

## Analysis of the Implementation of Collaboration between PT. Gapura Angkasa and PT. IAS Support for the Adequacy of BCT (Baggage Cart) at Soekarno Hatta Airport, Tangerang - Banten

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### Abstract

The availability of baggage carts (BCT) is a vital element in supporting passenger baggage and cargo services at Soekarno-Hatta International Airport. This study aims to analyze the implementation of the cooperation between PT Gapura Angkasa and PT IAS Support in fulfilling the requirement of 100 baggage cart units, as well as its impact on the adequacy of baggage carts for airport operational activities. A qualitative descriptive research method was employed, with data collected through observation, interviews, and document analysis. The findings indicate that the cooperation between the two companies has generally been effective in addressing the previous shortage of baggage carts by increasing the number of available units. This improvement has contributed to smoother ground handling operations and enhanced passenger baggage and cargo services. However, the study also identifies challenges in the distribution and deployment of baggage carts within the airport area. These challenges primarily stem from the lengthy bureaucratic procedures and strict regulations imposed by Angkasa Pura Indonesia regarding the entry of new assets into the airport, which delay the operational use of the carts despite the completion of the procurement process. Overall, the cooperation has played a significant role in fulfilling operational needs, although regulatory constraints remain a key obstacle to optimal implementation.

**Keywords:** baggage cart, corporate collaboration, PT. Gapura Angkasa, PT. IAS Support, Soekarno-Hatta Airport

## Introduction

Air transportation in Indonesia has experienced rapid development in recent decades, marked by increasing passenger numbers and additional flight routes for the 2025 Hajj season at Soekarno-Hatta International Airport. According to summary data from PT. Gapura Angkasa (2025), the number of flights for the first phase of Hajj is 47 flights with a total of 18,396 pilgrims. As one of the busiest airports in Southeast Asia, this airport is a prime example of the dynamics and complexity of air transportation in Indonesia in the era of globalization. Airports serve as connecting points connecting various countries, enabling effective exchange of cultures, ideas, and economies. Air transportation has high strategic value because it allows areas difficult to reach by land transportation to connect and facilitates interaction between various sectors. Soekarno-Hatta International Airport, located in Tangerang, Banten, is an airport with very heavy passenger traffic. The services and facilities available at this terminal play a crucial role in determining the quality of the passenger experience for both domestic and international flights, making it a strategic point that requires optimal management. The management of Soekarno-Hatta Airport involves two main, complementary entities: PT Angkasa Pura II [1], which has now changed its name to PT Angkasa Pura Indonesia (API), and PT Gapura Angkasa. PT Angkasa Pura Indonesia is responsible for the management of Soekarno-Hatta International Airport and plays a crucial role in maintaining high service standards. As the primary operator, API is obligated to ensure that every aspect of airport operations runs optimally. This responsibility includes providing adequate facilities and maintaining superior service quality. Meanwhile, PT Gapura Angkasa is a ground handling services company, specifically providing airport services that include serving passengers, baggage, cargo, and mail, as well as

aircraft during departure (pre-flight) and arrival (post-flight). In providing services at Soekarno-Hatta Airport in Tangerang, Banten, PT Gapura Angkasa strives to meet the needs of ground support equipment (GSE) [2] in accordance with established standards. GSE is equipment prepared for aircraft on the ground during arrival and/or departure, as well as the loading and/or disembarkation of passengers, cargo, and mail.

