

EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Data Management Systems (4)

Author: Mr. Jose Antonio Gonzalez Abeytua
Deimos Space S.L., Spain

Mr. Fabrizio Pirondini
Deimos Imaging, Spain
Mr. Carlos Fernandez
Deimos Space SLU, Spain

GS4EO: MULTI-MISSION USER SERVICES AND RECEIVING STATIONS

Abstract

DEIMOS Ground Segments are based on the **gs4EO** suite of products. These state-of-the-art products are the result of the know-how gathered in more than a decade of work for the European Space Agency, specially evolved for supporting small Earth Observation missions.

Using the gs4EO products a **multi-mission user services** system has been implemented, supporting a variety of spacecraft, like DEIMOS-2, Dubaisat-2 or Kompsat 2, 3 and 5. The web-based solution allows customers to easily assess the best mission to be used for acquiring their requested area of interest within the desired time window. The system models the different spacecraft capabilities and allow the customer to visualize graphically the different possible solutions, together with the cloud prediction. Once images are ordered the system allows the customer to follow them along their life cycle (acquired, downlinked, processed or disseminated).

This system can also be used in combination with **Direct Receiving Stations (DRS)**, allowing the customer to downlink data in their own antenna and process and archive the data locally. The gs4EO solution for DRS provides a very cost-effective solution for customers requiring this service, and allows the integration of multiple spacecraft within the system. The DRS can be customised to customer needs thanks to the flexibility provided by gs4EO.

The DRS will be tightly integrated with the **DEIMOS-2** main ground segment, allowing extraordinary responsiveness in the satellite tasking. The Deimos-2 mission (a 1m resolution optical instrument mounted over an agile platform) is to be launched in the first half of 2014.