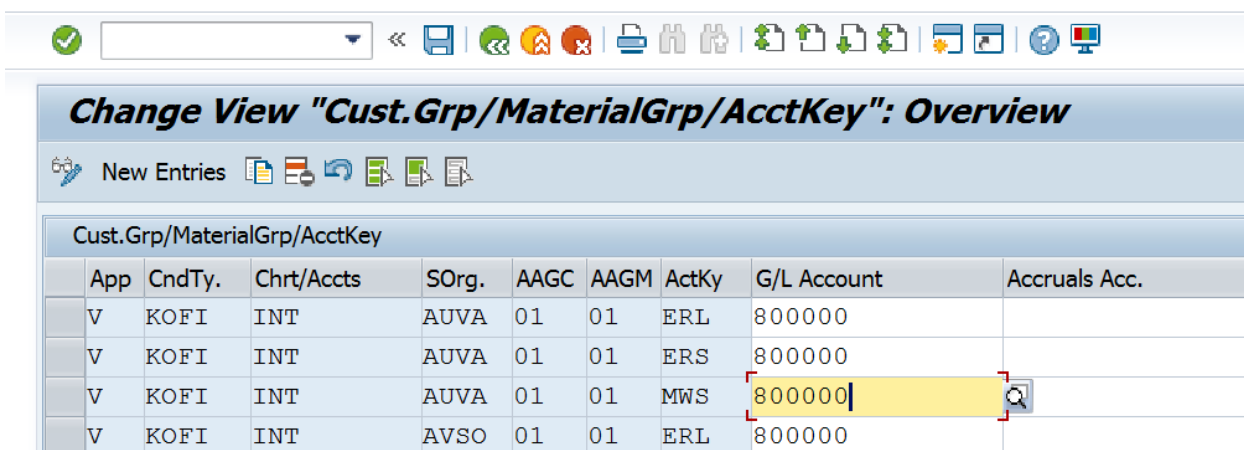


## Key Determinations In SAP SD

**This Document covers key determinations in SAP SD, explaining their components, T-codes, common errors, and causes.**

1. **Revenue Account Determination** = Application +Condition Type+ Chart of Accounts + Sales Organization +Customer Account Assignment Group (In customer master Billing Tab) + Material Account Assignment Group (In material master sales org 2 view) + Account Key

**T-code: VKOA**



App	CndTy.	Chrt/Accts	SOrg.	AAGC	AAGM	ActKy	G/L Account	Accruals Acc.
V	KOFI	INT	AUVA	01	01	ERL	800000	
V	KOFI	INT	AUVA	01	01	ERS	800000	
V	KOFI	INT	AUVA	01	01	MWS	800000	
V	KOFI	INT	AVSO	01	01	ERL	800000	

**Error: Revenue account posting fails in billing**

**Cause:**

- ❖ Condition type not assigned to correct account key in V/08.
- ❖ Maintain missing GL Account for relevant key in VKOA.

2. **Pricing Determination** = Sales area+ Document pricing procedure in (VOV8) + Customer pricing procedure in (Customer Master sales Tab) + Condition type

**T-code: OVKK**



Business Partner	4000072	HOMIE Manufacturers (Customer) / Dekalb IL 60115	
Change in BP role	FLCU01 Customer (Maintained)		
Distr. Channel	AU	Show Room Sales	Switch Area
Division	A4	Sedan's	

[Orders](#)
[Shipping](#)
[Billing](#)
[Partner Functions](#)
[Additional Data](#)
[Status](#)
[Customer: Texts](#)
[Documents](#)
[Transport Data](#)

**Product Attributes**

Pricing/Statistics

Price Group		
Cust.Pric.Procedure	01	Procedure 01
Price List		
Customer Stats.Group		

### Change View "Maintain Sales Order Types": Details

[New Entries](#)
[Print](#)
[Back](#)
[Forward](#)
[Refresh](#)

Sales Document Type	AM	Standard Order OTC	
SD Document Category	C		Sales Document Block
Indicator			

**Number systems**

No. Range Int. Asst	01	Item No. Increment	10
No. Range Ext. Asst	02	Subitem Increment	10

