

MATERIAL MANAGEMENT IN WORKSHOPS

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INTRODUCTION & SIGNIFICANCE

Q. WHY SHOULD I THINK ABOUT MATERIAL?

Material planning and management is an *integral component* of:

- Production (Outturn)
- Safety
- Cost
- Labour Relations

Your material management predicts your success as an officer

MATERIAL CLASSIFICATION

Basically, all Railway material is classified into two broad groups:

➤ ***Stock Items***

- Regularly used for routine work,
- Bought through an established procurement mechanism

➤ ***Non-Stock (NS) items***

- Procured as and when the *need* arises,
- Managed by a separate mechanism

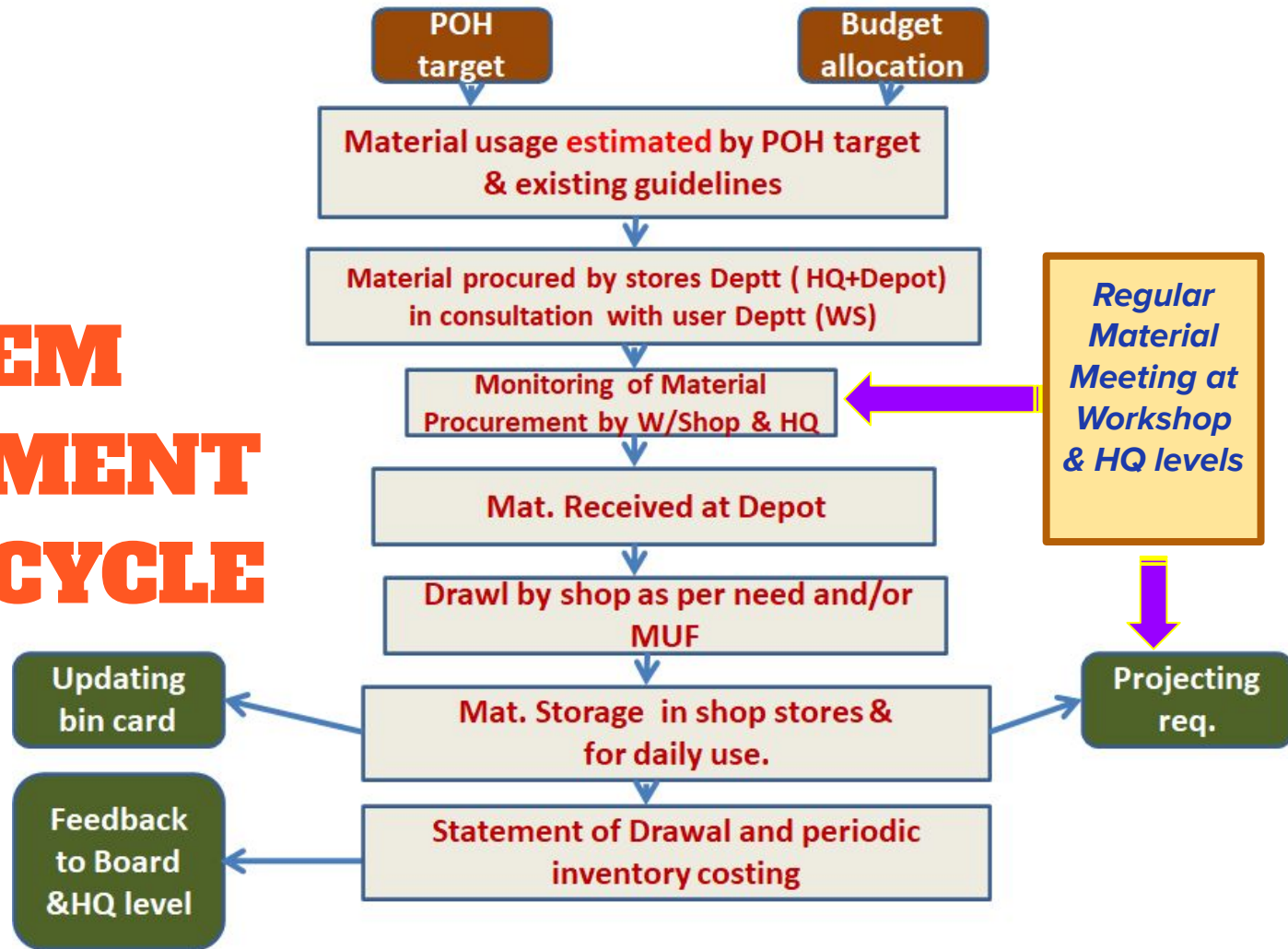
Stores Dept is the primary custodian & purchase interface for all material

