# **EASTERN RAILWAY**

# WORK STUDY REPORT ON ASSESSMENT OF REQUIREMENT OF PARCEL PORTER FOR HANDLING OF PRESENT REGULAR CONSIGNMENT AT HOWRAH PARCEL UNDER COMMERCIAL DEPARTMENT

(STUDY NO.WSER-22/19-20)

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#### **ACKNOWLEDGEMENT**

The study team would like to acknowledge its gratitude to Sr.DCM/HWH and ACM/1/HWH for welcoming the study team to conduct the subject study in this sphere of activities at HWH Parcel.

The study team is always thankful to CPLI/HWH,CS/Parcel/Comml Br./HWH and all other staff of HWH Parcel for their unstinted help rendered to the study team to steer the subject study in positive direction for completion the study in stipulated time.

#### **TERMS OF REFERENCE**

The subject work-study has been conducted based on the following terms of references –

- i) Existing sanctioned strength and MOR of HWH Parcel Porter as on 21.01.2020.
- ii) Activities being done completely in house and no. of Porters deployed.
- iii) Quantum of work load available for handling parcel traffic at Howrah Parcel.

#### **METHODOLOGY**

In conducting the subject work study, the study team has applied the following methodology.

- i) The study team has recorded the existing system of working.
- ii) A threadbare discussion was made with the supervisors and staff concerned.
- iii) Available work load of parcel traffic from 2016-17 to 2019-20.
- iv)The study team has conducted time study for shipment of Outward and Inward parcel traffic from Shed to Platform and Platform to Shed.
- v) The assessment of Parcel Porter for handling parcel traffic is purely made on the basis of present traffic offered on regular basis.
- vii) No fundamental change in the present method has been indicated in this report.

#### **SUMMARY OF RECOMMENDATION**

As per analysis made in the study report, it is recommended that the total actual requirement of parcel Porter duly revised will be 234 against a total sanctioned strength of 252 posts which will result in surrender of 18 posts from the Parcel office at HWH under Commercial Department.

Existing			Prope	osed
Sanctioned strength	MOR	Existing vacancy	sanctioned strength	Surrender
252	231	21	234	18

#### **CHAPTER-I**

#### 1.0 INTRODUCTION:

- 1.1 There is hardly any difference between the carriage of luggage and parcel. The luggage is normally carried by the passengers in the same passenger carrying trains in which they are traveling by paying the luggage charge (the chargeable weight being the weight of luggage minus the weight of free allowance as per extant rule). The parcel may move by any other passenger carrying train depending on the availability of room with lesser charges than that of luggage.
- 1.2 To increase the potentiality of higher revenue earning and to cope up with the present need, the scenario of Howrah parcel has been changing day by day. Leasing of SLRs was started in the year 1999 experimentally. As a Railway policy more and more SLRs of various trains are given to out agencies on lease basis and for this reason Railway claims cases are rapidly decreasing. By computerizing the parcel booking system, which in turn helps the office to monitor and prepare various statistical figures for onward transmission to higher authority in demand.
- 1.3 The above changes obviously have an impact over the workload and the manpower of parcel staff in Howrah. With the changes in pattern of working each and every activity centers require proper rationalization of workload vis-à-vis manpower. It is obvious that the introduction of advanced technology and the modified simplest method of doing work have created a clear scope of reduction of manpower in every field of activities.

As a result, Railway Board is paying more attention to the concept of rightsizing of manpower to achieve an optimum level of productivity in the Zonal Railways keeping the revised concept of modernization in view.

1.4 Presently the non-lease parcel and luggage handling work has been executed completely by departmental parcel porter.

The following jobs are required to be conducted by departmental porters:

#### a) Inward shed:

- i) Opening the SLR/after examination of seal by the Rly authority.
- ii) Unloading the parcel.
- iii) Carrying of parcels to the respective godowns.
- iv)Stacking of parcels in the godowns.
- v) To give delivery of parcels to the consignee.
- vi)Re-weighment if any in the shed.

#### b) Outward shed:

i) Carrying parcel/luggage to platform.

- ii) Loading of SLRs at platforms.
- iii) Stacking of materials, in shed, train wise and in section wise, for faster movement of parcels during loading.

#### c) Cross traffic and over carried materials:

Although cross traffic is restricted, but still there are some over carried or cross traffic which are handled by the departmental parcel porter. The works of both inward and outward sheds as cited above are done in this case.

1.5 Indian Railway is facing tremendous financial crunch after implementation of 7th Pay Commission. Operating ratio is gradually increasing. Though Indian Railway is not a business organization but to survive, it is always essential to make the organization in profit i.e. operating ratio should be less than 100. The "Operating Ratios" from 2016-17 to 2019-20 shown in the corporate plan booklet published by the Eastern Railway are given below –

Year	Operating Ratio
2016-2017	165.25
2017-2018	181.15
2018-2019	185.98
2019-2020	159.65 (Proposed)

1.6 In view of the above, Rly Board issued nos. of circulars, orders, etc to minimize expenses and increase earnings to Zonal Railways to achieve better Operating Ratio. The Zonal Railways also implement various measures for financial discipline.

