

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

Author: Mr. Gunter Schreier

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, gunter.schreier@dlr.de

Prof. Stefan Dech

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, Stefan.Dech@dlr.de

Dr. Erhard Diedrich

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, Erhard.Diedrich@dlr.de

Mr. Holger Maass

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, Holger.Maass@dlr.de

Mr. Eberhard Mikusch

Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany, Eberhard.Mikusch@dlr.de

CONTRIBUTIONS TO GLOBAL MONITORING OF ENVIRONMENT AND SECURITY (GMES) BY
THE GERMAN REMOTE SENSING DATA CENTER**Abstract**

GMES, Global Monitoring of Environment and Security, is the second pillar of the European space strategy, executed by the European Commission, ESA and its member states. This large scale operational earth observation program requires a complex and operational earth observation ground segment, integrating the data from the dedicated GMES Sentinel space segment as well as those from national collaborating missions.

As part of the new Earth Observation Center, the German Remote Sensing Data Center (DFD) of DLR in Germany operates for over 20 years payload data ground segments for national missions, ESA and its partners. DFD has established acquisition stations worldwide and operates a large earth observation data center, which makes earth observation available to general and dedicated applications, including those, demanding space borne information in near real time.

DFD is currently in preparation for the demanding challenges of the GMES ground segment. This paper describes the assets of DFD in bringing data acquisition and management closely together with applications such as mapping natural disasters. For example, it shows Payload Data Ground Segment (PDGS) configurations suited for Sentinel operations or how global data from Sentinel missions can be integrated with national and commercial high resolution SAR and optical information to generate critical geo-information, as those required for the GMES Services.