STOCK ITEMS

- Characterised by an **8-digit PL no.**
 - Unified PL no. for safety items and passenger amenity items
 - Each PL associated with a **technical specification and drawing**
- Each stock item has an Annual Consumption pattern (**EAC or AAC**)
- Bulk procurement **cycle** with a **lead time**
- Based on cost, EAC etc, procured at Depot/Zonal/Board level

Technical Suitability (TS) only by user, Rate Reasonability (RR) by Stores

STOCK ITEM PROCUREMENT PROCESS CYCLE



STOCK ITEM RECOUPMENT

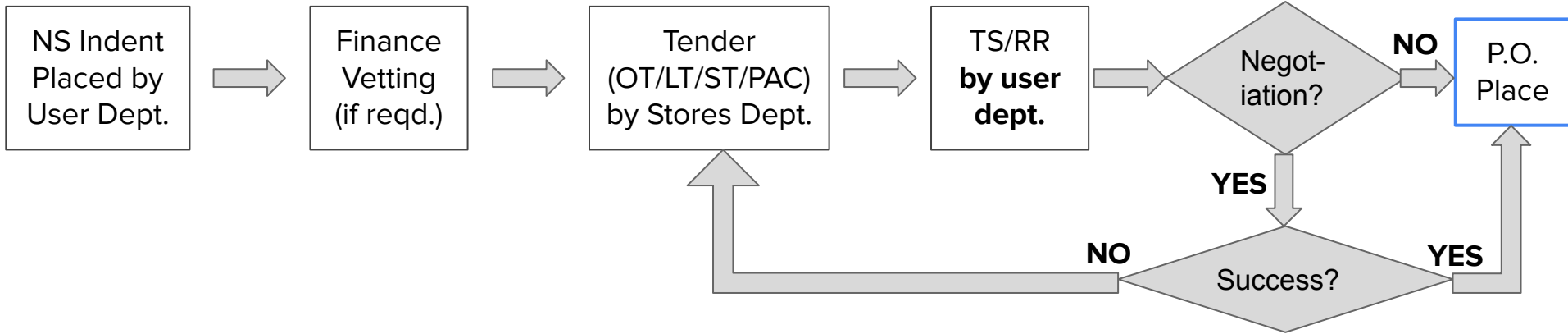
Stock items are usually recouped (procured anew to replenish stocks):

- ***Maxima-Minima System (EOQ)*** – When existing stocks touch the minima (reorder level) just sufficient to meet requirement during lead time, a fresh procurement of maximum amount (3 months' or 1 year's quantity) is initiated
- ***Annual Estimate System (AES)*** – A fixed timetable for recoupment is followed to stock items for the Contract Period (CP), usually 12 months

Availability of stock items depends on this recoupment cycle

NON-STOCK (NS) ITEMS

- Procured as and when the need arises
- Procurement initiated by user department by placing an **NS indent**



Both Technical Suitability (TS) & Rate Reasonability (RR) given by User Dept.

TRICKY POINTS IN FINALIZATION

- **Technical Suitability & Rate Reasonability (TS/RR)**; esp. bypassing L1
 - *Technical Deviation (TD)* – check w.r.t tendered spec
 - *Rate Reasonability* – check recent Last Purchase Rate (**LPR**) of your own or other zonal Railway (**iMMS** is an invaluable tool)
- **Negotiation & Counter offer** – If bid rates received are high, negotiation with L1 **only** is allowed (except for demand split)
If negotiation fails, **then** counter offer may be given
If counter offer is not accepted ⇒ tender discharged
- **Splitting of demand** is generally discouraged or prohibited, except
 - Placing of *developmental order*, or
 - Splitting of demand across L1, L2, L3 etc for part supply (*cartel formation?*)



https://www.ireps.gov.in/fcgi/runfrm



[16:WCR]

