

3.2 Rajasthan State Road Transport Corporation

Review on purchase and performance of tyres, tubes, retreading material and flaps

Highlights

Rajasthan State Road Transport Corporation was established in October 1964, with the main object of providing an efficient, economical and properly coordinated system of road transport services in the State of Rajasthan. As on 31 March 2004, the Corporation operated 4,468 buses through 48 depots.

(Paragraph 3.2.1)

Due to shortage of tyres, 3.66 lakh route kilometres were cancelled resulting in potential loss of revenue of Rs.19.02 lakh.

(Paragraph 3.2.7)

The Corporation purchased tyres on the basis of cost per tyre per 100 kilometre in violation of its purchase policy resulting in extra expenditure of Rs.73.29 lakh.

(Paragraph 3.2.8)

The Corporation incurred extra expenditure of Rs.98.45 lakh in purchase of tyres (Rs.42.63 lakh) and retreading material (Rs.55.82 lakh) due to not purchasing tyres and retreading material from the lowest suppliers to the extent of their capacity.

(Paragraphs 3.2.9 and 3.2.11)

The Corporation incurred extra expenditure of Rs.62.68 lakh in purchase of tyres of 'semilug' pattern .

(Paragraph 3.2.10)

Non-removal of tyres in time and non-providing of workable stepney caused premature scrap of tyres resulting in loss of Rs.27.89 lakh.

(Paragraph 3.2.16)

Introduction

3.2.1 Rajasthan State Road Transport Corporation (Corporation) was established on 1 October 1964 under Road Transport Corporations Act, 1950 with the main object of providing an efficient, economical and properly co-ordinated system of road transport services in the State of Rajasthan. The Corporation operated a fleet of 4,468 buses through 48 depots during 2003-04. Tyres, tubes and flaps including retreading material are one of the constituents of operational cost in the Corporation. Efficient tyre management provides for establishing a sound system of procurement and monitoring the performance of tyres which serves as a tool for decision making for purchase of tyres with optimum utilisation of resources and deriving maximum mileage.

Organisational set up

3.2.2 Purchase Board is the apex body for purchase of tyres, tubes *etc.* and is headed by Managing Director of the Corporation. As on 31 March 2004, the apex body consisted of four members *viz.* Financial Advisor and Chief Accounts Officer, two Technical Heads of Departments and a General Manager (Stores & Purchase). General Manager (Tyres) is a special invitee in the meeting of Purchase Board held for purchases of tyres, tubes and retreading material.

As on 31 March 2004, the Corporation had 48 workshops attached with each depot headed by Chief Manager and two tyre retreading plants at Jaipur and Ajmer headed by Chief Production Manager.

Scope of Audit

3.2.3 The present review conducted during December 2003 to May 2004 cover all aspects relating to assessment of requirements, procurement and performance of tyres, tubes, flaps and tyre retreading material for the last five years ending 31 March 2004.

The audit findings were reported to the Government/management in July 2004 with the request to attend the meeting of Audit Review Committee for Public Sector Enterprises (ARCPSE) so that the viewpoint of the Government/management could be taken into account before finalising the review. The meeting of the ARCPSE was held on 5 August 2004 where Government was represented by the Deputy Secretary (Transport) and the Corporation was represented by the Managing Director. The viewpoints of Government/management have been considered while finalising the review. The salient points of the review are discussed in the succeeding paragraphs.

Purchase of tyres, tubes and flaps

Financial outlay on the purchase of tyres, tubes and flaps

3.2.4 The table below indicates the expenditure incurred on purchase of tyres, tubes, flaps and retreading material and their percentage to total operating expenditure of the Corporation during 1999-2004:

Year	Total operating expenditure (Rs. in crore)	Expenditure on tyres, tubes, flaps and retreading material (Rs. in crore)	Percentage of expenditure on tyres, tubes, flaps and retreading material to total operating expenditure	Gross km of own buses (in lakh)	Cost per km of tyres, tubes and flaps (in paise)
1	2	3	4 (3/2X100)	5	6 (3/5)
1999-2000	602.50	22.35	3.71	4842.61	46.15
2000-01	672.16	20.22	3.01	4954.15	40.82
2001-02	687.08	18.38	2.67	5112.41	35.95
2002-03	716.70	19.27	2.69	5218.68	36.93
2003-04	737.47	16.17	2.19	5269.41	30.69

