

## **The International Space Station Multilateral Commercialization Group (MCG)**

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### **Introduction**

The International Space Station (ISS) is an unparalleled international collaborative venture that enables long-term space exploration and provides economic benefits to people on Earth. The International Partners of the ISS recognize the value of coordinated approaches to commercial development. This paper, prepared jointly by the Partners, describes some of the efforts and accomplishments to date of the Multilateral Commercialization Group (MCG) as well as their current activities and future goals.

The International Space Station assembly, operation, maintenance and utilization are all international collaborations. Each International Partner involved in this work retains the autonomy to operate their own commercial program aboard the ISS, within the framework of international agreements. Coordination and consultation provide a framework for cooperation to ensure that the commercial programs are in the best interest of the Partners and the commercial sector, as well as prevent any negative impacts of one Partner's activities on other Partners or the ISS as a whole.

The Multilateral Commercialization Group (MCG) was established by the ISS Multilateral Coordination Board (MCB) to provide a multilateral forum for the International Partners to consult and coordinate on policies and procedures related to ISS commercial development. The group is comprised of one Partner representative from each of the co-operating space agencies.

The MCG succeeded the Multilateral Consultative Working Group for Commercial Programs (MCWG-CP), which began discussions in November of 1999. The working group identified the need for a consultative process for commercial projects and consequently drafted and adopted a "Provisional Process for International Partner Consultation on ISS Commercial Projects". The MCWG-CP also published the first comprehensive set of pricing, practices and policies guidelines of all ISS Partner commercial programs. This document was distributed in June 2001 at the ISS Forum 2001 Utilization Conference in Berlin, Germany. At this same forum the group convened and was formally requested by the MCB to address specific issues of ISS commercialization. This request led to the current charter of the MCG group and a new

initiative to draft and adopt guidelines for commercial activities.

The overall objective of the MCG is to coordinate approaches to commercial activities aboard the ISS. The MCG will act as the focal point of coordination among the partnership on commercial projects to foster the greater commercial development of ISS. The MCG in particular will be responsible for developing and maintaining recommended guidelines for commercial activities in the following five market sectors: (1) advertising, sponsorship and branding; (2) entertainment; (3) research and development; (4) merchandising; and (5) space travel (e.g. passenger flight opportunities). These guidelines will serve as a common approach where appropriate to these issues among the partnership. These guidelines will address what type of commercial activities are inappropriate, how and when Partners should coordinate with each other on potential commercial projects, and identify the rights and obligations of the other Partners with respect to commercial activities undertaken by a given Partner.

The MCG can formally interface with other ISS international management bodies as necessary to achieve its objectives.

### **MCG Achievements**

The MCG, in its previous form as Multilateral Consultative Working Group for Commercial Programs (MCWG-CP), was established as the forum for the International Partners to promote the opening of the International Space Station to commercial activities.

The MCWG-CP set out to define basic, clear criteria to reduce the uncertainty that potential customers face in approaching business opportunities involving the ISS, and to reduce the barriers to entry.

The principle of autonomy of each Partner to pursue their own commercial development is established by the Space Station Intergovernmental Agreement (IGA) and a series of bilateral Memorandums of Understanding (MOU's)<sup>1</sup>. Each Partner may tailor their commercial development program to fit its own objectives and stakeholders. Recognizing that some commercial activities of one Partner may require the support of another, or may affect the resources and image of another, a simple consultative process for commercial projects was devised. The process assists the Partners in identifying the possible paths of resolution in these cases.

In parallel with establishment of this consultative process, each Partner set out to establish and publish commercial access conditions.

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<sup>1</sup> Agreement Among the Government of Canada, the Governments of Member States of the European Space Agency, The Government of Japan, the Government of the Russian Federation, and the Government of the United States Concerning Cooperation on the Civil International Space Station, January 29, 1998.

The Partners defined conditions of sale, such as bundling of resources and duration of utilization on board. All these conditions are reflected in the prices for the various accommodation and resources offered by the Station. The customers are offered a set of facilities, logistics and communications products to analyze and compare. All this information has been made available via a commercial brochure and is available at an MCG website (<http://commercial.hq.nasa.gov/international/>).



Each of the Partners defined a process by which entrepreneurial proposals in form of Offers can be submitted and subjected to a fair evaluation and selection involving, in some cases, a promotional support to the primary Research and Development activities.

A set of General Policies and Procedures regarding intellectual property protection and found in the IGA and MOU's has been posted by the Partners for customers performing commercial activities on-board ISS.

The MCWG-CP has been renamed the Multilateral Commercialization Group (MCG) to reflect it's official stature as a MCB approved organization. Its charter was modified to make the MCG "... act as the focal point of co-ordination among the Partners on

commercial projects to foster the greater commercial development of ISS". The MCG has the general mandate to address all issues related to the commercial utilization of the ISS.

A global web site dedicated to ISS commercialization was developed to house the output of the MCG and provide a link to Partner web sites dedicated to commercialization. The site address is: <http://commercial.hq.nasa.gov/international>.

### **MCG Development of Recommended Guidelines for ISS Commercial Activities**

The beginning of the operational phase of the ISS late last year, with its first full time crew heralded a new era in human space flight. This operational phase coupled with commercial sector interest in ISS utilization served as an impetus for the MCG to begin drafting Partnership-wide guidelines for ISS commercial activities. The guidelines are intended to provide basic principles of operation agreed upon by all Partners. It is the intent that these principles eliminate or at least reduce uncertainties that are expected to arise during implementation of ISS commercial activities. The guidelines are not meant to be exhaustive or extremely detailed, but rather provide a strong starting framework. It was agreed by the Partners that the guidelines would be kept simple and flexible to permit practice to shape the principles by establishing basic guidelines and allowing for modifications when contingencies arise.

