1. \*

Default hailing Parameters for Space Enterprises

(NORMATIVE)

This normative annex documents the default Proximity-1 session establishment parameters used for hailing a partnered transceiver for specific Space Enterprises e.g., Mars, Lunar. Note that his Annex provides the parameter values to carry out both a demand and a negotiated hail.

\* CCSDS Secretariat to assign Annex Letter in CCSDS 211.0-B.

* 1. UHF-Band (used at Mars)
		1. UHF Band Hailing channel Parameters

## Hailing Carrier Frequency

* + Channel 1 (435.6 MHz) forward link and Ch 0 (404.4 MHz) return link.[[1]](#footnote-1)
* Hailing Symbol Rate
	+ 8,000 symbols/second
* Coding
	+ Uncoded
* Modulation
	+ Bi-Phase-L
* Polarization
	+ Right Hand Circular
* Transceiver Mode
	+ Proximity-1
* Coding
	+ No coding
* Modulation
	+ Bi-Phase-L
* Polarization
	+ Right Hand Circular
* Transceiver Mode
	+ Proximity-1

* 1. S Band (Used at the moon)
		1. S Band Hailing channel Parameters
* Primary Hailing Channel 0
	+ Default Forward Link Channel 0 (2084.30625 – 2085.227083 MHz);
		- Forward Central Frequency 0 (2084.76667 MHz);
	+ Default Return Link Channel 0 (2263.5–2264.5 MHz);
		- Return Central Frequency 0 (2264 MHz);
* Optional Hailing Channel 9
	+ Default Forward Link Channel 9 (2099.039583 – 2099.960417 MHz);
		- Forward Central Frequency 9 (2099.500000 MHz);
	+ Default Return Link Channel 9 (2279.5–2280.5 MHz);
		- Return Central Frequency 9 (2280 MHz);
* Hailing Coded Symbol Rate
	+ 1,024 symbols/second
* Carrier Only Duration
	+ Maximum of 5 seconds
* Idle Duration
	+ Maximum of TBD seconds
* Coding
	+ LDPC (n=2048,k=1024) rate 1/2 code defined in CCSDS 211.2-B-4.
* Modulation
	+ Bi-phase-L
* Polarization
	+ Left Hand Circular
* Transceiver Mode
	+ Proximity-1
	1. Ka Band (At the Moon)
		1. KA Band Hailing channel Parameters
	+ TBD
1. Hailing is performed between transceivers that are pre-configured. Therefore, it is
nominally performed on the hailing channel. However, if transceivers are compatibly
configured, hailing can occur on an agreed-to channel. Several first generation of
transceivers in the Mars Enterprise at UHF are fixed frequency and use Channel 0. [↑](#footnote-ref-1)