It would be seen from the above that cost per km and percentage of expenditure on tyres, tubes, flaps and retreading material to total operating expenditure decreased from 46.15 paise (3.71 *per cent*) in 1999-2000 to 30.69 paise (2.19 *per cent*) in 2003-04. Audit observed that decrease in cost/expenditure was due to:

- Decrease in average purchase price of rib pattern tyre from Rs.5,381 in 1999-2000 to Rs.4,951 in 2002-03;
- Decrease in average purchase price of retreading material per tyre from Rs.1,130 in 1999-2000 to Rs.923 in 2002-03;
- Exclusion of cost of the tyre sets received with new buses (increased from 53 in 1999-2000 to 757 in 2003-04) from the expenditure on tyres, tubes and flaps as the same was capitalised; and
- Strengthening and upgradation of roads in the State.

Purchase policy

3.2.5 The purchase policy issued (August 1993) by the Corporation and purchase procedure were as under:

- Purchase of material of the value exceeding Rs. 50,000 was to made by inviting open tenders;

- Purchase can be made without calling for tenders from tyre manufacturing companies and from suppliers having rate contract with Association of State Road Transport Undertakings (ASRTU) on rates, terms and conditions, as prescribed in their rate contract, wherever applicable or on the standard price list with normal discount;
- Where purchase was to be made by inviting tenders/offers, specifications, terms and conditions were to be finalised before inviting tenders/offers and normally purchase was to be made at the lowest price with reference to prescribed specification or of approved sample;
- Quantity/levels of stores were generally to be fixed to ensure smooth availability of store; and
- Purchase Board was authorised to prepare procedural guidelines necessary for implementation of the purchase policy.

Audit observed that:

- The Corporation has not fixed the minimum and maximum stores levels to ensure availability of tyres when required. The Corporation stated (July 2004) that normally the inventory of new tyres at central store level was maintained to the extent of consumption of one week only which was reviewed regularly. Reply is not tenable as the stock of tyres at central store at the end of 2001-02 and 2002-03 was available for consumption of only 5.36 and 3.62 days and at depots *i.e.*, end user of tyres, for consumption of only 2.08 and 3.5 days respectively. Moreover Audit observed that in majority of depots, the stock of tyres was nil on the last day of the financial year.
- Tenders/offers for purchase of tyres were invited without prescribing any specification or without approving samples and same were finalised based on the lowest cost per tyre per 100 kilometres (CPTK) instead of the lowest price with reference to specification or approved sample as envisaged in the purchase policy.

Management stated (July 2004) that neither the suppliers provide the specification of tyres nor the Corporation has any system to check that specification. Reply is not tenable as in absence of specification, the Corporation did not make any exercise to assess performance of different make/pattern of tyres for different routes.

Procedure

3.2.6 The procedural guidelines for implementation of purchase policy were not prepared. Tyre sets, *i.e.*, tyres, tubes and flaps are purchased on the basis of CPTK by calling offers directly from the manufacturers. Extra tubes and flaps are purchased from the firms having ASRTU rate contract as per ASRTU specifications. Retreading material is also purchased on the basis of CPTK as per ASRTU specifications by inviting open tenders. The tenders/offers are opened by tender opening committee consisting of Executive Manager (Stores

& Purchase), Accounts Officer (Stores & Purchase) and concerned Purchase Officer in the presence of offerers/tenderers and are finalised by the Purchase Board. The purchase of tyres and retreading material on the basis of CPTK was not prescribed in purchase policy.

Irregularities relating to purchases

Improper assessment of requirement

3.2.7 The Purchase Board in their meeting held in January 1993 prescribed formulae* for assessment of requirement of tyres.

The Corporation assessed the requirement of tyres based on average consumption during last six months. The Corporation has not fixed the norms of average casing life of tyres and kilometres to be operated by tyres. In the absence thereof, correct requirement of tyres could not be assessed.

In a test check of 20 depots regarding loss of route kilometres due to shortage of tyres, audit observed that the improper system of assessment of requirement caused shortage of tyres which ultimately resulted in vehicles remaining off road for want of tyres and curtailment of 3,66,411 route km in five depots (Hanumangarh, Jaipur, Jhunjhunu, Khetri and Kota) during 1999-2003. The Corporation suffered a potential revenue loss of Rs.19.02 lakh towards non-recovery of fixed cost (actual total revenue-variable cost).

