

# Review of staff working at Printing Press Byculla

## Work Study No.: - No. G.250.WSCR.STORES/HQ-06/18-19

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Synopsis of the Study				
Study Number	No. G.250.WSCR.STORE/HQ-06/18-19			
Name of the Study	Review of staff working at Printing Press Byculla.			
Approved by	AGM			
Department	Stores			
Division	HQ			
Date of commencement	31.01.2019			
Date of completion	19.03.2019			
Date of submission	28 .03.2019			
No. of recommendations	01			
Sanctioned strength	483			
No. of men studied	296			
No. of vacancies	187			
No. of posts identified surplus	165			
Financial implications	Rs. 12,69,15,894/-			

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### Acknowledgement

The work-study team takes this opportunity to express deep thanks to Smt. P. Sudha Manager /P&S Byculla & Shri Arun Velan, AM (P&S) Byculla for their valuable guidance rendered to the study team for early completion of the study. The work-study team is also thankful to Shri S.B. Nitnavare & Shri Fernandis SSE, who guide the team in conducting the study. The work-study team is equally thankful to other staff working in Printing Press Byculla for providing all assistance and furnishing necessary data and information required for conducting the study.

#### Terms of Reference

This work-study on "Review of staff working at Printing Press Byculla" has been included as a Programmed study with No. G.250.WSCR.STORES/HQ-06/18-19. for the year 2018-19 with the approval of AGM. The terms of reference for the study may be to assess the Staff requirement to deal with present work load at Printing Press Byculla.

### Basis for the Study

- 1. Reduction of work load due to modernization / automation of printing technology.
- 2. Introduction and availability of latest technology printers in most of the unit/department.
- 3. Reduction workload due to discontinuation of some printing items through Printing Press Byculla.

## Methodology

- 1. Collection of data in details and quantum of workload of the staff.
- 2. Discussion of details with co-ordinating officer / supervisors.
- 3. Analysing the collected data with shop/section wise activities and assessing manpower requirement, based on the workload and present need.
- 4. To suggest ways and means for optimum utilization of the men, machine & material.
- 5. Making recommendations for need based staff in the present context.
- 6. Working out financial implication involved in saving as a result of surplus staff.

## Summary of Recommendations/Suggestions

**Recommendation No. 1**: It is recommended that 165 posts including Group "C" and Group "D" are identified as surplus may be surrendered. (Page 27)

**Suggestion No. 01:** It is suggested that Card ticket Section may be Clubbed with UTS/PRS section for effective utilization of available manpower. (Page 26)

**Suggestion No.02:** It is suggested that present practices of UTS printing may be switch over to print in Zig zag outfeed manner so as to achieve 100 % outturn of printing of UTS tickets. (Page 26)

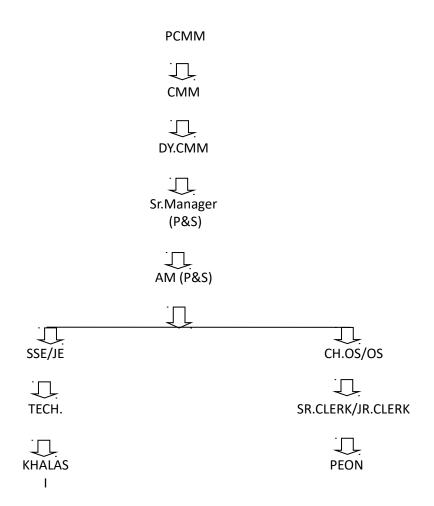
**Suggestion No.03:** A Review may be carry out again in terms of manpower requirement in UTS/PRS section after implementation of ZIGZAG outfeed manner printing for UTS tickets and further saving of manpower.(Page 26)

## Chapter -1

## Introduction

- 1. On 16<sup>th</sup> April 1853 the first Railway line in Asia between Mumbai and Thane a distance of 21 miles was open for public traffic. It was a memorable and historical day in the history of India.
- 2. To cater the need of stationary and tickets in the form of card ticket, paper tickets, blank paper tickets, excess fare tickets and other money value items etc, it was felt necessary to establish a printing press. Thereafter in the year 1895 considering the safety and security measures the printing press at Byculla was established.
- 3. Presently the printing press Byculla is meeting the requirements of card tickets, paper tickets, blank paper tickets, excess fare books, and other money value items, other standard stock items, non-stock items, vital items, safety items, and Railways monthly Gazette.
- 4. This Work Study is under taken as per directives of Rly Board, and on the basis of present available Work Load as well as changes in policies.

## Organisational set up of Printing Press Byculla



## Chapter II Existing Procedures & Critical Analysis

2.0. The stationary and printing press Byculla is headed by Sr. Manager, (Printing and Stationary). Further he/she is assisted by Assistant Manager (Printing and Stationary) and a team of senior supervisors, technical staff, ministerial staff, and transportation staff.

The press is mainly divided into two parts such as general printing units and ticket printing units.

#### 2.0.1. General printing unit:

- 2.0.2. The general printing unit is divided into further 8 sections which are given as under:-
  - (1) Production Control Organisation (PCO)
  - (2) Desk top Publishing section (DTP)
  - (3) Processing section
  - (4) Screen Printing
  - (5) Reading section
  - (6) Binding section
  - (7) Machine section
  - (8) Maintenance section

#### 2.0.3. Ticket printing unit:

- 2.0.4. Ticket printing unit sub divided into two sections given as under:
  - (1) Card tickets printing section
  - (2) UTS / PRS Tickets section
- 2.0.5. **Establishment section**: To deal with the staff matters the establishment section is also one of the parts of the press which is headed by Office Superintendent and assisted by various ministerial staff.
- 2.0.6. **General section**: To deal the general matters of the press and to keep the liaison with the other departments the general section is headed by the Office Superintendent.
- 2.0.7. The working time of the press is observed is as under:-

Days	First Shift	Second Shift	Remarks
Monday To Friday	07.30 To 16.00 Hrs	16.00 To 23.30 Hrs.	With Lunch Brake Of
			00.30 Hrs.
Saturday	07.30 To 11.30 Hrs.	11.30 To 16.00 Hrs.	

