

IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)
Enabling safe commercial spaceflight: vehicles and spaceports (3)

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SPACEPORTS AS MAIN HUBS FOR OPERATIONS OF SPACE ACCESS PLATFORMS AND
ASSOCIATED GROUND INFRASTRUCTURES

Abstract

The growing development of new technologies for frequent and low cost access to space is triggering at international level increased interest in selecting and outfitting Spaceports that are currently being regarded as primary importance strategic and economy fostering assets; actually, a Spaceport shall feature the proper capabilities and ground infrastructures to integrate operations of different kind of platforms, thus serving the space access needs of multiple users. Spaceports are also considered suitable environments to aggregate educational and research activities, create opportunities for networking at different level. The present paper addresses evaluation of integrated spaceport capabilities, ground segment and operations to support the continuous development of technologies and the research and commercial opportunities that such space access platforms unveil, in accordance with the applicable regulatory systems and safety requirements. In addition, the paper highlights over the long haul possible evolution of Spaceports services towards worldwide specialization in terms of commercial services, public and private research and development, educational activities, thus modulating the level of commitment and involvement in space activities. Access to space as of today is also triggering the interest of some countries, relatively new to space, that are drafting roadmaps which build up capabilities around the pivotal concept of Spaceport, aiming at filling the gap with more developed countries and at offering services to eventually be integrated within international network. The need of access to space and provision of services of such countries is often strictly driven by specific national needs within their community services and significant effort is being put in place by these countries to develop cooperation with other nations to help them implement the capabilities they need. The present paper describes some specific cases and provides an overview of the approach being pursued by one of these countries that has proved to be very active in seeking involvement and becoming a significant actor in Space business; this is also possible by specific favorable conditions, such as low latitude near equatorial geographical location; government institutions and investors are progressively being involved basing upon promising business forecasts, in considering to enable funds for outfitting Spaceports and associated capabilities to reach their strategic objectives of entering the Space business in steady and staggered fashion.