

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

Author: Dr. Maria girolamo Daraio
Italian Space Agency (ASI), Italy

Dr. Maria Libera Battagliere
Agenzia Spaziale Italiana, Viale Liegi 26, 00198 Roma - Italia, Italy
Mr. Alessandro Coletta
Italian Space Agency (ASI), Italy

DATABASE CONCEPTS AND REQUIREMENTS TO OPTIMIZE THE MANAGEMENT OF THE
COSMO-SKYMED INSTITUTIONAL USERS COMMUNITY

Abstract

COSMO-SkyMed (Constellation of Small satellites for Mediterranean basin Observation) is an Earth Observation Dual Use System (conceived to fulfill both civilian and defense needs). It is composed by four mid-sized satellites equipped with a Synthetic Aperture Radar (SAR) operating at X-band. The constellation is fully operational since May 2011. COSMO-SkyMed data access is regulated by means of an appropriate and well-defined Data Policy and the users, in the civilian domain, are classified mainly in two classes: institutional and commercial. The first ones include national and international Administrations, Agencies, Ministries, Universities, Research Centres, etc. and they are managed and coordinated directly by ASI under the signature of specific agreements. The second ones are managed by e-Geos, an ASI - Telespazio company, which is the commercial provider of CSK products. The operative management of a remote sensing mission, such as COSMO-SkyMed, includes activities like definition and development of operational and mission scenarios, drawing up of Civilian Global Handbook as well as provision of specific handbooks, management of the agreements, etc. Daily management tasks can regard to draw up agreements and licenses to use, to perform customer service activity with the aim to assist users in data ordering, to solve critical issues, to provide data, to optimize and monitor acquisition plans. On the basis of the experience gained from the operational activity and institutional users community management, the idea to define a conceptual maps to develop a database able to easily supervise and handle a huge number of tasks and a large volume of information related to the provision of COSMO-SkyMed data was developed. This paper illustrates the analysis performed to elaborate the concepts and requirements for a database tailored to be capable to extract quickly and easily fully comprehensive and complete charts. They can concern general statement about on-going projects including linked data provision and their economic statement. In addition the database should allow to visualize the state of the mission exploitation in terms of users requests, geographic areas of interest and application domains. It is likely a useful instrument for providing, to the research community, policy makers and general public, information and knowledge derived from the COSMO-SkyMed data exploitation, with the idea to enable and improve decision making.