Based on Law No. 1 of 2009, in general ground support equipment (GSE) [3] consists of motorized GSE and non-motorized GSE. Motorized GSE is ground support equipment (GSE) that has/uses a drive (generator, etc.) including: Baggage Towing Tractor (BTT), Aircraft Towing Tractor (ATT), Ground Power Unit (GPU), Aircraft Starter Unit (ASU), Lift Loader (LLF), High Catering Truck (HCT), Passenger Boarding Stairs (PBS), Toilet Service Truck (LST), Water Service Truck (WST), while non-motorized GSE includes baggage trolley (BCT)/Baggage/Cargo Trolley, Container/Cargo Dolly, manual passenger ladder, Towbar/ATT-aircraft connector. Based on initial observations made by researchers, to fulfill one of the needs of non-motorized GSE, namely baggage trolley (BCT), PT Angkasa Pura Indonesia collaborated with PT IAS Support, a subsidiary of PT Angkasa Pura Indonesia. PT IAS Support operates in the airport support sector, procuring GSE equipment, specifically baggage trolleys. The collaboration between PT Gapura Angkasa and PT IAS Support includes a baggage trolley (BCT) rental and maintenance contract. The maintenance contract is an agreement for the maintenance of PT IAS Support's BCT (baggage trolley) production equipment, which is used to meet PT Gapura Angkasa's operational needs at Soekarno-Hatta International Airport.

This study analyzes the implementation of the collaboration between PT Gapura Angkasa and PT IAS Support in meeting the need for 100 BCT units and its impact on the operational adequacy of baggage trolleys. The method used is descriptive qualitative through observation, interviews, and document analysis. The results indicate that this collaboration is effective in meeting baggage trolley needs at Soekarno-Hatta International Airport and addressing previous shortages. The increased number of trolleys supports smooth ground handling and improves passenger and cargo baggage services.

## Literature Review

*Definition of implementation.* – Implementation, according to the Indonesian Dictionary, means to carry out or apply. In the world of air transportation, implementation is the application of an idea, concept, policy, or innovation into practical action, resulting in an impact, whether in the form of changes in knowledge, skills, values, or attitudes [4, 5, 6, 7, 8, 9, 10] on airport services. Implementation is the application or action carried out based on a carefully and detailed plan. Another opinion also states that implementation is a concrete action or form of action in carrying out a carefully designed plan. In other words, implementation can only be carried out if a plan has been prepared. From this explanation, we can see that implementation stems from the mechanisms of a system, so its implementation must be in accordance with the plan to achieve the desired results.

*Cooperation.* – Cooperation comes from the English words "cooperate," "cooperation," or "cooperative." In Indonesian, it is called "operation." According to the Big Indonesian Dictionary, cooperation is defined as an activity or effort undertaken by several people (institutions, governments) to achieve a common goal. Cooperation is a familiar word to every individual; it is an activity carried out by two or more people with the intention of achieving a desired goal.

*PT. Gapura Angkasa.* – According to the GOM [11], PT Gapura Angkasa is a ground handling services company, namely airport services that include services to passengers, baggage, cargo, and mail, as well as aircraft during departure (pre-flight) and arrival (post-flight). To provide ground handling services [12] that prioritize safety and security as stated in the "HSE, Security, and Quality Policy", guidelines and implementation instructions are required to complete work processes within

the company's scope of business, while referring to relevant regulations and meeting customer (airline) requirements. Ground handling [13] is an airline's activity related to handling or providing loading and unloading services for passengers, baggage, cargo, mail, aircraft movement support equipment on the ground, and the aircraft itself while at the airport, both for departure and arrival.

*PT. IAS Support.* – History: PT. IAS is a holding company (subholding) that provides comprehensive services in the aviation sector. IAS is a subsidiary and part of the PT Aviiasi Pariwisata Indonesia (Persero) (known as InJourney) group of companies, a state-owned enterprise operating in the aviation and tourism sectors. IAS is a comprehensive service provider in the aviation sector and has several subsidiaries, including PT. IAS Support. One of IAS's subsidiaries is PT IAS Support Indonesia, formerly known as PT Angkasa Pura Solusi or AP Solusi, and now renamed PT IAS Support. PT. IAS Support is planned to become a GSE provider targeting airports in Indonesia.

*Ground Support Equipment (GSE).* – Ground Support Equipment (GSE) is included in airport service facilities regulated by Law No. 1 of 2009 concerning Aviation [3], Article 219. According to SKEP 91/IV/2008 concerning Ground Support Equipment (GSE), GSE is "support equipment prepared for the needs of aircraft on the ground during the arrival and/or departure, loading and/or disembarkation of passengers, cargo, and mail." To support aircraft services on the ground, some airports provide ground support equipment (GSE). Each type of equipment operated must be suitable for its intended use and must meet technical requirements and functional specifications as evidenced by an Operational Suitability Certificate issued by the Directorate General of Civil Aviation.