**General control**

Reference mandatory		Material entry type	
Check division	2	<input checked="" type="checkbox"/> Item division	
Probability	100	<input checked="" type="checkbox"/> Read info record	
Check credit limit	D	Check Customer Ref	
Credit group	01	<input type="checkbox"/> Enter PO number	
Output application	V1	Commitment date	
		<input type="checkbox"/> Disp. Preceding Docs	

**Transaction flow**

Screen sequence grp.	AU	Sales Order	Display Range	UALL
Incompl. Proced.	11	Standard Order	FCode for overv.scr.	UER1
Transaction group	0	Sales Order	Quotation Messages	B
Doc. Pricing Proc.	A		Outline Agrmt Mess.	B
Status profile			Message: Mast.contr.	

Change View "Det. of Pricing Procedures in Sales Docs.": Overview

New Entries

Sales Organiz...	Distrib...	Division	Doc...	Cus...	Pricing Proce...	Pricing Procedure	Con...	Condition Type for Fast Entry
AUVA	AU	A4	A	01	RVAA07	OTC Procedure	AR00	Base Price

### Error: Pricing procedure not determined in Sales Order

#### Cause:

- ❖ Missing or incorrect assignment in OVKK (Pricing Procedure Determination).
- ❖ Missing access sequence in pricing condition type (V/06).

3. **Tax Determination** = Destination country of the Ship to party + Departure country of the Shipping point+ Tax classification for customer master (Billing Tab in CM) + Tax Classification for Material Master (Material Master-Sales org 1 view)

#### T-code: OVK1

Change View "Taxes: Tax Categories by Country/Region": Overview

New Entries

Tax c/r	Country/Region	Seq.	Tax Cndn	Name
US	USA	1	AWST	Output Tax
VE	Venezuela	1	MWST	Output Tax

**Change Person: 4000105, role Customer**

Person Organization Group General Data Sales and Distribution ETM Data Relationships

Business Partner: 4000105 Genz Automobile Auto Hub / memphis TN 38112  
 Change in BP role: FLCU01 Customer (Maintained)

**Sales Area**

Sales Org.: AUVA Sales Org AUDI USA  
 Distr. Channel: AU Show Room Sales  
 Division: A4 Sedan's

Orders Shipping Billing Partner Functions Additional Data Status Customer: Texts Documents Transport Data

**Accounting**

Acct Assmt Grp Cust.: 01 Domestic Revenues

**Output Tax**

Dep. ...	Country/Region	Tax Cndn T...	Name	Tax C...	Description
US	USA	AWST	Output Tax	1	Liabile for Taxes

**Change Material 3747 (Finished Product)**

Additional Data Org. Levels Check Screen Data

Basic data 2 Sales: sales org. 1 Sales: sales org. 2 Sales: General/Plant Ext. SPP Basic Data

Material: 3747  
 Descr.: AUDI E-TRON  
 Sales Org.: AUVA Sales Org AUDI USA  
 Distr. Chl: AU Show Room Sales

**General data**

Base Unit of Measure: EA Each Division: A4 Sedan's  
 Sales Unit: Sales unit not var.  
 Unit of Measure Grp:  
 X-distr.chain status: Valid from:  
 DChain-spec. status: Valid from:  
 Delivering Plant: USTX AUDI PLANT  
 Material Group: 01 Material group 01  
 Cash Discount: ☒ Conditions

**Tax data**

D...	Departure Ctry/Reg.	Tax...	Tax Condition Type	T. Tax classification
US	USA	AWST	Output Tax	0 tax Exempt