Improper assessment of requirement of tyres caused curtailment of 3,66,411 route km resulting in potential revenue loss of Rs.19.02 lakh

Management stated (July 2004) that curtailment of kilometres on account of vehicles remaining off road for want of tyres were not due to inadequate demand assessed and the curtailment of kilometres for want of tyres was negligible. The reply is not tenable in view of the fact that during test check it was noticed that out of 20 depots, five depots were short of tyres which resulted in curtailment in kilometres. This indicates that the Corporation did not have proper system to assess the requirement of tyres as prescribed by Purchase Board in January 1993.

Purchase of tyres at higher rates

3.2.8 Decision to purchase tyres is taken on the basis of CPTK instead of landed cost. The CPTK is calculated on the basis of net landing cost of tyre plus average retreading cost with weightage of retreading factor divided by average total casing life of tyres scrapped during past 18 months. The average casing life of tyres plays a vital role in calculation of CPTK.

* $\text{km operated} \times 6 \div \text{by average casing life}$

The Corporation incurred avoidable extra expenditure of Rs.73.29 lakh in purchase of tyres based on lowest CPTK instead of lowest landed cost.

Audit observed that variations over different periods in the casing life of tyres of a particular manufacturer were phenomenal and ranged from 14.76 to 39.43 *per cent* during 1999-2003. Most of the major manufacturers of tyres got first or second lowest CPTK on one or more occasions. This indicates that the variation in the performance was not due to manufacturing quality of a tyre but due to other important factors such as fitment of tyres-front or rear, load carried by a vehicle, operating road conditions, maintenance practice followed and operating condition of a vehicle. These factors did not have relevance in evaluation of performance of tyres of a particular manufacturer. This fact was also confirmed by the Managing Director in the Purchase Board meeting (June 2002) stating that preference should be given to the firm which has the lowest landed cost as tyres were being manufactured by all tyre companies with same technology. Thus, due to purchase of tyres based on the lowest CPTK instead of the lowest landed cost as envisaged in purchase policy, the Corporation incurred avoidable extra expenditure of Rs. 73.29 lakh during 1999-2003.

Management stated (July 2004) that it was not possible to quantify the effects of many variables and most of the STUs were purchasing tyres on the basis of CPTK. The reply is not convincing, as this was not as per Purchase Policy.

Improper allocation of business among suppliers

3.2.9 The Corporation purchased tyres on six monthly basis by inviting offers directly from manufacturers.

During 1999-2003, major purchases were decided in six-monthly meetings of the Purchase Board held on 20 July 1999, 18 December 1999, 20 June 2000, 14 February 2001, 21 September 2001, 18 April 2002 and 27 September 2002.

Audit scrutiny of purchases revealed that instead of issue of purchase orders based on the lowest CPTK and manufacturers' capacity, the Corporation issued purchase orders to the manufacturers having higher CPTK ignoring the spare capacity of manufacturers having lower CPTK as detailed below:

Sl. No.	Date of decision	No. of tyres purchased	CPTK rank	Manufacturers capacity (Nos.)	Order placed (Nos.)	No. of manufacturers	Amount of extra expenditure (Rs. in lakh)	Reasons
1	20.7.1999	9,300	First lowest	6,000	4,200	4	5.43	No reasons given.
2	20.6.2000	10,585	First lowest Second lowest	7,200 12,000	6,790 1,940	9	10.34	Minimum three sources to be kept in the ratio of 70:20:10 and trial order to six manufacturers having higher CPTK.
3	14.2.2001	9,550	Second lowest	As per requirement (6,550)	1,200	9	11.53	Net landing cost of the set is on higher side and tubes and flaps were not manufactured by it.
4	21.9.2001	6,975	Second lowest	As per requirement (3,600)	2,700	3	2.42	Three sources to be kept in the ratio of 60:30:10.
5	18.4.2002	10,800	First lowest Second lowest	9,000 6,000	6,000 1,200	4	12.91	No reasons mentioned and lower CPTK due to better performance of left out tyres.

The reasons given above were not justifiable. As regards the minimum three sources to be kept while placing orders, the Corporation has not fixed such policy/guidelines regarding minimum number of suppliers. Further the decisions were not uniformly followed as in the meeting of 20 June 2000, the ratio of 70:20:10 was kept while in the meeting of 21 September 2001, the ratio was changed to 60:30:10 and in the meeting of 27 September 2002 only two sources were kept.

