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NEW MECHANISMS FOR TECHNOLOGICAL BREAKTHROUGHS AND SCIENTIFIC  
INNOVATION IN THE SPACE SECTOR BY REFLECTION FROM OTHER SECTORS

**Abstract**

In space sciences, as well as in “mainstream” science, the development of innovative new technologies opens new fields of research and provides new tools for scientists to further their research. Nevertheless, there is often a conservative approach to technology use and breakthroughs do not happen as frequently as they could. There is a need to identify factors that hinder scientific innovation and to propose possible mechanisms that could stimulate faster use of new technologies for the benefits of science.

In order to achieve this, the first step is to analyse the science and technology relationship and find an appropriate model to describe it. In the space sector the “need push - technology push” model can be used to describe the basic principles of this relationship. The second step is to study different sectors and how they react to innovation. The sectors to examine can be seen as fast sectors that exhibit an immediate reaction to innovation like consumer electronics and slow sectors like construction, aerospace and pharmaceutical. The third step is to look in a pan-European fashion centres and mechanisms that reflect successful scenarios for incubating innovation.

This paper will provide an analysis about different sectors conservative and non with regards to innovation. It will provide examples of successful centres and mechanisms in Europe and how they can be used in the space sector.