Position of Items

Railway	<input type="text"/>		
PL-No	<input type="text"/>	Search-Descr.:	<input type="text"/>
		<input type="button" value="Search"/>	<input type="button" value="PL-Position"/>
Show <input type="radio"/> All Orders <input checked="" type="radio"/> Outstanding Orders <input type="radio"/> Completed Orders		<input type="checkbox"/> Division-wise Consumption	<input checked="" type="checkbox"/> Remarks
Depot	<input type="text"/>	<input checked="" type="checkbox"/> Show Details of Other Depots also	<input type="checkbox"/> Show Full Description
Dy.CMM	<input type="text"/>	Pur. Sec :	<input type="text"/>
		Item Type	All Items <input type="button" value="Show List of Items"/>
Stock	N/A <input type="text"/> (Months)	Value Limit (in Lakh Rs.)	N/A <input type="text"/>
Coverage (Stock+Dues)	N/A <input type="text"/> (Months)	<input type="checkbox"/> Without Live P.O. <input type="checkbox"/> Include N.Stock P.O.s	
Report-Heading	<input type="text"/>		
<input type="button" value="Show Statement"/> <input type="button" value="Exit"/> <input type="button" value="Clear Form"/>			

iMMS

POST-P.O. PROCEDURES

- Finance *vetting* of high-value P.Os
- Firm *chasing* (unofficial, but very important)
- **DP (or EDD)** extension for **delayed delivery**
- **Inspection** clause
 - RITES Inspection, or Consignee Inspection?
 - Lab report vs Practical suitability (both are important)
 - PAC Item
- **Warranty/ guarantee/ penalty** clause, if any

Contract conditions, including inspection & delivery, cannot be modified here!

PAY ATTENTION AND TAKE CARE !

- **A, B, C** (based on cost) or **V, E, D** (based on *usage*) category items
- **Safety** items & **Passenger amenity** items
 - Emergency (spot) purchase allowed for safety,
 - Finance vetting only >15 lakh (for POs) and >10 lakh (for NS sanction)
 - More care required by both User and Stores departments!
- **GeM** items
- **RDSO** approved items/vendors
 - Procurement only through approved sources,
 - Consignee inspection not allowed

URGENT PROCUREMENT

- ***Spot purchase*** – Limited powers to buy urgently required items upon visual inspection by a standing committee of user & Stores depts. after sanction and finance concurrence (***check your zonal Railway's JPO***)
- ***Depot purchase*** – In exigent cases, Depot officers (Dy CMM and below) are empowered for LT or ST
- ***Imprest (Cash) purchase or Local Purchase (LP)*** – Urgently required petty or safety items may be purchased locally by cash imprest
- ***Material assistance*** – Depot- or Shop-level assistance from other units, if available upon request

VENDOR RELATIONS

- Vendor development is performed in a ***centralized manner*** by RDSO, Railway Board, RITES, COFMOW, PUs etc.
- However, ***good local level relations*** with vendors are often important
- Interaction with vendors must be kept transparent and publicly documented and, as far as reasonably possible ***without compromising the Railways' position***, cordial
- Underperforming vendors may be ***reported*** in writing to other Railway units, zonal HQ, RDSO, PUs, Railway Board etc.

MANAGING INVENTORY

- **Eliminate** clutter
“A place for everything, and everything in its place”
- **Minimize** excess **inventory**, by regular **scrap disposal**
- Enable **fast & easy movement**
- **Buzzwords:** *Housekeeping, Stacking, 5S*



MANAGING SHOP FLOOR INVENTORY

Use of *colour coded bins* in specified places to segregate and store material (inventory) on the Shop floor.

The bins here are classed as **New Items, Usable, Reject/Condemn Stock**



MANAGING SHOP FLOOR INVENTORY



- Bins and trollies for scrap segregation, disposal and movement.

