

Responses to Action Item CMC-A-2014-11-09

CMC members were asked to review the Planetary Communication Green Book project to determine if there is any interest and, if there is interest, provide resources (if any).

NASA

Nick: The response on CMC-A-2014-11-09 from NASA is that NASA has no resources or interest for the Planetary Comm work.

CSA

CMC-A-2014-11-09

CSA has no current resources to commit to Planetary Communication Green Book project.

JAXA

CMC-A-2014-11-09:

JAXA confirms that we are not planning to engage ourselves in this project.

CNES

On the action CMC-A-2014-11-09, I confirm the big interest of CNES and our proposal to take editorial responsibility to produce the Planetary Communication Green Book.

CNES believes it is appropriate to define now the roadmap on how to harmonize practices and solutions for the communications in the various domains of Mars, Moon, Planets or Asteroids.

We believe this is the objective of the GB document as it is defined:

“The Green Book will include the following items:

- 1) Identification of the functional and performance requirements for a CCSDS planetary communications standard in line with systems requirements and in coordination with SFCG. The SFCG recommendation allocating frequency bands for each identified type of link needs to be analyzed by CCSDS to assess how it fits technically from a CCSDS viewpoint. For instance, in the PCOM SIG, proposals were made for links at 5 GHz and in optics, two bands which are not in the SFCG rec. Aspects like feasibility of data rates, Tx power, antennas vs frequency bands, positioning issues, ... will be addressed.
- 2) Collection of the various mission profiles corresponding to the identified missions scenarios as well as system requirements along the lines of agencies' mission needs.
- 3) Revision of the state-of-the-art system architectures, techniques and technologies susceptible to be adopted in a future planetary communications standard”

The objective is not to replace whatever exists in CCSDS now but to perform an overview of the requirements and the inventory of the most appropriate technologies to support them.

No Blue Book is planned at this stage.

If no work is advanced on these subjects now, as they refer to the underlying technologies, is it worth advancing on higher layer ones, like DTN, Messaging or Applications ... as they may not be cross supported in the context of the actual missions?

For the CMC consideration.

DLR

DLR have no resources for that

ESA

Please find ESA's Reply to Action CMC-A-2014-11-09 "CMC members were asked to review the Planetary Communication Green Book project to determine if there is any interest and, if there is interest, provide resources (if any)."

Currently ESA has no resources for this project.

ESA suggests, in order to to produce a good quality output, to freeze this work and resume it at a later point in time when more resources will be available.

INPE

INPE has no resources at the moment for the project but wishes to express its recognition of the importance of the proposal for the Planetary Communication Green Book.

Should no sufficient resources be secured at the moment, it is proposed that this project topic may be reconsidered at a later date, when the viability of required resources for the execution of this project may become available, from members.

FSA

FSA position for CMC-A-2014-11-09.

PlaCom is interesting but we haven't got resources yet.

UK Space Agency

The UK certainly has interest in the Planetary Communications Green Book, but we have too few resources to commit to this at present. Also, I understand that the working group agreed to postpone work on the green book until there was an agreed mandate from ESA and Russia so that the work could go forwards in a sensible manner. I am told that the existing draft contents bear little relation to the infrastructure that actually exists at present.

Hence the UK position is that we should put the work on hold.