

यांत्रिक शाखा

MECHANICAL BRANCH

Sr.DME is the overall In-charge of Mechanical activities i.e C&W and Power in NED division and assisted by ADME/Power and ADME/C&W.

Carriage &Wagon:

Brief: NED division is the largest division in S.C.Railway with coaching, goods and other activities and is having One major coaching depot at NED & One minor coaching and freight depot at PAU. Other end maintenance (OEM) of trains is carried out at ADB, AWB, AK, NSL & J. The details of activities of depots are as below:

Main functions of coaching depots are

Primary Maintenance: Owns total responsibility of maintenance including schedule attention of all trains.

Secondary maintenance: Owns total responsibility of maintenance excluding schedule attention of all trains.

Turn Round Maintenance: Interior dry cleaning, toilet cleaning, watering is done for trains which return from platform.

Pass through Attention: Rolling in & out examination and watering of pass through trains over nominated points on NED division.

Sick Line Maintenance: Intermediate Overhauling of Coaches and attention to sick marked coaches.

On Board Housekeeping Services (OBHS): 10 trains in the division are covered under this service which is an outsourced activity.

Other Miscellaneous Activities: • Stores Management. • A.C. curtain maintenance. • Maintenance of SLR Safety equipment. • Break down Maintenance and activities. • Inspection carriage maintenance. • Contract management.

Freight Activities:

Freight examination in yard: 2 types of examinations are carried out in the division 1) Premium: Will be certified for 12+3 days and does not have base depots. 2) End to End: Will be certified for first loading point to immediate unloading point only.

Sick line attention: At minor freight train examination points facilities are provided for sick attention of wagons to carry out - wheel changing, medium welding repairs to body and under gear, medium nature draft gear attention. On train attention of repairs: During train examination minor repairs like replacement of CC pads/EM pads etc. will be attended on-train without detachment of wagons.

Miscellaneous activities: 1. Stores Management. 2. Yard cleaning, scrap collection and disposal. 3. Breakdown activities if attached. 4. Monitoring of weigh bridges. 5. Management of fire extinguishers through AMC. Breakdown specials:

