

IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
Fixed and Broadcast Communications (2)

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MULTIPOINT INTER SATELLITE LINK AND RANGING PROTOCOL

Abstract

The main goal of this document is to define a protocol allowing multipoint communication between the orbiter and several landers which can be involved in an exploration mission. The complexity of the protocol must be analyzed in order to be compliant to EWC31 S Band Transceiver platform developed by Syrlinks. The Proximity-1 Space Link Protocol will be analyzed in order to give some information in the definition of the new multipoint communication configuration. The communication protocol must also be compliant to the tone ranging function in a point to multipoint configuration. The study and manufacturing of the demonstrator was ordered by the CNES.