At this juncture, the role of Railway Efficiency & Research Directorate is also very important in connection with the productivity without hampering normal progress and activity by employing technique of 'Rationalizing of Man-Power' and eliminating diminishing categories/redundant activities, etc. The Railway has also invested huge amount in capital expenditure to improve its infrastructure by adopting new technology time to time.

1.7 From the above view point, the competent authority decided that a study to be conducted over the handling of parcels and luggage at Howrah parcel.

#### 1.8 Scope of the study:

This subject study is conducted to assess the requirement of Parcel Porter for handling Parcel Traffic as offered at present purely on daily average basis. The present deployment of parcel porter, engagement of trolleys etc have been observed physically, besides the data taken from the offices and sheds. Suggestions have been made in connection with modern equipments too, for further improvement of the system. However, any change in lease system may change the requirement of parcel porter.

#### **CHAPTER II**

#### 2.0 EXISTING SCENARIO:

- 2.1 Chief Parcel and Luggage Inspector (CPLI) has the dual responsibility of handling both parcel and luggage at HWH parcel. In addition, the parcel office is also responsible for the functioning of cloakrooms, which offers services to the intending passengers round the clock.
- 2.2 At present, the entire workload of handling of non-lease parcel and luggage are fully tackled by the departmental staff under CPLI/HWH. The work points/ areas where the existing Parcel Porters are deployed are as under:
  - i) PF/Station area in morning, evening and night shifts for shipment of inward hard parcel and luggage of both Eastern and South Eastern trains terminating at HWH station.
  - ii) PF area in morning, evening and night shifts for shipment of outward hard parcel and luggage of both Eastern and South Eastern trains originating from HWH station.
  - iii) For stacking and dispatch of outward booked parcels including loading in SLRs.
- 2.3 The present Sanctioned strength and Men on roll position of Parcel porter as on 21.01.2020 is tabulated below (data given by CPLI/HWH).

Category	Pay Level	Sanctioned Strength	Menon roll	Vacancy
Parcel Porter	Level-1	Not given	231	NA

As per previous work study report (WSER-33/14-15), the recommendation made by the study team for actual requirement of parcel porter was 252. Hence, the study team considered the sanctioned strength of parcel porter is 252 for making recommendation against the present work study.

2.3.1 The present workload related to handling of parcel and luggage for both outward and inward traffic of Eastern and South Eastern trains at HWH Parcel office is manned by the following departmental Parcel Porters. Work point wise vis-à-vis shift wise deployment of Parcel Porter for smooth handling of hard parcel at HWH is tabulated below.

	Porter deployed					
SI. No.	Work points	Morning	Evening	Night	General	Total
1	CS/LP	19	21	19		59
2	SE/UL	20	20	18		58
3	NJ 6	4	5	4		13
4	Shed 9	7	13	6		26
5	NJ 2	4	5	3		12
6	Shed 2	4	8	2		14
7	Super godown	5	8	7		20
8	PFPA	5	5	1		11
9	Strong Room	0	1	0		1
10	Free service	2	1	0		3
11	IMWB	1	0	1		2
12	Office, A/C, Stores	0	0	0	6	6
13	Lien	0	0	0	3	3
14	PMS	1	0	0		1
15	Gate	1	1	0		2
	Total	73	88	61	9	231

- 2.4 The distribution of staff as shown para 2.3.1 has been done by CPLI/HWH based on the requirement of P/Porter in different work points according to the present workload. Practically, it is seen that departmental P/Porters are exclusively engaged in handling of non-leased parcels and luggage as a regular measure.
- 2.5 During field study, it is noticed by the study team that 15 nos. of trolleys are utilized for handling H/Parcels and luggages in different platforms of E. Rly (Old complex). And 17 nos. of trolleys are utilized for handling H/Parcels and luggages in different platforms of S.E.Rly (New complex). It is worth mentioning that 02 nos. of P/Porters are deployed against each trolley (in few cases 3 nos. P/Porters are deployed).

Railway	Section	No of Trolley
	Shed-2	6
	Strong Room	2
ER	Super Godown	5
	CS/LP	2
	Total	15
	NJ-6	1
SER	Shed -9	6
SEK	SE/UL	10
	Total	17

2.6 Shift-wise vis-à-vis work point wise deployment of P/Porters under CPLI/HWH in details is tabulated in paragraphs underneath in accordance to their workload:

# 2.6.1 **Station Area (Inward Traffic):**

These staff are deployed to perform the workload of unloading the SLRs of inward trains, shifting and un-loading of Luggage & Parcel to respective godown. The shiftwise position of staff catering the workload of Station Area (Inward Traffic) is tabulated as under:

SI			Porter De	ployed	
No.	Work point	Morning	Evening	Night	TOTAL
1	ER (CS/LP)	19	21	19	59
2	SER	20	20	18	58
	TOTAL	39	41	37	117

