

Container Loading And Unloading Process At Container Freight Station (CFS) At PT. Prima Indonesia Logistik Belawan

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Abstract. *The purpose of this study is to determine how the Container loading and unloading process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan. The methodology used in making the research is a field study where the author conducts observations in the field (observations) and interviews directly with the company and a library study where the author obtains research material or materials from books in the library or other reading sources related to the discussion in the author's research. The results obtained in this study are the Container loading and unloading process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan has not run optimally due to obstacles that occur during loading and unloading such as frequent machine damage to the operator's equipment, negligence of the Tally Man officers causing delays in the container loading and unloading process, the occurrence of escape in surveying containers, and a long cleaning process.*

Keywords: *Loading and Unloading, container, CFS.*

1. INTRODUCTION

As we all know, the development of sea transportation has experienced rapid progress. This progress can be seen from the many modern and sophisticated ships in serving the transportation of goods from one country to another or between islands. One of the most famous means of transportation today is the transportation system using containers, because containers are currently considered an efficient and effective means of transporting goods, because goods are not easily damaged so that in terms of security they will be guaranteed, and loading and unloading activities become easier and can be transported by various means of transportation, making it possible to be carried out multimodally, highways, trains, and ships. With the container system, export and import activities become easier to handle and become more efficient and customers feel more satisfied.

Container transportation services are a system of goods transportation services, especially in developing areas, industrial centers, and trade and other service developments, such as warehousing and container storage. The container transportation service system is used to transport goods using "boxes" measuring 20 feet and 40 feet (for normal sizes) and using Twenty-foot Equivalent Units (TEU).

In handling the container system, a place is needed for container storage such as a Container Freight Station (CFS). In general, a Container Freight Station (CFS) is a warehouse where goods and products that do not fit in one container are collected, stored,

and wait for other goods to fill the container before being sent to the next destination, on the other hand, a Container Freight Station (CFS) is also a temporary container storage place, which is engaged in container storage services for shipping companies or leasing companies that do not have container storage and is an important supporting facility for international trade in the form of export and import activities.

Currently, Container Freight Stations (CFS) are increasingly important and very necessary in the development of international trade which is already very advanced as it is today, so that more and more Container Freight Stations (CFS) are being established by both individual companies and partnership companies, thus increasing increasingly tight competition.

PT. Prima Indonesia Logistik is a container shipping and delivery company using ships that serves 1 inter-island route. PT. Prima Indonesia Logistik operates 2 container services by providing good service and processes, so that consumers are interested and stay.

The increase in consumers has led to the increasing use of equipment in loading and unloading activities, so that maintenance (service) is rarely carried out. This is what causes damage to the machine on the operator's equipment so that there is a delay in loading and unloading containers and in addition, the delay in the loading and unloading process is also caused by the negligence of the Tally Man officer.

2. LITERATURE REVIEW

a. Definition of Process

According to Pria Waranata (2021), a process is a sequence of interrelated implementations or events that together change input into output. This implementation can be carried out by humans, nature, or machines using various resources. A process is a series of stages that are applied to a job so that the results achieved from the job are able to describe the good procedures used. In carrying out a job, there needs to be a proper process so that each job can be completed effectively and efficiently in accordance with the goals set.

b. Definition of Loading and unloading

According to Monica Nurdiana (2020), loading and unloading is the activity of moving goods from land transportation, and to carry out this cargo transfer activity, facilities or equipment are required that are available in a certain way or shipping procedures.

c. Definition of Container

According to Wiranata, Pua (2021) stated that containers can generally be described as removable warehouses that are used to transport goods and are components of the transportation system.

d. Definition of Container Freight Station

According to Nuralita, Diansari (2018). Container freight station is an area in the port that is used to store LCL (Less than Container Load) containers, carry out stuffing wistuffing, and to store break bulk 11 cargo that will be stuflagged into containers or unstuffed and containers.

