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“Making Space Profitable: the Role of Law and Policy”

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The commercialization of outer space is at a crossroads. The turning point of success or failure will pivot not on finance, but on law. A renewed focus on the creation of a commercial regulatory environment in outer space is in need. Two obvious starting points come to mind: existing national space law regimes, and the International Space Treaties themselves. I believe that the issue of national space laws will resolve itself in a most Darwinian fashion, as I will discuss later. It is the International Space Treaties where the greatest attention must be focused. I hope today to most humbly offer a few observations and perhaps a few ideas for your consideration in this regard.

There are two major challenges facing the growth of the commercial space industry: those of financing and law. Each is as equally important as the other. However, one we can do something about and the other we cannot. Ask anyone, in any business, in any industry and they will tell you that money is always a problem. Whether they are companies from manufacturing, transportation, telecommunications, or even the Internet, they always need more money, more capital, and more resources to ensure their success. Sufficient financing will always be a challenge. This will always be the case for our industry. However, I believe that the ultimate success or failure of the commercial space industry now lies not in the hands of bankers, but in those that will determine and shape our regulatory environment, our law and our policy.

Economics is law. By defining national and international law, Governments regulate the businesses they allow to prosper, or to fail. We might not be able to influence the flow of market capital, but we can influence and build our own legal and regulatory environment, and we must if the commercialization of space is to succeed. The present space laws and international treaties that govern and direct the development of our activities in outer space were written for a different age and a different time. We understand that these laws and agreements were formulated to meet a specific set of circumstances, and they served their purpose well. Conflict was prevented in outer space, and an admirable foundation of government space activities has been developed from them. Unfortunately, the laws that were written to fuel the government development of outer space are now having unintended consequences and are effectively acting as a choke point to the successful commercialization of outer space.

These laws are not written in stone, they are not the laws of physics. They are our laws, our ideas, and we can and must change them. It has been said that change is the one true constant in our industry. Our laws and regulations must change along with us, or they will continue to stifle our development.

I would argue that this has happened, and is happening, already today. Let me paint you some pictures -

An international consortium comes together to build an ocean going platform to launch from the equator. Their partners represent many nations. They incorporate their company in the Caribbean. They pour millions of dollars into the development of their technology and equipment. Yet their launch is delayed. This delay is not due to technology or to engineering, it is due to law. Commercial ambiguity enough exists in the Liability Convention that this company's experienced legal team cannot understand who their launching state is. They make the wrong decision and face delays and fines of millions of dollars because they got it wrong. This legal ambiguity almost put them out of business. This company was Sea Launch.

Another story -

The chief executive of a major multinational corporation has two teams of research scientists before him. Each team has a project they wish funded. The chief executive has only enough money to fund one project. One team wishes to conduct commercial micro gravity experiments on an International Space Station. The other wishes to conduct different experiments here on Earth. The chief executive is intrigued by the first team's wish to work in outer space, but his lawyer turns to him and whispers, "If we let them work in space then there is no guarantee of intellectual property rights, there's no product liability law. I don't know if we can protect our investment." Team Two, not Team One, gets their project funded. This time legal and regulatory ambiguity in outer space stops a commercial project that could have paved the way for many more. This company was ICI.

Such legal and regulatory ambiguities have been identified in the existing body of space treaties that form the foundation of all other national space laws. Yet now, as the commercial space industry increasingly begins to run afoul of them, the time has come for these ambiguities to be addressed. Some see this process as an insurmountable problem. I, and I hope also many of you, see this not as a problem, but as a challenge. The commercial space industry must work closely and proactively with its respective governments to address these issues in a positive and proactive fashion. In the past, as an industry, we have been too used to deferring to our governments. But now we must now work with them as equal partners to ensure success in this matter. They are our governments after all. Our success ultimately dictates their success.

Can this be done? Yes? No? Well, it's being done. Our company, ManSat, is working in earnest with our Government on the Isle of Man to do just this: to create a legal environment that will encourage, nurture, and secure the growth of commercial space companies that choose to operate in our regulatory jurisdiction.

