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FINANCING SPACE START-UPS IN THE US: LEGAL BARRIERS AND OPPORTUNITIES FOR PUBLIC AND PRIVATE FUNDS

Abstract

This paper reviews some key legal barriers facing start-up funding in the US as well as opportunities for obtaining public and private funding; all in the context of the space sector, including in cases of a non-US investor, client or partner. Space products and technologies are largely considered dual-use; hence there is an extra scrutiny on the space sector, which comes into play also with regards to financing, especially when a foreign element is involved. The barriers: (i) Under the Exon-Florio process, the Committee on Foreign Investment in the US (CFIUS) reviews transactions including investment for their impact on US national security; (ii) the US National Industrial Security Policy Operating Manual (NISPOM) sets the rules for private industry's access to classified information, which may be necessary for start-ups in the space sector; (iii) the US International Traffic in Arms Regulations (ITAR) restrict the export of military and dual-use products and technologies. All these rules and procedures limit the access to various types of funding opportunities. On the other hand, there are numerous paths to fundraising and the opportunities include government contracts, private investments and sector-specific State support. The opportunities: (i) the annual US government spending on civil space activities is around US\$ 20 billion, allocated mostly to NASA and NOAA and a significant part of this huge budget is spent on contracts awarded to commercial companies. These companies include "big players" such as Boeing and SpaceX, but also small companies, for which NASA has a special small-businesses track. NASA and NOAA contracts may also be awarded to foreign companies: the Agreement on Government Procurement (GPA), under the framework of the WTO, opens government procurement to foreign suppliers and it largely applies to NASA and NOAA. NASA and NOAA have also their own rules and policies on procurement which will also be presented. (ii) Private investments in space start-ups come from venture capital (VC) firms that are solely or partially specialized in the space sector. (iii) Another financing track is State support for R&D in the space sector, such as the support and programs offered by Space Florida. Looking forward, this paper suggests that bilateral agreements on cooperation in space activities will include specific reference to private sector financing, especially foreign direct investments (FDI), aiming to facilitate the flow of private funds across borders, and even to provide public funding to commercial R&D under joint framework programs.