

Intra Regional Transport Calculation Sheet System Description

Overview

The IRTCS (Intra Regional Transport Calculation System) is a decision support system developed for Hapag Llolyd Singapore (HL) aimed at helping users to decide the most cost effective sailing route pattern from the alternatives available for moving container traffic from one port of loading to port of destination after applying cost data calculations.

Process

The system processes costs, revenue and equipment supply rates starting from the port of origin to the port of destination showing the sum contribution on that vessel route. The cost elements in the contribution involved are pre-carriage cost, loading, feeder, mother vessel, discharge cost, on-carriage cost and any other user-defined fields. The revenue elements are sea freight, CAF and other revenue field value. The Terminal Handling Charge at origin and destination ports is optional in the derivation in the total revenue. The net profit of the contribution is then derived for the port of origin and port of destination.

Output

The system produces a calculation sheet prepared in two different formats namely for HL officers and Agents.

Two functions namely Export and Import are provided within the system for preparing the database for distribution to other HL sites. For this the database will be encrypted and password protected before it is distributed.

For purposes of database distribution the system distinguishes security rights between agents and HL's own site. A HL site can view all the cost and revenue tables whereas agents are not allowed to do this. The system will prompt the user prior to preparing the database as to for whom it is meant for.

The user profile list is maintained in the database to control restricted access over the system.

Technology

The application is installed at client places and the updated cost tables database is distributed periodically. The import facility in the IRTCS system enables the user to backup the current database and use the new database.

This system was developed using the Microsoft Visual Basic Graphical User Interface as the front-end and MS Access as the back-end database engine running on the same machine.