



PNRR Project – Task 1310.8 | Progetto: EMM – Earth Moon Mars CED Architectural Study

Overview

This task consist of the architectural study of the new CED-ASI design and all engineering analysis regarding the new layout, ancillary systems dimensioning (power supply and UPS, data lines, RF signal lines, time-frequency reference lines, etc.), Shielding and monitoring and control systems.

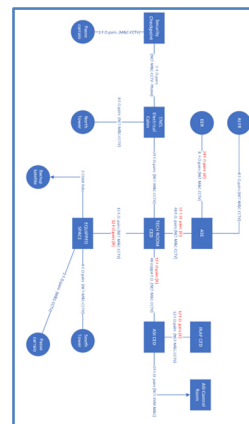
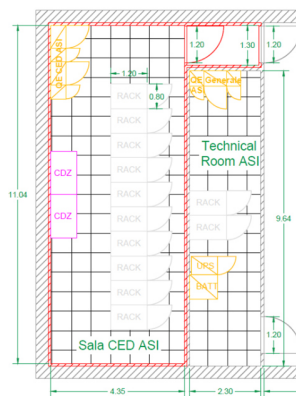
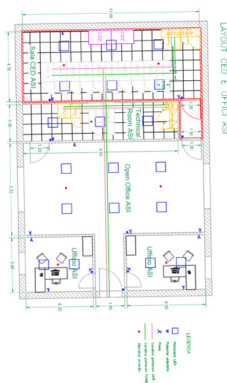
Technical specifications

- Definition of the new CED-ASI layout: rack equipment, ancillary systems (power distribution panels, HVAC internal unit, etc.)
- Definition of the power budget
- Calculation of the thermal budget
- Definition of the data cabling infrastructure
- Definition and design of the faraday cage to guarantee an attenuation of at least 80 dB for signals with a frequency of up to 18 GHz.
- Definition of all connections to antennas, equipped space, power distribution rooms.

Applications

The new ASI Data Center will host the ASI equipment for the downlink, storage and sending of signals coming from the antenna and all the necessary ancillary equipment [ASINET Video Surveillance, DATA CENTER, NTW (Spare), BACKEND and T&F]

Preliminary design Images



Main building Preliminary design CED ASI Datacenter preliminary layout

Fiber optic wiring diagram



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