Availability Check & TOR in Sales

Sales & Distribution

Topics

1. Introduction

2. Types of Availability Check

3. Replenishment Lead time

4. Control parameters

5. Scope of check

6. Process flow

7. Transfer of Requirements in SD

8. Control elements in TOR

- Availability check is one of the key functionalities in sales document processing. The confirmation of delivery of goods to customer while entering a sales document is carried out on the basis of this check.

- Availability check can be carried out on the deadline of goods availability that would be necessary to consider the picking, packing and shipping time.

- Availability check can only be carried out if transfer of requirements take place for goods from sales to purchase or production.

Types of Availability Check

- System provides for three types of Availability check explained as under:

  - ATP basis check

    Available To Promise (ATP) is calculated from warehouse stock, planned inward movement of stock (purchase orders, planned orders etc.) & planned outward movement of stock (sales orders, deliveries, reservations etc.)

$$\text{ATP} = \boxed{\text{W/h Stock} + \text{Inward mvmt.}} - \boxed{\text{Outward Mvmt.}}$$

    ATP check explained in equation terms above. The check is performed dynamically for each transaction.

Types of Availability Check

- Check against Product Allocation

  Product allocation is used for period based distribution of products for specified customers or regions. This check is over the normal availability check. It is carried out in cases where production is low and goods produced need to be distributed to customers and ensured that first customer is not allocated complete quantity.

- Check against Planning

  Check against planning is performed against planned independent requirements which are generated from a demand planning program.
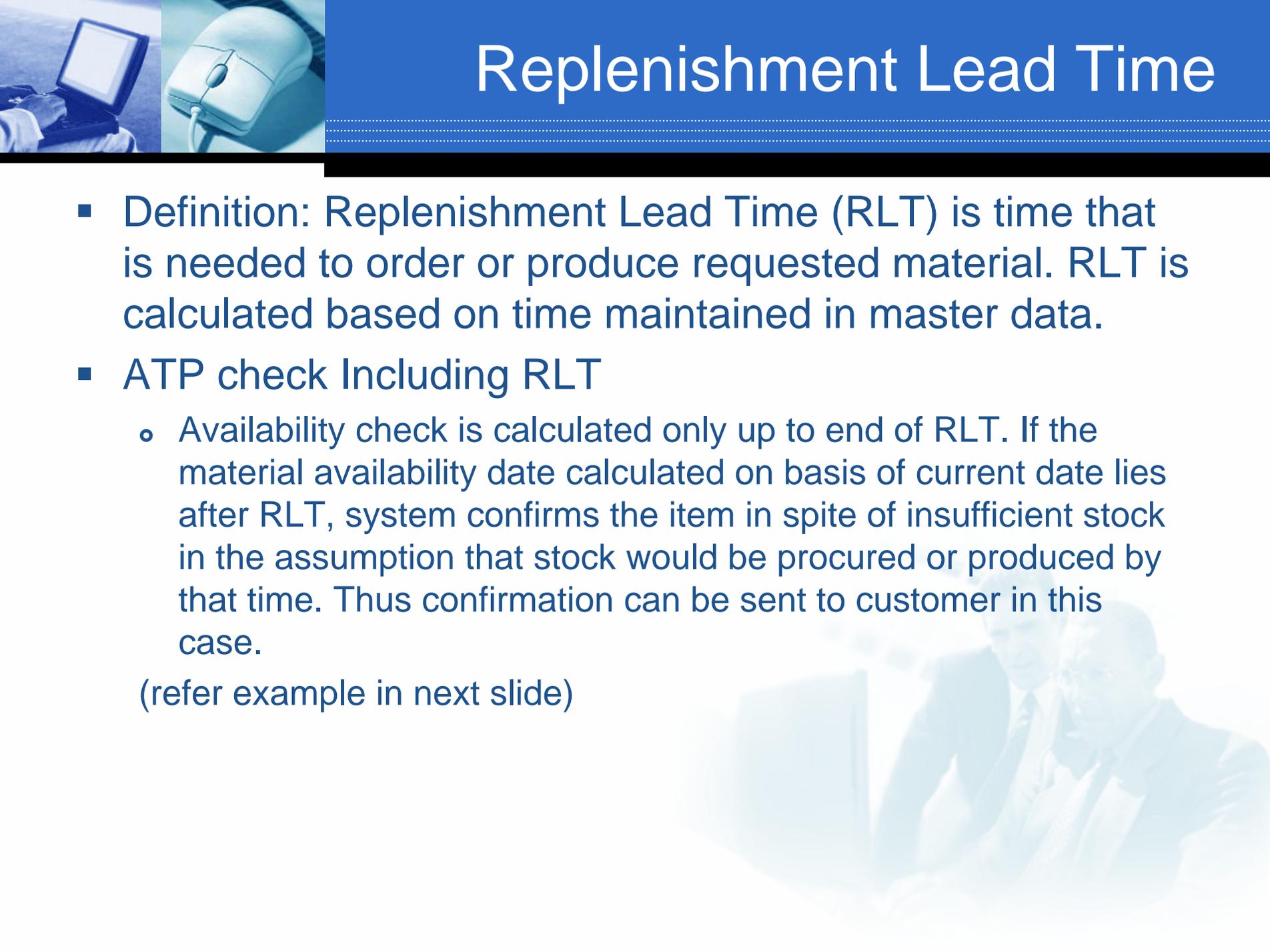
Replenishment Lead Time