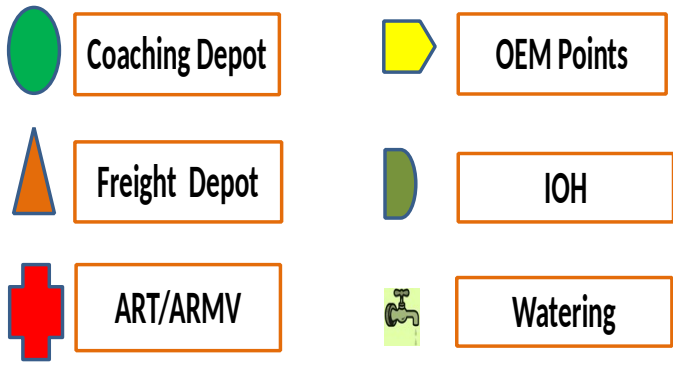
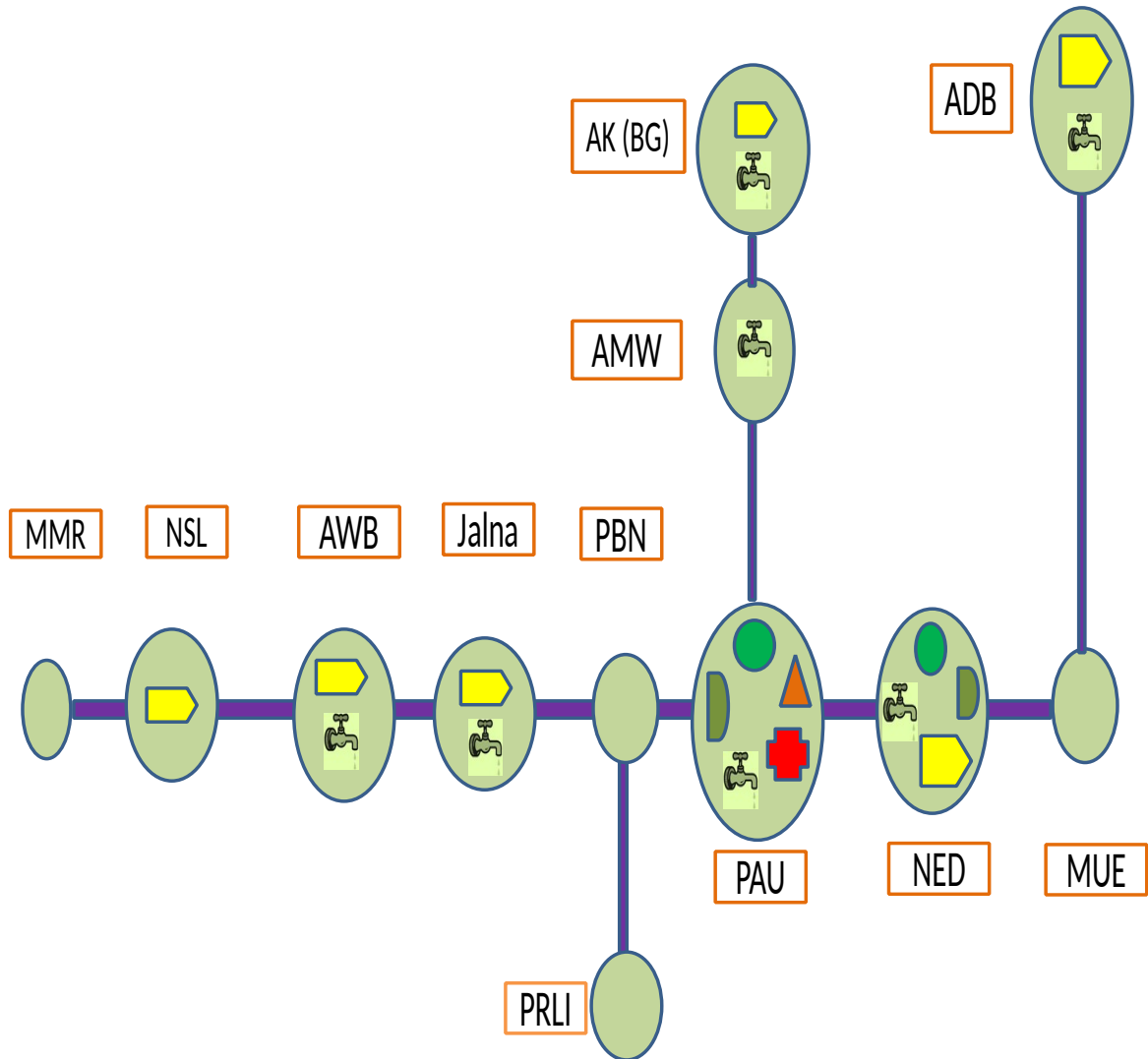
The following breakdown specials are under control of Mechanical / C&W department. And located at PAU-

“A” Class ART with MFD re-railing equipment and GOTTWALD make new design 140 T Crane and SPMRV are available at PAU:

Electronic in-motion weigh bridges: 3 electronic in-motion weigh bridges are maintained by this department and they are located at Nanded, Aurangabad and Shivni Shivapur.

Linen Management: Mechanical C&W Department has taken over linen management from Commercial Department with effect from 1.8.2010. and one BOOT Laundry of 1.5 Ton capacity is commissioned at NED on 12.02.2019.