Each Partner has the right and responsibility to manage its commercial projects as established by the IGA and MOU's. If adverse effects to other Partner resources are identified for a specific project the MCG provides a mechanism for resolution. This problem resolution process will be part of general guidelines.

Guidelines will be developed with the recognition of and deference to, where appropriate, the IGA and MOU's.

#### *Necessity of Guidelines*

The ISS is funded from public sector resources and represents the single largest civil R&D program in humanity's history. The ISS responsible government organizations have expressed a desire to facilitate successful commercial activities in this unique environment. It is not the intention to limit this unique resource to selected private sector shareholders, but rather to encourage a range of private ventures to leverage their resources with those of the public investment. While there is a clear opportunity for private gain, profit must be commensurate with risk and public sector objectives and assets must be upheld and protected.

To this end, the aerospace industry has expressed a desire for clear commercial utilization guidelines through informal discussions as well as a formal document<sup>2</sup>. With clear guidelines, industry will better be able to make sound decisions, based on objective criteria, regarding required investments, risks and rewards. This is a first step towards sustainable commerce in Low Earth Orbit. The guidelines are viewed as a necessary prerequisite to any serious, non-subsidized market activity and any transfer of responsibilities from the public towards the private sectors.

#### *Guidelines to be addressed*

The guidelines will address an array of potential commercial areas including: brand management (advertising, sponsorship and merchandising); entertainment, research and development, and passenger flight opportunities.

These guidelines will provide a common understanding to these issues among the Partners. They will address the types of commercial activities that are appropriate, how and when Partners should co-ordinate with each other on potential commercial projects, and identify the rights and obligations of the other Partners with respect to commercial activities undertaken by a given Partner.

#### *Brand Management (Sponsorship, Advertising, and Merchandising)*

It is expected that a significant amount of early commercial activity aboard the ISS will involve brand management including sponsorship, advertising and merchandising activities.

The cachet of the space program has long been recognized by marketing organizations. Associating products or services with the high-tech image of space and its prominent organizations to enhance the products innovative niche is a widely employed practice. In addition, one of the most appealing aspects for organizations interested in working with the space agencies is the opportunity to associate their organization with the agency. Indications are present that there is much capital value in the "space" brand. Given this evidence, the name and image of the ISS could be a valuable commodity. The MCG will explore the possibility of employing an Olympic-style model of sponsorship associated with the ISS brand.

#### *Research and Development*

The research and development activities aboard the ISS are considered to be a primary mission of ISS for both commercial and non-commercial activities. Research and development conducted on a commercial basis aboard the ISS may provide benefits to society in many areas including the following; advanced materials, new drugs, medical

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<sup>2</sup> Commercialization of the International Space Station: An Industry Perspective  
([http://www.unitedspacealliance.com/isscw/Resource/ISS\\_Commercialization\\_White\\_Paper\\_7-2-01.pdf](http://www.unitedspacealliance.com/isscw/Resource/ISS_Commercialization_White_Paper_7-2-01.pdf))

applications, more efficient combustion techniques with lower pollution and energy consumption and new commercial services. These activities could create new business opportunities and new wealth on Earth. Guidelines for commercial research and development will help define appropriate standards and avoid inappropriate activities, those that violate legal or ethical standards.

### *Passenger Flight Opportunities*

One of the fundamental concerns regarding space flight participants is safety. Space flight participants are individuals (e.g. commercial, scientific and other programs; crewmembers of non-partner space agencies, engineers, scientists, teachers, journalists, filmmakers or tourists) sponsored by one or several Partners.

The Multilateral Crew Operations Panel has developed Criteria for Selection, Assignment Training and Certification of ISS (Expedition and Visiting) Crew Members. It was agreed by all Partners that these guidelines would be used when assigning their professional astronauts/cosmonauts or space flight participants as ISS (Expedition and Visiting) crewmembers. Each Partner will nominate candidates to ISS crews and ensure that the individual meets the crew criteria.

MCG guidelines will propose a mechanism for providing Partners with the necessary information to assess and integrate this commercial activity into the context of other ISS activities. The impacts of passenger flight activities on the other Partners will be defined and guidelines will propose a process to resolve any conflict between Partners.

### *Crew Involvement*

Guidelines will be useful with regard to astronauts and cosmonauts activities. Astronauts and cosmonauts aboard the ISS are usually public sector employees, subject to national employment rules and regulations. The commercial guidelines for crew involvement should clarify the roles, responsibilities and rights of astronauts and cosmonauts and as much as possible defer to established guidance from pre-existing documents.

## **Conclusion**

The MCG has been established as a focal point among the Partners to exchange information on commercial projects. This exchange of information may create more opportunities for commercial projects based on the cooperation between the Partners.

Moreover, the Partners can promote commercialization more efficiently through mutual cooperation, such as establishing a common website for ISS commercialization, or hosting international events to promote ISS commercialization.

The MCG is creating guiding principles for the Partners in order to promote ISS commercialization. Such guiding principles provide indispensable information for potential users investing in new businesses utilizing ISS, since they reduce the business uncertainties and associated risks accompanying such a new field. At the same time, the guiding principles and coordination among the Partners can serve to protect users by avoiding unexpected adverse impacts from other user payloads.

Through such functions, the MCG, as a focal point between the Parties for commercial projects, can contribute to the ISS commercialization while strengthening international cooperation.

The ISS offers the global entrepreneurial and industrial community a unique opportunity to exploit an orbital resource to the benefit of both governments and the private sector. The MCG will continue to work in the best interests of their stakeholders to establish guidelines for commercial applications to ensure that promising and profitable ventures progress without any undue harm to public policy objectives in scientific and security areas.