**Error:** Tax is not calculated, or incorrect tax amount appears in the invoice.

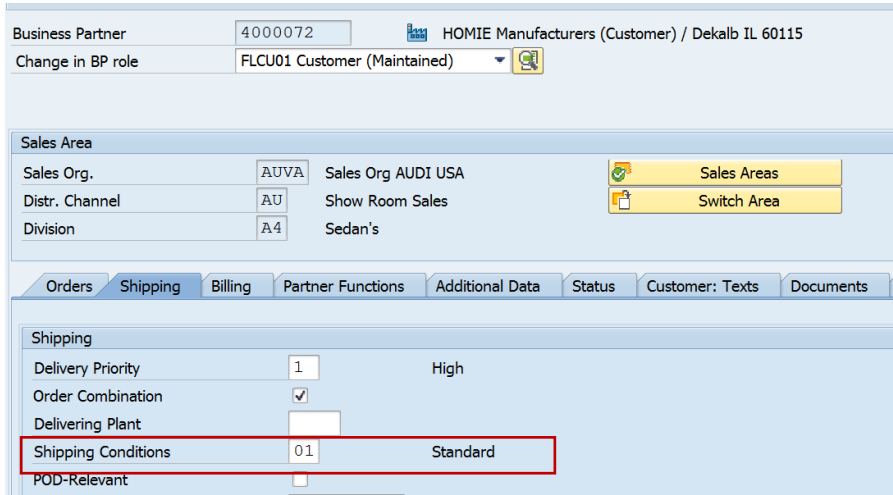
**Cause:**

- ❖ Tax classification missing in Customer Master (XD01)
- ❖ Tax classification missing in Material Master (MM01)



4. **Route Determination** = Shipping conditions (in customer master shipping tab) + Transport Group (sales general/Plant view in MM) + Destination Zone of the Ship to party + Departure Zone of the Shipping point.

### T-code: OVL4



Business Partner: 4000072 HOMIE Manufacturers (Customer) / Dekalb IL 60115  
 Change in BP role: FLCU01 Customer (Maintained)

**Sales Area**

Sales Org.	AUVA	Sales Org AUDI USA	Sales Areas
Distr. Channel	AU	Show Room Sales	Switch Area
Division	A4	Sedan's	

Orders Shipping Billing Partner Functions Additional Data Status Customer: Texts Documents

**Shipping**

Delivery Priority	1	High
Order Combination	<input checked="" type="checkbox"/>	
Delivering Plant		
Shipping Conditions	01	Standard
POD-Relevant	<input type="checkbox"/>	

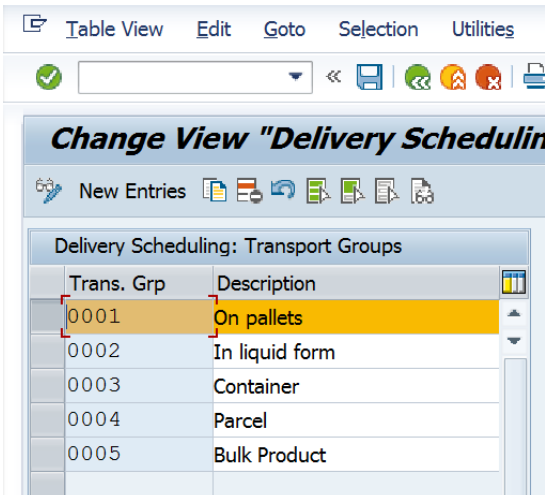


Table View Edit Goto Selection Utilities

Change View "Delivery Scheduling"