3. METHODS

The research method that the author used in compiling this final assignment paper is:

a. Field Research

In this study, the author conducted a survey in the field where container services are carried out, and also conducted interviews with field officers or employees and the company's field coordinator.

b. Library Study Method

The author conducted library research by reading books, journals, notes, archives, and documents related to the problems researched by the author, by searching for books in the campus library of the Adiguna Maritim Indonesia Polytechnic Medan, campus guidebooks and also via the internet to support the author's research in completing this paper.

4. RESULTS AND DISCUSSIONS

A. Brief History of PT. Prima Indonesia Logistik

In 2005, it was one of the core businesses of the Loading and Unloading Business (UBM) at PT. Pelabuhan Indonesia I (Persero), a spin-off branch of the core business of the UBM Port Branch.

Belawan became a container depot unit, and in the period of January 2011 to 2014 experienced a name change to Belawan Logistic Center. In the period of 2015 Belawan Logistic Center changed management from a branch to a subsidiary of PT. Prima Indonesia Logistik until now.

The basis for the establishment of PT. Prima Indonesia Logistik is the Decree of the Minister of SOEs No. S-510/MBU/09/2014 dated September 4, 2014 concerning the Approval of the Establishment of a Subsidiary of PT. Pelabuhan Indonesia 1 (Persero) in the logistics sector. PT. Prima Indonesia Logistik serves activities such as Container Yard (CY), Container Freight Station (CFS), Repair area, Fumigast quarantine area, Workshop, Cleaning Area

B. Company Activities in the Container Loading and Unloading Process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan

Land Transportation in Container Freight Station (CFS), which involves trucks or trains called container drayage operations, in this operation the truck passes several stopping points including container terminals, factories, empty container depots, and container truck garages (pools). The operation of container drayage trucks can be classified into two groups based on their direction, namely

- a. Containers that have been sent from other regions or countries to the terminal to then be sent to the owner of the goods or factory are called inbound (e.g. imports).
- b. On the other hand, containers that must be picked up at the location of the goods owner and then sent to the container terminal for further sea transportation are called exports.
- c. Recipient of goods (consignee), namely the person or legal entity to whom the goods are sent. At the time the ship arrives at the destination port, generally the shipping company concerned will announce the news that the company's ship (with complete identity) has arrived from a country and has arrived at the port pier

1) Related Parties

In a shipment or delivery of goods by ship, there are three parties who have legal relations with each other:

- a. Shipper, namely a person or legal entity who has a ship's cargo to be sent from a certain port (loading port) to be transported to the destination port.
- b. Carrier, namely a shipping company that carries out the transportation of goods from the loading port to be transported/delivered to the destination port by ship.
- c. Recipient of goods (Consignee), namely the person or legal entity to whom the goods are sent.

The rights and obligations of the three parties in shipping are regulated by legislation. National Government Regulations and several international conventions have been formed to regulate shipping issues, both in terms of technical and maritime aspects of shipping.

2) Selection of container users or used cargo according to container grade

In order to improve container user facilities to maintain container quality and reduce costs, container grades for 20 feet and 40 feet types are classified into 4 categories as follows.

a. Grade A

Grade A is the condition of the container new or good, clean interior and exterior, no stains, rust, foreign materials

b. Grade B

Grade B is a fairly good condition exterior and interior, approximately 10% of these containers are usually used for non-animal feed, leather cargo.

c. Food Grade

Food Grade means that the physical condition of the container is good, the interior and exterior are free of rust, stains, foreign materials and are suitable for food cargo.

d. Grade C

Grade C is the condition of the exterior and interior, approximately 25% rust on the exterior and interior panels, the floor is in good condition, usually this container is used for animal feed, leather, etc.

