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A DISCOVERY OF TAIWAN'S SPACE ECONOMY

Abstract

At the beginning of 2019, Taiwan's newly appointed Prime Minister SU Tseng-chang signed his first official approval about the 'Third Phase of National Space Program' (NSP-III) for 2019-2028 to inaugurate his new mandate. In his Facebook direct broadcasting, PM Su pointed out that the new 10-year long NSP-III foreseen to cost NT\$25.1 billion (US\$814 million) aims to forge Taiwan's advanced technologies, nourish Taiwan's space ST talents, and expand the national space industrial benefits. In addition, the NSP-III will be dedicated to safeguard the nation throughout its advanced space technologies. The highlights of the space policy and its delivery timing seem thoroughly selected to maximize its readiness at two levels. Internationally first, stimulated by the thriving competition among the space powers together with the increasing number of small and medium space economies, Taiwan is vying for its affordable, desired and also meaningful place in the expanding global space economy. Second, the new decade-long NSP-III promoted by the current Democratic Progressive Party-led government is expected to be a driving force not only to upgrade and transform Taiwan's existing high-tech industries and its vibrant economy but also to safeguard the nation, benefit its population, and generate prosperity in a sustainable way. Different from the other small and medium space economies, Taiwan has been consistently and subtly developing its space capabilities from the 1990s. Based on the achievements of the needed capabilities and infrastructure building from its two previous space programs, the NSP-I (1991-2006) with a budget of NT\$19.7 billion, and the NSP-II (2004-2018) amounted of NT\$25.9 billion, Taiwan's NSP-III is expected to not only grow its national space economic power but also to integrate the country's costly endeavors, in particular on the research excellence and tireless industrial innovation, into the expanding global space economy ecosystem. To bring out Taiwan's space endeavors more accessible to the concerned space community, this article proposes a discovery of Taiwan's growing space economic power by (1) revisiting the motivations, objectives and actions throughout Taiwan's space programs for space capability and power building, (2) reviewing the institutionalization path and the labor division among Taiwan's space agencies; (3) disclosing Taiwan's energetic though less-known scientific excellence and innovative SMEs which keep nourishing and growing Taiwan's space RD forces and space economic power; (4) highlighting the role of international cooperation in Taiwan's space economic start-up and its future acceleration; and finally (5) probing a foresight about Taiwan's future space economy.