

1. The Financial Feasibility on Developing Terminal Building of Sultan Mahmud Badaruddin II International Airport (Open Access)

Oktari, M. (1); Iqbal, M.M. (1); Agustien, M. (1)

Source: *Journal of Physics: Conference Series*, v 1198, n 8, May 10, 2019, *SENTEN 2018 - Symposium of Emerging Nuclear Technology and Engineering Novelty - Architecture and Civil Engineering*; **ISSN:** 17426588, **E-ISSN:** 17426596; **DOI:** 10.1088/1742-6596/1198/8/082015; **Article number:** 082015; **Conference:** 1st Symposium of Emerging Nuclear Technology and Engineering Novelty, SENTEN 2018, July 4, 2018 - July 5, 2018; **Publisher:** Institute of Physics Publishing

Author affiliation: (1) Department of Civil Engineering, Sriwijaya University, Palembang, Indonesia

Abstract: Passengers of Sultan Mahmud Badaruddin II (SMB II) International Airport has increased significantly. This can be seen by the increased flight in the Sultan Mahmud Badaruddin II International Airport, as much as 10.15% a year either domestic or international flights. The data shown in 2016, 5% revenue of Sultan Mahmud Badaruddin II International Airport comes from air side service (parking, take-off and landing), 6% from cargo, and 76% from terminal building service (Passenger Service Cost (PSC), and commercial area, 12% revenue from others (Angkasa Pura II, 2016). Objectives of the research are to forecast passenger growth at SMB II International Airport, to analyse revenue and costs of development of the terminal building and to analyse the financial feasibility of the development. To predict passenger growth employs trend projection, however, methods used for analysing the financial feasibility include Net Present Value (NPV), Benefit cost Ratio (BCR), Internal rate and Return (IRR), Payback Period (PP) and sensitivity analysis. After conducted analysis it can be concluded that the passenger will reach about 6.4 million in 2026. By considering revenue, expenses and investment costs of the terminal building development, it is obtained the value of NPV (Rp. 7,150,551,854.50), IRR (16.69%), BCR (1.003) and PP (7.13 Years). It can be concluded that the terminal building is feasible to be developed. © 2019 Published under licence by IOP Publishing Ltd. (6 refs)

Main heading: Airports

Controlled terms: Buildings - Cost benefit analysis - Costs - Economics - Investments - Sensitivity analysis

Uncontrolled terms: Benefit cost ratios - Development - Financial feasibility - International airport - International flights - Passenger service - Terminal buildings - Trend projections

Classification Code: 402 Buildings and Towers - 431.4 Airports - 911 Cost and Value Engineering; Industrial Economics - 921 Mathematics - 971 Social Sciences

Database: Compendex

Compilation and indexing terms, Copyright 2020 Elsevier Inc.

Data Provider: Engineering Village