3) Empty Container Collection Process

a. Shipper Request Order to Shipping party to make Empty Container Order. In this case, the shipper can include the type of cargo and the planned destination. Delivery Order (DO) letter is a letter or document issued by the shipping carrier, either through a shipping service by sea or a shipping company. The delivery order letter states that the cargo and ownership of the goods transported by the shipping line company are the name of the company. The personal name listed in the delivery order issued is issued by shipping line

b. After the shipping line issues a DO Request Order to the shipper according to the request, pay the Delivery Order fee which is usually via e-mail from the shipping company to the exporter.

c. Shipper gets DO after that makes Lift On payment

d. The shipper comes directly to the depot by bringing DO, Proof of Payment Transfer and NPWP

e. The Depot issues an invoice according to the DO brought by the shipper.

- f. After that, the Depot releases the Job Order by entering the DO first. The use of services creates job orders, prints EIR (Equipment Interchange Receipt) and distributes EIR I to shippers.
- g. Shipper selects container according to ship type
- h. In this case, a lift on activity occurs container is done by the Kalmar tool side loader after the container is deemed suitable
- i. The administrator brings the DIWI (Depot Working Instruction) to the gate out for EIR (Equipment Interchange Receipt stuffing out) is made based on DWI (Depot Working Bistruction)

4) Empty Container Return Activity Process

Container unloading is known as Lift off, which is an activity carried out when the container enters the depot either after import activities (consignee), or reposition (shipping line). The documents that must be brought by EMKL. (Sea Freight Expedition) before entering the Depot are as follows

- a. EIR (Equipment Interchange Receipt) luaran SP2 dari port
- b. DO (Delivery Order) stating that the container is being returned to a specific depot. Usually, the DO already has an approved depot stamp.
- c. The DO brought is still in the time of acceptance validation. If the DO brought has expired, then the FMKL must take care of it first with the shipping line
- d. Payment, the consignee submits or confirms to the Depot by bringing the interchange EIR and bringing proof of payment transfer. The EMKL party or the consignee owner's management submits the Delivery Order (DO) to the gate in admin to issue the depot working instruction.
- e. After that, when the container enters the depot, an inspection (survey) is carried out
 - In the Survey In process, the surveyor must be more careful and credible, meaning that in checking the container, sufficient skills and knowledge are needed regarding the container. This, in conducting the survey, good and accurate results will be obtained. The skills required are understanding and understanding the washing procedure, container criteria procedure.
 - container criteria procedure, Container Repaire based on IICL (Institute of International Lessor) standards, Container surveyors also understand the components of the container along with the ISO code.

- Surveyors must understand the various codes, such as damage location codes, damaged component codes, damage codes and repair method codes. Especially for repair methods or determining repair methods, surveyors must master the techniques and skills regarding container repair. If not, it will result in inaccurate survey results.
- Steps in the In Gate container survey. Other activities, among others, consist of, moving, arranging or flowing, arranging, mechanical lift on lift off, conducting surveys, packaging, and labeling
- Check the completeness of the documents brought by the truck driver for SP2 from the port or factory. Container Loan Letter (EIR).
- Make sure the container number on the document is the same as the physical container, and make sure the container is unloaded at the destination according to the description. Survey all parts of the container, then take a photo, because the container is damaged, the photo will be attached to the EOR (Estimated Of Repair) made by the estimator.
- The writing must be clear and informative so that there are no errors in data input by the Equipment Control (EQC) team.

5) Stuffing Activity Process

- a. Expedition request for empty containers at the depot for expedition loading through the clerk by submitting a release order or booking number.
- b. The clerk hands over the empty container with the help of the reachstaker/kalmar tool
- c. The expedition was accompanied by a clerk who checked the condition of the empty container.
- d. The expedition submits the release order or booking number to the yard operations admin or clerk as a requirement for printing the container handover in the TCM program.
- e. Expedition requests for stuffing work in the depot through the clerk and when there is a heavy load, the customer must submit an application to the forklift operation by filling out the SPK job for heavy equipment
- f. Workers do stuffing with the clerk's instructions.
- g. The expedition seals the container with a seal on the locking bar handle on the right side of the container door.

- h. The expedition fills in the container delivery letter according to the type of load and seal number.
- i. The expedition submits the container handover letter to the yard operation admin.
- j. Yard operation admin inputs container delivery letter data into the TCM 6.

