

EARTH OBSERVATION SYMPOSIUM (B1)
Dual Use Earth Observation (6)

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COSMO-SKYMED SECONDA GENERAZIONE DEVELOPMENT STATUS AND PROSPECTS
RELEVANT TO INTEROPERABILITY, EXPANDABILITY AND MULTI MISSION/MULTI SENSOR
CAPABILITIES**Abstract**

COSMO-SkyMed Seconda Generazione (CSG) user ground segment, in continuity with COSMO-SkyMed architectural key principles, is based on an interoperable and multi-mission design enabling the exhibition of CSG services to external partners and, conversely, the access through CSG to services made available by other partners. The exploitation of these multi-mission Earth Observation services may be achieved through the definition of a Common Interoperability Layer (CIL), based on Service Oriented Architecture, in charge to interconnect the different partners, customise the information exchange and implement additional functions in support to services not available at CSG level. Due to the CSG architectural features, the CIL can be implemented limiting the impacts towards the CSG system to the addition of specific plug-ins and maintaining the man-machine interfaces already identified at CSG

level for operators access to the services (e.g. multi-mission request submission, multi-mission planning, multi-mission catalogue browsing). This paper provides an overview of CSG user ground segment services that can be made available to external EO partners, with particular reference to the CSG defense user environment, and identifies the main characteristics of the Common Interoperability Layer.