# Time Management Working Group Minutes

October 29, 2020 virtual meeting  
November 4, 2020 virtual meeting

## Attending

* Jon Hamkins
* Stanley Cooper
* Carlyn-Ann Lee
* Robert (Lee) Pitts
* Yukio Yamamoto
* Eric Pitts
* Ilshat Gubaydullin
* Sinda Mejri
* Cuitao Zhang
* Marina Ohara
* Christian Stangl
* Victor Sank
* Beau Blanding

## Agenda

* Overview in lieu of plenary presentation
* Actions from last meeting:
  + Each space agency to detail format of time calibration packets used in missions
  + Each space agency to collect data for mission survey
  + ~~Jon to provide spreadsheet template for mission survey~~
  + ~~Jon to investigate participant from Russia for section 4.3 and mission survey~~
  + Green Book draft
    - ~~Christian to provide full citations for [20-22]~~
    - Beau/Eric to provide citation for [23] – will check
    - Sinda to clarify Qosc in 3.1
    - Sinda to insert detail in 3.5.2
    - ~~Beau and Eric to revise section 4.1.4 (or resend)~~
    - Jon Hamkins to rework the introduction in Section 5 to remove any NASA-specific terminology.
    - ~~Beau Blanding tentatively agreed to write section 7.3, spacecraft maneuvers.~~
* Mission survey
  + Carlyn overview of google form
  + Review input
* Discuss reorganization of sections 5 and 6 – wait until we receive input for section 6.
* Author identification for missing sections - done
* Decide next meeting date: December 3, 7 am PST

## Minutes

### Plenary presentation

The Working Group went through the plenary presentation provided by the CCSDS secretariat. WG members were encouraged to provide comments about the new CCSDS website to the secretariat.

### Action items

The Working Group discussed the status of action items open from the September meeting. It was agreed to begin tracking open action items more formally, using an action item ID number and a table included in the minutes.

### Mission survey

Carlyn Lee presented an overview of the Google Forms she has set up to collect mission survey inputs. WG members are encouraged to use a system that works for them, and are welcome to use the Google Forms system. Inputs can be exported to a spreadsheet. The WG plans to extract information from the spreadsheet for inclusion in a table in an annex of the Green Book.

### Green Book status

The Working Group stepped through the Green Book draft and reviewed new inputs and revisions. Ilshat Gubaydullin provided an input on GLONASS and on Russian time management. Beau Blanding provided an input on spacecraft maneuvers. Christian Stangl provided revisions relating to references and other items.

Authors were identified to write or revise sections on the time management concepts, introduction, NTP, DTN, and time synchronization.

The WG agreed to table discussion of merging or reorganizing sections 5 and 6 (time correlation and time synchronization) until after we receive input from Lee Pitts on section 6.

## Next Meeting

The WG made good progress during the Oct. 29 meeting and completed its agenda. The WG agreed to cancel the previously planned November 4 meeting, and instead work the open action items and convene again in December. Unfortunately, there did not appear to be a convenient time at which all members are free, but we agreed to meet on December 3. An alternate attendee may attend for JAXA.

Agenda for December 3:

* Action items review

## Actions

Open action items are listed in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **AI#** | **Action** | **Assignee** | **Due Date** | **Status** |
| AI\_20\_01 | Each space agency to detail format of time calibration packets used in missions | NASA: Jon; ESA: Sinda; JAXA: Yukio | Dec 2020: determine what can be released.  May 2021. | Open. Agencies may be limited in what can be released. |
| AI\_20\_02 | Determine what/whether mission survey data can be publicly released | NASA: Carlyn  ESA: Sinda  DLR: Christian  JAXA: Yukio | Dec. 2020 | Open |
| AI\_20\_03 | Complete mission survey | NASA: Carlyn  Others: TBD | May 2021 | Open |
| AI\_20\_04 | Write section 2.1 | Jon Hamkins | December 2020 | Open |
| AI\_20\_05 | Write 3.5.4 | Sinda Mejri | December 2020 | Open |
| AI\_20\_06 | Write 3.5.5 | Lee Pitts | December 2020 | Open |
| AI\_20\_07 | Write section 6 (time synchronization section) | Lee Pitts | December 2020 | Open |
| AI\_20\_08 | Rework the introduction in Section 5 to remove any NASA-specific terminology | Jon Hamkins | December 2020 | Open |