

## Analysis of hub-and-spoke airport networks in Java Island, based on cargo volume and freight ratio

<b>Publons ID</b>	20589089
<b>Wos ID</b>	WOS:000370957800079
<b>Doi</b>	10.1016/j.proeng.2015.11.061
<b>Title</b>	Analysis of hub-and-spoke airport networks in Java Island, based on cargo volume and freight ratio
<b>First Author</b>	
<b>Last Author</b>	
<b>Authors</b>	Sugiyanto, G; Santosa, PB; Wibowo, A; Santi, MY;
<b>Publish Date</b>	2015
<b>Journal Name</b>	CIVIL ENGINEERING INNOVATION FOR A SUSTAINABLE
<b>Citation</b>	7
<b>Abstract</b>	<p>In recent years, air transport network in Soekarno-Hatta International Airport have become congested, leading to delays for business travelers, and freight shipments. One of the alternative solutions for this problem is to evaluate the hub-and-spoke airport networks. Hub-and-spoke airport networks enable carriers to supply transport services to many combinations of origin and destination zones at high frequencies and low costs. The disadvantage for the traveller is of course that they have to make a detour via the hub airport implying an extra stop. For many combinations of origin and destination zone, travellers can choose between more than one main carrier and airport. The aim of this paper is to analysis of hub-and-spoke airport networks in Java Island based on cargo volume and freight ratio. Based on freight ratio value, airport can be classified in four types: full passenger airport, freight interest airport, freight specialist airport, and mixed passenger and freight airport. This study shows that the flight route in Indonesia has not been fully developed in accordance with the concept of hubs-and-spokes. All of the six airports in Java Island (Soekarno-Hatta Airport Jakarta, Juanda Airport Surabaya, Adi Sucipto Airport Yogyakarta, Adi Sumarmo Airport Surakarta, Husein Sastranegara Airport Bandung, and Ahmad Yani Airport Semarang) for the domestic and international flight include in mixed passenger and freight airport type. Soekarno-Hatta Airport has the highest of freight ratio value, 8.128 for domestic flight and 24.738 for international flight. The percentage of cargo volume in Soekarno-Hatta Airport is 71.898% for domestic flight and 93.330% for international flight. The growth of hub-and-spoke airport networks has allowed medium and large-size airports that limited in passenger demand in the catchment area to become the primary hubs in their respective regions. (C) 2015 The Authors. Published by Elsevier Ltd.</p>
<b>Publish Type</b>	Book in series
<b>Publish Year</b>	2015
<b>Page Begin</b>	556
<b>Page End</b>	563
<b>Issn</b>	1877-7058
<b>Eissn</b>	
<b>Url</b>	<a href="https://www.webofscience.com/wos/woscc/full-record/WOS:000370957800079">https://www.webofscience.com/wos/woscc/full-record/WOS:000370957800079</a>
<b>Author</b>	Prof Dr Ir GITO SUGIYANTO, S.T, M.T, IPM, ASEAN Eng