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)