HORIZON 2020 Italian technology priorities

_____Theme_____

Space Technologis and Applications

1.Introduction

The Platform, launched at the end of September 2011, will harness the synergies between Industry, University and Research and foster dialogue with every organization involved and interested in the Space activities and applications.
Our Country, through industrial and the institutional support, has invested in past decades significant resources in Space activities, achieving a leading position in Europe and worldwide.
This remarkable position, made possible by a significant presence and role of the academic and scientific community, must be maintained and enhanced in a context of increased competition and in a scenario of emerging countries playing a growing role in space technologies. The role of institutional programs is key in this contest; they allow the proper support to develop high value technological assets and to consolidate an enabling scientific, technological and product landscape for a competitive space industry.

2.Innovation Objectives:

The SPIN-IT Platform will convey the contribution of the Space stakeholders on the objectives of strengthening the initiatives and the effectiveness of the Italian Research, Technology and Development (R&T&D) system as well as analysis of the impact of Space technology as enabling and competitive factor and assets for other areas, with particular respect to the European research framework, and particularly in the light of Horizon 2020.
In Space development is crucial the role of the so-called "Users" who are mostly institutions and government agencies whose contribution must address the identification of the joint national strategic priorities.
Along with these and in line with the Italian Space Agency strategic vision document of the 2010-2020, the Platform has to objective to sustain and to increase the competitiveness of the country through a detailed mapping of skills, activities of the industrial value chain and of academic and scientific research system as well as to analyze and settle a set of evolutionary road maps to address research priorities.

3.European competitive advantage of the identified priorities:

For the European citizen

Telecommunications services, Satellite navigation, Environmental monitoring, Homeland security, Prevention and emergency management are some of the most relevant and important aspects of Space technologies that affect the quality of life for European citizens.

For the European Industrial System

The Space industry has a macro economic impact much larger than the dimension of the sector itself (in Italy there are about 5,500 employees with an annual turnover of over 1.4 billion euros). Space technology is a General Purpose Technology supporting competitiveness of many economic and industrial sectors with a significant "multiplier effect" induced.

4.Research Focus:

The Platform SPIN-IT was established on 29.09.2011. First activities have been focused to working sessions to define the platform taxonomy as well as a first structure in terms of thematic sub-groups for Application Domains and Enabling Technologies Clusters. More than 60 organizations among industrial players, universities and research centers start to actively participate to the platform.
Within the first quarter 2012 is expected to produce a set of position papers by application domains and technology clusters with overall SPIN-IT positioning and by October 2012, the presentation of the Strategic Research Agenda.

Focus 1:

Strengthen the competitive and leadership position in major space application domains (Earth Observation, navigation, telecommunication, planetary and human exploration, access to space) through a medium-long term R&T&D strategy fostering injection of innovation momentum

Focus 2:

Maintain and strengthen scientific knowledge through the development and launch of key scientific instruments and analysis of the acquired data as well as the full scientific utilization of the Space Station through microgravity life sciences

Focus 3:

Support the development of innovative and breakthrough technologies having critical impact for the realization of space systems subsystems and instruments with specific emphasis on transversal technologies like microelectronics, nanotechnologies, advanced material. Build a strong position to leverage Italian technology value chain in the frame of European technology harmonization process.