

DRAFT

CCSDS NAVIGATION WORKING GROUP RESOLUTION ~~07-Aug~~5-Sep-2016

Whereas the Navigation Hardware Message (NHM) is currently an Approved Project of the CCSDS Navigation Working Group in the CCSDS Management Framework;

Whereas the interface for the provision of attitude and orbit data from the Attitude & Orbit Control System (AOCS) to the flight dynamics system is a recurrent implementation, historically requiring specific implementations, that would benefit from the operational robustness and cost efficiency of a standardized and well-defined exchange mechanism;

Whereas the NHM White Book has been developed and refined over several years, and by some measures can be considered an "advanced" White Book nearly ready for the required CCSDS Agency Review;

Whereas the recently assigned new NHM Book Editor has exhibited significant enthusiasm for the project, and has advanced several ideas designed to address some of the design point challenges affecting the further elaboration of the NHM;

Whereas significant efforts have been made since April 2016 to obtain a second prototyping Agency commitment for the NHM, in accordance with new policies of the CCSDS Management Council (CMC) and CCSDS Engineering Steering Group (CESG);

Whereas the Navigation WG has been discussing ways in which the NHM might be designed so it does not **require** the use of an Interface Control Document (ICD), in order to satisfy new requirements levied by the CESG;

Whereas the *Organization and Processes for the Consultative Committee for Space Data Systems Yellow Book (A02.1-Y-4)* allows for the possibility of an "Experimental Specification" (aka "Orange Book" with relaxed requirements regarding Agency Review, agency involvement in development, and prototyping; [NOTE: This point only relates to "Option #2" below.]

Whereas the agencies of the CCSDS have invested significant resources since 29-Sep-2010 in bringing the NHM to its current level of development; and

Whereas the members of the NHM continue to believe that the concept behind the NHM has value, even though it might not ever be widely implemented...

OPTION #1: THEREFORE BE IT RESOLVED:

1. That further development of the NHM Blue Book shall continue, per existing plans; and
2. That the NHM project shall continue to be a component of the Technical Program of the CCSDS Navigation Working Group.

OPTION #2: THEREFORE BE IT RESOLVED:

1. That further development of the NHM shall continue, with a conversion to Orange Book; and
2. That the NHM project shall continue to be a component of the Technical Program of the CCSDS Navigation Working Group.