#### 2.0.8. Calculation of man hours of other than ministerial staff.

Sr. No	Particulars	No of Days
1	Total No. of days in a Year	365
2	Total Sundays in a Year	52
3	Total Saturdays 1/2 days in a Year	26
4	Total general holidays in a year	16
		271

#### **Total Number of Working Days = 1-2-3-4**

- (2) Total working hours in a day = 08.00 hrs. 20% Fatigue allowance = 06.4 hrs. Working.
- (3) Total working hours per employee in a year =  $06.4 \times 271 \text{ days} = 1734 \text{ man hours}$ .
- 2.0.9. The ministerial staffs are observing the timings from 10.00 to 17.30 hrs. on week days and Saturday timings are observed from 10.00 to 14.00 hrs.
- 2.0.10. Scale Check of Staff in Printing Press Byculla is given below:

Sr.No.	Category	GP	Level	SS	MOR	Vac
1	SSE	4600	7	25	7	18
2	JE	4200	6	22	18	4
3	Sr.Tech	4200	6	98	78	20
4	Tech-I	2800	5	189	132	57
5	Tech-II	2400	4	26	15	11
6	Tech-III	1900	2	54	16	38
7	Tech-I(MD)	2800	5	1	0	1
8	Computer Opt.	2400	4	1	0	1
9	Lorry Cleaner	1800	1	1	0	1
10	Mistry	2400	4	4	0	4
11	Khalasi	1800	1	11	0	11
12	Packer	1800	1	4	1	3
				436	267	169
Ministrial	Staff			•		•
13	Ch.OS	4600	7	1	1	0
14	OS	4200	6	12	8	4
15	Sr. Clerk	2800	5	5	0	5
16	Jr.Clerk	1900	2	4	3	1
17	Sr.Steno	4600	7	1	0	1
18	Ch. Typist	4200	6	1	1	0
19	S & WI	4600	7	1	1	0
20	Hindi Asst.	4200	6	1	1	0
21	Peon	1800	1	5	2	3
				31	17	14
Canteen St	aff					
22	Canteen Manager	2400	4	1	1	0
23	Asst. Manager	1900	2	1	0	1
24	Sr.Cook	2400	4	1	1	0
25	Cook Gr I	2000	3	1	0	1
26	Asst.Cook	1800	1	0	1	-1
27	Vender	1800	1	2	0	2

28	S/Man II	1800	1	5	1	4
29	S/ ManIII	1800	1	5	8	-3
				16	12	4
	Total			483	296	187

#### 2.1. Production Control Organisation (PCO)

Production Control Organization (PCO) is an important section which keeps all records of standard and non standard items, production data of General printing and ticket Printing, preparation of work Dockets for standard and non standard items maintain connected files, work-order Registers, calculation of work load received and completed, correspondence with other departments, zonal railways, Railway Board, preparation of PCDO, Labour charges, procurement of non standard materials as and when required .

For effective management of printing press the PCO section should be made responsible for each and every activities in respect of security of tickets, production of the printing in the press, upkeep of machines and liaisoning between the press and other department of railways. This section may also be made responsible for increasing the productivity and upkeep of records by providing modern furniture, modern gadgets such as computer with printer, fax machine, Xerox machine, Rail net, Internet etc. This will improve the overall efficiency of the section.

The PCO is headed by JE and assisted by other staff. The activity performed by the section is on receipt of work order form concerned department and duly ordered by Sr.Manager (P&S). The docket is opened in the section of recorded in the docket register with details such as type of material to be printed paper size, quantity, colour, type of binding, and expected date of delivery and planning is made out as per the priority of work. There after the docket is forwarded to D.T.P. section for further action. After the completion of work the docket is return to PCO section and preserved as record. Thereafter the report is submitted to Sr.Manager (P&S) regarding the completion of the work order and material is kept ready for delivery to respective department.

#### 2.1.1. The staff deployed in this section are as given under:-

Sr. No.	Category	Grade	MOR
1	Jr. Engg.	4200	2
2	Sr. Tech	4200	1
3	Tech-I	2800	2
	Total		5

## 2.1.2. The work order and print order received (in terms of dockets) and completed in last three years are as given under:

Item	2016-17		2017-18		2018-19	
	Received	Completed	Received	Completed	Received	Completed
Stock Items	443	443	511	500	75	53
Non Stock Items	1175	1165	960	936	121	73

In above table it is shown clearly that in last three consecutive year the numbers of work Orders reducing gradually and in the current year it is drastically go down due to the reason that the closure of General Books and Forms and Safety items. Only in urgency some of the General Stock Items printed during last few months. However the new guidelines of Railway Board for Printing Press is not fully implemented so that the press is running in unstable situation and actual work load is not quantified.

2.1.3. The work load in terms of DFCI of the section is given below: -

Year	Target	Achievement	Shortfall	% of shortfall
2016-17	7.39 crore DFCI	6.28 crore DFCI	1.11 crore DFCI	15%
2017-18	6.11 crore DFCI	4.89crore DFCI	1.22 crore DFCI	20%
2018-19	2.32 crore DFCI	2.02crore DFCI	0.30 crore DFCI	13%

2.1.4: On the scrutiny of the workload, it is seen that the workload is converted into DUBLE FULL SCAPE IMPRESSION (DFCI) on the standard size of paper A-2 size. (International size of paper) Merely converting the figure into DFCI does not reflect the correct work load because this figure indicates that so much amount of papers have been processed and printed in the press. From above table it is also shown clearly that in last three consecutive year the numbers of DFCI target as well as the achievement reducing gradually from 7.39 carors DFCI to 2.32.carors DFCI and 6.28 Carors DFCI to 2.02Carors DFCI. Hence in terms of DFCI also shows the huge reduction in work load it arrives to One-Third. The PCO section has to maintain status in this regard. Therefore the existing number of staff deployed in the PCO section is considered adequate.

#### 2.2. Desk Top Publishing (DTP) Section

The press has been introduced Desk Top Publishing (DTP) Section some time back in which computers have been provided for improved technology in printing area. This section basically performed the activities is that after receiving the docket from the PCO section, the material is typed on the computer for preparation of Pre Sensitized plate (PS Plate) and other allied work. The section is headed by Junior Engineer and is assisted by various staff. In all 4 staff including 01 Supervisor (JE) have been deployed in this section.

2.2.1. The staff deployed in this section are as given under:-

Sr. No.	Category	Grade	MOR
1	Jr. Engg.	4200	1
2	Sr. Tech	4200	2
3	Tech-I	2800	1
	Total		4

The work study team has demanded the work load in terms of number of work traced out by this section and the average time taken for unit work but the actual work load is not provided by this section to the work study team however the team gone through all details and actual working of this section, on the basis of work load provided for months i.e. Nov., Dec. 2018 and Jan.2019 as 265 nos., 372 nos. and 293 nos. respectively. The tracing consumption depends upon the description of Machine and description of paper size i.e. HMT, Rotary and A4 and A5 size paper respectively. It means on A4 size for HMT machine 08 Tracing , A4 size for R1 Machine 06 Tracing , A5 size for HMT machine 16 Tracings are required for o1 Plate .

2.2.2. The work load furnished by the section supervisor to the study team is given as under: -

Sr.No.	Month	No. of job
1	Nov.2018	265
2	Dec.2018	372
3	Jan.2019	293
Average( monthly)	310	
Annual		3720

Avg. 3720 (pages) / 271 (Days) = 14 pages per day.

Avg. time for one page = 2hrs.

Avg. available man hours =6.4 hrs. hence the requirement of staff for 14 pages for DTP is 28/6.4=4.3 i.e.4 staff is sufficient to cater the work load.