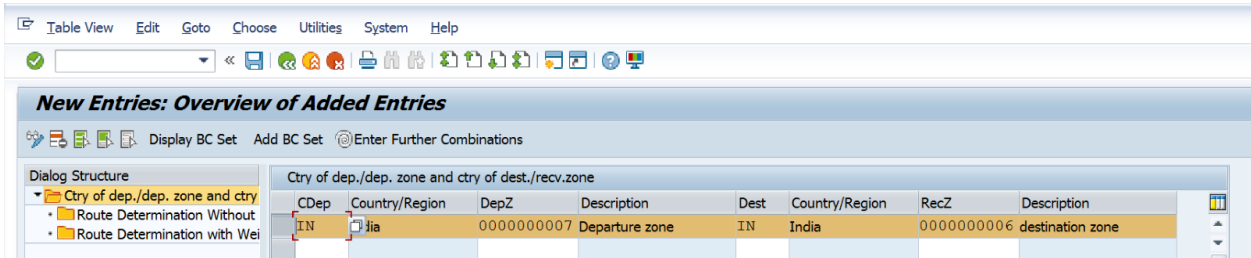
New Entries

Delivery Scheduling: Transport Groups

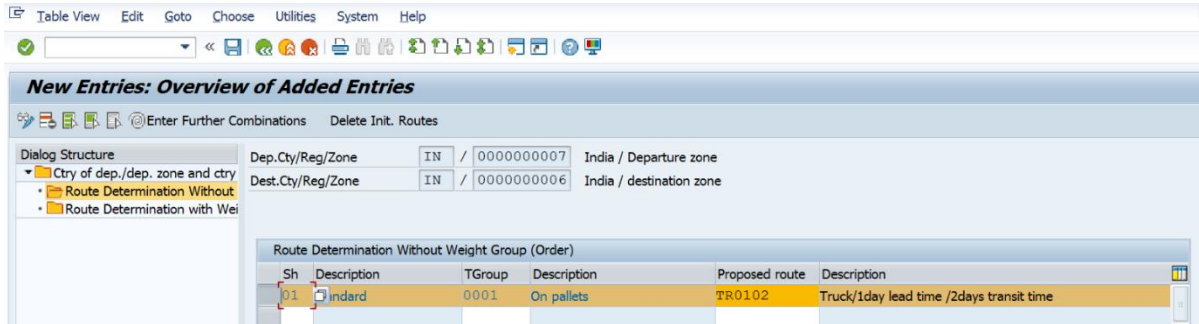
Trans. Grp	Description
0001	On pallets
0002	In liquid form
0003	Container
0004	Parcel
0005	Bulk Product



## Maintain Route Determination



CDep	Country/Region	DepZ	Description	Dest	Country/Region	RecZ	Description
IN	India	0000000007	Departure zone	IN	India	0000000006	destination zone



Dep.Cty/Reg/Zone	IN	/	0000000007	India / Departure zone
Dest.Cty/Reg/Zone	IN	/	0000000006	India / destination zone

Sh	Description	TGroup	Description	Proposed route	Description
01	Standard	0001	On pallets	TR0102	Truck/1day lead time /2days transit time

**Error:** Incorrect or missing route in the sales order.

**Cause:**

- ❖ Transportation zone not maintained in Customer Master
- ❖ Route determination is not configured in OVL4.

5. **Plant Determination**= While System pulls Plant into the order, firstly it checks at CMIR level. Maintain Plant in T-code **VD51**

### Create Customer Material Info Record : Item Screen

▲ ▼ Classify

Material	3759		
	AUDI A4 MODEL		
Sales Organization	AUVA	Sales Org	AUDI USA
Distribution Channel	AU	Show Room Sales	
Customer	100016	HOMIE Manufacturers (Customer)	

Customer material

Customer Material	AUDI MATERIAL A4		
Customer Description			
Search term			

Shipping

Plant	USTX	
Delivery Priority	1	High
Minimum Delivery Qty		EA

If the plant is maintained there, the plant will be determined into sales document, otherwise system checks for plant at customer Master level.

### Change Organization: 4000072, role Customer

Person 
 Organization 
 Group 
 General Data 
 Sales and Distribution 
 ETM Data 
 Relationships

Business Partner	4000072		HOMIE Manufacturers (Customer) / Dekalb IL 60115
Change in BP role	FLCU01 Customer (Maintained)		

