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ASIF: THE ASI SUPPORTED IRRADIATION FACILITIES, AN EXAMPLE OF NATIONAL
COORDINATION

Abstract

Italy, with France and Germany, represents a main key player between the European leaders in the space sector. Italy has strong capabilities including ground systems, satellite infrastructures, robotic payloads, and human spaceflight. Technological developments represent one of the reasons of the national success in space, a very strategic sector that continuously needs new technologic solutions and innovative methodologies to always face new challenges. The Italian Space Agency is fostering many developments in order to maintain the position acquired in the past years, pushing forward the limits of the reached engineering solutions, although public and private investments are needed to efficiently deal with the high costs of the technological developments. A strong national leadership is needed applying different logics: technology push and mission pull, bringing a sustainable approach at an international level with other European institutional players, such as ESA, EDA, EC. Targeting the national efforts can optimize the coordination results, harmonizing the technological roadmaps respect to the international needs. One of the most important fields of the international competition regards the EEE components, key sector of the space systems. Very interesting areas have been selected following a strategic approach towards innovative concepts: new components, power management devices, sensors and testing facilities. ASIF is the result of the collaboration between INFN (Istituto Nazionale di Fisica Nucleare, National Institute for Nuclear Physics) and ENEA (Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, Italian National Agency for New Technologies, Energy and Sustainable Economic Development) with the ESA support, the main aims are: a national network of irradiation testing facilities, integration with the european network interfaced with ESA. The facilities in ENEA are: CALLIOPE, FNG, TAPIRO, TRIGA; while the INFN facilities are: BTF, LNL, LNS, TIPFA. The start of experimental projects between several users for research and industrial scopes is foreseen for 2017.