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Strategic Risk Management for successful space programmes (6)

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NEW INSURANCE MODELS EVOLVE WITH THE DEVELOPMENT OF COMMERCIAL SPACE  
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**Abstract**

Technical risks insurances have been longtime incorporated in the launch and operation investments and current expenditure of big satellite systems, especially in the TLC field where the commercial effects of launch or operational failures can jeopardise the project financing schemes under which these ventures are managed. In a number of cases, moreover, political risks component of these programmes have even been subscribed by international institutions as it was the case in the past of the Sea Launch Boeing promoted platform (World Bank guarantee), the Starsem EU-Russian launcher venture (European Investment Bank) or the Rapid Eye constellation for Earth Imagery (Germany's KfW and Canada's Eximbank). This paper is now investigating if the increasing business connected to the Space Economy evolution, bringing a host of new systems and services to the market availability by a much wider market of smaller users. Because, as far as the "basis" of this business areas can be determined and investigated, no doubt it will need new insurance packages capable to adapt to more cost effective and less institutional requirements of risk coverage. Typically, the study is intended to offer a survey of the real extension of these new areas of activity and all the main available examples of risk coverage, where possible with their costs and damage occurrency record: small satellites launches and operations (starting with the 10 Skybox Google satellites already launched and operational), satellite data supply networks to be protected by cyber risks in their performance toward the market, stratospherical flight increasing traffic for suborbital tourism, multipurpose balloons and blimps, drones, with their specific patterns of customers and costs. The study will conclude presenting the incorporation of insurance coverage in these various fields as a must for the managers of the new space systems required by space economy as well as the strategical need of a risk minimization policy (i.e. by certified technical prognostics / offset and validation in the main risks areas).