Sales Area

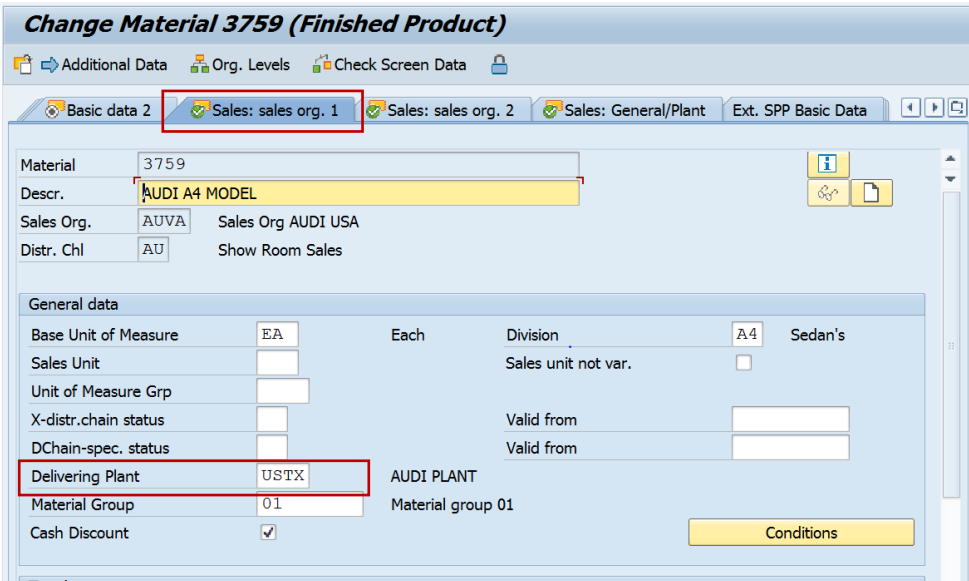
Sales Org.	AUVA	Sales Org	AUDI USA	Sales Areas
Distr. Channel	AU	Show Room Sales		Switch Area
Division	A4	Sedan's		

Orders Shipping Billing Partner Functions Additional Data Status Customer: Texts Documents Transport Data

Shipping

Delivery Priority	1	High
Order Combination	<input checked="" type="checkbox"/>	
Delivering Plant	USTX	
Shipping Conditions	01	Standard
POD-Relevant	<input type="checkbox"/>	

If the plant is maintained there, plant will be determined into sales document Automatically, otherwise system checks for plant at material master level.



If Plant is not available at material master level also, we must maintain plant manually

### T-code: OVL2

Determines from which plant the goods will be delivered.

**Error: The system fails to determine the plant in a sales order.**

### Cause:

- ❖ Material Master (MM02 - Sales Org 1 View) lacks plant assignment.
- ❖ Customer Material Info Record (VD51) missing plant assignment.
- ❖ Customer Master (XD03 - Sales Area Data) does not have a default plant

6. **Shipping Point Determination**= Plant+ Shipping Conditions (in Customer master shipping Tab) +Loading Group (sales general/plant view in MM)

### T-code: OVL2



Additional Data Org. Levels Check Screen Data

Sales: sales org. 2 **Sales: General/Plant** Ext. SPP Basic Data Intl Trade: Export Sales text M

Material 3759  
 Descr. AUDI A4 MODEL  
 Plant USTX AUDI PLANT

**General data**

Base Unit of Measure	EA	Each	Replacement Part	<input type="checkbox"/>
Gross Weight	2,000	KG	Qual.f.FreeGoodsDis.	<input type="checkbox"/>
Net Weight	1,500		Material Freight Grp	
Availability check	02	Individ.requirements		
Appr.batch rec. req.	<input type="checkbox"/>			
Batch management	<input type="checkbox"/>			
Batch management(Plant)	<input type="checkbox"/>			

**Shipping data (times in days)**

Trans. Grp	0001	On pallets	LoadingGrp	0001	Crane
Setup time		Proc. time		Base qty	EA

### Change Organization: 4000072, role Customer

Person Organization Group General Data Sales and Distribution ETM Data Relationships

Business Partner 4000072 HOMIE Manufacturers (Customer) / Dekalb IL 60115  
 Change in BP role FLCU01 Customer (Maintained)

**Sales Area**

Sales Org.	AUVA	Sales Org AUDI USA	<input checked="" type="checkbox"/> Sales Areas
Distr. Channel	AU	Show Room Sales	<input type="checkbox"/> Switch Area
Division	A4	Sedan's	

Orders Shipping Billing Partner Functions Additional Data Status Customer: Texts Documents Transport Data

**Shipping**

Delivery Priority	1	High
Order Combination	<input checked="" type="checkbox"/>	
Delivering Plant	USTX	
Shipping Conditions	01	Standard
POD-Relevant	<input type="checkbox"/>	

<b>Change View "Shipping Point Determination": Overview</b>				
New Entries				
Shipping Point Determination				
Shipping Condition	Loading Group	Plant	Proposed Shipping Point	Manual Shipping Point
01	0001	USTX	USMI	
01	0001	USVP	RTR1	RTR1
01	0001	UTBP	RTR1	RTR1
01	0001	UTCP	RTR1	RTR1

**Error: Incorrect or missing shipping point in the delivery.**

**Cause:**

- ❖ Shipping conditions are missing in Customer Master (XD03 - Sales Area Data).
- ❖ Loading Group missing in Material Master (MM02 - Sales Org 1 View).
- ❖ Plant-Shipping Point assignment not maintained in OVL2.