The reasons of higher net landed cost given in purchase decided on 14 February 2001 is irrelevant as the same were already considered in the calculation of CPTK.

The Corporation incurred avoidable extra expenditure of Rs.42.63 lakh due to purchase of tyres having higher CPTK.

The reason of better performance due to left out tyres* given in purchase decision of 18 April 2002 is also not justifiable as the formula for calculation of CPTK was devised after considering all such aspects.

Purchase of 13,505 numbers tyres during 1999-2003 from the suppliers having higher CPTK caused avoidable extra expenditure of Rs.42.63 lakh.

Management stated (July 2004) that extra expenditure was incurred to develop performance data of various suppliers and to have adequate sources of suppliers. The reply is not tenable, as the Corporation did not have any set procedure for awarding the orders to the lowest acceptable firms and to new firms on trial basis.

Purchase of semilug tyres of higher CPTK

The Corporation incurred extra expenditure of Rs.62.68 lakh due to purchase of semilug pattern tyres of higher CPTK.

3.2.10 The Corporation had been purchasing tyres of three different patterns i.e., rib, semilug and radial. The CPTK of rib tyre was the least and it was the highest in the case of semilug tyres. Audit observed that despite higher CPTK of semilug tyres (suitable for trucks only), the Corporation purchased 7295 semilug tyres during July 1999 to September 2001, without giving justification for purchase. The difference in CPTK of semilug tyre as compared to rib tyre ranged from Rs.1.7117 to Re.0.1176. Thus, the Corporation incurred extra expenditure of Rs.62.68 lakh.

Management stated (July 2004) that purchase of semilug tyres has been done looking to bad road conditions at that time. The reply is not tenable as the bad road condition was not the base for the purchases. Considering the higher CPTK, the Purchase Board decided (18 April 2002) to purchase rib tyres in lieu of semilug tyres.

* Tyres of a company from which significant purchases were not made in recent past.

Avoidable extra expenditure in purchase of retreading material

The Corporation incurred extra expenditure of Rs.55.82 lakh due to non-placement of purchase orders for full capacity of supplier.

3.2.11 Open tenders were invited (May 2002) and opened (June 2002) for supply of 380 MT retreading material (tread rubber) for 12 months requirement. According to purchase policy the material was to be purchased at the lowest CPTK price. As per decision (July 1994) of the Purchase Board, regular purchases should have been made from the firms having sample size of 500 tyres or more.

The Corporation received four offers viz. Polygold, Vamshi, MRF and ELGI based on required sample size. The Corporation worked out CPTK of these firms as Rs.1.9037, 2.2882, 2.6728, 2.7485 respectively. Accordingly, Polygold L₁ was ordered for 21.5 MT tread rubber but they failed to supply the ordered quantity. Vamshi L₂ was ordered for supply of 30 MT tread rubber against their capacity to supply 600 MT. Orders for balance quantity of 328.5 MT were issued to MRF L₃ (197 MT) and ELGI L₄ (131.5 MT), respectively.

Audit observed that non-consideration of Vamshi for balance quantity was not justifiable. Had order been placed on Vamshi, in place of ELGI and MRF, the Corporation could have avoided extra expenditure of Rs. 55.82 lakh*.

Management stated (July 2004) that CPTK of Vamshi was felt unrealistic as in other purchases decided in April 2001, February 2002 and April 2003 its CPTK was higher. The reply is not tenable. Purchases were decided every time based on CPTK worked out for that purchase and not on previous CPTKs.

Quality control - sample testing

In contravention of provisions of purchase policy, tubes and flaps were purchased without specifications from tyre manufacturers.

3.2.12 The tubes and flaps alongwith tyres (tyre sets) were purchased from tyre manufacturers without any specifications and retreading material were purchased from ASRTU rate contract firm. Samples thereof, were sent to Central Institute of Road Transport, Pune (CIRT) for testing against specification of ASRTU firms for academic comparison only. The Corporation sent sample of one tube and one flap in 1999-2000, which was rejected in testing. Again in 2000-01, four flaps were sent for testing against which two samples were rejected. The sample testing of tubes was discontinued from April 2000 and of flaps from September 2000.

Audit observed that norms for selection of sample for testing of extra tubes, flaps and retreading material were not fixed. However, samples of extra tubes, flaps and retreading material were sent for testing at CIRT and Shri Ram Test House, Delhi.