- Definition: Replenishment Lead Time (RLT) is time that is needed to order or produce requested material. RLT is calculated based on time maintained in master data.

- ATP check Including RLT

  - Availability check is calculated only up to end of RLT. If the material availability date calculated on basis of current date lies after RLT, system confirms the item in spite of insufficient stock in the assumption that stock would be procured or produced by that time. Thus confirmation can be sent to customer in this case.

  (refer example in next slide)

Example: In this example (refer figure) 20 pcs of stock requested by customer can be confirmed if RLT is included with ATP check because although 20 pcs of stock may not be available on day requested the date falls after the lead time specified for item and hence stock would theoretically be available.
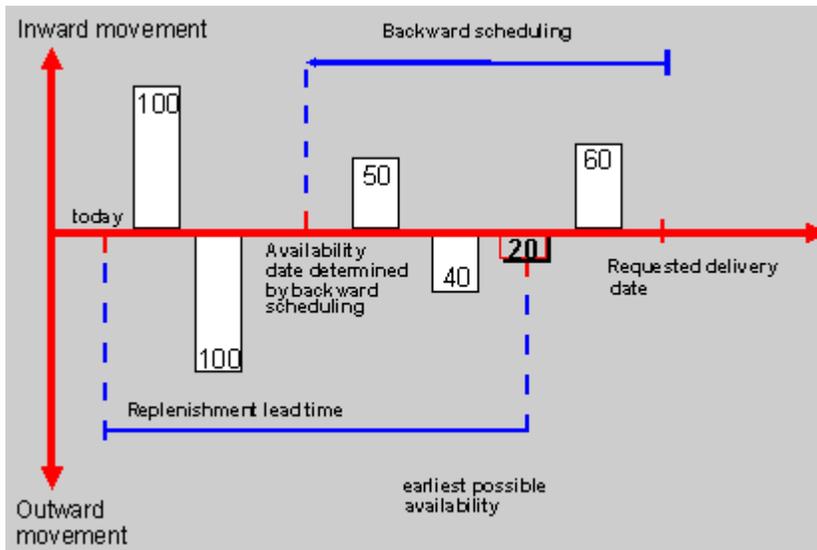
- ## ATP check Excluding RLT

  - If RLT is not included in ATP check system performs a check on the unrestricted stock and scope of check on inward and outward movement of stock.

