

Call for interest in Mission Planning Service Standardisation

Mario Merri - 11May2012

The Spacecraft Monitoring and Control (SM&C) working group of the CCSDS (Consultative Committee for Space Data System - www.ccsds.org) has developed a Mission Operations (MO) Service Framework for the specification of standardised services for the exchange of meaningful information between the major components of the spacecraft mission operations system. On 18 April 2012, during the CCSDS technical meeting in Darmstadt, Germany, the SM&C working group held a half-day session to discuss the need for standardised mission planning services built on the MO Service Framework with the mission planning community. Before the event, an extensive [promotion campaign](#) was performed that brought together in Darmstadt more than 60 mission planning experts.

During the sessions, the discussion was very interesting and stimulating. The summary is:

- Not all areas requiring mission planning were properly represented, especially in the areas of manned missions and rovers.
- There was general consensus that there is a need for standardisation of Mission Planning Services.
- It was recommended to keep the level of standardisation simple (high level), at least at the beginning to allow the quick identification of commonality across agencies.
 - Initial standards will not cover in full the needs of the community and will solve only a subset of the problems. However, they could be fast track and be used as a means to focus and consolidate the opinion of the planning experts on next steps.
- The following standardisation priorities identified (not in order of priority):
 - Terminology
 - Planning Request Management (and reporting)
 - Plan/Timeline Management (and reporting)
 - Flight Dynamics Event Management
 - Rules & Constraints Management (and reporting).

The agreed way forward is as follows:

- An open CCSDS distribution list has been established (<http://mailman.ccsds.org/cgi-bin/mailman/listinfo/moims-mp>) for interested parties.
- An initial concept paper on the approach to Mission Planning service standardisation will be drafted before the end of summer 2012.
- Interested organisations are invited to submit a short email confirming (Mario.Merri@esa.int):
 - Their interest in standardisation of mission planning services
 - Their mission planning services priorities
 - Their willingness to contribute to the initial concept paper
 - Their willingness to contribute to the long-term standardization effort.
- A similar meeting will be held at the next CCSDS workshop in Cleveland. This will complement the discussion done at this meeting to hopefully include a larger participation from the US side covering also the areas of manned missions and rovers.

The minutes and the presentation material is available [at this link](#).