7. **Storage Location Determination**= Storage Conditions (In MM Plant Data/ Storage 1 View) + Plant + Shipping Conditions (Shipping Tab in Customer Master)

**T-code: OVL3**

Storage location gets determined at delivery level and Maintain Determine storage location should be Checked in Delivery Item Category (OVL3)

Storage location gets Determined based on 3 rules

- 1) In OVLK, if Storage location Rule assigned to Delivery Type is MALA, System Considers

## Storage Conditions + Shipping Point + Plant

**Change Material 3759 (Finished Product)**

Additional Data Org. Levels Check Screen Data

Extended SPP **Plant data / stor. 1** Plant data / stor. 2 Accounting 1 Accounting 2 Costin...

Material 3759  
 Descr. **AUDI A4 MODEL**  
 Plant USTX AUDI PLANT  
 Location USMI Storage Loc MI

**General data**

Base Unit of Measure EA Each Unit of Issue  
 Storage Bin Picking area  
 Temp. conditions 01 **Storage conditions 01**

**Change Organization: 4000072, role Customer**

Person Organization Group General Data Sales and Distribution ETM Data Relationships

Business Partner 4000072 HOMIE Manufacturers (Customer) / Dekalb IL 60115  
 Change in BP role FLCU01 Customer (Maintained)

**Sales Area**

Sales Org. AUVA Sales Org AUDI USA Sales Areas  
 Distr. Channel AU Show Room Sales Switch Area  
 Division A4 Sedan's

Orders Shipping Billing Partner Functions Additional Data Status Customer: Texts Documents Transport Data

**Shipping**









Delivery Priority 1 High  
 Order Combination ☒  
**Delivering Plant USTX**  
 Shipping Conditions 01 Standard  
 POD-Relevant ☐

**Change View "Shipping Points": Overview**

New Entries

Shipping Point	Description
USMI	<b>Shipping point USA</b>
USPP	USHA Pune 1 Shipping point
USSH	user shipping point



<b>Change View "Picking Location Determination": Overview</b>					
 New Entries     					
Picking Location Determination					
	ShPt	Plnt	SC	Stor	
	USMI	USTX	01	USMI	
	USMI	USVP		0001	
	USMI	USVP	01	0001	
	USMI	UTBP		0001	

- 2) In OVLK, if Storage location Rule assigned to Delivery Type is RETA, System Considers  
Storage Conditions + situation + Plant
- 3) In OVLK, if Storage location Rule assigned to Delivery Type is MARE, System Considers  
Firstly, the System considers MALA to determine storage location, if it is not possible it will choose RETA as Back up Procedure  
Determine the correct Storage Location for picking goods.

**Error: Storage location is not automatically picked in the delivery.**

**Cause:**

- ❖ Storage location not maintained in Material Master
- ❖ Storage location determination missing in OVL3 (Plant & Shipping Point assignment)

8. **Delivery Item Category Determination**= Delivery Type + Item Category Group + Item Usage + Higher level Item Category

**T-code: 0814**

<b>Change View "Delivery item category determination": Overview</b>															
New Entries															
Delivery item category determination															
DivT	ItCG	Usge	ItmC	ItmC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC	MIItC
LO	NORM			DLN											
LO	NORM	CHSP		DLN											
LO	NORM	CHSP	KLN	KLN											
LO	NORM	CHSP	TANN	TANN											

It is used while creating a Delivery Document without Sales order. By Default, there is Standard order type (DL), item category (DLN), schedule line (CP) and Delivery type (LO) available in the system by SAP