*Soekarno Hatta Airport.* – According to ICAO [14] (International Civil Aviation Organization) Appendix 14, an airport is a special area on land or water (including buildings, installations, and equipment) designated in whole or in part for the arrival, departure, and movement of aircraft. In accordance with Law Number 1 of 2009 [3] Article 1 paragraph 33, an airport is an area on land and/or water with certain boundaries used as a place for aircraft to land and take off, embark and disembark passengers, load and unload cargo, and transfer between modes of transportation.

## Research Methodology

This research is a quantitative study using observation, interviews, and documentation methods. According to Imron [15] and Rianto [16], quantitative research is a qualitative research method based on the philosophy of post-positivism, used to examine the conditions of natural objects (as opposed to experiments). The researcher is the primary instrument, data sources are collected purposively and through snowballing, data collection techniques use triangulation to compare the results of observations, interviews, and documentation, data analysis is inductive or qualitative, and qualitative research results emphasize meaning rather than generalization.

This research was conducted at Soekarno-Hatta Airport for five months, from March to July 2025. This involved observing the use of baggage trolleys in the operational area of Soekarno-Hatta Airport, interviews with relevant parties such as management from PT. Garuda Angkasa and supervisors, namely PT. IAS, the parent company of Garuda and IASS, as well as documenting internal reports, procurement data, and company policies. The data obtained was analyzed to describe the effectiveness of collaboration, the obstacles encountered, and their impact on smooth operations.

The data collection technique used in this study was observation on March 27, April 6, June 11, and August 11, 2025. The researcher also conducted interviews with three respondents: two from Garuda Angkasa and one from IAS. The documentation used in this study includes archived Standard Operating Procedure (SOP) documents and GSE fulfillment activity schedules, as well as a series of activities carried out by the researcher while at Soekarno-Hatta International Airport.

## Results and Discussion

*Implementation of Cooperation between PT. Garuda Angkasa and PT. IAS Support.* – Based on the results of the author's research in the field, the implementation of cooperation [17] between PT. Garuda Angkasa and PT. IAS Support in fulfilling the baggage cart (BCT) unit at Soekarno-Hatta Airport Tangerang-Banten, has shown positive results. From the results of the cooperation to fulfill the baggage cart (BCT) has been in accordance with various aspects including, the baggage cart (BCT) has met quality standards, in new condition, and complete with logos and accessories that comply with technical specifications with DOC documents. NO. : TS – OTE – OT – 036B REV.02 namely Specifications and has met the functional requirements and specifications used for luggage trolleys (BCT) with a capacity of 1.5 tons, and with structures that have been met such as, a platform to accommodate loads up to a total of 1,500 kg, The design of the luggage trolley (BCT) is equipped with a 0.8 mm thick top cover, using a 30 x 30 x 2 hollow frame and has been reduced on the right and left roof by 200 mm, The towing bar is already at the front (front end) of the trolley and the towing hook is at the rear (rear) of the trolley, and is equipped with a rubber bumper/rubber protector at the top end of the unit (each corner). The procurement of 100 new luggage trolleys (BCT) through this cooperation scheme is considered to have run effectively. The addition of baggage trolley units (BCT) can significantly reduce the shortage ratio of baggage trolleys (BCT) used for baggage/cargo transportation at Soekarno Hatta Airport in particular, although in terms of quantity the fulfillment target has been met, the author still found technical obstacles in the process of mobilizing baggage trolley units (BCT), where there was a delay in distribution when the units were about to enter the Soekarno-Hatta Airport area. This caused the optimization of the use of baggage trolley units (BCT) to not be able to be used directly in operations after the procurement of baggage trolleys (BCT) was completed.