    Similar example as above excluding RLT check, system would confirm the item only when stock would actually be available.
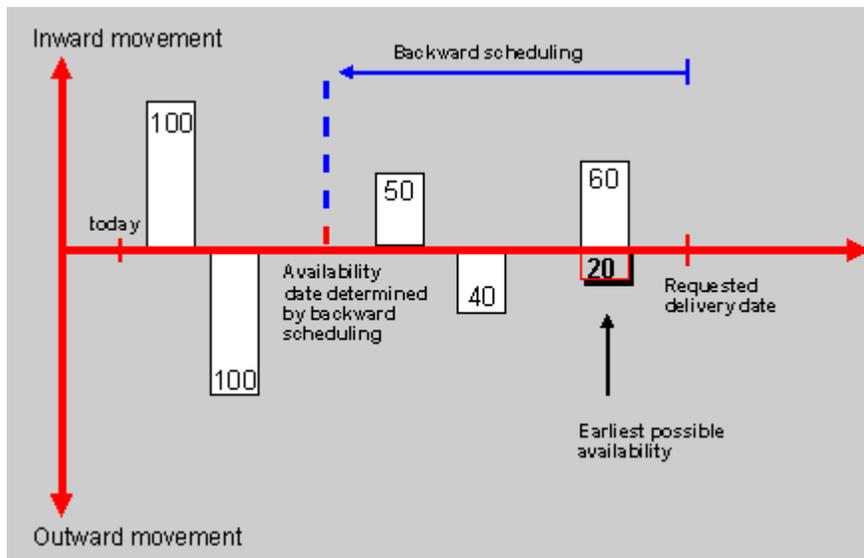
Control Parameters

- **Control Parameters of Availability Check in Sales**

  Following SD specific control parameters need to be maintained.

  - **Checking Group**

    Checking group forms one of factors for specifying scope of availability check. It is used for grouping of materials for individual or collective requirements. It is assigned in material master Sales/Plant view.

  - **Checking Rule**

    Checking rule forms the other factor in specifying scope and is assigned to each transaction in sales and distribution. The checking rules are predefined in system.

  - **Schedule Line Category**

    Schedule line category had additional check to turn on/off availability check.

- Following elements can be included in scope of availability check
  - Stock
    - Safety Stock
    - Stock in Transfer
    - Blocked Stock
    - Quality Inspection

  - Inward/Outward movement of goods
    - Purchase requisitions & orders
    - Planned & Production orders
    - Reservations
    - Sales & Delivery requirements
    - Dependent requirement

- The process flow in which system checks for Availability is as follows

Requirement Type exists to find Requirement Class

↓

Requirement Class has Availability Check **ON**

↓

Schedule Line Category has Availability Check **ON**

↓

From Material Master of Item

CHECKING GROUP

From Transaction (like SD Order)

