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| CCSDS Navigation WG Telecon | 13-Jul-2016 |
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Attendees: David Berry, Dale Force, Cheryl Gramling, Reinhard Kiehling, Alexandru Mancas, Dan Oltrogge, Julie Thienel, Patrick Zimmerman

| Notes | Action |
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| 1. Document/Action Item Review & Status | |
| Most of the Action Items involve documents, so there is intertwined status of documents and their respective action items below. Documents are sorted below in alphabetical order. | None |
| a) ADM: Alain was not able to attend, so no discussion, no status. | a) To Alain: Proceed with plan to publish ADM P1.2 |
| b) CDM: Applicable action item target dates extended. | b) None |
| c) EVM: No new status. | c) None |
| d) Navigation Data - Definitions and Conventions V.4: Dale reported that he has only received minimal commentary on version 3.2. | d) To All: Send comments on the "changes tracked" version draft to Dale. Due date extended. |
| e) Navigation Data Messages Overview Green: No discussion. | e) None |
| f) NDM/XML: David stated that the CMC Poll for our new project ends 13-Jul-2016; so far all votes have been to adopt. | f) To David: Produce NDM/XML P1.1 per Action Item; project has essentially been approved. |
| g) NHM: See notes on Agenda Item #2 below. | g) See Actions on Agenda Item #2 below |
| h) ODM: Dan sent out a version P2.33 earlier in the week, but has already made revisions based on some worthwhile comments so a P2.34 will be distributed. Reviewers should concentrate on version P2.34, sections 2, 6, and 7. | h) To All: Review OCM related sections of ODM P2.34 (sections 2, 6, 7). |
| i) PRM: Fran was not able to attend, so we had no status. | i) To Fran: provide rough draft test plan. Complete updates to Red Book 1.1 (including dispositions). To David: Remind Frank that we are looking for a ROSETTA sample to convert to PRM. |
| j) RDM: The new project has successfully passed the CMC poll. | j) To Alexandru: Produce White Book version 1.0 |
| k) SMM: See notes on Agenda Item #3 below. | k) See Actions on Agenda Item #3 below |
| l) TDM: Applicable action item target dates extended. | l) To David: Proceed with plan to publish TDM P1.0.4 |
| 2. Navigation Hardware Message Resolution & Discussion | |
| <ul style="list-style-type: none"> This was the first of two main discussion items. We reviewed the DRAFT resolution to discontinue development of NHM and entertained discussion. No prototype 2 volunteer stepped forward at this time. Julie Thienel reminded us that there | <ul style="list-style-type: none"> To All: Consider NHM issues as expressed in the resolution. |

| Notes | Action |
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| <p>is value in standardization of this information, so we shouldn't necessarily discontinue the work. Various options for continuing the standardization effort were raised, for example, to spend some time trying to narrow the scope of the NHM with the intent of reducing the reliance on an ICD, or adding applicable material to the ODM and ADM, or making the NHM an Orange Book.</p> <ul style="list-style-type: none"> No decision with respect to the NHM was made. We will make a decision at the Rome meetings. For now, further development of the NHM will be on hold. | <ul style="list-style-type: none"> To David: Prepare counter view to discontinuance of NHM (NOTE: others are welcome to prepare counter views too). To David: Modify the "Whereas" relating to SCaN Manager prohibiting participation by Joe to reflect that it was not a performance-based decision. |
| 3. SMM/OCM Potential Overlap Discussion | |
| <ul style="list-style-type: none"> This was the second of two main discussion items. We started with Reinhard's responses to some questions David had posed to him (senior member of the WG). Reinhard indicated that OPM modeling is being used effectively at DLR/GSOC for many missions, even though it is not very comprehensive or sophisticated; it is sufficient for pointing purposes and cross support purposes, but not for solar electric propulsion (low thrust) type maneuvers. GSOC is not using APM so he did not have a comment on the utility of the APM maneuver modeling (but the structure is analogous to that of the OPM in detail). Currently GSOC does not see any practical applications for the OCM in its operation, but sees that from the OCM/SMM comparison table we consider that the OCM is more appropriate for electric orbit raising since it supports acceleration profile time history and/or finite thrust burn time history. David noted that the proposed first edition of the SMM, containing the Maneuver Planning Message, in principle might not contain much more complexity than is already available in the OPM and APM constructs. This potentially calls into question SMM utility. Cheryl pointed out that for Δh maneuvers we need a complement to the Δv maneuvers that can be expressed in the OCM. In the current plan the SMM would be the place to do that. The notion of adding Δh maneuvers to the OCM was raised; Dan expressed willingness to consider this. Also raised was the idea of adding a construct similar to the OCM maneuver information into the ADM revisions. No decision was made. We will make a decision on SMM direction at Rome. | <ul style="list-style-type: none"> To David: Add Fall 2016 agenda item on SMM direction. |
| 4. Other Discussion | |
| <ul style="list-style-type: none"> There was brief discussion on the topic of applying for additional NASA funding for the Nav WG through Paul Gill. | <ul style="list-style-type: none"> Dan and David will discuss offline. |
| 5. Set Next Telecon | |
| <ul style="list-style-type: none"> Next telecon: NOTE: No meeting in the month of August. Next telecon will be 07-Sep-2016 1300 UTC | <ul style="list-style-type: none"> To David: Set up webex meetings and send calendar invitations. |