#### 2.3. Reading Section:

2.3.1. The Proof Reading section has to read thoroughly all proofs received from DTP section. Readers read the page, comparing the main script for both standard and non standard jobs. A reader carryout corrections, setting the front and style. As per norms the one page is equivalent to four pages with 1st, 2nd, 3rd proof and final proof reading. Most of the time consignee gives the documents for printing in soft format, so that it need not be retyped and corrected by printing staff to avoid redundancy in work.

#### 2.3.2. The existing deployment of Reading section are given as under:-

Sr. No.	Category	Grade	MOR
2	Head Reader (JE)	4200	1
3	Sr.Tech (Reader)	4200	2
Total			3

The proof reading section is headed by JE (Head Reader) and assisted by two Sr. Technician (Reader). The work study team has taken three years work load of Reading section which shows that in current year 2018 there is a huge reduction in proof reading work load i.e. no. of pages of proof reading. This comes down in last year 2017, from pages 2,800 to in the year 2018, pages 652 only. This is almost one-forth of last year. Only 02 staff utilised for proof reading purpose.

#### 2.3.3. The three years work load and men power utilised for the work is given as under:

Year	Number of pages set and corrected	Staff working in DTP section.
2016	2077	2
2017	2800	2
2018	652	1

During the course of work study the work study team taken work load and gone through detail discussion with head reader. It is clarified that the actual deployment of staff in this section is 03. The team found that the **02** reader staff is sufficient to cater the existing work load.

#### 2.4. Process Section

The activity performed in this section with the help of off set machine. It uses plates in its printing work which is thin aluminum plate which is coated with certain chemical. The process of plate making includes pasting of DTP traced paper with matter to be printed in specific manner to get the folds as per running page numbers. This work is done on touch up table. The plate pasted with tracing papers are exposed and washed with the help of certain chemical and thereafter it is dried by the heating gadgets available in the section. Thereafter plate is transferred to machine section for printing section. During the study it is learnt that about 30% plates are preserved for repetitive forms hence need not to prepare fresh plates for such jobs. There are two machines are installed in this section i.e. Processor and Plate Exposure. The main job of this section to receive Traced material for printing from DTP Section and then develops its PS Plate positive and set out the page and sent to Machine section for the printing.

#### 2.4.1. The staff deployed in the process section are as given under:-

Sr. No.	Category	Grade in Rs.	MOR
1	Senior Tech.	4200	2
2	Tech. I	2800	3
Total			5

Presently this section is operated by 05 Technicians staff. The actual work load has not provided by this section to the work study team, however the work load provided for the months of Nov.- Dec. 2018 and Jan. – Feb.2019, on the basis of work load the work study team has calculated the man hours and access the man powers.

#### 2.4.2. The work load furnished by Process Section of previous few months are given as under:

S.No.	Month	No. of Plate Developed
1	Nov.2018	67
2	Dec.2018	69
3	Jan.2019	114
4	Feb.2019	67
	Total	317
Avera	ge(Monthly)	79

The average time taking for Striping, Exposing, Developing, Touch up for one plate is 30 minutes. Where as the before developing of Plate it takes average 1 hour for inscription / Pastup, however this timing depends upon the nature of job. During discussion with the supervisor it has come to know that the as and when required basis 02 staff utilised for Pre press work.

Therefore the work study team analyses the fact and found that average 04 PS Plates developed by this section daily. Hence there is average 6 hours utilization needs only one staff and for pre press two staff.

2.5. **Screen Printing**: The Screen Printing is graduated with DTP section the work order proceeded by PCO to the DTP Section where the subject matter composed and traced material sent to Screen Printing. This unit develops the traced print on Board and than Print it manually to desired numbers of copies. Mainly small print materials printed here i.e. Visiting Cards of Officers, Cover print of Medical, Identity, Duty, FRC Cards. There are 04 staff are deployed to cater the work load of this section, however the work load of this section is normally irregular in nature.

#### 2.5.1. The staff deployed for Screen Printing Section are given as under:

St. No. Category Grade in Rs.	Sr. No.	Category	Grade in Rs.	MOR
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1	Senior Tech.	4200	3
2	Tech. I	2800	1
Total			4

The work study team gone through the actual working of this section, detail discussion with concerned staff and found that against existing 04 staff deployed, only **03** staff are sufficient to cater the present work load hence the 01 staff is redundant and needs to be surrendered.

2.5.2. The work load furnished by Screen Printing Section of previous few months are given as under:

S.No.	Month	Printed work
1	Sep.2018	14,400
2	Oct.2018	20,950
3	Nov.2018	16,350
4	Dec.2018	19,550
5	Jan.2019	12,650
6	Feb.2019	18,850
	Total	1,02,750

2.6. **Binding Section**: Binding Section is divided into two sub section as per convenience i.e. General binding and Numbering.

A) The General binding performing the activities i.e. notching, cutting, folding, gumming, Covering, stitching, bundling, counting, gathering, Transporting, numbering etc. Whereas the Numbering section performing the activities i.e. gathering, Counting, stitching, numbering, checking etc of money value items only. The printed job from machine section is forwarded to this section for binding, bundling, stitching, counting, gumming, cutting, gathering, folding, numbering, sewing, wiring, pasting, locking etc.

These sections receives the printed material from printing section and then start their further working on it. First of all they, knocking the provided papers and then separate into desired numbers of leafs i.e.50,100 etc. The next step is cutting of large paper into its printed size again send for bundling and then for wire stitching checking serial numbers and any defect. Then again this sent to finishing cutting, counting and scrap paper inserting. Sometimes gathering, pasting, covering and locking etc. also proceeded and then finally and completed materials supplied to AMM Byculla / assignees of different Railways.

2.6.1. The total number of staff including supervisors deployed in this section are given as under:

Sr. No.	Category	Grade	Staff
1	Sr. Section Engg.	4600	1
3	Jr.Engg-I	4200	4
5	Sr. Tech (Binder)	4200	22
6	Tech – I	2800	41
7	Tech – II	2400	02
8	Tech – III	1900	09
Total			79

This section is headed by SSE assisted by JE and a number of Technical staff. Presently 79 staff deployed in this section out of which 02 JE with 32 staff deployed in Numbering unit and 02 JE with 40 staff are deployed in General binding unit.

- 2.6.2. As per the data furnished by the binding section Supervisor to the work study team, staff presently deployed and activities performed in this section are summarized as under:
- a) The Machines available in the section and men deployed on it are as under:

Sr.	Type of	No of	Men Power deployed
No	machine	Machine	
1	Web Bound	01	5
2	Stitching	05	10
3	Cutting	03	9
4	Folding	01	2
5	Punching	01	2
	Total	11	28

b) The Activity wise deployment of staff in this section are as under:

S.No.	Activities	Staff deployed
1	Folding	2
2	Gathering	6
3	Binding and Pasting	3
4	Bundling	3
5	Numbering Table 4(4*6+4=28)	28
6	Dispatch	2
7	Transaction of material	2
	Total	46

The work study team gone through the quantum of actual work load in respect of No. of machines involved in binding activities, quantum of books, printed materials etc. The team found that out of 15 machines previously installed in this section only 11 machines are in working condition. It is also seen that due to new printing policy of Railway Board to closure of printing activities of General Books and Forms a lot of work is reduced, only money value items are printed and a few non stock items. The Section supervisor has unable to quantified the work load as per available man power, activities and the optimum utilization of man powers.