CHECKING RULE

↓

AVAILABILITY CHECK
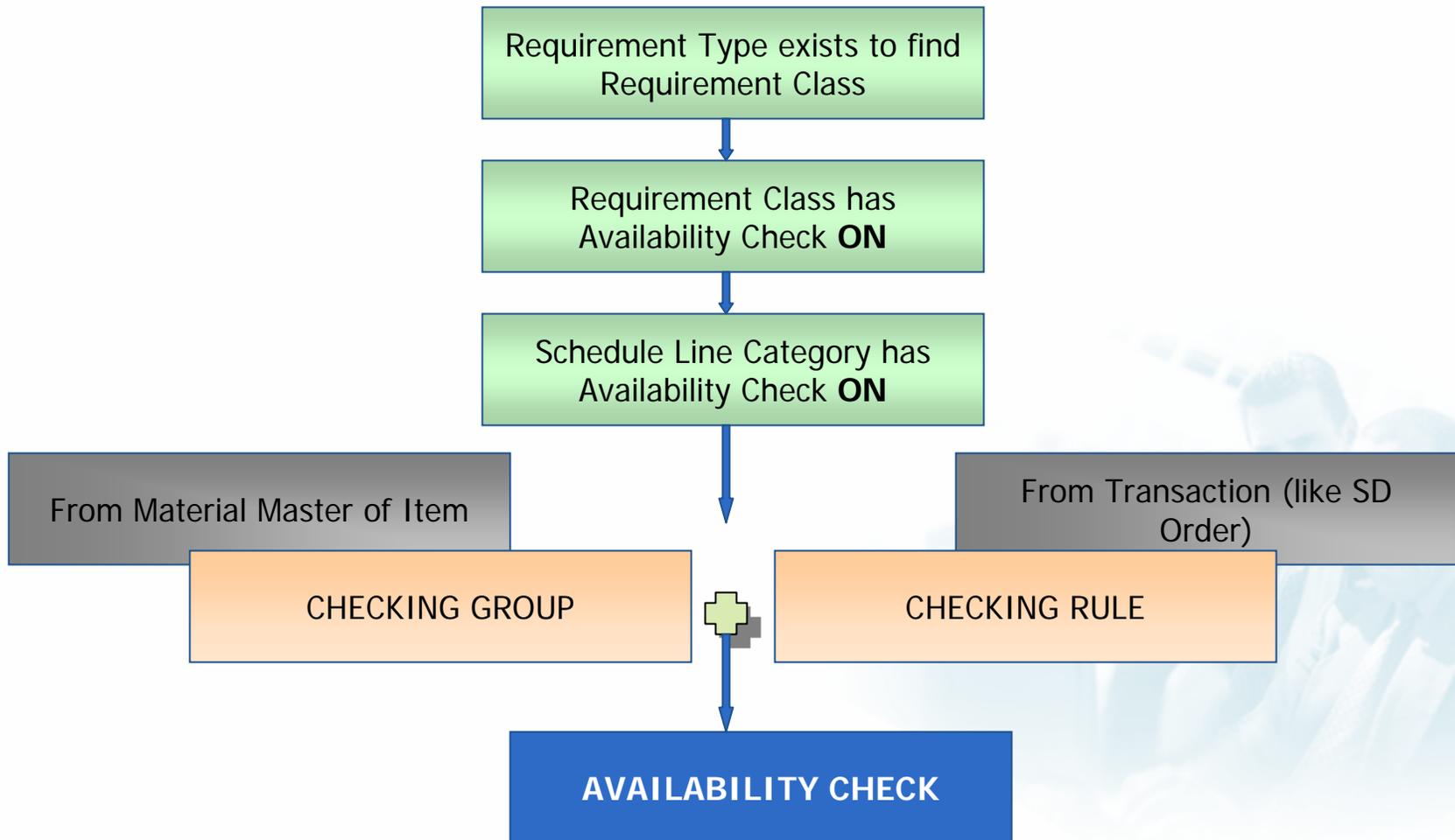
- Requirements generated in Sales & Distribution need to be transferred to material requirements planning to ensure the quantities ordered are available to be delivered on time to Customer. This is called transfer of requirements (TOR).

- TOR are of two types:

  - TOR with individual requirements

    A line for each individual requirement is created in availability overview for each sales document and schedule line. This helps in tracking the initiating document. System uses this for special stock scenarios like Make-to-order stock, project stock etc. It can also be used for standard orders if sales order volume is not large and requirements need to be tracked at item level.

- TOR with collective requirements.

  Collective requirements combine various requirements based on following criteria:

  - Plant
  - Storage Location
  - Batch
  - Date
  - Transaction &
  - Requirement class