9. **Item Category Determination**= Sales Document Type + Item Category Group + Item Usage+ Higher Level Item Category

**T-code: VOV4**

<b>Change View "Assign Item Categories": Overview</b>								
New Entries								
SaTy	ItCGr	Usge	HLevItCa	DfItC	MIItCa	MIItCa	MIItCa	
AM	NORM			AMN	CBXN	CB2	CBLN	
AM	NORM		AMN	TAN				
AM	NORM		CBPC	CBAO				
AM	NORM		CBTC	TAE				
AM	NORM		CBTD	CBTE				

System Considers Item usage and higher-level Item category in scenarios like

- 1) Cross-selling

- 2) Material Determination
- 3) Free Goods Determination
- 4) BOM

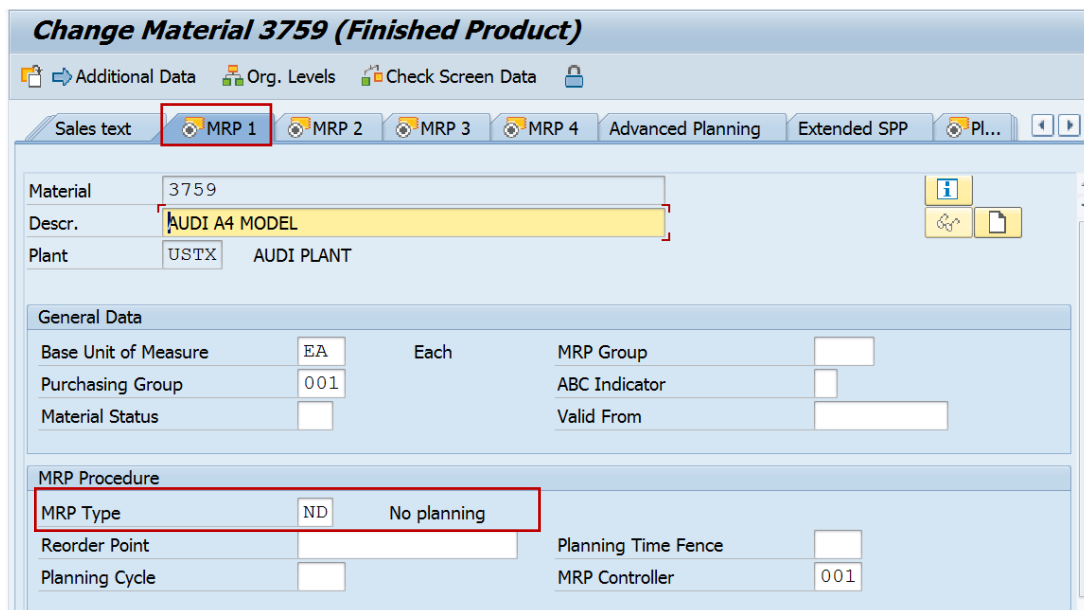
The reason being that all the above scenarios have subline items determined into the sales Document and to determine Item category to the subline items system considers item usage and higher-level item category

**Error: missing item category in the sales order.**

**Cause:**

- ❖ Incorrect assignment in VOV4 (Item Category Determination).
  - ❖ Item category group missing in Material Master (MM02 – Sales Org 2 View).
10. **Scheduled Line Category Determination**= Item category + MRP Type of the material

**T-code: VOV5**



**Change Material 3759 (Finished Product)**

Additional Data | Org. Levels | Check Screen Data

Sales text | **MRP 1** | MRP 2 | MRP 3 | MRP 4 | Advanced Planning | Extended SPP | Pl...

Material: 3759  
 Descr.: AUDI A4 MODEL  
 Plant: USTX AUDI PLANT








**General Data**

Base Unit of Measure	EA	Each	MRP Group	
Purchasing Group	001		ABC Indicator	
Material Status			Valid From	

**MRP Procedure**

MRP Type	ND	No planning	Planning Time Fence	
Reorder Point			MRP Controller	001
Planning Cycle				



<b>Change View "Assign Schedule Line Categories": Overview</b>						
  New Entries     						
ItCa	Typ	SchLC	MSLCa	MSLCa	MSLCa	
AMN	ND	AN				
AMN	P1	CP	CN			
AMN	P2	CP	CN			
AMN	PD	AP				

**Error:** Schedule line category missing or incorrect confirmed quantity in sales order.

**Cause:**

- ❖ Schedule Line category not mapped in VOV5.
- ❖ MRP type missing in Material Master (MM02 - MRP 1 View).