2.6.3. Hence after analyzing the facts in relation to work load, activities to be performed and other aspects the work study team has found that there is inefficient utilization of existing staff. Therefore the team suggest to ensure the optimum utilization of precious man power to achieve economic and also right sizing.

#### 2.7. Machine Section

The Machine Section is headed by SSE and assisted by a number of staff. The section is involves in Printing of Money Value items as well as Stock and Non Stock items fulfilling the requirement of Central Railway, Western Railway. Previously there were 15 Machines in this section but now a days total 07 Machines are in working condition. At present this section is operated by total **36** staff including 03 Supervisors and 01 khalasi. The SSE in charge of this section has given detail description of work load and man power utilization. The section runs in 1st shift with **26** staff along with 03 supervisors and only with 06 staff along with 01 supervisor in night shift on 01 Machine out of 06 staff only 03 staff is utilised on machine where as 01 staff is looking after table work and remaining 02 staff are kept spare for as and when required basis for UTS/PRS Section.

2.7.1. The staff deployed in machine section are given as under :-

Sr. No.	Category	Grade Pay	MOR
1	Sr. Section Engg.	4600	2
4	Jr. Engg	4200	2
5	Sr. Tech (Machine)	4200	14
6	Tech – I	2800	14
7	Tech – II	2400	2
8	Tech – III	1900	1
9	Khalasi	1800	1
Total			36

2.7.2. The work study team has collected the details of the machine and it's type. The collective out turn of the machines has also been furnished by the section engineer. The details are given below:-

Year	Shift wise no. of Machines utilization		Total man	Total man	% of man hours
	Day	Night	Available	worked	utilization
2016-17	8	8	10457	8993	86
2017-18	6	5	7780	6180	81
2018-19 (till Jan.2019)	6	6	6999	6089	89

2.7.3. The machine wise existing men power deployed and year of installation of machine is given below:

Sr.	Machine No	Man power	Man power	Year of Installation
No		deployed in day	deployed in Evening	
		shifts	shifts	
1	R-1	5		05/2000
2	R-5	5		05/1985
3	C-4	3	3	1998
4	C-5	2		12/2004
5	C-12	3		1987
6	C-16	3		8/1988
7	Treadal	2		7/1939
	Total	23	3	

2.7.4. The Machine wise last two years work load in terms of DFCI is given as under:

S.No.	Machine	2017-18	2018-19
1.	R 1	1,42,91,307	91,67,688
2.	R 3	70,23,000	Nil
3.	R 4	86,09,218	Nil
4.	R 5	31,02,668	21,69,816
5.	C 4	42,62,642	8,87,980
6.	C 5	85,950	99,460
7.	C 12	32,14,430	30,12,950
8.	C16	36,33,268	49,39,060

In above table it is clearly shown that during year 2017-18 there 08 Machines were working where as in current year only 6 Machines are utilized for printing. In all these Machines working except Machine designated C 5 and C 16 all other Machines shows a huge decline in production in terms of DFCI. It is a clear graph of reduction in utilization of man and machines leads to reduction in work load.

2.7.5. The work load in terms of Dockets of the section is given as under: -

S.No.	Year 2016-17	2017-18	2018-19(till date)
1.	1068	970	142

In above table the work load of Machine section is given in terms of Dockets which do not quantify the actual work load performed.

**2.7.6.** Hence after analyzing the facts in relation to work load, activities to be performed and other aspects i.e deployment of staff on Machines, their utilization etc. the work study team has found that there is under utilization of existing staff and still more staff are deployed in relation to machines and activities specially in night shift. Therefore the team suggest to ensure the optimum utilization of precious man power to achieve economic. Therefore team found that the 27 staff is sufficient to cater work load as per deployment correspond to machines.

#### 2.8. Maintenance Section:

This section is entrusted with the responsibility of maintaining the 54 machines including newly installed 8 Colour Offset machine for UTS/PRS tickets in the press. The repairs and maintenance problems in machines are attended as and when needed. Out of these 54 machines 19 machines are installed in Card Ticket printing Section which have only occasional utilization and not regular function of machines due to less and irregular work order. In addition to this 17 machines are planned to transfer from western Railway for RR Printing in this press.

#### **2.8.1.** The staff deployed in machine section are given as under :-

Sr. No.	Category	Grade	Staff
1	Sr. Section Engg.	4600	1
2	Jr. Engg	4200	1
3	Sr.Tech	4200	2
4	Sr.Tech –I	2800	4
5	Tech– III (Press Mech)	2800	1
6	Tech-III	2400	1
Total			

#### **2.8.2.** List of Machines are given as under which are maintained by this section are given as under:

S.No.	Name of Machine	Numbers of Machines	Remarks
1	Rotary	2	Machine Section
2.	HMT	2	7
3.	Graphica	1	7
4.	Macro Print	1	7
5.	Treadal	1	7
6.	Plate Processor	1	Process Section
7.	Plate Exposer	1	
8.	Plate up table	1	
9.	Monotype Caster	1	Maintenance Section
10.	Leathe Machine	1	
11.	Drill Machine	1	
12.	Grinder (1+1)	2	
13.	Welder machine	1	
14.	Kundal folder	1	Binding Section
15.	ACME wire stitching	6	
16.	Paper cutting	3	
17.	Box Stapling	2	
18.	Bedbound	1	
20.	Ticket printing machine	6	Card Ticket Section
21.	Ticket Shredal	2	
22.	Stapple machine	1	
23.	Wire stitching	2	
24	Spine tapple	1	
25	Flatbed single	1	
26	Ticket set	1	
27.	Stripping machine	2	
28.	Ticket cutter	4	
29.	Spooling Machine	4	PRS/UTS
30.			
	Total	54	

On scrutiny of the statement it will revealed that the machines which are very old and always goes out of order affects the out turn. The cause wise analysis shows that machines always goes out of order on account of Mechanical and Electrical failure., It is therefore suggested that maintenance section should be well

equipped with modern gadgets. It is also suggested that staff deployed in the section may be given periodically training so that maximum utilization of machine can be made by properly up keeping the machine by periodic / preventive / predictive maintenance.

It is also observed that UTS/PRS Machine is highly equipped electronic and there is not any electronic expert appointed in this press hence it to be appointed.