6) Striffing Activity Process program

- a. striffing process can only be carried out after the shipper/consignee has paid the costs incurred for sending the container (freight) prepaid/freight collect).
- b. The consignee party is usually informed by the shipper that the goods will be transported by which ship, which voyage and an estimate of when the ship will arrive at its destination.
- c. The striffing process begins when the consignee arrives and shows the original B/L (Bill of Lading) as a sign of payment of the invoice. The marketing officer matches it with the CCL (Commerce Control List), manifest with the B/L. If the consignee only brings a faxed B/L, the consignee must make a sealed inquiry letter and show valid identification. The B/L in the form of a photocopy is declared invalid for taking the goods.
- d. After the checking process is complete and declared valid, the marketing officer will issue a DO as proof of collection of goods with a maximum striffing time limit of 4 (four) days after the container is unloaded.
- e. The DO is given to the depot head and the depot head shows where his container is located. The depot head writes on the DO the location of the container. After knowing the location of the container, the consignee goes to the container yard and shows the DO to the field interchange section. The field interchange officer shows the container in question and shows whether the seal and container lock are still in good condition. After that, the consignee can carry out the striffing process.
- f. after the striffing process is complete and the consignee's goods have been transported by truck, the loading consignee makes a waybill of 2 (two) sheets. The waybill must be information is given on who should carry out the striffing process, the container number and the type of goods to be striffed. For 1 (one) sheet of the waybill is given to the truck driver to be submitted to the security guard when leaving.

- g. The container status if stripping has been completed is MTY and if the container has not been completed stripping then the container status becomes STR.

7) Supporting Documents

In every container movement, whether from empty or full depot or until loaded onto a ship, it is always equipped with supporting documents. A document is a letter containing information about data on something, for example, cargo. The function of this document is very important in the process of serving container cargo services. One of them is to avoid deviations in container ownership and the safety of container shipping.

a. Delivery Order (D/O)

Delivery order or often referred to as D/O is a letter of instruction for sending goods/containers from a shipping company to a consignee. Every container shipment transported by a ship that arrives at the port can receive its container after first obtaining a) D/O from the shipping company that owns the ship that transports the container to the destination port. D/O is obtained by exchanging the Bill of Lading (B/L). The D/O clearly states the name of the shipping company, consignee, name of the ship that delivers the container from the loading port to the destination port (unloading port), container number and seal, cargo description, and cargo weight

b. Equipment Interchange Receipt (EIR)

EIR (Equipment Interchange Receipt) or in practice often referred to as Container Inspection Report (container inspection report) is a document as evidence of the entry and exit of containers from the depot either in an empty or full condition. This document is to determine responsibility for the container. The EIR records the container number and the physical condition of the container at each transfer point such as:

- a) To Unload/Load/Stack/Repair
- b) From: Depot/CY/Ship shop/Repair
- c) To: Depot/CY/Ship shop/Repair

c. Container delivery letter (SP2)

Container handover letter is a letter issued by the port operator stating that the container is permitted and handed over to the importer / EMKL. In this SP2, it also explains the physical condition of the container being handed over.

d. Receipt (Cover Letter)

This document is issued by the Sea Freight Expedition (EMKL) as a reference for field officers in returning empty containers. This document contains the type of container number returned and the number of containers returned, whether 20ft or 40ft.

e. SBO (Opslag Proof Letter)

This document is issued by the shipping company (EMKL) as a reference for field officers in returning empty containers. This document contains:

- Name of the ship and destination
- No delivery
- No container

f. Equipment operation production report

This document is used to record the container prefix number and to find out the amount of production of heavy equipment such as forklifts per day, after the activities in a day are completed this document is submitted to the operational section to be inputted to find out whether the production of the equipment has decreased or not. g. Work order (SPK) This document is a work order

g. Work order letter (SPK).

work to carry out the activities of lowering (lift off) and raising (lift on) empty containers from the stacking area onto the truck and vice versa, which will be released by the shipping company to PT. PIL if it has met the conditions in its implementation is a document published by the shipping party.

