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ESTABLISHMENT OF KOREA'S NEW SPACE AGENCY

Abstract

This research is to intend to make new model of space development innovation system in Korea. In Korea, a new president took office in May 2022. Until now, the governance of space development centered on KARI (Korea Aerospace Research Institute) as government-supported institute. The new government is making a promise to establish the Aerospace Administration in Gyeongnam, the southern region of the Korean Peninsula. While the establishment of a space agency is in full swing among 70 countries in the world, especially among newly developing countries, it is expected that a new space agency will be established in Korea as well. As of 2021, Korea's space industry activity amounted to KRW 3.42 trillion. The space equipment manufacturing sector accounted for KRW 1.3 trillion, and the space utilization sector accounted for KRW 2.12 trillion (62.0 percent). The field of space equipment manufacturing is continuously increasing every year, and the proportion of companies is high. Most of the space utilization also occurs in companies, accounting for 94.4 percent as of 2021. As of 2021, there will be a total of 8,969 manpower in the space field, 3,398 (37.9 percent) in the field of space equipment manufacturing, and 5,571 (62.1 percent) in the field of space utilization. Looking at the affiliated institutions, there are 6,305 people in companies, 1,529 people in universities, and 1,135 people in research institutes. We first analyse the three constitutions of space development innovation system such as the governance (the actors and cooperation relationship of which the center is the public research institute), resource (the input of the financial resources and human power), and the diffusion of research result. Next we examine the four impact factors in the viewpoint of sectoral innovation system such as the technological character of complex product system, the level of technological advancement, idea and international environment. Through analysis of the elements and influence factors of Korea's space development innovation system, the development plan for Korea's space development governance and ultimately the theoretical basis for the establishment of a new space agency will be presented.