* $13587(\text{no. of tyres retreadable}) \times 0.4603 (\text{difference in CPTK of Vamshi and ELGI}) \times 39641(\text{average life per retreading}) \div 100 = 24.79 \text{ lakh}$
 $20355(\text{no. of tyres retreadable}) \times 0.3846 (\text{difference in CPTK of Vamshi and MRF}) \times 39641(\text{average life per retreading}) \div 100 = 31.03 \text{ lakh}$

Mangement stated (July 2004) that tyre companies did not disclose their specifications for tubes and flaps as such it was not possible to get them tested. Reply is not tenable as purchases without specifications were in contravention of provisions of purchase policy.

3.2.13 Data regarding sample of tubes and flaps sent for testing, approved, not approved and percentage of not approved samples of ASRTU firms was as under:

Item	Year	Number of samples sent	Number of samples approved	Number of samples not approved	Percentage of samples not approved to total samples sent
Tubes	1999-2000	8	5	3	37.5
	2000-01	11	5	6	54.6
	2001-02	5	4	1	20.0
Flaps	1999-2000	13	1	12	92.3
	2000-01	7	-	7	100

A review of position of samples sent for testing, revealed that the percentage of rejection of tube samples was 37.5, 54.6 and 20 during 1999-2002 and of flaps samples was 92.3 and 100 during 1999-2001 respectively. Despite such a heavy rejection, the Corporation stopped sending material for testing after May 2001. As a result the possibility of getting the inferior quality material and non-recovery of compensation there against as per ASRTU rate contract, could not be ruled out.

3.2.14 Audit observed that there was heavy rejection of samples of bonding gum (retreading material) during 1996-1997 to 1999-2000, as indicated below:

Item	Year	Number of samples sent	Number of samples approved	Number of samples not approved	Percentage of samples not approved to total samples sent
Bonding gum	1996-97	5	2	3	60.0
	1997-98	35	26	9	25.7
	1998-99	7	4	3	42.9
	1999-2000	4	3	1	25.0

It would be seen from the above that there was huge variation in number of samples sent for testing and rejection of samples varied from 60 *per cent* in 1996-97 to 25 *per cent* in 1999-2000. Despite this Purchase Board decided (January 2000) not to send any sample (retreading material) for testing thereafter.

As a result of discontinuation of testing of samples of retreading material after January 2000 and not keeping watch on their quality, the percentage of retreaded tyres scrapped due to separation of tread rubber to total retreaded tyres scrapped increased from 37.55 *per cent* in 1999-2000 to 44.32 *per cent* in 2002-03. The Corporation could not recover any compensation from supplier due to non-availability of any such condition in purchase order.

Management stated (July 2004) that samples of bonding gum have its shelf life and to be stored at specific temperature and keeping in view the limited shelf life, samples could not be sent for testing. Reply is not tenable as non-testing of material resulted in consumption of inferior quality material.

Performance of tyres, tubes and flaps

Comparison with other State Road Transport Corporations

3.2.15 The Corporation has not fixed any norms of consumption of new and retreaded tyres and cost of tyres, tubes and flaps per 100 kilometres. However, a comparison of performance data of the Corporation for 1999-2000, 2000-01 and 2001-02 was made with performance data available in the CIRT publication of State Transport Undertakings (STU) of adjoining states *i.e.* Gujarat, Madhya Pradesh, Uttar Pradesh, Haryana and Punjab, which are given in **Annexure – 17**.

It would be seen from the annexure that break down per lakh km of buses of the Corporation due to failure of tyres during 1999-2000 was 0.41 which was more than Haryana (0.07) and Uttar Pradesh (0.29) in 1999-2000. The position improved in 2001-02 but it was still higher (0.17) than Haryana (0.10). Similarly, the consumption of new and retreaded tyres per lakh kilometre was always higher than Uttar Pradesh and Gujarat as consumption of new tyre per lakh km during 1999-2000 to 2001-02 of the Corporation ranged from 4.91 to 4.65, against the range of Uttar Pradesh from 4.77 to 4.37 and of Gujarat from 4.55 to 4.00. Similarly, consumption of retreaded tyre per lakh km during 1999-2000 to 2001-02 ranged from 11.04 to 12.27 against the range of Uttar Pradesh from 9.90 to 8.40 and of Gujarat from 4.80 to 4.75.