- **2.8.3.** The Maintenance Section is headed by SSE over all incharge assisted by 01 JE supervisor and 08 staff. The work study team during the course of work study has gone through all details of this section and found that the measure maintenance is required for Machines installed in PRS/UTS, Machine and Binding Sections, therefore the existing staff is sufficient to cater the work load of this section.
- **2.9. Ticket Printing Section**: Ticket Printing Section is divided into two Sub Sections i.e. Card Ticket Printing Section and PRS/UTS:

#### 2.9.1. Card Ticket Printing Section:

Presently ticket printing section is catering the need of card ticket for Central Railway, West Central Railway, North Western Railway, Western Railway, South Eastern Central Railway, West Central Railway, etc. The last indents received in this section from CR, WR, NWR, SECR and WCR is 11/01/2018,28/06/2018, 24/11/2018, 31/10/20180 and 24/05/2018 respectively. All indents were completed on 28/01/2019. At present there is no work order pending for printing hence this section is completely closed on temporary basis and all the staff and supervisors is deployed in UTS/PRS ticket section.

**2.9.1.1** The deployment of staff in Card ticket printing section are given as under :-

Sr. No.	Category	Grade	Staff
1	Sr. Section Engg.	4600	1
4	Jr. Engg	4200	1
5	Sr. Tech (M / O)	4200	5
6	Tech – I	2800	6
7	Tech – II	2400	2
Total			

Note: Presently above staff is transferred to UTS/PRS section due to non availability of workload.

**2.9.1.2.** On receipt of the tickets indent by individual printer as handed over by SSE (Ticket Printing) the matter is composed by compositors. The composed matter is given to printer to materialize the same. The proof of ticket is made in 2 copies and proof reader ensures the correctness of the matter. In case of any change is required, the matter is corrected by compositor and proof reader signs one copy of the ticket retains and hand over second copy to printers to start printing. The defective and wrong proof are destroyed on the spot.

The work study team has taken the data of workload handled during last three years up to Jan. 2019. The details of work load of this section is given under, showed the reducing work load gradually.

#### **2.9.1.3.** Details of Card Ticket Printed in last 03 years are given as under:

1	2016-17	912	2923	1,14,51,150
2	2017-18	712	2312	87,36,850
3	2018-19	537	537	88,56,650
	Total	2161	5772	2,90,44,650
	Average	720	1924	96,81,550

**2.9.1.4.** The work study team observed that the card ticket printing is closed as per Railway Board Policy however it has been working due to requirement of Card ticket on Remote stations where there is not UTS implemented. The work study team has analyzed the material fact and come to conclusion that this section may be run in clubbing with the UTS/PRS section. This section has not any regular work it has only as and when required basis work , hence the Card Ticket section should club with UTS/PRS section so that to achieve efficient working and economic.

#### 2.9.2. PRS/UTS Ticket Section:

- Printing Press Byculla has taken over in house PRS/UTS Ticket printing since May 2017, earlier this, printing was being done by Private agencies. For this purpose an advance imported printing machinery i.e. Perfect NT have been installed in a separate Section meant exclusively for PRS/UTS Ticket printing.
- ❖ The Perfect NT press is versatile rotary press having modular design and the shaft less technology which allows multiple combinations in-line. The design has been developed to match the requirements of the security printing industry with improved and accurate tension control saves paper wastage. The technology used in this machinery has individual control of each units for a very fast set up even with the most difficult substrates and generate a constant and stable offset printing quality and has a proven records in the printing manufacture of numerous products which involve mix printing processes in the field of security for bonds, value documents like stamp paper, train, bus or airline tickets, cheques etc. on different foils, aluminum, films and carton board. These numerous different segments have opened a tremendous range of opportunities for the web offset shaft less technology in the world of printing.
- ❖ This automation technology provides a better commissioning, less material waste, and an unbeatable printing and color register reliability. Its mechanic production speed going up to 350 m/min remotely controlled longitudinal register and register precision, make it absolutely ideal for medium and large print runs, turning it into the rotary press of its range that displays the best quality / productivity performances of the market. This Printing machine is attached with 04 Spooling machines to make ticket rolls of UTS tickets as required by Commercial department due to ticketing system is not compatible with fanfold format.
- ❖ This Section entrusted to fulfill the requirement of PRS/UTS Ticket of Central Railway. Printing press BY fulfill the required annual need of 75000 PRS ticket packets. However only 70 % requirement of UTS tickets is fulfilled by this press and 30 % of the requirement is outsourced from Private Agencies. During year 2018-19 AMM/ BY placed 6,14,000 rolls order of UTS tickets to this unit. Printing press planning to fulfill 100 % requirements of UTS tickets in coming year. More ever

Printing Press also preparing to manufacture ATVM tickets for Central Railways , presently 2.4 lakhs rolls of ATVM tickets are ordered to this press.

#### **2.9.2.1.** Workload handled by Printing press in terms of PRS/UTS tickets printing is furnished as under:

Year	UTS		PRS	
	Tkt Printed	No. of spools	Tkt Printed	No. of Pkts
Jan.2018 - Mar.2018	540,22,500	1,06,020	31,39,000	18,510
Apr 2018 - Jan2019	2799,12,000	5,42,780	186,35,600	94,118
Total	3339,34,500	6,48,800	217,74,600	1,12,628

#### **2.9.2.2.** The deployment of staff in PRS/UTS Ticket printing section is given as under:

Sr. No.	Category	Grade	Staff
1	Sr. Section Engg.	4600	2
4	Jr. Engg	4200	6
5	Sr. Tech (M / O)	4200	27
6	Tech – I	2800	56
7	Tech – II	2400	6
8	Tech-III	1900	5
Total			102

This section has total 102 staff including 8 supervisors, which are utilised in various purposes. In addition to this 13 staff along with 02 supervisor (SSE 1Machine section & JE 1) also deployed on temporarily basis from the Card Ticket Section due to unavailability of work load at card ticket printing section. Hence the total staff presently deployed in this section is come to 117. This section is running in 02 shifts from 7:30 am to 3:30 pm and 3:30 pm to 11:00 pm.

#### **2.9.2.3.** Activity wise distribution of staff in UTS/PRS Ticket printing section:

Sr. No.	Activity	Shift	Staff deployed	Total	
1	Ticket printing	2	7	14	
2	Stripping	2	2	4	
3	Spooling Supervisor	1	2	2	
4	Spooling	2	12	24	
5	Sorting	2	2	4	
6	Box making	2	12	24	
7	Checking	2	2	4	
8	Packing	2	2	4	
9	Scraping & belling	1	2	2	
10	Dispatch/loading	1	4	4	
11	Monitoring	1	1	1	
12	Computer	2	1	2	
13	Supervisor (JE)	2	3	6	
14	Incharge (SSE)	2	1	2	
	Total				

The work study team has taken all details and observed physically the working scenario, technically and other aspects of work. The team discussed with the supervisors and found that this section has total 117 staff

including 10 supervisors the deployed presently out of which 97 staff including supervisors are justified where as 20 staff are still surplus. The team also suggests that Card Ticket Section should merged with PRS/UTS Section. There is no any justification of separate section for card ticket because it closed by Railway Board's policy but it is not closed practically hence as and when required basis the work order placed by different Railways it means there is no regular work. Therefore a single section UTS/PRS can cater the work load so that to efficient utilization of staff.