Activities of C&W Organization –NED Division



I. Maintenance of trains:

Sl. No.	Train.	NAME	FROM	TO	LOAD	RAKES	Arr:	Dep:	No.of Coaches
PRIMARY MAITENANCE AT NANDED:									
1	12715/16 Exp	SACHKHAND (LHB)	NED	ASR	22	4	16:00	09:30	88
2	12730 Exp (Sun & Tue)	PUNE EXP	NED	PA	17	1	10:00	21:20	17
3	17614 Exp (Sun, Mon, Tue, Wed, Thu & Fri)	PNVL EXP (CBC)	NED	PNVL	22	2	09:25	17:30	44
4	17688 Exp	MARATHWADA /TAPOVAN	DAB NED	MMR CSTM	18	3	18:00	01:30	54
5	12767 Exp (Mon)	SRC EXP	NED	SRC	16	1	18.55	15.15	16
6	17621 Exp (Fri)	AWB-RU EXP	AWB	RU			06.30	11.50	
7	17623 (Thu,)	NED-SGMR-NED	NED	SGMR	19	1	02:45	09:00	19
8	12751 Exp. (Fri)	NED-JAT (Humsafar EXP) (LHB)	NED	JAT	19	1	20.45	10.30	19
9	12753 (Tue)	NED-NZM-NED (Sampark Kranti Exp)	NED	NZM	15	1	01.00	08.00	15
10	57542 Pass	MMR PASS	NED	MMR	12	4	09:55	18:45	51 (03 sleep Coaches)
11	57516 Pass	DD PASS	NED	DD	11	4	11:45	20:50	50 (06 sleep Coaches)
11 Trains (5 rakes LHB, 2 rakes CBC & 15 rakes ICF conventional						22			373

Sl. No.	Train.	NAME	FROM	TO	LOAD	RAKES	Arr:	Dep:	No.of Coaches
SECONDARY MAINTENANCE AT NANDED:									
1	22457 Exp (Sat)	Una Himachal Express	NED	UHL	15	1	23:45	11:00	15
01 trains (ICF Conventional)						1			15

Sl. No.	Train.	NAME	FROM	TO	LOAD	RAKES	Arr:	Dep:	No.of Coaches
PRIMARY MAINTENANCE AT PURNA:									
1	17610 Exp (Fri)	PATNA EXP	PAU	PNBE	12	1	07:10	18:10	12
2	57548 Pass	HYB PASS	PAU	HYB	12	3	21:05	07:30	36
3	57551 Pass	ADB Pass	PAU	ADB	12	4	11:10	17:50	48
4	57522 Pass	PRLI Pass	PAU	PRLI	09	1	23:30	16:15	09
04 trains (ICF Conventional)						9			105
Bare requirement									482

II. Infrastructure (Coach Maintenance facilities):

Depot	Facilities available
NED	<ul style="list-style-type: none"> ➤ 24 coach length CAMTECH pit line No. 03. ➤ 20 coach length CAMTECH pit line 01 (extension of pit line from 20 to 26 coaches) works awarded to M/s. Vishwa Construction, Nanded (new siding towards PAU end). ➤ 21 coach length CAMTECH pit line 02. ➤ High-pressure coach cleaning pipeline around the pit lines. ➤ Rolling in examination lights with huts. ➤ IOH shed with 02 EOT Cranes 25 ton capacities each. ➤ Effluent Treatment Plant. ➤ 03 Nos. Electronics In motion weigh bridges (NED, AWB & SVW). ➤ Road Mobile Crane (Hydra-Make). ➤ Boot Laundry of 1.5 ton capacity has been commissioned w.e.f. 12.02.2019. ➤ Compactor commissioned on 10.12.2018 for bed roll office [8000 packets capacity]. ➤ 05 Nos. JMP Jacks has been commissioned on 09.01.2019. ➤ ACE Fork Lift of 03 ton capacity has been received on 08.03.2019 commissioned on 16.03.2019 at IOH/Shed.
PAU	<ul style="list-style-type: none"> ➤ 18 coach length conventional design pit line. (Work for the CAMTECH Design catwalk is completed one side and other side work is under progress.) ➤ High-pressure coach cleaning pipeline around the pit line. ➤ Rolling in examination lights with huts. ➤ Freight train examination facilities – Both side CC pathway & lighting arrangements. ➤ Sick line shed. ➤ ‘A’ scale brake down with 140t crane (Gottwald) & SPMRV available. ➤ Crane mounted lorry to attend en route wheel changing is available.