Management stated (July 2004) that data were not comparable as operating conditions were different in each state. Audit observed that the Corporation has not studied the performance data looking to operating conditions of other states.

Loss of Rs.27.89 lakh due to scrap of new tyres

3.2.16 On the basis of physical condition of tyres at the time of scrap, scrapped tyres are grouped in 10 categories of overrun, wire exposure, run flat, rim damage, patch damage, side damage, concrete cut, over cut, burst and separation. Scrap of tyres due to overrun^{*}, wire-exposure[@], run flat[#] and rim damage^{\$} could be avoided by removing the tyres in time and providing workable stepney in each bus. Audit observed that in 20 depots, stepnies were available only in 6.41 *per cent* buses. The position of scrapping of new tyres during 1999-2003 due to overrun, wire exposure, run flat and rim damage is given in **Annexure – 18**.

* Tyre run when non scrappable depth level reached to 1.5 mm.

@ Wire of tyre came out of rubber.

A deflated tyre not removed and scrapped.

\$ A tyre cut from the edge of rim.

The Corporation suffered loss of Rs.27.89 lakh due to non removal of new tyres in time for retreading and non availability of workable stepney with buses.

It would be seen from the annexure that the average CPTK during 1999-2003 of these scrapped tyres was Rs.12.78, Rs.12.40 and Rs.7.36 of Rib, Semilug and Radial tyres respectively, which was much higher than the average CPTK of the Corporation of Rs.6.32, Rs.6.95 and Rs.6.35 respectively during the same period. Thus due to non removal of new tyres in time for retreading and non availability of workable stepney with the vehicles, the Corporation suffered a loss of Rs.27.89 lakh on scrap of new tyres.

Management stated (July 2004) that 'run flat' and 'rim damage' are due to puncture, which is unavoidable. The Corporation did not make any comment on non-availability of workable stepney, which could have controlled the tyres failed due to 'run flat' and 'rim damage'.

Internal control/internal audit

Internal control

3.2.17 It was the overall responsibility of the Purchase Board to ensure purchase of tyres, tubes, flaps and retreading material in the most economic manner. The factors like life of tyres, tubes, flaps, requirement of individual depots, suitability of tyres in individual depots, specifications of material purchased *etc.* should have been analysed before taking a decision for economic purchases. However, such parameters were not prescribed. In absence thereof, no effective internal control system existed for purchases of tyres, tubes, flaps and retreading material.

It was overall responsibility of General Manager (Tyres) to ensure most efficient use of tyres, tubes, flaps and retreading material. Audit observed that in the absence of norms of casing life of new and retreaded tyres, number of retreadings, life of tyres on each retreading, specifications of material to be purchased, consumption norms of different material, criteria for deciding manufacturing defects in tyres, *etc.*, there was no effective internal control system for evaluating the performance of tyres, tubes, flaps and retreading material.

Internal audit

3.2.18 Internal audit of depots and tyre retreading plants is conducted annually by the Corporation staff, under overall control of Financial Advisor and Chief Accounts Officer. Audit scrutiny revealed the following

- Internal audit did not cover the assessment of requirement, purchase of material and lodging and settlement of claims for defective tyres,
- The Corporation never reported the internal audit findings to Managing Director / Board,

- Physical verification of stores of tyres, tubes, flaps and retreading material at depots is conducted once in two to three years instead of carrying out annually.

Management stated (July 2004) that physical verification reports are submitted to Managing Director. The reply is not correct, as the reports of internal audit were never submitted to Managing Director.

The matter was reported to Government (June 2004). Their reply had not been received (August 2004).

Conclusion

Tyre is one of the constituents of operational cost. Despite this, tyres and retreading material were not being procured from the lowest acceptable firms to the extent of their capacity to avail maximum cost benefit. The Corporation had not prescribed any norms for casing life of a new and retreaded tyre to fix the responsibility for premature failure of tyres. Non-removal of tyres in time and non-providing workable stepney also caused premature scrap of tyres.

There was a need to prescribe procedure for procurement of material from the lowest acceptable firms to the extent of their capacity as well as testing samples of tubes, flaps and retreading material to avoid usage of inferior quality of material. Casing life of a new as well as retreaded tyre should be fixed. Stepney and tool kit need to be provided in each bus to avoid premature failure of tyres.