#### 2.6.2 Inward Shed for Stacking, re-weighment & dispatching:

These staff is deployed to perform the workload of stacking of unloaded Luggage & Parcel at Inward shed, re-weighment of Luggage & Parcel and delivery of the said materials, marking of packages. In strong room, delivery of insured packages (Outward/Inward) and Banklodgments of SE Rly cash are done by the porter. The shift-wise position of these is tabulated as under:

SI		Porter Deployed			
No.	Work point	Morning	Evening	Night	TOTAL
1	NJ2	4	5	3	12
2	NJ6	4	5	4	13
3	Re-weighment (IMWB)	1	0	1	2
4	Strong Room	0	1	0	1
TOTAL		9	11	8	28

#### 2.6.3 **Stable in Outward Shed:**

Staff deployed in outward shed performs the workload of stacking& marking of Luggage & Parcel after booking at Outward shed, shifting the Luggage & Parcel to SLR position of respective trains and loading the materials to SLRs including dispatch of Rly money value books in Local train. In free service section, porters are used for loading & unloading the documents which are booked under free service way bill system and deliver it to the consignee. In PFPA section, porters are utilized for sealing of VP at goods shed and sending messages to yard & other departments as required. The shift-wise position of these staff is tabulated as under:

SI Waste maint		Porter Deployed			
No.	Work point	Morning	Evening	Night	TOTAL
1	Super Godown	5	8	7	20
2	Shed 2	4	8	2	14
3	Shed 9	7	13	6	26
4	PFPA	5	5	1	11
5	Free Service	2	1	0	3
	TOTAL	24	35	16	74

2.7 A statement showing the year-wise position of Actual wt. of outward luggage (in ton) of both E.Rly and S.E.Rly is tabulated below:

Rly.	Year	Actual wt. (in ton)
	2016-17	2351
CED	2017-18	2717
SER	2018-19	1750
	2019-20 (up to Nov)	1366
	2016-17	6634
	2017-18	6056
ER	2018-19	4922
	2019-20 (up to Nov)	2514

- 2.7.1As per above table, it is clear that the workload of outward luggages of both SER and ER bonded trains is in the decreasing trend for which the requirement of P/Porters for handling the outward luggages has become less.
- 2.7.2 Similarly, a statement showing the year-wise position of Actual wt. (in ton) of Inward luggage of both E.Rly and S.E.Rly is tabulated below:

RIy.	Year	Actual wt. (in ton)
	2016-17	580
CED	2017-18	398
SER	2018-19	217
	2019-20 (up toNov)	175
	2016-17	4493
	2017-18	4123
ER	2018-19	3614
	2019-20 (up toNov)	2893

- 2.7.3 As per above table, it is clear that the workload of inward luggages of both SER and ER bonded trains is in the decreasing trend for which the requirement of P/Porters for handling the inward luggages has become less.
- 2.8 A statement showing the year-wise position of Actual wt. (in ton) of outward parcel (Non Lease) of both E.Rly and S.E.Rly is tabulated below:

Rly.	Year	Actual wt. (in ton)
	2016-17	40564
CED	2017-18	44084
SER	2018-19	32997
	2019-20 (up to Nov)	17177
	2016-17	29266
ER	2017-18	30193
EK	2018-19	25139
	2019-20 (up to Dec)	13240

- 2.8.1As per above table, it is clear that the workload of outward parcel traffic of ER & Ser bonded trains is in the decreasing trend for which the requirement of P/Porters for handling the outward parcel has become less.
- 2.8.2 Similarly, statement showing the year-wise position of Actual wt. (in ton) of inward parcel (Non Lease) of both E.Rly and S.E.Rly is tabulated below:

RIy.	Year	Actual wt. (in ton)
	2016-17	24082
SER	2017-18	23896
SEK	2018-19	17977
	2019-20 (up to Nov)	12144
	2016-17	31087
ER	2017-18	33543
EK	2018-19	29853
	2019-20 (up to Nov)	20417

- 2.8.3As per above table, it is clear that the workload of inward parcel traffic of ER & Ser bonded trains is in the decreasing trend for which the requirement of P/Porters for handling the outward parcel will become less.
- 2.9 Status of Leasing and non-Leasing of SLRs of Outward traffic of E.Rly bonded trains for the year 2016-17 to 2019-2020 (up to Nov'19) is tabulated as under:

Period	Parcel (Lease) (SLR/VP/AGC) (Wt. in Ton)	Parcel (Non-lease) (Wt. in Ton)	Luggage (Non-lease) (Wt. in Ton)	Total Non lease (col.3+col.4)	Total (Lease + Non-Lease) col. 2 + col. 5	% of Lease (SLR/VP/AGC) over Total wt. (col. 2 /col.6)	% of Non-Lease (Parcel + Luggage) over Total wt. col. 5 / col. Col.6)
1	2	3	4	5	6	7	8
2016-17	68087	29266	6634	35900	103987	65.48	34.52
2017-18	66724	30193	6056	36249	102973	64.80	35.20
2018-19	69413	25139	4922	30061	99474	69.78	30.22
2019-20 (upto Nov)	59304	13240	2514	15754	75058	79.01	20.99

2.10 Status of Leasing and non-Leasing of SLRs of Outward traffic of S.E. Rly bonded trains for the year 2016-17 to 2019-2020 (up to Nov'19) is tabulated as under:

