

## MECHANICAL DEPARTMENT

### 1.1 Coach Ownership:

Sl.No	Type of coach	No of coach	
		2010-11	2011-12
1.	Air conditioned	375	391
2.	Non-air conditioned	1687	1771
	Total	2062	2162

### 1.2 Coach Ownership:

Name of the Depot	Coach holding March-2012			Primary Trains		Secondary Trains		Round Trip	
	A/C	Non A/C	Total	Total no of trains	Avg. per day	Total no of trains	Avg. per day	Total no of trains	Avg. per day
PUI	200	800	1000	27	15	-	-	8	5
BBS	131	383	514	16	7.4	4	1.9	2	2
VSKP	51	504	555	14	10.7	1	0.3	9	8
SBP	9	84	93	5	2.5	-	-	1	1
<b>Total</b>	<b>391</b>	<b>1771</b>	<b>2162</b>	<b>62</b>	<b>35.6</b>	<b>5</b>	<b>2.2</b>	<b>20</b>	<b>16</b>

## 2.1. Carriage maintenance

### 2.1.1. Coach Holding & Trains maintained

ECoR has coaching train examination and maintenance facilities at Puri, Visakhapatnam, Bhubaneswar and Sambalpur. The depot-wise holding, numbers of primary and secondary trains handled are as given below:-

Name of the Depot	Coach holding March-2011			Primary Trains		Secondary Trains		Round Trip	
	A/C	Non A/C	Total	Total no of trains	Avg. per day	Total no of trains	Avg. per day	Total no of trains	Avg. per day
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Total	<b>391</b>	<b>1771</b>	<b>2162</b>	<b>62</b>	<b>35.6</b>	<b>5</b>	<b>2.2</b>	<b>20</b>	<b>16</b>

### 2.1.2. Maintenance facilities

The infrastructure facilities available at the coaching depots for under taking maintenance and repair of coaching trains are given as follows.

Name of the Depot	No. of / integrate pit lines	Covered sick line capacity in terms of coaches under covered shed	No of Pit line without catwalk	No of Washing line
PUI	5	8	1	1
BBS	2	4	1	1
VSKP	5	8	-	-
SBP	3	2	-	-

## 22.3 System improvement & achievement in 2011-12

### 2.3.1 Measures taken for improving passenger satisfaction:

Mechanical Department, ECoR has given special thrust for improvement of passenger amenities provided in the coaches and specially given stress to improve the cleanliness and hygienic conditions of coaches by outsourcing different cleaning activities in different coaching depots and stations is as given below :-

a) **Mechanized Coach Cleaning:** In ECoR the coach cleaning work is being done on mechanized manner in all four coaching depots i.e Puri, Bhubaneswar, Visakhapatnam & Sambalpur. By outsourcing the coach cleaning activities, there has been perceptible improvement in the cleanliness of coaches & customers appreciation.

b) **Clean Train Station:** At both the nominated CTS stations of ECoR i.e. Bhubaneswar(shifted to KUR w.e.f 07.07.12) and Viskhapatnam stations, coaches of trains are being cleaned, during halt at the station, between 6-22 hours, in mechanized manner by ISO-9001-2000 certified mechanized cleaning service providers. Aisle area, toilets, door way, gang way and AC coach window glass are cleaned and disinfected during halt of trains at these stations.

c) **Pest & Rodent Control:** Pest control activities at all the four coaching depots at Puri, Bhubaneswar, Visakhapatnam & Sambalpur have been outsourced.

d) **On Board House Keeping Service:** In order to provide for frequent cleaning of trains during day time and on demand, OBHS service has been implemented in all 36 nominated trains in ECoR.

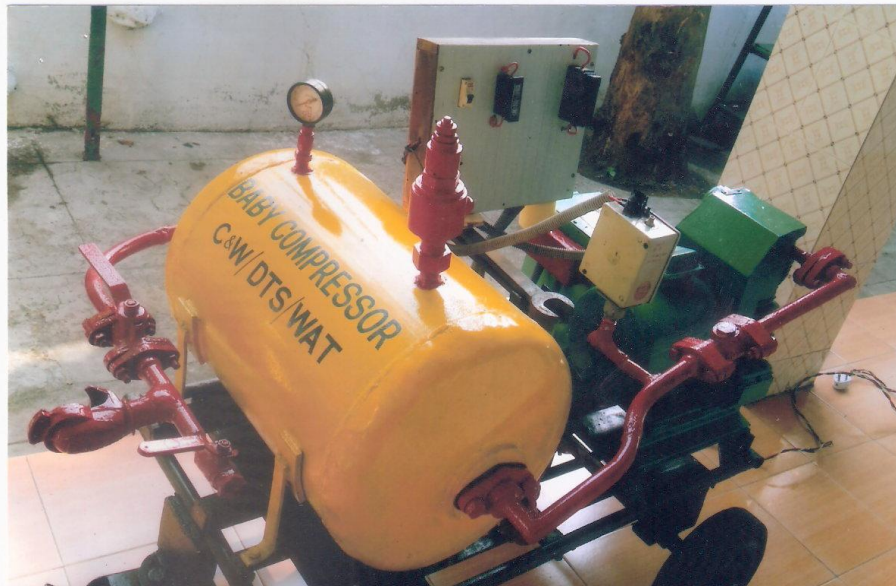
e) **Coaching Non-AC ineffective** was **7.68%** during 2011-12 as compared to **7.74%** during corresponding period of last year(2010-11) showing an improvement of **0.73%** and against target of **8.5%** reflecting an improvement of **9.65%** over target.

f) **Supply of Poly Vastra** bed sheet has been started in 1<sup>st</sup> AC and 2<sup>nd</sup> A/C coaches of BBS-NDLS Rajdhani Exp. & BBS-NDLS Duronto Exp. from Coaching Depot/BBS.

## 2.4. INNOVATIONS AND SYSTEM IMPROVEMENT

2.4.1 The C&W Training School, WAT has developed a “Baby Compressor” with the accessories collected locally. It can build sufficient air pressure to operate brake system and has the provision of automatic cut off system. With the help of this compressor the

trainees can be demonstrated about working system of break gear of BOXN (Simulator), BMBS brake cylinder working and Alarm chain pulling working system.



#### 2.4.2 Working Model of Bogie Mounted Brake System of Coaching stock (BMBS)



The C&W Training School, WAT had developed a Working Model of Bogie Mounted brake system with original levers and Piston stroke adjustment system. This Cylinder works with air pressure. Also one screw rod with handle has been provided to operate even without air pressure. This will facilitate the trainees to understand the working system of BMBS very easily and also they can observe when the slack taking place by piston inside the cylinder.

#### 2.4.3 GADGET FOR REPLACEMENT OF BROKEN BOLSTER SPRING ON COACHES

One Gadget for replacing the broken Bolster spring on coaches was indigenously developed by Chg depot, VSKP having the following advantages:

- The coach is not required to be detached from the rake.
- Can save time by avoiding shunting and placement of coach.