Not many in the space industry have ever heard of the Isle of Man. That is because until today you haven't had cause to. Those in financial circles have surely heard of our nation. The Isle of Man is the world's largest offshore banking center; one of the world's largest captive insurance centers, and holds its third largest ships' registry. How has a small Island off the coast of England with a population of less than seventy five thousand people created such a financial center? Through the establishment of a truly commercial legal and regulatory environment that encourages the growth and success of business.

What is taken for granted as 'best business practice' in other industries is now becoming apparent to the commercial space industry as it continues to evolve. The Isle of Man knows and understands this, and is now actively working to create a legal environment specifically tailored to the needs of the commercial space industry. We are working with our government to formulate this

new regulatory environment, an environment that will attempt to address many of the existing commercial issues in space law that are potentially hindering the growth of commercial space activities.

To give an initial example, the Isle of Man Government has taken the proactive step of effectively privatizing its route of access to the ITU. They have done this through a sole and exclusive agreement with our company, ManSat. We are now active in this endeavor.

In effect, with the Isle of Man Government we are establishing a regulatory 'safe haven' for the world's commercial space industry on the Isle of Man. Such 'safe haven's have driven the success of many other industries, for example banking, insurance, and shipping. It's time that our industry had one too.

Operating from such regulatory 'safe havens' has already proven a delineator in the success of many companies in many industries. Those who choose to operate in such regulatory havens often succeed, those who don't almost always fail. It is our belief, at ManSat, that the establishment of such regulatory safe havens, in a most Darwinian fashion, will solve the issues raised by the differences in the various national regimes of space law.

It will become a case of the survival of the fittest regulatory environment. The best regulatory environment will attract businesses, and companies will actively avoid unfavorable regulatory environments where possible. In the past they may not have had such a choice, but in today's commercial environment, just like in other industries, they increasingly do have a choice. Companies will choose to operate from the nations that offer them the most attractive and conducive regulatory environments.

Either nations change their regulatory environments to nurture and encourage the growth of their commercial space activities, or they won't have a commercial space industry operating from their country. Profit decides success or failure, and profit is now dependant upon regulatory environment.

To give you a very basic example, why are many American companies incorporated in the State of Delaware? Why do banks choose to operate from the Isle of Man, the Channel Islands, and Switzerland? Why are the worlds shipping fleets registered in the Bahamas, Liberia, and the Isle of Man?

The choice of regulatory environment is crucial for the profitability and for the success of a business. This is just as true for the commercial space industry as for any other. As our global economy coalesces and shrinks, the choice of national incorporation becomes more important and far more interesting. Please give the Isle of Man some thought and please feel free to contact us at ManSat in this regard.

What of revisions to the International Space Treaties? Here I must commend the United Nations Office of Outer Space Affairs and the United Nations Committee on the Peaceful Uses of Outer Space for their work in initiating this discussion, and many others like it, building upon their excellent work at UNISPACE III. A true opportunity lies before us.

Can we promote the active deregulation of outer space through the revision of the Treaties? The issues of ownership of both intellectual and real property, amongst others, must be

addressed for example. But how can we tackle these issues and still have outer space be the 'common heritage of all mankind'? Can in effect a Free Trade Zone be established for commercial space activities? Present regulations are deterring commercial activities in outer space. How can we turn this around? What can we learn from the effective examples of other industries and the successful deregulation of other markets?

Before we return to the Moon, and when we go to Mars, we must have tackled such issues as these, and others. Private capital will not invest in outer space if it can neither protect nor profit from its investment. Space ventures carry enough technical and financial risk as it is. It is up to us to ensure that any regulatory challenges facing the industry are tackled in a proactive manner. I hope that we will choose to build a legal foundation, a level playing field and regulatory framework, for outer space that will encourage and nurture commercial space activities. Whether the commercialization of outer space is to succeed or fail is no longer a matter of finance, but of law. The financial challenges are somewhat out of our control, but the regulatory challenges aren't. They need not exist. It is up to us to identify them, to address them, and to solve them.