Period	Parcel (Lease) (SLR/VP/AGC) (Wt. in Ton)	Parcel (Non-lease) (Wt. in Ton)	Luggage (Non-lease) (Wt. in Ton)	Total Non lease (col.3+col.4)	Total (Lease + Non-Lease) col. 2 + col. 5	% of Lease (SLR/VP/AGC) over Total wt. (col. 2 /col.6)	% of Non-Lease (Parcel + Luggage) over Total wt. col. 5 / col. Col.6)
1	2	3	4	5	6	7	8
2016-17	45241	40564	2351	42915	88156	51.32	48.68
2017-18	34045	44084	2717	46801	80846	42.11	57.89
2018-19	39913	32997	1750	34747	74660	53.46	46.54
2019-20 (up to Nov)	25445	17177	1366	18543	43988	57.85	42.15

2.11 The study team has collected the number of train dealt and porter deployed by each Shed/Go-down in different shift and the details are given below-

		Morning shift		Evening	shift	Night s	shift	Tota	al
Railway	Shed	Porter deployed	Trains dealt	Porter deployed	Trains dealt	Porter deployed	Trains dealt	Porter deployed	Trains dealt
	NJ-2 (Inward)	4	27	5	9	3	7	12	43
Eastern	Super Go- down (Outward)	5	9	8	13	7	5	20	27
	Shed-2 (Outward)	4	6	8	13	2	2	14	21
	Total	13	42	21	35	12	14	46	91
	Shed-9 (Outward)	7	15	13	17	6	8	26	40
South Eastern	NJ-6 (Inward)	4	12	5	13	4	6	13	31
	Total	11	27	18	30	10	14	39	71

#### **CHAPTER III**

#### 3.0 **CRITICAL ANALYSIS:**

- 3.1 Based on the changed circumstances arisen out due to decrease in existing workload of P/Porters, the subject study has been undertaken to evaluate the actual requirement of P/Porters especially in the field of activities of both outward and inward traffic compared to the previous years. A noticeable nos. of contractual labours has phase-wise been absorbed as P/Porter and as a result of which the nos. of departmental P/Porters has been increased in phases. On the other hand, from table 2.9 & 2.10 of previous chapter, the outward traffic of E. Railway & SE railway has been decreasing steadily from 2017-18. The complete workload of financial year 2019-20 is not available, hence the comparison of 2018-19 and 2019-20 is not possible. This situation obviously results in reduction of departmental workload of handling parcels and thereby a scope of surplus of P/Porter has been created, consequent upon the changed situation of reduction of quantum of workload of parcel porter.
- 3.2 The process of handling of non-leased H/Parcels traffic by the contractor's labours has totally been stopped and the said workload is fully tackled by the departmental P/Porters. The P/Porters working under CPLI/HWH are deployed to handle the parcels and luggage of both inward and outward traffic of all terminating and originating trains at HWH stn. Therefore the total quantity (in ton) of parcels & luggage handled by the porters is a prime factor to assess the actual requirement of P/Porter. Basically, the handling of luggage and parcels depends upon the following factors:
  - i) Total weighment carried by trolley.
  - ii) Movement of trolley.
  - iii) Loading of SLR.
  - iv) Unloading of SLR.
  - v) Stacking of inward parcels in shed, etc.

Therefore, weight is a factor while for considering the workload of upliftment of parcels, loading and unloading of SLRs, loading on trolleys, stacking of parcels, etc. The movement of trolleys is fully dependent on the arrival and departure of trains from HWH station.

- 3.3 The total handling work of parcels and luggages may widely be classified in two major groups:
  - a) Inward Traffic Includes work of unloading from SLR and shifting of materials to inward sheds, Marking &stacking at inward shed, luggage office, city booking office, free service, etc.
  - **b) Outward Traffic** Includes work of shifting of materials from outward sheds to SLR and loading, marking &stacking at outward shed, luggage office, free service, etc.

3.4 As it is stated earlier that the movements of trolleys and its carrying capacity are playing a vital role in assessing the need based deployment of P/Porters, the activities during handling of both inward and outward traffic of E.Rly and S.E.Rly have been studied separately.

#### 3.4.1 <u>Activities of Inward Traffic:</u>

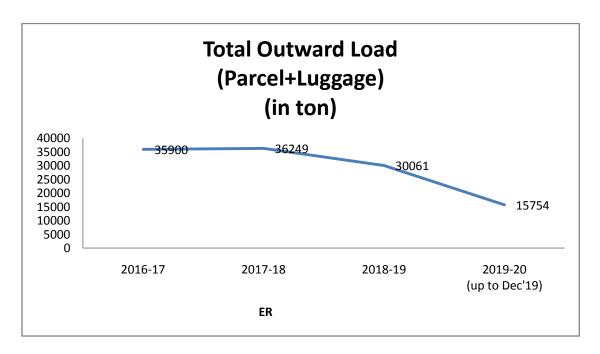
- i) Unloading of H/Parcel from SLR to PF.
- ii) Loading on trolleys.
- iii) Shifting of materials by trolley from PF to corresponding inward sheds.
- iv) Unloading of parcel and luggage in the respective sheds and return to PF for further operation.

