

IAF SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Satellite Commercial Applications (3)

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SPACE SYSTEMS, SERVICES AND APPLICATIONS IN SUPPORT OF LARGE NATIONAL
INFRASTRUCTURES

Abstract

This work aims to show the results of an initiative, promoted by the Italian Space Agency (ASI), concerning the opportunities deriving from space systems, services and applications for national infrastructures, in which the community operating in the sector of large infrastructures was involved, with the aim to collect the main user needs for the planning of new initiatives by the agency.

Telecommunications, Navigation and Earth Observation represent the space sectors with the most relevant growth, not only for the level of technological maturity and the quantity and quality of the operational infrastructures built, but also for the important diffusion of the applications and services connected to them.

For Italy they are the most important space sectors and constitute a valuable resource for the achievement of multiple strategic, political and socio-economic objectives at national and international level.

In line with these perspectives, ASI envisages further investments aimed at the development and promotion of new services with very high added value, based on satellite Telecommunications, Navigation and Earth Observation systems, also combined each other and integrated with sensors, non space-based technologies and services, with the aim of guaranteeing and improving real-time services to citizens, businesses and managers of large infrastructures, contributing to economic growth, scientific and technological development and the sustainability of the Country.

The initiative, born with the aim of strengthening and accelerating the process of interaction with the national community operating in the large infrastructure sector, provided: the presentation of the Agency's present and future initiatives for promoting the development of space systems, services and applications to support the Country's emerging needs; the presentation of projects by managers of the main national infrastructures (highways, railways, water networks, networks for the production and distribution of electricity, telecommunications network, airport services, etc.) and the collection of needs for the definition of the requirements of future space earth observation, navigation and telecommunication infrastructures and related application services; the presentation of projects and initiatives by entrepreneurial subjects operating in the ICT and Aerospace sectors, of potential utility for solving problems relating to large infrastructures.

The aim of this work is to show how downstream services and applications, based on satellite technologies for Earth Observation, Navigation / Positioning, Telecommunications, also integrated each other and with not space-based technologies, can bring a significant contribution to the planning, design, construction, monitoring and management of large infrastructures, that represent a strategic asset for the nation.