h. Receiving card (Loading Card)

This document is a loading card to perform repositioning or often referred to as a receiving card / SP2, Receiving Card is given to the trucking operator when the repositioning activity is carried out where the trucking operator brings the container to the port terminal, this document explains Closing Dry, Closing Reefer, Container, in this document must be the same as the cover letter.

i. Announcement

This document is an export list announcement, namely a document that announces the export list for a repositioning activity. This document explains the ship, invoice number, quantity and number to be repositioned, whether empty or full, and estimate closing for empty/full containers.

j. Daily report in

Daily Report is a document or daily report that contains all container prefix numbers and principle names in receiving (in) activities, both 20ft and 40, made by field officers (tally). Where after the daily activities are completed, this document is submitted to the operational section for input. With the daily report, managers can track the progress of the project, identify obstacles that occur, and find ways to overcome these problems. In this case, the daily report helps in predicting the final results of the project and creating strategies to ensure that the target is achieved effectively.

k. Cover letter

This document is issued by PT Prima Indonesia Logistik as a guide for trucking operators to enter the port terminal gate. This document contains the trucking plate number, recipient whether depot, CFS or CV, ship name, container prefix number, size, and this applies to empty or full container units.

C. Obstacles in the Container Loading and Unloading Process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan

In carrying out an activity that has a specific purpose with the hope of obtaining maximum, efficient and effective and satisfactory results. However, it does not always get satisfactory results. Obstacles faced during the loading and unloading process are as follows

1. Machine damage occurred to the operator's equipment, resulting in delays in the loading and unloading process.
2. There was negligence on the part of the Field Tally officers in the loading and unloading process, such as loading containers not in accordance with job orders.
3. Occurrence of slippage in surveying container damage
4. Long cleaning process

D. Efforts to Overcome Obstacles in the Container Loading and Unloading Process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan
In overcoming obstacles in the Container Loading and Unloading Process at the Container Freight Station (CFS) at PT. Prima Indonesia Logistik Belawan, the efforts made include:

1. Companies must carry out more intensive maintenance on work equipment to prevent damage.
2. Routinely conduct briefings and outreach to the Loading and Unloading Workers (TKBM) regarding the implementation of the Arsyad process, good loading and unloading
3. A surveyor should be more careful when checking the container unit to prevent damage to the container.
4. Change the number of workers (HR) to speed up the cleaning process.

5. CONCLUSION AND SUGGESTIONS

A. Conclusion

The container loading and unloading process at PT. Prima Indonesia Logistik Belawan has not been running effectively due to several obstacles such as machine damage to the operator's equipment, negligence of field tally officers, escapes when conducting container damage surveys, and long cleaning processes. However, the officers were able to overcome these obstacles well.

B. Suggestions

The suggestions that the author can give so that the container loading and unloading process at PT Prima Indonesia Logistics Belawan can run effectively are that the company should carry out more intensive maintenance on work equipment to prevent damage, routinely conduct briefings and socialization to the Loading and Unloading Workers (TKBM) regarding the good loading and unloading process, Surveyors should be more careful in checking container units, and increase the number of workers (HR) to super-speed up the cleaning process.

