CHAPTER 3
CHALLENGES IN VESSEL OPERATIONS

Teh Zaharah Yaacob, Mohd Dzulhakiem Alias, and Norhayati Zakuan

3.1 INTRODUCTION

In the shipping industry, the global strategic alliances between liner shipping companies have become a dominant feature over the decades. According to the International Transport Forum (2018), global strategic alliances are the agreements between container lines for operational matters. These alliances were established as the form of the vessel information agreements and their operational slots. The main objective of the alliances is to have economies of scale on the operational cost of vessels and their services coverage.

This liner shipping industry has entered a stage where only three global alliances exist between two to three large companies that are about the same size and business capacity. This is different compared to previous practice, whereby the alliances mainly served only a limited group of mid-size and small carriers to reach the economies of scale. Commercially, liner shipping services provide service by carriers to shippers on fixed-route services and frequent schedules between ports. According to the World Shipping Council (2020), liner shipping provides the service of transporting goods with high-capacity ships by providing regular routes on fixed schedules. A similar source said approximately

400 liner services are in operation today, and most of the carriers provide weekly departures from all the ports that each service calls.

Table 3.1 represents the statistic from the United Nations Conference on Trade and Development (UNCTAD) on Review of Maritime Transport 2019 that shows the number of world containers in 2018 and 2017. It shows 4.7% growth from 2017 to 2018, from 757 million twenty-foot equivalent units (TEUs) to 793 million TEUs. It also shows the throughput is highest for Asia's total throughput and tentatively followed by Europe, North America, Latin America and the Caribbean, Africa, and Oceania. The vessel operation procedure is a crucial element in business operation. It gives a huge responsibility to the boarding agent to ensure the ship berthing, loading, and discharging activity runs smoothly without any delay. This study was conducted to have a better understanding of the vessel's operational flow of vessel ship call operation. It was very important to understand this operational flow. As quoted by Mohit (2017), the understanding of the operational process flow will improve the quality of services by the business operators.

Table 3.1 World container port throughput by region, 2017–2018 (Source: United Nations Conference on Trade and Development [UNCTAD], 2019)

Region	2017	2018	Annual Percentage Change 2017–2018 (%)
Africa	30,398,569	30,940,898	1.8
Asia	488,852,650	510,513,120	4.4
Europe	119,359,397	125,888,633	5.5
Latin America and the Caribbean	48,863,196	51,669,025	5.7
North America	58,510,434	61,352,043	4.9
Oceania	12,003,344	12,896,887	7.4
World Total	**757,987,590**	**793,260,606**	**4.7**

Note: 20-foot equivalent units and annual percentage change

3.2 VESSEL OPERATION AND STANDARD OF OPERATING PROCEDURE

The objectives of having vessel operation flow are purposely to define the vessel operation procedures and to ensure that all relevant activities are being carried out correctly and timely. The implementation standard of operating procedure (SOP) is required for the vessel operation formalities and activities in accordance with the vessel operation and local authorities' procedures. The standard also must comply with the laws and regulations to ensure smooth vessel operations at Malaysian ports.

In vessel operation standard operating procedure, usually a vessel will receive a long-term schedule, coastal advice, vessel notification, and general particulars from the Regional Vessel Operators. The information by the port authority is based on the particular vessel and detail. Upon receiving the information, the company will register the vessel identification details through the Jabatan Laut Malaysia system and the Ship Call Number through the u-Customs system at least 30 days prior to vessel's arrival. At this stage, the vessel operating company will need to prepare a monthly vessel schedule and send the schedule to the relevant internal department by the first week of each month. Then, the department will send the Berth Booking Advice to Westport's and Northport terminals a minimum 30 days prior to the vessel's arrival. The timely changes will be provided with regular updates on a weekly and daily basis as approaching closer to the vessel arrival date.

3.2.1 Issues Related to Vessel Operation Standard of Operating Procedures

In container liner shipping service, they will usually have a time window arrangement with the port terminal for berthing prospects. A time window is explained as the time allocation that is given by the terminal for the carriers to berth for loading and discharging activities to take place. From this time window arrangement allocation, the vessel master must arrange their shipment journey to follow each time window in