCSDS standard (reference [3]), specifies a VCM protocol as well as a method for the receiver to monitor quality-of-reception parameters and to communicate this information back to the transmitter, as part of an Adaptive Coded Modulation (ACM) protocol.

SCCC specifies a VCM protocol.

DVB-S2 specifies a VCM protocol.