2.10.1: Administration Section: Ministerial staff of Sr.Manager (P&S) office: The ministerial staff who is functioning under the control of Sr.Manager ( P&S) is performing the following activities such as maintaining the personal record of the staff, such as promotion, maintenance of leave record, service registers of the staff and officers, confidential reports of the staff, roaster, seniority, arranging the meeting of organized labour union, withdrawal of various advances, final settlement of the diseased, removed, dismissed and on superannuation staff, DAR cases of the staff, Audit Para, issue of passes and PTO's, FRC's, school passes, on duty passes, to the serving employee and complimentary passes to retired staff, receipt and dispatch of Mail, Posting of printing work done for all divisions of Central Railway as well as Foreign Railways, Budgetary work of the press for procurement of material, Preparation of pay sheets for regular and other payments, calculation of Income Tax and preparation of Form No 16, Fixation of pay, drawls of annual increments, preparation of drawn and dues of the staff, correspondence of factory license, Preparing of non stock item requisition, credit note, gate pass, impress cash, Annual finance concurrence of repairing work, vetting of requisition, calling quotations, calling tenders, opening, and preparation of brief note, preparation of M&P programme, issue of token numbers to the artisan staff at the gate in both shifts, preparation of daily attendance statement, issue of salary certificate and service certificate, chasing of material, issue of identity card, medical card to the serving and retired staff, Preparation of MCDO and PCDO etc.

Further the Administrative Section of Printing Press Byculla divided in mainly three sub units i.e.

- 1. General Section
- 2. Establishment Section
- 3. Bill Section
- **2.10.2**: General Section: The main activities of this section is as under:
- i) Off-loading printing jobs cases through ireps.
- ii) On line Non stock requisitions through immis.
- iii) DRR and Bill payment through AIMS.
- iv) Cash Imprest.
- v) Audit and Inspection matter
- vi) Budgeting and WMS.
- vii) All legal / Statutory matters like factory Act, Excise Duty, Sales Tax, Court cases
- viii) M&P and work programme matter
- ix) Contracts related to Pre-printed PRS/UTS Printing.
- x) All house keeping/ Utilities matters like cleaning, furniture, consumable and repairs etc.
- xi) Paper work of all machines and office equipments.
- xii) Condemnation matters
- xiii) Telephone and Electric Bills.
- xiv) Dak receipt and distribution
- xv) Other works as per order of Sr. Manager (P&S).

The work study team gone through the quantum of work load performed by all on roll staff and it is observed that many of the activities mentioned are less frequent, but are in essential nature and requires continues attention considering this the present staff strength is sufficient to cater the work load.

- **2.10.3**: **Establishment Section**: The main activities performed by this Section i.e. Recruitment, Promotion, roster register, Cadre maintenance, settlement, seniority list for Supervisor and Artisan staff, Miscellaneous Matters and General correspondence of Establishment section like DAR Cases, Audit para, PNM, Statistics, RTI, NOC, Vigilance Clearance, holiday list etc., issue Pass / PTO, Identity Card, Medical Card for these work o5 staff are deployed.
- **2.10.4:** Bill Section: The main activities performed by this Section is related to pay sheet i.e. leave posting, arrears, advances, settlement, loans etc., for these work there are 05 staff deployed out of which one staff reserved for time keeping at gate. The other activities performed by this section as under:
- i) Checking and posting in Register and I-pass i.e. ECC Loan, PF Advance, HBA, Scooter Advance, PCA Advance .
- ii)Calculation of Interest HBA/PC/Scooter if any and HBA permission if any.
- iii) Submission of TA/ECC Loan Form / P.F. withdrawal/ Spectacles.
- iv) Preparation of muster.
- v) Leave posting in Leave Register and in I-Pass.
- vi) Annual increment / Promotion Fixation.
- vii) Income Tax/Form -16.
- viii) Court attachment.
- ix) SR update (Retirement / Promotion entry & Arrears/ Increment entry/GI Card Qualifying service).
- x) Tuition Fee Reimbursement, Bonus (PLB work).
- xi) After Retirement benefit work i.e. PLB, Future Debit, Packing Allowances, Leave Salaries.
- xii) MACPS and ESR.

#### **2.10.5:** Deployment of staff in Administrative Section is given as under:

Sr No	Category	Grade (Rs)	No. of
			Staff
1	Ch. OS	4600	1
2	OS	4200	8
4	Jr.Clerk	1900	3
5	S & WI	4600	1
7	Ch.Typist	4200	1
8	Hindi Asst.	4200	1
9	Peon	1800	2
10	Tech		2
Total			19

**2.10.6:** The Administrative Section is entrusted to perform various activities i.e. staff matter, policy matter, establishment, preparation of pay sheet, fixation and other correspondences of printing press. The ministerial staff have deployed to perform the specific work for dealing with office and all matters related to employees of this depot. Presently 17 staff having 01 Ch. OS, 08 OS,03 Jr. S & WI, 01 Ch. Typist, 01 Hindi Assistant and 02 Peons have deployed for the purpose. In addition to these staff 02 more Technician staff has deployed to help them.

The Work Study team after all discussion with the Section incharge in respect of work load and norms for dealing of ministerial staff has analyzed the facts to come on conclusion, that in against of sanctioned

strength 31 posts the present deployed i.e. 17 staff is sufficient to cater the work load and need based hence 14 post (vacancy) is redundant needs to be surrendered.

**2.10.1:** Canteen: There is a statutory canteen in the premises of Printing Press which provides Lunch, Breakfast and tea to employees. This canteen is running on the no loss no gain basis and managed by the canteen committee of Printing Press. Presently this located at first floor besides of Binding (Numbering) Section. Canteen runs in two shift from 7:50 am to 3:15 pm and evening shift 4:00 pm to 11:00 pm, however it mainly works in general shift where breakfast, lunch and tea serves and in evening shift only tea serves.

Average 35 lunch meals and 250 breakfast and 100-125 cups of tea served daily.

#### **2.10.2:** Deployment of staff in Staff Canteen are given as under:

Sr No	Category	Grade (Rs)	No. of
			Staff
1	Canteen Manager	2400	1
2	Asst. Manager	1900	0
3	Sr.Cook	2400	1
4	Cook Gr I	2000	0
5	Asst.Cook	1800	1
6	Vender	1800	0
7	S/Man II	1800	1
8	S/ManIII	1800	8
Total			

**2.10.3:** The Staff Canteen has entrusted for facilitating to the Printing Press staff with daily Lunch, Break fast and tea. This is a statutory provision of canteen for this depot. Presently against of 16 sanctioned strength of Staff Canteen 12 staff are deployed. Out of 12 existing staff 10 staff deployed in general shift and 02 staff deployed in evening shift for tea. The work study team gone through all details and discussion with Canteen Manager and management team after all analyses the facts. The team found that the existing staff strength 12 staff is enough to smooth running of canteen hence 04 vacant posts is found redundant and needs to be surrendered.

