AnNEX E\*  
  
Default hailing Parameters for Space Enterprises  
  
(NORMATIVE)

This normative annex documents the default Proximity-1 hailing (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
  + 8000 symbols/second
* Coding
  + Uncoded
* Modulation
  + PCM/PM/Bi-Phase-L
* Polarization
  + Right Hand Circular
* Transceiver Mode
  + Proximity-1
* Coherency
  + Non-coherent
  1. S Band (Used at the moon)
     1. S Band Hailing channel Parameters
* Primary Hailing Channel 0[[2]](#footnote-2)2
  + Left Hand Circular (LCF) Polarization;
* Optional Hailing Channel 9[[3]](#footnote-3)2
  + Right Hand Circular (RCF) Polarization;
* Hailing Coded Symbol Rate
  + 2000 symbols/second
* Coding
  + LDPC (n=2048,k=1024) rate 1/2 code defined in CCSDS 211.2-B-4.
* Modulation
  + PCM/PM/Bi-phase-L (filtered)
* Transceiver Mode
  + USLP (Version 4 Transfer Frame)
* Coherency
  + Non-coherent

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)
2. 2 Specific frequency channel assignments are defined in the Proximity-1 Space Link Protocol - Physical Layer (reference [6]). [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)