Space Link Services Area

Resolution SLS-R-2021-05-002

Start of CWE Project for CCSDS 414.1 "Pseudo-Noise (PN) Ranging Systems" Blue Book Issue 3

11th May 2021

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The Space Link services Area,

CONSIDERING that the RF & Modulation (RFM) Working Group

- identified the need to update 414.1-B, almost due for 5-years review, in order to make 24 Mchip/s an available chip rate for Ka-band
- produced a draft CWE Project available at https://cwe.ccsds.org/fm/Lists/Projects/DispFormDraft.aspx?ID=724
- the WG has consensus on the draft CWE Project

RECOGNISING that required resources have been identified

RECOGNISING that due to the nature of the change, no prototype is required

RESOLVES to request CMC to approve starting the CWE Project identified above

RECOMMENDS that the CMC approve this resolution and, finally

REQUESTS that a CMC poll be conducted to accomplish this.

Close

Overview

Project Title	Pseudo-Noise (PN) Ranging Systems - Issue 3
Approval	Draft
Document Number	414.1
Charter	5.01 RF and Modulation Working Group
Document Type	Blue
Description of Document	The Pseudo-Noise (PN) Ranging Systems Recommended Standard defines both transparent and regenerative PN ranging systems. This update intends to make 24 Mchip/s an available chip rate for Ka-band.
Applicable Patents	There are no patent issues for this technology that are known by the CCSDS community
Patent Comments	None.
Survey of Similar Standards Documents or Projects Undertaken in Other Bodies and elsewhere in CCSDS	None.

Resources

Book Editor	ESA
Book Editor Resources	1 man-month
Prototype 1	Not Required
Prototype 1 Resources	Not required
Prototype 2	Not Required
Prototype 2 Resources	Not required
Prototype 3	Not Required
Prototype 3 Resources	Not required
Contribute	ESA
Monitor Only	CNES, NASA
Resource Comments	Limited change with limited effort required.

Schedule

Legend for Schedule Milestones = Required for Orange Books = Required for Green Books = Required for Magenta Books = Required for Blue Books Note - Red Books are Draft Blue/Magenta Books					**Original Completion Date** (Date in M/D/YYYY format.)	**Comments** (Date in M/D/YYYY format.)

Schedule Milestones	Orange Book	Green Book	Magenta Book	Blue Book		
Project Approved					6/15/2021	
Project Start Date					6/15/2021	
Internal WG Review						
First Draft Circulated to WG					6/15/2021	
First Draft Comments Due					6/20/2021	
Second draft circulated to WG					6/25/2021	
Second Draft Comments Due					6/30/2021	
Final WB Submitted to AD for Further Processing					7/10/2021	
External Milestones						
Secretariat Document Processing					8/15/2021	
First Agency Review					10/15/2021	
RID Resolution					11/15/2021	
Secretariat Document Processing 2					11/30/2021	
Final Agency Review					11/30/2021	Not expected
RID Resolution					11/30/2021	Not expected
First Prototype Development					11/30/2021	Not required
Second Prototype Development					11/30/2021	Not required
CMC Approval					2/15/2022	
Total Time to Complete (in months)					**8**	

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