REFERENCES

- Abadi, R. (2024). Report on the flow of loading and unloading empty containers at the depot of PT. Global Terminal Marunda. STIA and Barunawati Surabaya Monthly Management. Retrieved February 4, 2024, from <http://relpositori.stiamak.ac.id/id/elprint/525/>
- Arsyad, T. (2022). Container stuffing and stripping procedures at PT Tanto Intim Line Makassar. Container Loading and Unloading at the Depot by PT Prima Indonesia Logistik Belawan Maritime Scientific Journal. Retrieved October 4, 2023, from https://karya.brin.go.id/id/eprint/26734/1/2962-0627_1_1_2022-4.pdf
- Izudin, A. (2021). Empty container activity flow in smooth export and import at PT Citra Prima Contamer Surabaya Depot. Journal of Shipping and Port Applications, 11(2). Retrieved March 1, 2021, from <https://pdp-journal.hangtuah.ac.id/index.php/jurnal/article/view/60>
- Kosasih, S., et al. (2021). Multimodal transportation management in Jakarta. Djangkar.
- Nainggolan, F., Yusnidah, Y., & Sabila, F. H. (2023). Prosedur perpanjangan sertifikat nasional pencegahan pencemaran dari kapal TB Pancaran 118 pada KSOP oleh PT. Dean Shipping Agensi Batam. Jurnal Manajemen dan Ekonomi Kreatif, 1(4), 316-329.
- Nurdiana, M., & M. Z. (2020). Analysis of operational procedures for loading and unloading containers by PT Pelindo IV (Persero) Banjarmasin Branch at the Banjarmasin Container Terminal (TPKB). Retrieved July 6, 2023, from <https://id.scribd.com/document/657493174/976f3f7c83d429f8b38d0028aelab0260-7>
- Nurmalita, D. (2018). The role of container freight station (CFS) warehouse services in the smooth flow of import and export goods in Tanjung Emas Port, Semarang. Diploma Thesis, Semarang Maritime Science Polytechnic. Retrieved February 4, 2019, from <https://repository.pip.semarang.ac.id/864>
- Pasaribu, L. U. R. E., Dirhamsyah, D., & Sabila, F. H. (2023). Process clearance in & clearance out Millennium 806 using the application B-SIM by PT. Putra Samudera Inti in the area Free Trade Zone Batam. Wawasan: Jurnal Ilmu Manajemen, Ekonomi dan Kewirausahaan, 1(4), 403-410.
- Regulation of the Minister of Transportation Number 60 of 2014 concerning the implementation and management of loading and unloading of goods from and to ships. Ministry of Transportation. Retrieved November 25, 2014, from <https://peraturan.bpk.go.id/Details/103898/permenhub-no-60-tahun-2014>
- Sabila, B. (2024). Container loading and unloading process at the depot by PT Prima Indonesia Logistik Belawan. Journal of Maritime and Education. Retrieved February 13, 2024, from <http://eljournal.poltek-amimedan.ac.id>
- Sajudi, A. (2018). The process of increasing the container freight station warehouse at Tanjung Emas Port, Semarang. National Shipping Management Journal. Retrieved October 8, 2018, from <https://id.scribd.com/document/508680322/7-29-1-PB>

- Sitinjak, A., Ginting, S., & Sabila, F. H. (2023). Efficiency factors affecting metal box loading operations at PT. Gelora Perkasa Belawan. *Jurnal Ilmu Sosial Mamangan*, 12(3), 528-537.
- Supriyanta, P. (2019). The process of accepting and releasing empty containers at the container depot at PT Perusahaan Pelayaran Nusantara Panurjwan. *National Shipping Management Journal*. Retrieved March 31, 2020, from <https://www.semanticscholar.org/paper/PROSES-PENERIMAAN-DAN-PENGELUARAN-EMPTY-CONTAINER-Supriyanta-Permatasari/d0810cef77e227b8ec5136bc3f5d4761d1ad3566>
- Suryantoro, B., Punama, D. W., & Haqi, M. (2020). Labor, lift-on/off loading and unloading equipment, and effectiveness of stacking yard on container loading and unloading productivity. *Baruna Horizon Journal*. Retrieved June 29, 2020, from <https://www.semanticscholar.org/paper/TENAGA-KERJA-PERALATAN-BONGKAR-MUAT-LIFT-ON-OFF-Suryantoro-Punama/706499223fc887875a5aec20e6778bbd954453af>
- Wiranata, P. (2021). The process of loading and unloading containers at the depot of PT Salam Pacific Indonesia Lines. Department of Maritime Affairs, Bengkalis State Polytechnic. Retrieved April 14, 2024, from <http://eprints.polbeng.ac.id/2414/>