ABSTRACT

PT. Pindad (Persero) is a manufacturing company that produces weapons and

commercial products such as marine, specialty vehicle and rail tool. The

receiving goods in each production division is only given time window of the

arrival time from each supplier that given by the ISC division (procurement)

(Pindad, 2015).

The phenomenon that occurred in PT.Pindad (Persero) is a company does not yet

have a fixed schedule for each arrival of components from local suppliers, as the

result there are occured supplier queue at the reception in the warehouse of

Railway Equipment Division. This is happened due to the arrival of suppliers

which is uncertain at certain hours that make material receipts to warehouse

becomes irregular and queuing because they have to wait to be serve on the

receiving process.

This research discusses about the schedule arrival for a local supplier by taking

into account the time window of each supplier, the number of QI, MHE number

and capacity of these resources in the warehouse Railway Equipment Division

PT. Pindad. Scheduling arrival supplier performed using integer linear

programming that will get the optimal schedule for reducing the supplier's

waiting time because queue in receiving zone.

Results from this research is to reduce the percentage of waiting time that occurs

in the warehouse Railway Equipment Division by 81,71% from actual waiting

time with optimal scheduling in the process of receiving material at the

warehouse of Railway Equipment Division PT. Pindad.

Keywords: Inbound Logistic, Scheduling, Integer Linear Programming, Queue.

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