III. Carriage watering facilities on platforms:

Depots	Facilities available
NED	➤ Carriage watering facilities on platform No. 1, 2, 3 & 4
PAU	➤ Carriage watering facilities on platform No. 1, 2, 3 & 4.
AWB	➤ Carriage watering facilities on platform No. 1,2 & 3
AK	➤ Carriage watering facilities on platforms No. 5 (BG)
ADB	➤ Carriage watering facilities on platform No. 1 & 2.
J	➤ Carriage watering facilities on platform No. 3 for OEM Trains.

AMW	➤ Carriage watering facilities on platform No. 01 for through Trains.
------------	---

IV. A) Works sanctioned under LAW/LSWP:

S. N	Work Sanctioned under LAW/LSWP 2017-18	PH	Proposed Cost	Status
1	NED - Extension of 1 st Pit line from 20 coaches to 26 coaches.	4200	2.25 Cr	Tender opened on 19.06.18. LOA issued to M/s. Vishwa Construction, Nanded
2	PAU – Replacement of old Pit line Cat-Walk with standard Cat-Walk.	4200	30 Lakhs	LOA issued to M/s. Swan Infrastructure Nanded on 15.05.16. 85% work is completed remaining under progress.

V. Provision of Weigh bridges :

Supply and Installation of in - motion- weigh bridges is sanctioned at NED, AWB & SVW.

Depot	Status of Weigh Bridges	Remarks
NED	Commissioning done by the firm M/s Essae Digitronics Pvt. Ltd Bangalore.	Commissioned on 23.02.12 and half yearly periodical testing done on 13.07.2019, Legal metrological certificate issued on 12.02.2019, valid up to 11.02.2020.
AWB	Commissioning done by the firm M/s Essae Digitronics Pvt. Ltd Bangalore.	Commissioned on 24.08.12 and half yearly testing done on 12.07.2019. Legal metrological certificate issued on 15.02.2019, valid up to 14.02.2020.
SVW	Commissioned done by the firm M/s Essae Digitronics Pvt. Ltd Bangalore.	Commissioned on 09.08.2019 and handed over to Commercial department for use. Legal metrological certificate issued on 08.08.2020.

VI. Improvements in maintenance:

A. Mechanized Coach Cleaning during Primary maintenance:

Depot	Number of Coaches attended per day	Cost of cleaning in Rs/coach	Agency
NED (Gr.I) & (Gr.II)	52	Rs.547.00/-	Contract awarded to M/s. Jagdev Infrastructure Pvt. Ltd. Hubli for a period of Two Years, LOA issued on 25.10.2018 for a value of Rs. 2,92,98,872.37/-. Work started from 25.11.2018 & valid upto 24.11.2020.
	54		Contract awarded to M/s Jagdev Infrastructure Pvt. Ltd. Hubli for a period of 292 Days, work started from 22.03.2019 and valid up to 24.11.2020 for a Value of contract Rs. 2,92,98,872.37/-.
PAU	31	Rs.642.62/-	Contract awarded to M/s. Akshay Dry Cleaners, Nanded For a period of 2 years and LOA issued on 12.10.2018 contract amount Rs.1,45,42,494.93/-. Work started on 03.11.02018 & valid upto 02.11.2020.

B. Turn-round cleaning of Coaches:

Depot	Name of Work	From	To	Contract value	Agency
NED	Turn round coach cleaning of OEM trains and watering of En-route trains at NED Station for a period of two years.	24.08.19	23.08.21	87,73,715/-	Contract awarded to M/s. DYNAMIC ENTERPRISES 65,Globus Township near Indralok Nagar Ratlam. LOA issued on 20.07.19 and work started from 24.08.19 and valid up to 23.08.2021.
AK	Turn round coach cleaning and watering of OEM Trains at AK Station for a period of two years.	20.03.18	19.03.20	17,40,841/-	Contract awarded to M/s. Akshay Dry Cleaners,Nanded. LOA issued on 20.03.2018 and valid upto 19.03.2020. Contract terminated on 03.09.2019 and Work terminated on 03.09.2019. Presently work is going on under Quotation. New tender floated and opened on 29.11.2019.
ADB	Turn round coach cleaning and watering of OEM Trains at ADB Station for a period of two years.	01.04.17	31.03.19 Extended upto 30.01.20	34,99,234/-	Contract was awarded to M/s. Somnath Sungolge, Nanded and LOA issued on 01.04.2017 valid up to 30.01.2020. New tender opened two times and discharged due to non eligible party. Again required shortly.
AWB Jalna & NSL	Turn round coach cleaning and watering of OEM Trains at AWB & NSL Station for a period of two years.	07.09.19	06.09.21	1,07,70,993/-	Contract awarded to M/s. DYNAMIC ENTERPRISES 65,Globus Township near Indralok Nagar Ratlam. LOA issued on 19.08.19 and work started from 07.09.19 and valid up to 06.09.2021.

