

IAA Study Group Status Report

Responsible Commission: 3 “Space Technology & System Development”.

Study Number and Title: 3.4 “Public/Private Human Access to Space”

Short Study Description (repeat from Study Group Proposal):

This study group will create a report that assesses the cultural, economic and political environments affecting the creation and sustainability of global public and private orbital space activities and beyond.

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 study will be a combination of two primary activities: (1) a collection of past works and (2) a series of separate but coordinated activities, including research studies, participant workshops and academic forums.

Progress in past six months:

Major milestones that have been accomplished for this study group activity are given below:

- March 2013: In-person meeting of the study group at the IAC Planning Meetings in Paris, France.
- Presentation at the 8th IAA Symposium on the Future of Space Exploration : Towards the Stars in Turin (IT), July 3-5, 2013 of the status of the study with a paper entitled “An Outline of the Study Group Public/Private Human Access to Space”
- Acceptance at the IAC 2013 of the paper outlining the status of the study group activities
- Initial results of “Human Orbital Market Industry Structural Analysis (United States)” delivered. Will provide basis of future papers and analyses to support this study group.
- Research project “U.S. Human Orbital Markets Industry Chain” initiated. Preliminary results expected on monthly basis (e.g, 30, 60, 90 days).

Study group members have been identified and communication to confirm their participation confirmed. The current list of confirmed study group participants includes:

Confirmed Members

- Simonetta DI PIPPO (ASI, Co-Chair)
- Ken DAVIDIAN (FAA, Deputy-Chair)
- Xiaohui CAO (CALT)
- Jie “Jay” HOU (Dresden Univ of Tech)
- Zhuoyen “Joy-yen” LU (Univ of Lapland)
- Bustanul ARIFIN (SGAC CSPG)
- John CULTON (US Embassy Denmark)
- Jose Mariano Lopez URDIALES
- Philipp MAIER (Dresden Univ of Tech)
- Gennaro RUSSO (CIRA)
- Khurana SHASHANK (SGAC CSPG)
- Randy SWEET (Lockheed Martin)
- Marco VILLA (SpaceX)
- Vikram UDYAWER (Univ of Sydney)
- Takane Imada (JAXA)

Invited Members

- Alan BOND
- Allen HERBERT (USA)
- Claire JOLLY (OECD)
- Dmitry PAYSON (Skolkovo Space and Telecommunications)

Each of the study group members have agreed to investigate a single country or region and have been given the following specific task assignments:

- Literature Search: Compile publicly available reports that provide data and/or analysis of the space industry for a given country or region.
- Historical & Cultural Assessment: Based on historical and cultural information from “Invention of Enterprise” for select countries, provide a "compare and contrast" analysis based on your personal experiences and assess the applicability and relevance to your country's space industry and the viability of a human orbital commercial market.
- Initial Industry Cluster Assessment: Based on “The Competitive Advantage of Nations” notes for select countries, provide a "compare and contrast" analysis based on your personal experience and assess the applicability and relevance of the given industry cluster analysis to your country's space industry and the viability of a human orbital commercial market

Below is a chart that shows the country or regions assigned to the confirmed and invited members:

Country/ Region	Name	Lit Search	Cultural Analysis	Industry Cluster	Country/ Region	Name	Lit Search	Cultural Analysis	Industry Cluster
Africa	Allen Herbert	●		●	India	Khurana Shashank	●		●
Australia	Vik Udyawer				Indonesia	Bustanul Arifin	●	●	●
Canada					Italy	Gennaro Russo	●		●
China	Zhuoyan Lu	●	●●		Japan				
China	Xiaohui Cao	●		●	Russia	Dmitry Payson	●	●	●
Denmark	John Culton	●		●	Spain	Jose Mariano Lopez Urdiales	●		●
Europe	Simonetta di Pippo	●	●	●	UK	Alan Bond	●	●	●
Europe	Claire Jolly	●		●	US	Ken Davidian	●	●	●
France					US	Marco Villa	●		●
Germany	Philipp Maier	●	●●	●	US	Randy Sweet	●		●
Germany	Jie Hou	●	●	●	JAPAN	Takane Imada			

● Lead Activity ● Current Activity ●● 2013 IAC Abstract Submitted ● Invited Activity

Website Study Information up to date?

(Study Group Membership, Study Plan and Schedule): Yes

Issues requiring resolution? (recommend approach): None.

Product Deliveries on Schedule? (If modified explain rationale): Phase I report on schedule for delivery in October-November timeframe.

Study Team Member Changes? (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

Name of person providing Study Group Status (Study Group Chair or Co-Chair): Ken Davidian and Simonetta Di Pippo

Status Report Date: 2013-August- 28

Study Team Membership Roster with Changes Noted

Changes	First Name	Last Name	E-mail Address	Company
	Bustanul	Arifin		SGAC
	Xiaohui	Cao		
	John	Culton		Department of State
	Ken	Davidian		FAA AST
	Simonetta	Di Pippo		ASI
	Alan	Dupas		
	Jie	Hou		
	Allen	Herbert		
	Claire	Jolly		OECD
	Yu	LU		CALT
	Zhuoyan	LU		Faculty of Law, University of Lapland
	Philipp	Maier		
	Dmitry	Payson		Skolkovo Space and Telecomm
	Cai	Qiaoyan		CALT
	Gennaro	Russo		
	Khurana	Shashank		SGAC
	Randy	Sweet		Lockheed-Martin
	Vikram	Udyawer		
	Jose Mariano Lopez	Urdiales		BLOON
	Marco	Villa		
NEW	Takane	Imada		JAXA