

EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications and Economic Benefits (5)

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EARTH OBSERVATION EXPANSION PROVIDES OPPORTUNITIES FOR COMMERCIAL MARKET
GROWTH

Abstract

The Earth observation (EO) industry continues to develop strongly with growing investment in government EO programs and growing commercial demand for EO systems and solutions. It is estimated that in 2011 government investment in EO programs reached \$6.7 billion, an all time high. Despite wider budget concerns in the current economic context EO remains a top government priority in space applications; with strong drivers to support environment monitoring and climate change objectives, meet local requirements for EO data, and/or to help develop a local space industry. Such expansion is evident in the number of satellite launches: Over the next 10 years, 288 satellites are expected to be launched for EO and meteorology purposes, compared to 149 satellites launched over the previous decade. This escalation will increase data supply and provide opportunities for satellite manufacturers. Indeed, revenues generated through manufacturing EO (non-meteorology) satellites will total \$24.3 billion from 2012-2021, representing a 34% increase over the previous decade. Although the majority of these revenues are associated with leading government EO programs with an established industry, an increasing number of units from emerging and commercial programs will provide export opportunities. In total, 30% of EO satellites are scheduled to be launched from emerging and developing programs in Asia, Latin America, Africa the Middle East over 2012 to 2021. A key to program development in emerging regions is technology transfer or localization with existing manufacturers as countries seek to establish and develop a space industry. Commercial EO data sale faces its challenge but again growth in the sector is anticipated. The market for commercial Earth observation (EO) data slowed significantly in 2011 with growth of 6% to \$1.4 billion following five years of strong growth of over 20% from 2006 to 2010. The primary factor for this decrease in percentage was the stabilization in U.S. defense data procurement following the awards of the Enhanced View contracts by the NGA to DigitalGlobe and GeoEye. This, however, disguises significant growth in further applications and regions. In particular, data sales to international defense continue to grow strongly, reaching a value of \$400 million in 2011. Sectors such as engineering, infrastructure and location-based services also continue to develop. The commercial data markets in South-East Asia, Latin America, Russia and CIS are all experiencing high growth rates.