11. **Delivery Document Determination** = it is achieved through  
 Maintaining Delivery type in Corresponding Sales Document Type in VOV8

When a sales order is created, the system checks the assigned delivery type and automatically determines the relevant delivery document in VL01N







<b>Change View "Maintain Sales Order Types": Details</b>			
New Entries			
Alt.sales doc. type1	<input type="text"/>	ProdAttr.messages	<input type="text" value="A"/>
Alt.sales doc. type2	<input type="text"/>	<input checked="" type="checkbox"/> Incomplet.messages	
Variant	<input type="text"/>		
<b>Scheduling Agreement</b>			
Corr.delivery type	<input type="text"/>	Delivery block	<input type="text"/>
Usage	<input type="text"/>		
MRP for DlvSchType	<input type="text"/>		
<b>Shipping</b>			
Delivery type	<input type="text" value="AF"/> Outbound Delivery	Immediate delivery	<input type="text"/>
Delivery block	<input type="text"/>		
Shipping conditions	<input type="text" value="01"/> Standard	Ship.Con.Ship-to-p.	<input type="text"/>
ShipCostInfoProfile	<input type="text"/>		
<b>Billing</b>			
Dlv-rel.billing type	<input type="text" value="A2"/> Invoice	CndType line items	<input type="text" value="PC02"/>
Order-rel.bill.type	<input type="text" value="A2"/> Invoice	Billing plan type	<input type="text" value="90"/>
Intercomp.bill.type	<input type="text" value="IV"/> Intercompany Billing	Paymt guarant. proc.	<input type="text" value="01"/>
Billing block	<input type="text"/>	Paymt card plan type	<input type="text" value="93"/>
		Checking group	<input type="text" value="01"/>

12. **Billing Document Determination** = it is achieved through Maintaining Billing type in Corresponding Sales Document Type in VOV8

When a sales order is created, the system checks the assigned Billing type and automatically determines the relevant Billing document in VF01



**Change View "Maintain Sales Order Types": Details**

 New Entries
 





Alt.sales doc. type1	<input type="text"/>	ProdAttr.messages	<input type="text" value="A"/>
Alt.sales doc. type2	<input type="text"/>	<input checked="" type="checkbox"/> Incomplet.messages	
Variant	<input type="text"/>		

**Scheduling Agreement**

Corr.delivery type	<input type="text"/>	Delivery block	<input type="text"/>
Usage	<input type="text"/>		
MRP for DlvSchType	<input type="text"/>		

**Shipping**

Delivery type	<input type="text" value="AF"/> Outbound Delivery	Immediate delivery	<input type="text"/>
Delivery block	<input type="text"/>		
Shipping conditions	<input type="text" value="01"/> Standard	Ship.Con.Ship-to-p.	<input type="text"/>
ShipCostInfoProfile	<input type="text"/>		

**Billing**

Dlv-rel.billing type	<input type="text" value="A2"/> Invoice	CndType line items	<input type="text" value="PC02"/>
Order-rel.bill.type	<input type="text" value="A2"/> Invoice	Billing plan type	<input type="text" value="90"/>
Intercomp.bill.type	<input type="text" value="IV"/> Intercompany Billing	Paymt guarant. proc.	<input type="text" value="01"/>
Billing block	<input type="text"/>	Paymt card plan type	<input type="text" value="93"/>
		Checking group	<input type="text" value="01"/>

## Conclusion

Determinations in SAP SD automate business processes by ensuring accurate data flow across sales, delivery, and billing, reducing manual effort and errors. They enable seamless integration between sales, logistics, and finance, enhancing efficiency and compliance. Proper configuration ensures smooth transaction execution, improving accuracy and customer satisfaction.