- *Manpower-saving device*

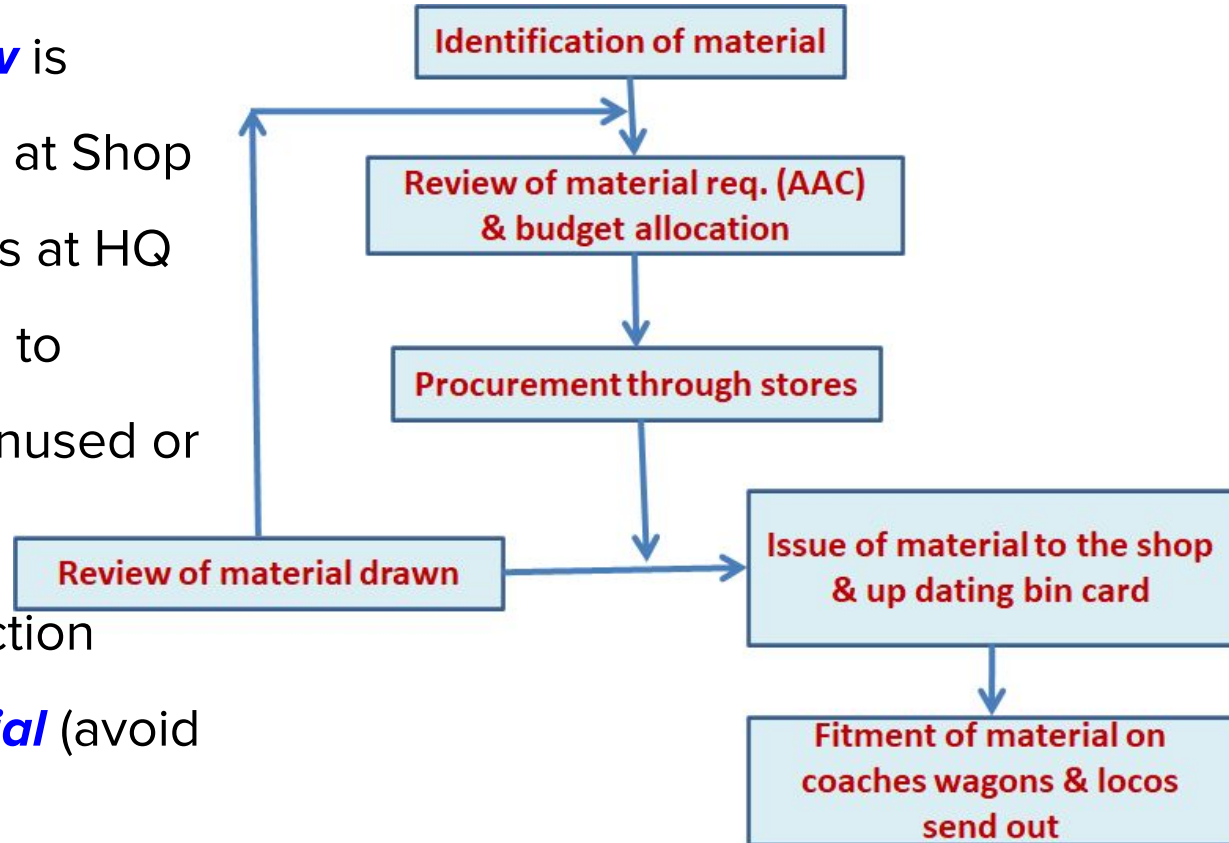


REDUCING INVENTORY

- Do not draw more than MUF from Stores Depot
- Regularly review EAC of A- and B-category items
- Find and dispose of scrap regularly, especially large items
- Regularly check Shop account to identify slow-moving items
- Regularly inspect the Shop store for accumulated stock
- Plan and coordinate inter-Shop movement (*Safety inspection also*)

REGULAR REVIEW MATERIAL DRAW

- In general, **EAC review** is carried out **every year** at Shop level and every 3 years at HQ level in zonal Railways to check and eliminate unused or underused items.
- It is a major cost reduction exercise that's **essential** (avoid nonmoving)



CONCLUSIONS

- **Material management** is a **key area** of Shop floor functioning that must be a key focus area of all officers and supervisors
- Material procurement and its chasing presents **significant challenges** that must be considered from the point of view of **financial jurisprudence** and the **existing rules** and instructions as exist from time to time
- **Inventory management** on the Shop floor is a very **different area**, more concerned with the proper storage, accountal and use of material after procurement with maximum **safety, efficiency & productivity**