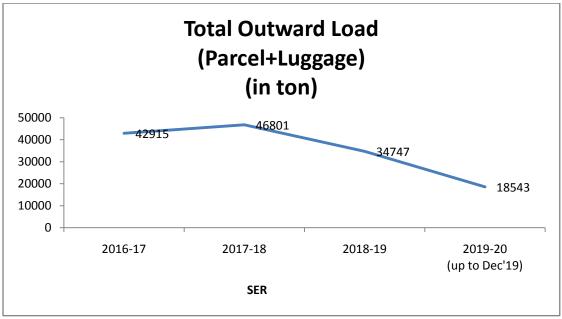
# 3.4.2 Activities of Outward Traffic:

- i) Loading of H/Parcel in trolley at shed.
- ii) Movement of trolleys from outward shed to loading point i.e. PF.
- iii) Unloading of materials in PF or in SLR directly.
- iv) Return to outward shed for further operation.
- 3.5 On being summarized the workload position stated in para 2.7 and 2.8, the position of total Outward Luggage and Parcel (non lease) of both E.R and S.E.R bound trains for the years 2016-17, 2017-18, 2018-19 & 2019-20 (up to Dec'19) is tabulated as under:

YEAR	Outward (Non L (in t	ease)	Outward (in t		Total Outward Load (Parcel+Luggage) (in ton)		
	ER	SER	ER	SER	ER	SER	
2016-17	29266	40564	6634	2351	35900	42915	
2017-18	30193	44084	6056	2717	36249	46801	
2018-19	25139	32997	4922	1750	30061	34747	
2019-20 (up to nov'19)	13240	17177	2514	1366	15754	18543	

3.5.1 The graphical representation of total outward non lease parcel traffic from 2016-17 to 2019-20 (up to dec'19) for both Eastern and South Eastern Railway is given below:



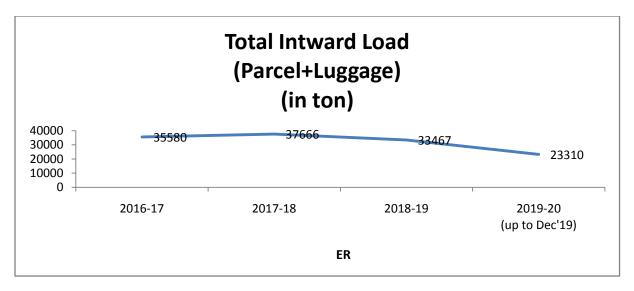


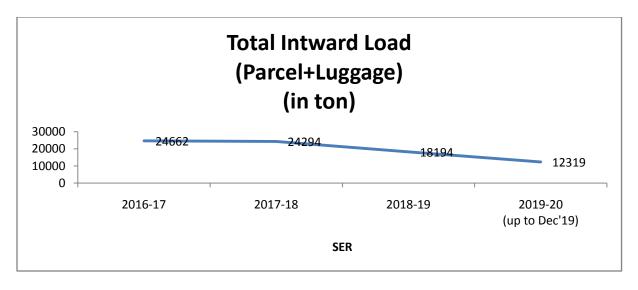
The above diagram clearly depicts that the out ward parcel work load (non lease) has been decreasing steadily for both Eastern & South Eastern Railway.

3.6 Similarly, as per para 2.7.2 and 2.8.2, the summarized position of total Inward Luggage and Parcel (non lease) of both E.R and S.E.R bound trains for the years 2016-17, 2017-18, 2018-19, 2019-20 (up to dec'19) is tabulated as under:

YEAR	Inward (Non L (in t	ease)	Inward (in t		Total Inward Load (Parcel+Luggage) (in ton)		
	ER	SER	R ER SER		ER	SER	
2016-17	31087	24082	4493	580	35580	24662	
2017-18	33543	23896	4123	398	37666	24294	
2018-19	29853	17977	3614	217	33467	18194	
2019-20 (up to Dec'19)	20417	12144	2893	175	23310	12319	

3.6.1 The graphical representation of total inward non lease parcel traffic from 2016-17 to 2019-20 (up to dec'19) is given below:





The above diagram clearly indicates that the inward parcel work load (non lease) has been decreasing steadily.

Hence, conclusion may be drawn considering the above figures that the total workload of Inward & Outward traffic (non lease) at HWH parcel is gradually decreasing.

3.7 From above para 3.5 & 3.6, the actual daily average Outward & Inward parcel traffic from year 2016-17 to 2019-20 has been carried out by parcel porter is tabulated below.

