

BUSINESS INNOVATION SYMPOSIUM (E6)
Public/Private Human Access to Space - Supporting Studies (2)

Author: Dr. Simonetta Di Pippo
Italian Space Agency (ASI), Belgium

Mr. Ken Davidian
Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

AN OUTLINE OF THE IAA STUDY GROUP “PUBLIC/PRIVATE HUMAN ACCESS TO SPACE”

Abstract

Over the entire history of government-led, civilian and military space programs as they have been conducted to date, no human orbital space industry has yet been created or evolved naturally that is viable and self-sustaining independent of government customers. Not yet, but emerging. Repetition of past practices will not increase the possibility of a viable human orbital market in space, so we need a disruptive approach to succeed. It is widely recognized that the level and nature of enterprise, innovation and entrepreneurship varies greatly with national (regional), societal and cultural factors. [Landes et. al., 2010] This type of analysis must “encompass a more holistic approach of economics in political, social, and cultural settings” [Hertzfeld, 2012], implementing a multi-disciplinary approach to begin understanding the many contributing factors of long-term new market creation and viability. Performing such a complex analysis on a nation-by-nation basis offers the best opportunity for understanding whether one or more nations (or regions) can realistically develop and support a human orbital space market. The International Academy of Astronautics (IAA), having recognized the importance of this topic, and its implications on the future of space activities, fostered the creation of the IAA Study Group “Public/Private Human Access to Space”, co-chaired by Simonetta Di Pippo and Ken Davidian. The IAA Study Group is based on the analysis of the space industrial base of each nation (and region) by applying well established and academically based frameworks of industry structure and national competitiveness. Different nations have different goals and approaches, so the competitive posture of nations and regions active in space industry segments are assessed separately. The Michael Porter “Diamond” framework [Porter, 1998] will be applied to frame the analysis and identify the characteristics of each nation’s resources (e.g. natural, human, knowledge, capital and infrastructure), home demand, related firms and supporting industries for a potential human orbital space market. Depending on the many interdependent factors, the viability of future human orbital markets will be assessed based on a nation’s (region’s) ability to foster innovation and innovation growth in the industry segments of interest. The paper will present some preliminary results of the Study Group, while the complete report will be completed by 2014 and published by IAA. We can anticipate that the first of many conclusions that will result from this study is that commercial space, or NewSpace, is the new frontier of humankind.