

IAF EARTH OBSERVATION SYMPOSIUM (B1)  
Future Earth Observation Systems (2)

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MBZ-SAT MISSION GROUND SEGMENT (GS)

**Abstract**

The MBZ-Sat mission is a low earth observation satellite system with a Ground Sampling Distance (GSD) of less than 0.3 m at 500 km sun-synchronous orbit. The system is expected to be ready for launch by 2023.

The main highlight of the MBZ-Sat Ground Segment is centered towards heading into advanced systems that serves the growing commercial demand for high-resolution satellite imagery through a 24/7 automatic interactive image ordering processing chain for governmental and non-governmental entities in the UAE and globally.

MBZ-Sat Ground Segment (GS) consists of five different Elements. Each element represents a main function in MBZ-Sat mission workflow. The five elements are; Mission Operations (MO), Ground Network (GN), Image Lab (IL), Customer Services (CS), and Cal/Val Subsystem.

In this paper, the five elements of MBZ-Sat GS will be introduced. In each element, Concept of Operation, the Operational Flow, Automation Flow, and Key Features will be highlighted and explained.