Railway	YEAR	Outward Traffic (wt. in ton)	Daily Avg. (wt. in ton)
	2016-17	35900	98.36
	2017-18	36249	99.31
ER	2018-19	30061	82.36
	2019-20 (up to Nov'19)	15754	57.50
	2016-17	42915	117.58
CED	2017-18	46801	128.22
SER	2018-19	34747	95.20
	2019-20 (up to Nov'19)	18543	67.68

Railway	YEAR	Inward Traffic (wt. in ton)	Daily Avg. (wt. in ton)	
	2016-17	35580	97.48	
	2017-18	37666	103.19	
ER	2018-19	33467	91.69	
	2019-20 (up to Nov'19)	23310	85.07	
	2016-17	24662	67.57	
CER	2017-18	24294	66.56	
SER	2018-19	18194	49.85	
	2019-20 (up to Nov'19)	12319	44.96	

3.7.1 As the complete figure of parcel traffic for the financial year of 2019-2020 is not available, hence the study team has taken the outward and inward traffic for the calendar year of 2019 i.e. from Jan '19 to dec'19. The figure is tabulated below.

	Sout	th Easte	ern railw	ay			Eastern	railwa	у		
	hard	Parcel a	and Lugg	jage		hard	Parcel a	nd Lug	gage		
Month	NJ- (Inwa	_	She (Outv		NJ (Inw		shed-2 (Outward) Package Wt.in ton		Gode	Super Godown (Outward)	
	Package	Wt.in ton	Package	Wt.in ton	Package	Wt.in ton			Package	Wt.in ton	
Jan	32122	1324	46626	2642	62969	3026	24517	1254	21941	1177	
Feb	30954	1313	44234	2547	58665	2795	23998	1334	21566	1274	
March	37150	1560	49380	2805	56882	2699	21156	1081	25730	1575	
April	37825	1636	44744	2672	59436	2840	20017	1011	21414	1406	
May	36190	1615	50400	3024	54961	2625	20940	1166	29743	2000	
June	30121	1329	33063	1907	40826	2051	14689	748	17015	914	
July	30363	1344	33766	1834	45379	2332	17058	754	17314	898	
Aug	28907	1285	35840	2068	46824	2336	17712	727	13000	872	
Sept	33035	1456	45939	2764	61086	3068	16834	812	21749	1257	
Oct	28216	1275	35192	2042	49518	2581	19368	719	15540	803	
Nov	28508	1241	35783	2053	50863	2702	16379	749	14444	763	
Dec	29503	1126	44603	2607	53656	2777	14489	642	11474	586	
TOTAL	382894	16504	499570	28965	641065	31832	227157	10997	230930	13525	
Monthly Avg.	31907.833	1375.33	41630.83	2413.75	53422.08	2652.67	18929.75	916.42	19244.17	1127.08	
Daily Avg.	1063.59	45.84	1387.69	80.46	1780.74	88.42	630.99	30.55	641.47	37.57	

3.8 During field study at HWH old & new complex of platform area and the activities at the inward & outward sheds, the movements of hard parcel & luggage as inward & outward traffic have been observed on 10.01.2020, 11.01.2020 & 13.01.2020. Based on the data collected during physical observation related to the activities of the parcel porters to handle both inward & outward traffic, the results of the observed time for such activities have been element-wise given below;

#### 3.8.1 For SER traffic:

# A) *Inward Traffic*:

- i) Unloading from SLR:
- a) Time taken for unloading of one loaded SLR (4Ton) = 20 minutes (Maximum)
- **b)** Parcel Porter deployed

= 04 men

Total man-minutes required for unloading of 4t material = 20x4 = 80man-minutes.

- ii) Shifting of Trolley from PF to concerned shed:
  - a) Time taken for loading 660 kg of Hard Parcel or Luggage on trolley = 5 minutes (Maximum)
  - b) Average time required = (30+20)/2 = 25 minutes for one trolley of 660 kg
  - (Average time is calculated based on time taken from nearest Platform and time taken from furthest platform as well as HWH end & KLK end in peak hours).
  - c) Unloading of parcels/luggage from trolley to sheds = 5 minutes
  - c) Avg. Time required for empty trolley to return from sheds to platform =(25+15)/2 = 20 minutes

Therefore, total shifting times = (5+25+5+20) = 55 minutes

Based on the observed values & observed situation during shifting of materials from the nearest as well as the furthest end of each Platform depending upon the placement of non-leased SLRs for unloading of Inward Traffic, an assessment regarding total time taken for shifting of materials by each trolley movement is made which is as under.

- a) Shifting from the furthest zone = 30 35% cases out of total case = 65 70% cases out of total case

Giving additional allowances, the shifting of materials from both ends is considered as equal in nos. out of total inward traffic handled by the parcel porters. Thereby, the average time required for movement of each trolley with hard parcel /Luggage in peak period is equated as 56 minutes.

It is obvious that the average time taken for shifting purpose will be less in nonpeak hours and that has also been observed and equated as 45 minutes. However, while assessing the manpower, the average time for shifting activities inclusive of other related activities have been considered as 55 minutes (maximum), though the aforesaid time taken in non-peak hours is 45 minutes.

No. of Trips for 4T materials @ 660 kg. /Trip = 6 trips

Total Man-minutes required for shifting of 4T of materials by 2 Parcel Porters in 55minutes = 2 X 6 X 55 i.e. 660 Man-minutes.