C. Pest & Rodent Control of PM Coaches:

Depot	Name of Work	From	To	Contract value	Agency
NED & PAU	Pest control of reserved Coaches at NED & PAU Depot.	27.04.18	26.04.20	Rs.8,68,710/-	Contract awarded to M/s Pest control Service, Yamunagar (HR). LOA issued on 27.04.2018 and valid upto 26.04.2020.
	Pest Control for Un-Reserved Coaches at NED & PAU Depot	10.10.18	09.10.20	Rs.8,68,710/-	Contract awarded to M/s Pest control service, Yamunagar Haryana LOA issued to 27.07.2018 and valid upto 09.10.2020.

D. Accident Relief Train:

Depot	Class	Composition	Major Equipment
PAU	'A' Class ART	140 T crane + 2 Coaches	140T Gottwald make New Design Hydraulic Crane JMP).
		ART (4 coaches + 2 BRNHS)	MFD Re-Railing Equipment.
	SPMRV	03 coaches	04-Cummins Engine, 02-Main Engine, 02 125 KVA D.G. set, 02-Compressor, 01 set of LUKAS HRD & 01- set of Holmetro HRD. LUKAS make Hydraulic Rescue device.

Details of Other End maintenance Trains-NED Division

S.N	Station	Train No.	From	To	Load	Total coaches per day	PM depot/Rly	Days of operation	Lie over	Cleaning
1.	NED	17618	NED	CSTM	18	116	NED	Daily	08.35 hrs	Outsourced
2.		57558	NED	NZB	12		NED	Daily	02.55 hrs	
3.		57564	NED	HYB	11		NED	Daily	01.00 hrs	
4.		16593	NED	SBC	17		SBC	Daily	06.30 hrs	
5.		57594	NED	MED	11		NED	Daily	00.30 hrs	
6.		17410	NED	ADB	21		TPTY	Daily	01.40 hrs	
7.		20810	NED	SBP	18		SBP/E.Co	Tri-weekly	01.40 hrs	
8.		20812	NED	VSKP	23		VSKP/E.Co	Tri-weekly	01.50 hrs	
9.		11012	NED	LTT	21		LTT/CR	Weekly	03.00 hrs	
10.		12485	NED	SGNR	19		NED	Weekly	11.15	
11.		12421	NED	ASR	15		ASR	Weekly	11.15	
12.	PAU	57582	PAU	AK	12	24	PAU	Daily	02.30 hrs	Outsourced
13.		57584	PAU	AK	12		PAU	Daily	01.05 hrs	
14.		57554	ADB	PRLI	09		PAU	Daily	04.05 hrs	

15.	ADB	57552	ADB	PAU	09	60	PAU	Daily	02.30 hrs	Outsourced
16.		17406	ADB	TPTY	21		TPTY	Daily	01.30 hrs	
17.		17409	ADB	NED	21		TPTY	Daily	01.15Hrs	
18.	AWB	17621	AWB	RU	15	14	NED	Weekly	03.15 hrs	Outsourced
19.		57550	AWB	HYB	12		PAU	Daily	01.15 hrs	
20.	NSL	57541	NSL	NED	12	39	NED	Daily	09.40 hrs	Outsourced
21.		17214	NS	NSL	21		NS	5 days	03.00 hrs	
22.		17232	NSL	NS	21		NS	Bi-weekly	01.15 hrs	
23.		16004	NS	MAS	22		MAS/SR	Weekly	02.15 hrs	
24.		07417	TPTY	NS	20		NSL/TPTY	Weekly	12.05 hrs.	
25.	Jalna	12072	J	DR	15	25	DR/CR	Daily	09.25 hrs	Outsourced
26.		77684	NSL	J	10		KCG	Daily	07.57 hrs	
		77657	J	SNSI						
27.	AK	17640	AK	KCG	18	30	KCG	Weekly	15.00 hrs	Outsourced
28.		57583	AK	PAU	09		PAU	Daily	01.50 hrs.	
29.		57539	AK	PRLI	09		PAU	Daily	01.45 hrs.	
30.		57581	AK	PAU	09		PAU	Daily	01.10 hrs.	

