

BUSINESS INNOVATION SYMPOSIUM (E6)
Space-related Commercial Applications and Markets (2)

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GOVERNMENT DEMAND FOR SATELLITE APPLICATIONS AND SPACE SCIENCE DRIVING
TWO DECADES OF SPACE ACTIVITIES

Abstract

This article will address the recent and future trends in satellite launches for institutional and commercial purposes. During the ten years from 1999 to 2008, the world satellite industry launched an average of 74 satellites per year, plus a total of 72 small satellites launched into low Earth orbit (LEO) for three constellations delivering commercial communications services).

Government dominance of the space market was accentuated in the mid-2000s as the commercial geostationary (GEO) satellite market dropped to fewer than 20 units per year between 2003 and 2005.

A total of 500 government satellites were launched over the ten years, principally into low Earth orbit, compared to 310 commercial satellites, most of them in geostationary orbit. Over half of the government satellites were civilian, for space research and meteorological agencies. Military agencies launched 235 of the 500 satellites, principally in the USA and Russia.

From 2009 to 2018 the market for the space industry is due to grow by almost a half compared to the past ten years, totalling \$178 billion over the decade for a total of 1,185 satellites to be built and launched. Most of that market value will come from satellite manufacturing for civilian and military government agencies.

Underlying this trend is the unique capability of satellite technology to improve economic and social development leading more countries to acquire satellite systems to deliver communications and broadcasting, navigation and environmental services.

The space industry will also benefit from governments' growing concerns with defense and security issues, which will present opportunities to provide cost-effective systems, either through dedicated satellites or hosted payloads on commercial satellites.

Almost 200 geostationary communications satellites (comsat) now in orbit for commercial services will have to be replaced in the coming decade. New domestic comsat projects with the backing of government and/or private interests will also emerge in different regions throughout the world. These customers will require a reactive space industry, capable of delivering reliable satellite and launch products on-time and able to respond to non-technical requirements such as financing.