Therefore, the total Man-minutes required for unloading of Materials from SLRs and shifting of unloaded Materials from SLRs to nominated shed-

- = Unloading time + Shifting time
- = 80+660 man-minutes
- = 740Man-minutes for 4T handling
- = 185Man-minutesfor 1T handling

### B) Outward Traffic:

# a) Loading of materials on trolley:

Time taken for loading 660 kg of Hard Parcel or Luggage on trolley = 5 minutes (Maximum) by 3 parcel porters.

# ii) Shifting of Trolley from shed to PF concerned to:

- a) Average time required = (18+12)/2 = 15 minutes for one trolley of 660 kg
- (Average time is calculated based on time taken from nearest Platform and time taken from furthest platform as well as HWH end & KLK end in peak hours).
- b) Unloading of parcels/luggage from trolley to PF = 5 minutes
- c) Avg. Time required for empty trolley to return from PF to sheds =(15+8)/2 = 12 minutes

Therefore, total shifting times = (5+15+5+12) = 37 minutes

# b) Loading of SLR:

Time taken for loading of one SLR of 4T Capacity is 20 minutes with 5Parcel porters(Additional 2 Parcel porter are required for stacking of materials geographically).

Therefore, total Man-minutes required for loading of SLR (4T) for outward movement = Loading of materials on trolley + Total shifting of materials (4T) + Loading time of SLR

- = (3x6x5) + (2 X 37X 6) + (5 X 20) Man-minutes
- = (90 + 444 + 100) Man-minutes
- = 634 Man-minutes for handling 4 T of Luggage/Parcel.

Hence for outward Traffic 634/4 Man-minutes i.e. 159 *Man-minutes* are required for handling of 1T materials.

#### 3.8.2 For ER traffic:

# A) Inward Traffic:

### i) Unloading from SLR:

Time taken for unloading of one loaded SLR (4Ton) = 20 minutes (Maximum)

Parcel Porter deployed

= 04 men

Total man-minutes required for unloading of 4t material = 20x4 = 80 man-minutes.

### ii) Shifting of Trolley from PF to concerned shed:

- a) Time taken for loading 660 kg of Hard Parcel or Luggage on trolley = 5 minutes (Maximum)
- b) Average time required= (30+20)/2 =25 minutes for one trolley of 660 kg

(Average time is calculated based on time taken from nearest Platform and time taken from furthest platform as well as HWH end & KLK end in peak hours).

- c) Unloading of parcels/luggage from trolley to sheds = 5 minutes
- d) Avg. Time required for empty trolley to return from sheds to platform = (20+15)/2 = 18 minutes

#### Therefore, total shifting times = (5+25+5+18) = 53 minutes

No. of Trips for 4T materials @ 660 kg. / Trip = 6 trips

# Total Man-minutes required for shifting of 4T of materials by 2 Parcel Porters in 53minutes = 2 X 6 X 53 i.e. 636 Man-minutes.

Therefore, the total Man-minutes required for unloading of Materials from SLRs and shifting of unloaded Materials from SLRs to nominated shed-

- = Unloading time + Shifting time
- = 80+636 man-minutes
- = 716Man-minutes for 4T handling
- = 179Man-minutes for 1T handling

#### B) Outward Traffic:

### c) Loading of materials on trolley:

Time taken for loading 660 kg of Hard Parcel or Luggage on trolley = 5 minutes (Maximum) by 3 parcel porters.

# ii) Shifting of Trolley from shed to concerned PF:

- a) Time taken for loading 660 kg of Hard Parcel or Luggage on trolley = 5 minutes (Maximum)
- b) Average time required = (22+15)/2 = 19 minutes for one trolley of 660kg

(Average time is calculated based on time taken from nearest Platform and time taken from furthest platform as well as HWH end & KLK end in peak hours).

- c) Unloading of parcels/luggage from trolley to PF = 5 minutes
- d) Avg. Time required for empty trolley to return from PF to sheds = (18+12)/2 = 15 minutes

Therefore, total shifting times = (5+19+5+15) = 44 minutes

# d) Loading of SLR:

Time taken for loading of one SLR of 4T Capacity is 20 minutes with 5Parcel porters (Additional 1 Parcel porter are required for stacking of materials geographically).

Therefore, total Man-minutes required for loading of SLR (4T) for outward movement = Loading of materials on trolley + Total shifting of materials (4T) + Loading time of SLR

- $= (3 \times 6 \times 5) + (2 \times 44 \times 6) + (5 \times 20)$  Man-minutes
- = (90 + 528 + 100) Man-minutes
- = 718 Man-minutes for handling 4 T of Luggage/Parcel.