**Figure 1. The 100 gaggage cart units**

Source: Image taken by the author (2025)

*Obstacles in Cooperation Implementation.* – In the process of implementing the baggage cart (BCT) procurement cooperation, the author still found a major obstacle that hampered the smooth operation, namely the protracted distribution process of the baggage cart (BCT) units. According to the author, this obstacle was not caused by internal problems of Garuda Angkasa or IAS Support, but rather due to the strict regulations of Angkasa Pura Indonesia as the airport manager. The permitting procedure for the entry of new assets into restricted areas at the airport (Airside or Landside) requires verification and compliance with complex aviation security standards. Bureaucracy and examination of unit eligibility documents at Soekarno-Hatta Airport are the main factors causing the slow use of new baggage cart (BCT) units by PT. Garuda Angkasa for operations at Soekarno-Hatta Airport.

*Solutions and Mitigation Efforts.* – Facing obstacles in the distribution of baggage trolleys (BCT), PT. Gapura Angkasa took strategic steps to maintain the level of service (Service Level Agreement). As a short-term or temporary solution, PT. Gapura Angkasa implemented a rental system for baggage trolley units (BCT) to anticipate shortages or fulfill the need for baggage trolleys (BCT) to other ground handling parties, in this case PT. JAS (Jasa Angkasa Semesta) as ground handling at Soekarno-Hatta Airport. This tactical step was taken so that the need for baggage trolleys (BCT) in operations remains met amidst the ongoing bureaucratic process of procurement of baggage trolley units (BCT). Meanwhile, according to the author, collaboration with PT. IAS Support is positioned as a long-term and sustainable solution. Through this partnership, it is hoped that the availability of baggage trolley units (BCT) in the future will no longer experience shortages, so that PT. Gapura Angkasa's services at Soekarno-Hatta Airport can be maintained consistently.

## Conclusion

The results of this study demonstrate the effectiveness of collaboration. The implementation of collaboration to meet the need for 100 baggage trolleys (BCTs) between PT. Gapura Angkasa and PT. IAS Support was generally effective. This is evidenced by the increase in the number of baggage trolleys (BCTs) to meet the need for baggage and cargo services at Soekarno-Hatta Airport. This supports smooth ground handling operations and improves passenger baggage and cargo services at Soekarno-Hatta Airport. Distribution constraints are a major obstacle to implementing the baggage trolley requirement at Soekarno-Hatta Airport, namely the lengthy distribution process and complicated bureaucracy. This is due to Angkasa Pura Indonesia's strict regulations regarding procedures for the entry of new assets into the Soekarno-Hatta Airport area, which prevent these units from immediately operating to support operations even after the procurement of baggage trolleys (BCTs) is complete. PT. Strategi Solusi Gapura Angkasa successfully addressed the shortage of baggage trolleys (BCTs) through two approaches: a short-term solution by renting baggage trolleys (BCTs) from PT. JAS to maintain the operational adequacy of baggage cart (BCT) equipment. A long-term solution through investment cooperation in baggage cart (BCT) units with PT. IAS Support will ensure future service and adequacy of baggage carts.

*Recommendation* – Based on the research findings, it is recommended that PT. Gapura Angkasa coordinate and communicate more intensively with Angkasa Pura Indonesia well before the baggage cart (BCT) units arrive at the airport, allowing for a more expedited regulatory verification process, parallel to the baggage cart (BCT) procurement process. PT. IAS Support is advised to continue maintaining the quality of maintenance on the 100 baggage cart (BCT) units completed by PT. Gapura Angkasa to extend the service life of the baggage carts and maintain their good condition during operational use. It is recommended that both parties begin considering the use of a tracking or digitalization system to monitor the position of baggage carts (BCT) throughout Soekarno-Hatta Airport, making it easier for officers to redistribute the scattered baggage carts (BCT) units to points where there is a shortage of baggage carts in service at Soekarno-Hatta Airport. And for future authors, it is recommended to develop further by focusing on direct passenger satisfaction analysis or operational cost evaluation (cost-benefit analysis) between the unit rental system compared to the procurement of baggage trolleys (BCT) independently by PT. Gapura Angkasa.

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