Capable to promise (CTP):

a) First of all, the employee has to connect the SAP APO with an R/3 system. In order to enable data transfer between the two systems, he must also set out the settings for the APO Core Interface. Moreover, implementing CTP settings in both systems needs to be done.

b) Next, the sales order is recorded by the employee in the R/3 system and the desired date and quantity are specified.

c) An ATP check will be run in SAP APO for the requirements. The system will check if the desired quantity can be confirmed for the desired date or not.

d) If the required quantity is unavailable, SAP APO calls the production planning team.

e) In the amount of the missing quantity SAP APO creates an access element for the product in the order item. The SAP APO carries out the production planning, which includes scheduling the order and determining the necessary components. The planning is carried out using the bucket-oriented capacity check. This means the planning is conducted while considering the available capacity. The SAP APO then determines the availability date of the products. Also if the consideration of the important components has been set, the planning will take place in several stages, which means the availability of the components is also taken into consideration.

f) Temporary requirements are created at the same time to protect the plan order from other customer orders.

g) Thereafter, the result for the confirmed quantity and date will be shown in the delivery proposal. The employee accepts the confirmation and returns back to the R/3 to enter the sales order. Consequently, the employee saves the sales order.

h) The order will be posted in the R/3 System and in the SAP APO. The temporary planned orders will be converted into permanent orders in the SAP APO. The temporary quantities of assignment are then deleted and the ATP time series are updated.

i) If the employee has adjusted settings in the system before, the posting of the sales order will lead to an automatic send from SAP APO to the R/3 system.

j) The plan order is transferred to SAP APO and the number is updated there after it has been posted in the R/S system. The sales order is then checked and saved, and the process ends.

Row 1

Sales order is to be created → **Conduct intial settings**
(R) Employee

→ (AND gateway +) →

- **Connect SAP APO to a R/3-system**
  (R) Employee
- **Make the settings for APO Core interface**
  (R) Employee
- **Implement CTP settings in both systems**
  (R) Employee

→ (AND gateway +) → **Setting completed**

R/3-system
→ **Record sales order in the system**
(R) Employee

Row 2

(AND gateway +) →

- R/3-system
  Specify the required quantity
- R/3-system
  Specify the desired date

→ (AND gateway +) → **Customer order recorded in system**

SAP APO
→ **Carry out ATP check for demand** △

→ (XOR gateway ✕) →

- **The quantity can be confirmed by the requirement date.**
- **The quantity can not be confirmed by the requirement date.**

Row 3

SAP APO
Call up production planning
→
SAP APO
Create an access element
→
Bucket-oriented capacity check
SAP APO
Carry out the production planning

→ (AND gateway +) →

- **The order is scheduled**
- **The necessary components are determined**

→ (AND gateway +) →

SAP APO
Determine the availability date of the product.

```
                          ┌──────────────┐
                   Yes ───│      ○       │
                          │ The          │
                          │ availability │
                          │ of the       │
                          │ components   │
         ◇                │ is also      │
                          │ taken into   │
The consideration         │ account      │
of important              └──────────────┘
components is                    ◇
set?
                                        SAP APO          ▤
                   ┌──────────────┐   ┌──────────────────┐
                   │      ○       │   │ Create temporary │        ○
                   │ The          │   │ requirements for │    Temporary
            No ────│ availability │   │ the product      │    requirements
                   │ of the       │   └──────────────────┘    created
                   │ components   │
                   │ is not taken │
                   │ into account │
                   └──────────────┘
```

Row 1 (process flow):

- Decision: The consideration of important components is set?
  - Yes → The availability of the components is also taken into account
  - No → The availability of the components is not taken into account
- SAP APO: Create temporary requirements for the product
- Temporary requirements created
- (gateway X)
- SAP APO: Show the result in the delivery proposal
- Results showed

Row 2 (process flow):

- SAP APO: Accept the confirmation — R Employee
- R/3-system: Return to sales order entry in R/3 System — R Employee
- R/3-system: Save sales order — R Employee
- R/3-system: Post sales order is posted in R/3 system
- SAP APO: Post sales order is posted in SAP APO system
- The sales order is posted
- SAP APO: Convert temporary planned orders into permanent orders

Row 3 (process flow):

- (gateway +)
  - The temporary quantities of assignments are deleted
  - ATP time series are updated
- (gateway +)
- Adjust settings — R Employee
- Sent from SAP APO to the R/3 System
- R/3-system: Post plan order
- Plan order number is transferred to SAP APO and updated there