



RECOUPMENT OF STORE – STOCK ITEM

STC/NBQ/NFR

Recoupment Procedure

- **Zonal Railways Recoupment procedure apply to “ Stock items”.**
- **The demand for Non-Stock items are met by direct purchase and expenditure debited to the consuming dept. without passing through the stocking depots.**

System of Recoupment

Estimate is on the basis of

- ⊗ **Previous consumption**
- ⊗ **Trend of consumption**
- ⊗ **Information given by user departments**



System of Recoupment

- **Previous consumption**
- **Last 3 years Simple Average**
- **Last 3 years Weighted Average**



Terms used

- **Estimated Annual Requirement (EAR)**

or

- **Anticipated Annual Consumption (AAC)**



Terms used

- **DUES:**

Quantity of material for which purchase action started but material not yet received.

Terms used

- **Types of Dues-**
 - **i. Covered Due: Purchase Order released
but material not yet received.**
 - **ii. Uncovered Due: Purchase Order not
yet released.**

Terms used

- **Lead Time:**

Time elapsed from the date of initiation of purchase to the physical receipt of material at the stocking place.

Ideal – 2 to 6 weeks.

- **Safety Stock or Buffer stock:**

Stocks provided to avoid stock outs.

- **Pending Demand (PD):**

Requisitions received from user departments which have not been complied due to low stock or Nil stock.



Recoupment of Emergency Stores

- **Slow moving items and therefore are issued occasionally.**
- **Their future demand pattern is totally uncertain.**

Recoupment of Emergency Stores

- A stocking limit known as base stock is sanctioned.
- Base stock is based on some data of past consumption and a guess for future consumption.
- As and when an item is issued, an equivalent quantity is immediately recouped.
- Theoretically,
$$\text{No. of recoupments} = \text{No. of issues.}$$



Recoupment of Emergency Stores

- **The method of recoupment for these stores is known as Base Stock method.**
- **As per Base Stock method, at all times,**
Physical stock + Dues = Base Stock

Recoupment of Ordinary Stores

- System of Recoupment for **Ordinary Stores**:

1. **Continuous Review System (or Recorder Level System or Q system or Maxima -Minima System)**
2. **Periodic Review System (or P System or Annual Estimate System)**

Maxima-Minima System

- A re order level is fixed
- When
Stocks + Dues come down to Re order level,

Purchase action is initiated.

Maxima-Minima System

- **Maximum: The quantity which is most economical to order at a time.**
- **High value item- fixed as 3/6 months requirements**
- **Low value item- fixed as 12 months requirements**

Maxima-Minima System

- **Minimum :**

Minimum is the quantity (physical stock + dues) which should be sufficient for the consumption during the lead time, i.e. time taken for procurement of the item.

Quantity for Recoupment

- **Quantity for recoupment (Q) is worked out by the following formula:**

$$Q = \text{Maximum} + \text{Minimum} + \text{Pending Demand} - (\text{Stock} + \text{Dues})$$

2. Annual Estimate System

- **Recoupment is done periodically on fixed review date.**
- **Date on which the recoupment sheet for the item is to be prepared is fixed as per pre-decided time table & when they touch the minimum level.**

Annual Estimate System

Terms used

- **The period for which items are recouped is fixed and is called “Contract Period”.**
- **This contract & period is generally 12 months.**
- **The interval between the dates fixed for preparing the recoupment and the beginning of the contract period is known as “Interim period”.**
- **This period is equivalent to lead time for that item.**

Annual Estimate System

- **Forecasting of Anticipated Annual Consumption is normally estimated based on :**
 - **Past 3 years consumption after giving due consideration for stock out periods.**
 - **Trend of past consumption and**
 - **Information available about increase/decrease of the activities, condemnation of Rolling stock, Replacement and Acquisition of new stock etc.**

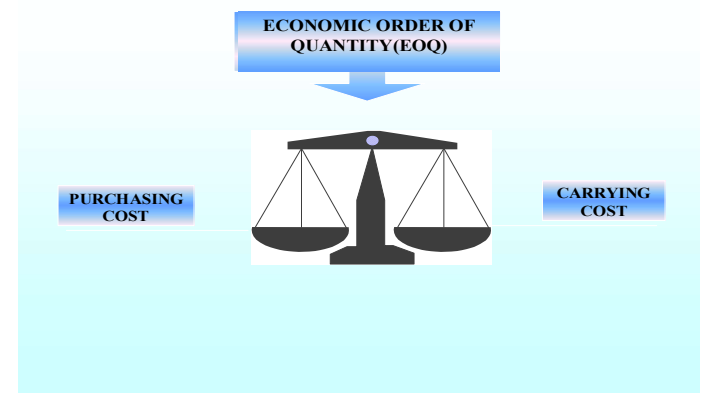
Quantity to be Recouped

- **Economic Order Quantity (EOQ):**

To overcome both shortage and surpluses and to obtain optimum order quantity a formula is derived so that total cost involved to procure the item is minimum.

$$Q = \sqrt{\frac{2AS}{I}}$$

- **A = Annual consumption in value**
- **S = Set up cost (order cost)**
- **I = Inventory Carrying cost**
- **Q = Order quantity value.**



Quantity to be Recouped

- **Gross requirement for the Interim period (GRIP)**
- **GRIP** = Interim period (in months) x **Anticipated monthly consumption (MUF)** + **Buffer stock** + Pending demand (if any).

Quantity to be Recouped

- **Net Requirement for the Interim period (NRIP)**
- **NRIP = GRIP – (Stock + Dues)**

Quantity to be Recouped

- **Net Contract Period Requirement (NRCP):**

$$\text{NRCP} = \text{Contract Period in months} \times \text{MUF} + \text{NRIP}$$

- **MUF - Monthly Usage Factor / Anticipated Monthly consumption**
- **NRIP - Net Requirement for the Interim period**



Thank You