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## IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Launch Services, Missions, Operations, and Facilities (2)

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## THE PROSPECTS FOR A SPACEPORT IN PERU: AN OPPORTUNITY FOR AEROSPACE DEVELOPMENT AND THE COUNTRY'S ECONOMY

## Abstract

In Peru, the National Commission for Aerospace Research and Development (CONIDA) has reached an important milestone with the PeruSat-1 satellite project, currently in operation and in orbit thanks to launch systems from other countries. However, the predominant use of technology and human talent from other space agencies has hindered progress in the country's aerospace field, which is reflected in the lack of a community of engineers and researchers trained in this area. Therefore, it is essential to implement a spaceport in Peru, which would allow the development of the technology and technical capabilities of the people involved in the project. In addition, most of the countries that have spaceports have a low latitude, as is the case of Peru, which significantly reduces the energy required for the launch and, therefore, has a positive impact on the country's economy. This study evaluates the feasibility and economic implications of establishing a space station in Piura, Peru. The comparative analysis of low-latitude spaceports in countries such as French Guiana, Brazil, India, and Indonesia is conducted to achieve this objective. Factors considered include the launch conditions of rockets, terrain, and spaceport regulations. Additionally, the economic landscape of start-ups in the space industry and investment trends in the aerospace sector are analyzed. The study aims to provide valuable insights into the potential benefits and challenges associated with establishing a spaceport in Piura, Peru, including the growth of knowledge in the aerospace industry and economic development. The results of the analysis of the selection of locations for the construction of a spaceport in the district of Talara, in Piura, and the conditions of spaceports in other countries near the equator, show that both indicators, i.e., good economic efficiency and contribution to local economic development, are the most relevant for the sustainability of a spaceport. From this it is concluded that Talara has a good condition as a location to build a spaceport. The first indicator, good economic efficiency, includes the availability of infrastructure and investments; the presence of supporting industries. Likewise, regarding the indicator of contribution to local economic development, which encompasses economic growth and investment potential. Thus, the selection of the development of a spaceport in Peru should be carried out in Talara, Piura.