Power Activities over Nanded Division



Note: 1. Combined crew lobby/MMR & RCD/MMR is under BSL Division (CR)
2. Activities at PRLI is under SC division but NED crews are availing Running Room facilities.

The Power Branch of NED is contributing in achieving excellence in the following fields.

- Availability and booking of crew for Coaching/Goods services.
- Improving the knowledge, confidence levels and driving skills of LPs/ALPs to maintain the safe, punctual working of Coaching/Goods trains.
- Conducting safety and technical seminars/counselling sessions to improve the knowledge of the running staff.
- Maintaining the Running Rooms/Rest Rooms to the utmost satisfaction of the occupants.
- Maintenance and operations of RCDs.

Running Rooms

Four Running Rooms and Four Rest Rooms are provided at various places over NED division to avoid more than 9 hours working. All the facilities are provided in every Running Room including subsidized meals

The Running Rooms are as follows:

1. Running Room/MMR

Running Room MMR received GM's Railway Week Award for best maintained Major Running Room over South Central Railway for the year 2013-14 with a Cash award of Rs 5000/-. Running Room MMR has participated in the Inter Railway Running Rooms Competition at Board's Level and obtained 2nd prize during the Year 2013-14. Running staff of PAU and AWB depot Crew are availing the facilities of this Running Room.



2. Running Room/PAU

Running Room PAU has been received ISO 9001-2015 on dated 20.01.2018 for three years. Running staff of ADB, AK, AWB, KCG and NZB depot Crew are availing the facilities of this Running Room.



3. Running Room/AK

Running Room AK has been received ISO 9001-2015 on dated 10.02.2018 for three years. Running staff of PAU, KNW and BD depot Crew are availing the facilities of this Running Room.



4. Running Room/ADB

Running Room ADB has been received ISO 9001-2015 on dated 21.02.2018 for three years. Running staff of PAU & NGP depot Crew are availing the facilities of this Running Room.



Rest Rooms are provided at NSL, J, AWB and NED for smooth Running of trains as well as to avoid excess duty hours.

Crew Booking Lobbies and Crew Changing Points:

S No	Crew Booking Lobby / Crew Changing Point	Average Sign ON per Day	CMS
❖ Crew Booking Lobbies			
1	Purna (PAU)	160	03 No of CMS KIOSKs available.
2	Aurangabad (AWB)	48	02 No of CMS KIOSKs available.
3	Adilabad (ADB)	40	02 No of CMS KIOSKs available.
4	Akola (AK)	35	02 No of CMS KIOSKs available.
5	Nanded (NED)	120	02 No of CMS KIOSKs available.
❖ Crew Changing Points			
1	Jalna (J)	06	01 No of CMS KIOSK available.
2	Nagarsol (NSL)	09	01 No of CMS KIOSK available

Cases of crew working more than 09 Hrs is minimised for safety of the Running Trains. Facilities provided at Crew Booking Lobbies: CRIS (Crew Management System) implemented at NED, PAU, AK, AWB, ADB, J & NSL Crew

Booking Lobbies and achieved 100% sign ON and Signing OFF through CMS/CRIS KIOSK. Rest Lounge is provided beside in all crew lobbies over NED Division.

Railway Consumer Depots (RCD) are available at PAU (374 KL capacity) and ADB (160 KL capacity) for fuelling of diesel locomotives.