# Hence for outward Traffic 718/4 Man-minutes i.e. 180 *Man-minutes* are required for handling of 1T materials.

3.9 On scrutiny of the data shown in para 3.7.2 and also the assessment for handling 1 Ton materials in terms of man-minutes for both Inward and Outward traffic, a revised position in connection with Actual Requirement of P/Porters for transshipment from shed to platform and platform to shed to tackle the entire workload of HWH Parcel (on an average) has been calculated as under:

# DEALING OF HARD PARCEL AND LUGGAGE FOR A PERIOD OF 12 MONTHS [January'19 TO December'19]

	South Easte	ern railw	ay	Eastern railway				
Outwa	ard Traffic	Inwa	rd traffic	Outwa	rd Traffic	Inwa	rd traffic	
Daily Avg. in ton	Parcel Porter Required	Daily Avg. in ton	Parcel Porter Required	Daily Avg. in ton	Parcel Porter Required	Daily Avg. in ton	Parcel Porter Required	
80.5	80.5x159/ 8x60 =27	46	46x185/ 8x60 =18	68.0	68x180/ 8x60 =26	88.5	88.5x179/ 8x60 =33	

3.10 The study team has critically analyzed the shed wise workload handled by the porter in different shifts corresponding the number of trains and the requirement of parcel porter thus arisen out is tabulated below.

			Total work load in 03 shifts									
		in ton	No of t	Staff required for handling of work load in shed								
Railway	Nature of parcel traffic	Work load	Shed/Godown	Morning	Evening	Night	Morning	Evening	Night	Total		
	Daily avg.Inward Traffic in Jan'19 to Dec'19	88.5	NJ-2	27	9	7	5	4	3	12		
ER	Daily avg. Outward Traffic	68.0	Super godown	9	13	5	4	5	2	11		
	in Jan'19 to Dec'20	00.0	Shed-2	6	13	2	4	5	2	11		
CED	Daily avg.Inward Traffic in Jan'19 to Dec'19	46	NJ-6	12	13	6	4	5	3	12		
SER	Daily avg. Outward Traffic in Jan'19 to Dec'20	80.5	Shed-9	15	17	8	5	6	3	14		
	Total			69	65	28	22	25	13	60		

3.11 Consequent upon the calculation done in a tabular form in the para 3.9 & 3.10, the Actual Requirement of P/Porters at HWH Parcel under CPLI/HWH is assessed as under:

Actual Requi	Actual Requirement of Parcel Porter for handling of Inward & outward Traffic for both E.Rly& S.E.Rly at Howrah station										
Location	Activity	Railway	Requirement	Remarks							
Inward Shed	For Stacking, re-weighment&	ER	12	In three							
Illward Siled	dispatching	SER	12	shifts							
Outward Shed	Collecting material from booking site & stacking	ER	22	In three							
Outward Siled	according to Train	SER	14	shifts							
	For shifting of material for	ER	33	In three							
Platform	Inward Traffic	SER	18	shifts							
Plationiii	For shifting of material for	ER	26	In three							
	Outward Traffic	SER	27	shifts							
CPLI	Miscellaneous workloadsuch as re-weighment of booked materials as well as handling of untoward incident as and when required.	ER	14	In three shifts							
	Bare Requirement		178								
F	Rest Giver (RG) @ 16.66%	30									
Le	eave Reserve (LR) @ 12.5%	26									
	Actual Requirement	234									

3.12 During field study, it is noticed that in every shift, a reasonable period of time is found as idle hours of P/Porters which can be utilized to meet up the additional needs of handling of traffic arisen out. The idle hours of gang allotted for inward traffic can be utilized for handling outward traffic to avoid empty haulage of trolleys and viceversa. In case of any eventualities such as late coming of trains in a bunch within a short span of time due to natural calamities or any other disturbances. To tackle this kind of situation, the deployment of a special gang of 14 nos. of P/Porters per day has been taken into consideration in addition to the utilization of idle man-hours, while assessing the actual requirement of P/Porter.

#### 3.13 RECOMMENDATION:

As per assessment made in para 3.12, it is concluded that the Actual requirement of Parcel Porters at HWH Parcel Office under CPLI/HWH will be 234 against the Present Sanctioned strength of 252 Porters, thus rendering a surplus of (252-234) = 18 posts. Therefore, it is recommended to surrender the surplus 18 posts of parcel porter from the existing staff strength working under CPLI/HWH with immediate effect.

#### 3.14 SUGESSION:

- i) It is suggested that 12 nos. of motor trolleys (8 for old complex and 4 for new complex) may be provided in addition to the existing nos. of push trolleys to expedite the smooth movements of Parcel and Luggages in lesser time by deploying less nos. of staff. It is also suggested that the movements of trolley is required to be monitored to maintain a smooth, trouble less & effective handling of materials by utilizing the ineffective man-hrs.
- ii) It is also suggested that the departmental loading of SLRs should be preferred at rear SLRs only. It definitely decreases the shifting time of inward & outward traffic. Hence, front SLRs should be considered first for leasing of SLRs.

# **CHAPTER-IV**

# 4.0 FINANCIAL APPRAISAL:

4.1 As per recommendation made in Para 3.13, the total surplus post works out to **18 posts** of Parcel Porter working under CPLI/HWH.

A statement showing the total annual financial savings on account of surrender of 18 *posts* is furnished below.

LEVEL	G.P	PAY	MEAN PAY	D.A	NO OF POSTS	MONEY VALUE	
				17%		MONTHLY	ANNUAL
1	1800	18000- 56900	37450	6367	18	Rs.788706 /-	Rs.9464472 /-

Thus, the annual financial savings works out to 94.6 lakhs.