The printing press Byculla is meeting the requirements of card tickets, paper tickets, blank paper tickets, excess fare books, and other money value items, other standard stock items, non-stock items, vital items, safety items, and Railways monthly Gazette. The printing press Byculla is headed by Sr. Manager, (Printing and Stationary). The Printing press Byculla is mainly divided into two parts i.e. General printing and ticket printing. General printing is further divided in subsections like PCO, DTP, Processing, Screen Printing, Reading, Binding, Machine and Maintenance. Ticket Printing activities are also divided in two Units i.e. Card Tickets Printing and UTS/PRS Printing Section.

Printing press Byculla used to print and fulfill the requirement of Central, Western and other Railways in printing of Money Value, Safety and General Items. It had 77 Money Value items for Central Railway and 34 Money Value items for Western Railway, 32 Safety items and 360 General items. However these items have been proposed to reduced to only 46 money value items.

Railway Board's recent Policy for Byculla Printing Press regarding printing of only PRS/UTS Tickets and Money Value items for own Railway and three other Railways i.e. WR, WCR and SECR and outsourcing of Printing of General Books, Forms and Safety items, which will have immense effect on the work load as well as requirement of man power.

The work study team during the course of work study of Printing Press Byculla visited various units/sections of Printing press and observed the working process in present scenario and subsequent discussions with concerned Supervisors and Officers, critically analyzed the facts & workload available to access the actual men power requirement for the printing press.

The Production Control Organization (PCO) Section is an important section in printing press which keeps all records of standard and non standard items, maintaining data of General printing and ticket Printing, preparation of work orders in the form of dockets for standard and non standard items, maintaining related files, work-order Registers, calculation of work load received and acheived, correspondence with other departments, zonal railways, Railway Board, preparation of PCDO, Labour charges, procurement of non standard materials as and when required . 5 staff including 02 JE and 03 Technicians who is dealing with all above mentioned activities and is found sufficient for smooth functioning of this section.

The Desk Top Publishing (DTP) Section has well equipped with Computers and Machines the main activities of this section is to receive the work order from PCO section with sample and thereafter typing the same and to make final trace out of given print material which is further sent to Processing and Screen printing section to develop its PS Plate. At present there are 04 staff including 01 JE carrying out the existing work load, the work study team after considered the factual workload found that the existing staff is sufficient to smooth functioning of this section.

The Reading Section is graduated with DTP Section. The Proof Reading section has to read thoroughly all proofs received from DTP section. The job of reader involves reading the pages & comparing with the main script for both standard and non standard jobs after corrections, setting the front and style of print material is sent to DTP section for trace printing. Now a day's samples of printing materials are received in soft format, so that it need not be retyped and corrected by printing staff. The work study team has collected data of last three years from Reading section and found that there is a huge reduction in proof reading work in last some years i.e. from 2800 pages in the year 2017 to 652 pages in the year 2018. This is almost one-forth of the workload of the year 2017. Hence it is found that instead of 03 present staff in Reading section only 02 staff is sufficient to cater the existing work load.

The **Process Section** is also one section attached to DTP Section which converts traced out pages into PS Plate positive for final printing. The process of plate making includes pasting of DTP traced paper with matter to be printed in specific manner to get the folds as per running page numbers. This process involves inscription / Pastup, Striping, Exposing, Developing, Touch up done on touch up table. The plate pasted with tracing papers are exposed and washed with the help of certain chemical and thereafter it is dried by the heating gadgets available in the section. The work study team has analyzed the fact and found that average 04 PS Plates are developed by this section daily which can be carried out by one staff also but considering the procedure involved at least 02 staff is required for assisting Pre press work hence total 03 staff is sufficient to cater the existing work load instead of present 05 staff.

The **Screen Printing** is another section attached with DTP section the subject matter composed and traced material is sent to Screen Printing. This unit develops the traced print on Board and than Print it manually to desired numbers of copies. Presently small size of materials i.e. Visiting Cards of Officers, Cover print of Medical, Identity, Duty, FRC Cards is Screen printed here

There is 04 staff are deployed in this section, however the work load of this section is of irregular in nature. Instead of 4 staff deployed in this section o3 staff is sufficient for smooth running of this section.

The **Binding Section has two sub division i.e.** General binding and Numbering, the printed job from machine section is forwarded to this section for binding purpose which involves the activities i.e. notching, cutting, folding, gumming, Covering, stitching, bundling, counting, gathering, Transporting, sewing, wiring, pasting, locking stitching, checking, numbering etc. of General books and forms, safety and money value items. This Section is headed by 01 SSE and 04 JE's assisted by a number of staff. Presently there are 79 staff including SSE and JE. The work study team has gone through out the Number of machines which in working condition, activities performed and quantum of work load availbale after closure of various activities and found that there is inefficient utilization of existing staff, hence considering optimum utilization of man power and to achieve economy it is considered that 65 staff including supervisors is sufficient to cater the existing work load.

The **Machine Section** is headed by SSE and assisted by a number of staff. The section is involved in Printing of Money Value items as well as General and Safety items to fulfilling the requirement of Central Railway, Western Railway. Out of 15 Machines installed in this section only 07 Machines are in working condition of which 05 Machines are actually utilised for printing work, one Treadal machine is being used for Numbering of cards and one machine is occasionally utilized for face printing of Card board for Card tickets printing purpose. At present this section is running with total **36** staff including 03 Supervisors.

Hence after analyzing the facts in relation to available work load, quantum of activities to be performed and other aspects like deployment of staff on Machines, their effective utilization etc. the work study team has found that there is inefficient utilization of existing staff and more staff are deployed than requirement machines and activities specifically in night shift. Therefore the team suggest that to ensure the optimum utilization of man power 27 staff is sufficient to cater work load as per deployment correspond to machines.

The **Maintenance Section** is entrusted with the responsibility of maintaining the 54 machines including newly installed 8 Color Offset Web feed Printing Machine for UTS/PRS Tickets printing. The repairs and maintenance of machines are attended as and when needed. Out of these 54 machines 19 machines are installed in Card Ticket printing Section which have only occasional utilization and not in regular function of machines due to less and irregular work order.

it is revealed that the machines which are very old and always goes out of order affects the out turn. One of the reason behind failure is that the machines always goes out of order on account of Mechanical and Electrical failure., It is therefore suggested that maintenance section should be well equipped with modern gadgets. It is also suggested that staff deployed in the section may be given periodically training so that maximum utilization of machine can be made by properly up keeping the machine by periodic / preventive / predictive maintenance. It is also observed that UTS/PRS Machine is highly equipped electronic and there is not any electronic expert appointed in this press hence it to be appointed.

This Section is headed by SSE over all incharge assisted by 01 JE supervisor and 08 staff. The work study team during the course of work study has gone through all details of this section and found that the measure maintenance is required for Machines installed in PRS/UTS, Machine and Binding Sections, therefore the existing staff is sufficient to cater the work load of this section.

