

# **CONSTELLATION MANAGEMENT AND IMAGERY SERVICE PROVISION**

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The Disaster Monitoring Constellation (DMC) exists as a significant example of international collaboration and scientific integration for rapid revisit imagery provision for disaster monitoring and commercial applications. Coordination of the satellites in orbit and the management of imaging opportunities and resource capacity are integral to the efficient utilisation of this valuable resource. Impending developments in imaging capacity due to the launch of new sensors will increase the total imagery volumes available significantly. In order to continue to effectively exploit satellite imaging system, issues will be resolved through the development of new hardware, software and the global integration of groundstations into the operational system.

During 2007 DMCii have, using the DMC satellite resources, collected imagery over 38 countries in Europe to achieve imagery coverage of the entire landmass with on average 5% cloud cover. This has required considerable planning and logistical analysis to produce this complete dataset within specific timed imaging windows and with the required technical specifications for the delivered product. Similarly, precision agriculture services provided in France, the UK and the USA and disaster response imagery provision exert a pressure on satellite programming coordination and resource management of a different sort.

New sensors to be launched in 2008, 2009 and onwards will also result in renewed requirements for absolute constellation intercalibration campaigns.

This paper describes the current and future operational mechanisms of the constellation including a description of the routine constellation management and calibration and current and planned scheduling mechanisms for different project types.

**KEYWORDS:** Constellation, Phasing, Satellite, Scheduling, Imagery, Agriculture, Forestry