  These requirements can either be created daily or weekly. The documents initiating collective requirements cannot be directly identified but can be traced via list of orders for material.
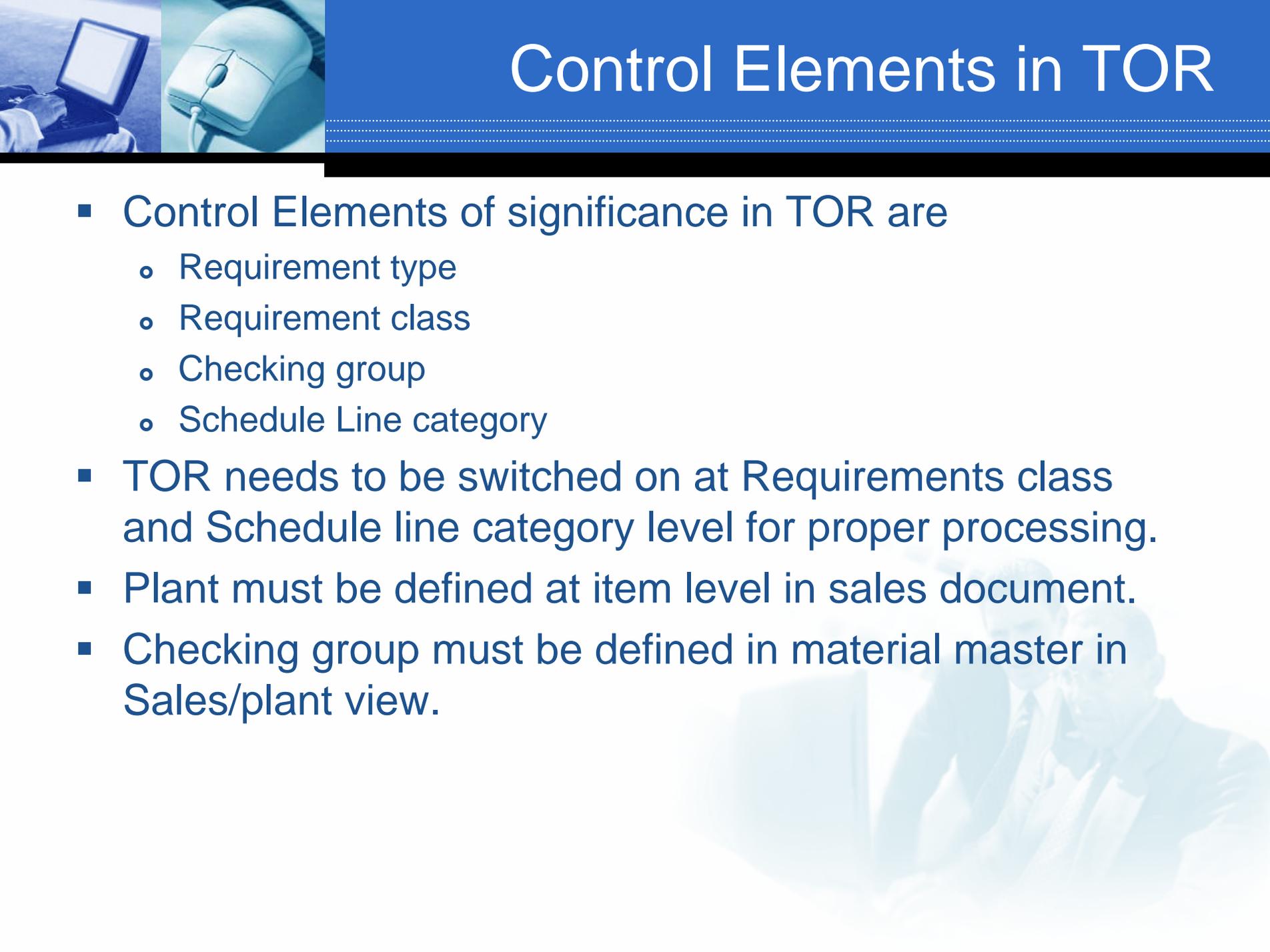
- Control Elements of significance in TOR are
    - Requirement type
    - Requirement class
    - Checking group
    - Schedule Line category

- TOR needs to be switched on at Requirements class and Schedule line category level for proper processing.

- Plant must be defined at item level in sales document.

- Checking group must be defined in material master in Sales/plant view.