Recommendation for Committee Decision

Recommendation 1: Search and Rescue

Prepared by: Working Group B

Date of Submission: 6 December 2017

Issue Title: Search and Rescue GNSS payload interoperability

Background/Brief Description of the Issue:

The space segment component of the international Search and Rescue program is expanding. This requires continued communication between the GNSS providers to ensure interoperability.

Discussion/Analyses:

Information sharing has deepened to better understand the service providers' search and rescue concept of operations using GNSS payloads. Near-term intentions of the newest SAR space segment provider, BDS, was discussed.

Recommendation of Committee Action:

Invite further discussions on the global interoperability of search and rescue payloads on board GNSS constellation spacecraft. This includes national and international coverage concepts as well as return link implementation progress.

Recommendation for Committee Decision

Recommendation 2:

GNSS SSV - Use of GNSS for exploration activities in cis-Lunar space and beyond

Prepared by: Werner Enderle, Stefan Wallner, Daniel Blonski (ESA), Joel Parker, Frank Bauer (NASA), Hui Yang, Xinuo Chang (CAST, China), Alexey Bolkunov (Roscosmos, Russia),

Date of Submission: 06/12/2017

Issue Title: GNSS SSV - Use of GNSS for exploration activities in cis-Lunar space and

beyond

Background/Brief Description of the Issue:

During the WG-B GNSS SSV Working Group activities associated with the generation of the GNSS SSV Booklet, it became clear that the use of GNSS signals in support of missions within and beyond cis-Lunar space is possible and could contribute to improved on-board navigation capabilities.

Discussion/Analyses:

It is essential to understand the user needs for missions to cis-Lunar space and beyond, and to perform detailed analyses of the GNSS SSV capabilities and potential augmentations related to the support of missions to cis-Lunar space and beyond.

Recommendation of Committee Action:

WG-B will lead and Service providers, Space Agencies and Research Institutions are invited to contribute to investigations/developments related to use of the full potential of the GNSS SSV, also considering the support of exploration activities in cis-Lunar space and beyond.