The Card Tickets Printing Section is catering the need of card ticket for Central Railway, West Central Railway, North Western Railway, Western Railway, South Eastern Central Railway, West Central Railway, etc. but due to drastic changes in technology and invention of various mode of passenger tickets, card tickets are being replaced by UTS as per Railway Board Policy, which has automatically lowered down the demand and use of Card Ticket system, presently 99 % of the passenger tickets are in the form of UTS type of Tickets but still at remote location stations some quantity of Card tickets is issued which is comparatively very less. The last indents for Card ticket printing received in this section was from CR, WR, NWR, SECR and WCR i.e. on 11/01/2018, 28/06/2018, 24/11/2018, 31/10/20180 and 24/05/2018 respectively. All indents were completed till 28/01/2019. At present there is no work order pending for printing hence this section is completely closed on temporary basis and all the staff and supervisors is deployed in UTS/PRS ticket section.

The work study team has analyzed the material fact and came to the conclusion that this section can be clubbed with UTS/PRS Tickets Section. Presently there is no workload available at all to this section and also there are very less chances of work load that may be available, but considering future contingency of workload, provision of staff should be available for this section therefore clubbing of Card Ticket section with UTS/PRS section can solve the purpose to the best and effective utilization of available manpower.

#### **PRS/UTS Tickets Printing Section**

Printing Press Byculla has taken over in house PRS/UTS Ticket printing since May 2017, earlier this, printing was being done by Private agencies. For this purpose an advance imported printing machinery i.e. Perfect NT (8 Colour Offset Web feed Printing Machine) have been installed in a separate Section meant exclusively for PRS/UTS Ticket printing. This section is entrusted to fulfill the requirement of PRS/UTS Ticket of Central Railway.

Printing press Byculla has printed 33,39,34,500 UTS tickets during the period Jan.2018 to Jan.2019 in the form of Spooling Rolls i.e. 6,48,800 Rolls and 217,74,600 PRS Tickets which is printed in Zig Zag manner in the same period. The printing press is fulfilling 100% requirement of PRS Tickets of Central Railway where as only 50-70 % requirement of UTS Tickets is fulfilled, the reason behind this is that the Printing Machine installed in this section have already a provision of printing tickets in zigzag outfeed manner by

which printed tickets can be directly sorted and packed on the spot but only PRS tickets are being printed in the above manner but in the case of UTS tickets, after ticket printing it is sent to the spooling section where it is wrapped on a roll in predefined quantity of 500 tickets in each roll, this process takes a long time resulting in fulfilling the demands of UTS tickets to Railways. Presently there 04 Spooling Machines installed in this section which is insufficient to spool required numbers of Rolls. The team also observed that the spooling process is very lengthy i.e. consuming excess time and man powers which create chaos in management and storage of printed tickets which affect on production.

Therefore in connection of above the work study gone through all details and discussion with supervisors and officers come to the conclusion that to achieve the required result and utilization of full capacity of Machine the UTS tickets may be printed in Zig Zag outfeed manner to avoid further spooling into rolls. The introduction of this method can enables 100% utilization of manpower and machinery in printing of UTS tickets which will also save extra manpower involved in spooling process. The team has also observed that other Railways like SR & SCR have already adopted this method . The team has also calculated the man power utilised in spooling process and found that in present scenario after implementation of Zig Zag outfeed manner UTS tickets printing which will save more than 40 staff which are one of the most valuable resources .

Presently UTS/PRS section has utilised 117 staff including 10 supervisors, out of which 97 staff including supervisors are justified. The team also suggests that Card Ticket Section should merge with PRS/UTS Section

**Administrative Section: this section** is entrusted to perform various activities i.e. staff matter, policy matter, establishment, preparation of pay sheet, fixation and other correspondences of printing press. The ministerial staff have deployed to perform the specific work for dealing with office and all matters related to employees of this depot. Presently 17 staff having 01 Ch. OS, 08 OS,03 Jr. S & WI, 01 Ch. Typist, 01 Hindi Assistant and 02 Peons have deployed for the purpose. In addition to these staff 02 more Technician staff has deployed to help them.

The Work Study team after all discussion with the Section incharge in respect of work load and norms for dealing of ministerial staff has analyzed the facts to come on conclusion, that in against of sanctioned strength 31 posts the existing operated 17 staff is sufficient to cater the work load and need based hence 14 post (vacancy) is redundant needs to be surrendered.

The **Staff canteen the** sanctioned strength of Canteen staff is 16 and presently 12 staff is on roll. Out of 12 existing staff 10 staff deployed in general shift and 02 staff deployed in evening shift for serving tea. The work study team has gone through all details and discussion with Canteen Manager and management team after analyzing the facts it is found that the existing staff strength 12 staff is enough for smooth running of canteen hence **04** post (including vacancy) is redundant and needs to be surrendered.

Considering the facts and workload available, Work Study team proposes to revise the present sanctioned strength of Printing Press Byculla to the Need based requirement of staff as under:

Sr.	Section	Existing deployment	Proposed	Excess
No.		of staff	deployment of staff	
1	Production Control Organisation (PCO)	5	5	0
2	Desk top Publishing section (DTP)	4	4	0
3	Processing section	5	3	2
4	Reading section	5	2	3
5	Screen Printing	4	3	1
6	Binding section	79	65	14
7	Machine section	36	27	9
8	Maintenance section	10	10	0
9	Card tickets printing section	15	0	15
10	UTS / PRS Tickets section	102	97	5
11	Administration	19	17	2
12	Canteen	12	12	0
	Total	296	245	51
RG+LR			31	
	Total		276	
Provision for Additional staff as unforeseen needs		@ 15% of Proposed staff	41	
Proposed Need based requirement of staff			318	
Sanction Strength		483		
Man On Roll		296		
Vacancies		187		
Posts identified surplus		165		

Recommendation: 1. It is recommended that 165 posts including Group "C" and Group "D" are identified as surplus may be surrendered .(Page 27)

Suggestion No.01 it is suggested that Card ticket Section may be Clubbed with UTS/PRS section for effective utilization of available manpower.( Page 26)

Suggestion No. 02.it is suggested that present practices of UTS printing may be switch over to print in Zig zag outfeed manner so as to achieve 100 % outturn of printing of UTS tickets. (Page 26)

Suggestion No. 03. A Review may be carry out again in terms of manpower requirement in UTS/PRS section after implementation of ZIGZAG outfeed manner printing for UTS tickets.(Page 26)

## Chapter –IV Financial Implications

The Approximate money value of posts of different categories identified surplus is being worked out

### as under:

Sr. No.	GP	Level	No. of Posts	Money value in Rs.	Annual saving in Rs.
1	4600	7	11	12,24,942	1,34,74,362/-
2	4200	6	23	9,66,612	2,22,32,076/-
3	2800	5	75	7,94,610	5,95,95,750/-
4	2400	4	15	6,97,164	1,04,57,460/-
5	1900	2	20	5,43,474	1,08,69,480/-
6	1800	1	21	4,89,846	1,02,86,766/-
Total		165		12,69,15,894/-	

Annual Recurring savings subject to actual surrender of posts.