

SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3.)
Assessing Public-Private-Partnerships for Space Projects (3.)

Author: Mr. David Iron
Logica, Leatherhead, United Kingdom, david.iron@logica.com

Mr. Ken Davidian
NASA, Washington, United States, kdavidian@nasa.gov

COMMERCIAL DEVELOPMENT & PPP FOR THE US-UK LUNAR INITIATIVE.

Abstract

Introduction

NASA and the British National Space Centre are investigating how NASA's Commercial Development Policy for exploration can be combined with the lessons of the UK's experience in Public Private Partnerships (PPP) to support the 2007 US/UK agreement to work together on lunar missions.

This IAC 2008 paper will contain programmatic content which has not been made public before. It will describe the latest thinking and how that fits in with NASA's Vision for Space Exploration, and will thus point to how space exploration missions may be formulated in the future.

NASA's ECDP

As a natural evolution of NASA's Technology Commercialization Policy, its Exploration Systems Mission Directorate (ESMD) has approved the ESMD Commercial Development Policy (ECDP) with specific goals of encouraging the development of emerging commercial space capabilities, to help complement NASA's exploration mission goals using standard commercial acquisition tools available to NASA, in a way that retains all intellectual property rights with the industry. The policy gives special emphasis to the inclusion of commercial opportunities in the development of exploration architectures developed by NASA.

NASA programs and organizations which support the ECDP already exist, including Commercial Orbital Transportation Services (COTS), the Space Portal at NASA Ames, and NASA's prize program Centennial Challenges.

The UK's PPP

A Public/Private Partnership (PPP) exists whenever a commercial concern commits to the delivery of a government service and takes a commercial risk in doing so. Private financing, usually known as PFI for Private Finance Initiative, is a type of PPP in which the private sector risk includes investment to build the infrastructure which enables the service.

The UK's experience of PPP includes over 700 contracts now under operation which altogether have raised over 130 Billion Dollars of private investment, and the experience is increasingly being used abroad.

Of particular interest are two space PPP's. The UK military satellite communications programme Skynet 5 is an example of how to do it, while the European satellite navigation programme Galileo has lessons on what to avoid.

Application

Partnership opportunities are being identified for the near, mid and far terms, showing the most likely areas of commercial investment interest. Starting with the Moon, they include uncrewed crewed transport, robotic vehicles vehicle components, and infrastructure services for orbital surface operations.

The latest ECDP/PPP programme planning will be described at IAC 2008.