

# **FACTORS INFLUENCING RAIL UTILISATION: A CASE STUDY OF TANJUNG PELEPAS PORT**

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## **ABSTRACT**

Transportation is an economic function. Transportation is to service along with other productive function. It has been estimated that transportation costs is the aggregate account for more than 20% of the gross production costs. With the rapid growth in local ports as well as domestic and cross border trade, rail carrier services has gained popularity among shippers, importers and exporters as an invaluable alternative for freight services. The Tanjung Pelepas Port (PTP) is today acknowledged as the international gateway and regional logistics hub for the southern region. The construction of 35 km rail facility at PTP linked to the national grid via Kempas Baru interchange has been completed and ready for operation in 2004 with a total investment more than RM600 million. The rail infrastructure provides direct rail access from PTP across Peninsular Malaysia extending into Southern Thailand as part of multimodality concept made available for port users. Since 4 years operation (2004-2007) the rail facility utilization in PTP is small which contribute in average 3% of cargo delivery compared to 97% via road mode delivery yearly. Based on the current situation, the main objective of this study is to identify what are the factors that can influence and encourage rail services from the users' perspective. The researcher has conducted a survey through questionnaires distribution to the respondents and a simple mathematical method has been applied to perform the data analysis. The result of the study identified that there are several factors to be implemented to further improve the rail services linked to the port such as flexible service schedule, increase fleet to cater current and future demand, improve rail condition from Kempas Baru to Pasir Gudang Port to increase speed from 40km/hour to 110km/hour and subsequently improve the service capability, upgrade Kempas Baru interchange by providing fly over to avoid bottle neck since priority is given to the passenger train. In order to increase users acceptability as well as the effectiveness of the rail services especially at port, an adequate facility and reliable infrastructure is needed for the betterment of the industry.

## **ABSTRAK**

Sistem pengangkutan penting dalam kegiatan ekonomi sekaligus ianya turut memberi khidmat sokongan kepada sektor lain pembuatan dan dianggarkan kos pengangkutan menyumbang lebih kurang pada kadar 20% daripada keseluruhan kos pengeluaran produk. Dengan pertumbuhan ekonomi negara yang pesat, perkhidmatan rel kargo menyediakan pilihan bagi pergerakan barang. Pelabuhan Tanjung Pelepas (PTP) merupakan hub logistik serta pemangkin kepada kegiatan ekonomi di selatan tanah air. Pembinaan landasan keretapi sepanjang 35km yang menghubungkan Stesyen Kempas Baru telahpun siap dibina dan sedia beroperasi menjelang tahun 2004 dengan nilai pelaburan yang melebihi RM600 juta. Dengan terbinanya landasan berkenaan, ianya menyediakan rangkaian terus keretapi merentasi Semenanjung Malaysia sehingga ke Selatan Thailand yang menawarkan konsep multimodal kepada pengguna pelabuhan. Semenjak 4 tahun beroperasi (2004-2007), jumlah pergerakan kargo melalui keretapi di PTP amat rendah yang mana jumlahnya hanya mewakili 3% berbanding 97% pergerakan melalui jalanraya dalam setahun. Objektif utama kertas ini ialah untuk mengenalpasti faktor yang mampu meningkatkan penggunaan perkhidmatan keretapi di pelabuhan daripada prespektif pengguna. Daripada kaji selidik yang dibuat, terdapat beberapa faktor yang perlu diambil kira seperti menyediakan perkhidmatan yang mesra penguna, menambah kekerapan khidmat ulang alik gerabak, menambah baik keadaan landasan keretapi untuk sektor Kempas Baru ke Pelabuhan Pasir Gudang bagi meningkatkan kelajuan gerabak daripada 40km/jam kepada 110km/jam sekaligus menambah kapasiti gerabak dan menyediakan persimpangan bertingkat di Stesyen Kempas Baru bagi mengelakkan kesesakan di stesyen berkenaan memandangkan keutamaan adalah diberikan kepada koc penumpang. Untuk itu, pengendali perkhidmatan rel perlu terus berusaha untuk menyediakan perkhidmatan yang efektif serta perasarana termaju untuk faedah pengguna.