



UNIVERSITI
TEKNOLOGI
MARA

THE DOCTORAL RESEARCH ABSTRACTS

Volume: 10, Issue 10 October 2016

**TENTH
ISSUE**

INSTITUTE of GRADUATE STUDIES

IGS Biannual Publication



Name : AMINUDDIN MD AROF

Title : KEY SUCCESS FACTORS FOR INTERSTATE ROLL-ON ROLL-OFF SHORT SEA SHIPPING IN THE BRUNEI, INDONESIA, MALAYSIA AND PHILIPPINES EAST ASEAN GROWTH AREA

Supervisor : ASSOC. PROF. DR. IRWIN OOI UI JOO (MS)
DR. RAWINDARAN NAIR (CS)

The aim of this study is to determine the key success factors for interstate Ro-Ro Short Sea Shipping (SSS) operations in the Brunei, Indonesia, Malaysia and Philippines East ASEAN Growth Area (BIMP-EAGA). Although the literature has addressed a myriad of important factors through earlier research, the identification of the key determinants for the success of SSS operations in this sub-region is imperative because each route or corridor has its own peculiarities. Hence, this study is expected to assist SSS authorities, private investors and financial institutions to focus their limited resources on several key factors that could ensure the success of their SSS undertakings. The initial step in the research design involved the identification of relevant factors that have contributed towards successful SSS operations through a process of literature review. However, the breath of the literature on SSS outside Europe and North America, which may differ in the required variables for a successful SSS operation is still limited. Hence, a Delphi survey has been conducted with sub-regional SSS experts through a purposive sampling method to identify any new determinants and assess their opinions on the relative importance of all the determinants involved. After identifying the key

determinants, their weightages were subsequently determined through the Analytic Hierarchy Process (AHP). As a result, a decision making model to assess the prospect of interstate Ro-Ro SSS operations along the routes identified is established. This study addresses the gap in the literature by focusing on interstate Ro-Ro SSS in BIMP-EAGA and extending the usage of a combined Delphi-AHP technique to the domain of SSS. Additionally, unlike most contemporary SSS research that focuses on developing SSS as a viable alternative to road transportation, most of the routes identified in BIMP-EAGA are inter-island connections. Hence, this research also contributes to the dearth of literature in corridors where SSS is an imperative in order to facilitate sub-regional connectivity and economic development. Therefore, this decision making model is expected to assist the sub-regional stakeholders to address the identified key determinants required for a successful SSS operation.