

Purchase Orders – Dates and its Calculations

Activity: To study various dates in Purchase order and how the dates are calculated.
When one of the date is changed changed before GR and also after GR ,
how it will reflect on other dates.

Data: NEQ 100
Plant – 9010
Material – 70047830
Vendor - 202666

In the Material Master ,

- a) Planned delivery time is maintained as 60 days
- b) GR Processing time - 0 days

The screenshot displays the SAP 'Display Material' interface for material 70047830. The title bar reads 'Display Material 70047830 (Finished products)'. Below the title bar, there are tabs for 'MRP 1', 'MRP 2' (selected), 'MRP 3', 'MRP 4', 'AFS MRP', and 'AFS - Foreign Trade'. The main data area shows the material number '70047830' and the description '5950 TORLEA GRAY/GRAPHITE MCTO521NHL'. The plant is '9010' and the dropship plant is 'USA'. The 'Procurement' section includes fields for 'Procurement type' (F), 'Batch entry' (checkbox), 'Special procurement' (checkbox), 'Quota arr. usage' (checkbox), 'Backflush' (checkbox), 'JIT delivery sched.' (checkbox), 'Co-product' (checkbox), and 'Bulk Material' (checkbox). The 'Scheduling' section includes fields for 'In-house production' (13 days), 'GR Processing Time' (0 days), 'SchedMargin key' (000), 'Planned Deliv. Time' (60 days), and 'Planning calendar' (checkbox).

Procurement	
Procurement type	F
Batch entry	<input type="checkbox"/>
Special procurement	<input type="checkbox"/>
Quota arr. usage	<input type="checkbox"/>
Backflush	<input type="checkbox"/>
JIT delivery sched.	<input type="checkbox"/>
Co-product	<input type="checkbox"/>
Bulk Material	<input type="checkbox"/>

Scheduling	
In-house production	13 days
GR Processing Time	0 days
SchedMargin key	000
Planned Deliv. Time	60 days
Planning calendar	<input type="checkbox"/>



In the Info record ,

The Planned delivery time - 46 days



Manufacturing Lead time - 14 days

Transportation Lead time - 32 days

Screen A

 Display Info Record: Overview AFS additional data			
			
Info Record	<input type="text" value="5300375532"/>	<input type="text"/>	
Vendor	<input type="text" value="202666"/>	UNITED CROWN INT'L MACAU COMM OFFSH	
Material	<input type="text" value="70047830"/>	5950 TORLEA GRAY/GRAPHITE MCTO521NHL	
Material Group	<input type="text" value="01"/>		
Purchasing Org.	<input type="text" value="0010"/>	Plant	<input type="text" value="9010"/>
Planned delivery times		Round. convert to PO	
Replenishment Lead Time for Raw Material	<input type="text" value="0"/>	<input checked="" type="radio"/> Round not	
Manufacturing Lead Time	<input type="text" value="14"/>	<input type="radio"/> Round up	
Packing Lead Time	<input type="text" value="0"/>	<input type="radio"/> Round down	
Transportation Lead Time	<input type="text" value="32"/>	<input type="radio"/> Round nearest	
Capacity Offset Lead Time	<input type="text" value="0"/>		
Source Allocation			
complexity factor	<input type="text" value="0"/>		
Total Order Minimum Qty Per Material	<input type="text" value="0"/>	<input type="text" value="EA"/>	

Screen B

 Display Info Record: Purch. Organization Data 1			
General Data Conditions Texts Variant Conditions 			
Info Record	<input type="text" value="5300375532"/>	<input type="text"/>	
Vendor	<input type="text" value="202666"/>	UNITED CROWN INT'L MACAU COMM OFFSH	
Material	<input type="text" value="70047830"/>	5950 TORLEA GRAY/GRAPHITE MCT0521NHL	
Material Group	<input type="text" value="01"/>		
Purchasing Org.	<input type="text" value="0010"/>	Plant	<input type="text" value="9010"/> <input type="text" value="Standard"/>
Control			
Pl. Deliv. Time	<input type="text" value="46"/> Days	Tol. Underdl.	<input type="text" value="0.0"/> % <input type="checkbox"/> No MText
Purch. Group	<input type="text" value="031"/>	Tol. Overdl.	<input type="text" value="99.0"/> % <input type="checkbox"/> Ackn. Rqd
Standard Qty	<input type="text" value="1,000"/> EA	<input type="checkbox"/> Unlimited	Conf. Ctrl <input type="text"/>
Minimum Qty	<input type="text" value="0"/> EA	<input checked="" type="checkbox"/> GR-Bsd IV	Tax Code <input type="text"/>
Rem. Shelf Life	<input type="text" value="0"/> D	<input type="checkbox"/> No ERS	
Shippg Instr.	<input type="text" value="26"/> Ocean	Procedure	<input type="text"/>
Max. Quantity	<input type="text" value="0"/> EA	Rndg Prof.	<input type="text"/> UoM Group <input type="text"/>

Scenario 1 - Before GR

Case1 : delivery date is not changed after PO creation

Refer to PO # 4500041660 created using Sales Order 658336 which is having delivery date 09/04/2013

We have a Sales Order 658336 for above material having the delivery date as 09/04/2013

Display NEC Standard Order: Overview line entry (item)

Order <Base values>

Sold-to pt: 1006331 SEATTLE SHIRT SEATTLE SD Doc.: 658336

Ship-to: 2018407 SEATTLE SHIRT COMPAN... SEATTLE ☐ Subst.off ☐ No dupl.

Name: Pur. Order: PO DATES TESTING Dlv.plant:

Net: 3,196.00 USD Department:

Quantity: 200 Targ qty: 0 Dldat: 09/04/2013 Q1f:

AFS Document Header AFS Item overview AFS Fast entry AFS Conditions AFS Ordering party AFS UPC/EAN AFS VAS

Item	Material	P...	Quantity	U.	RqDiv.date	Short Text	I...
000010	70047830	9010	200	EA	09/04/2013	5950 TORLEA GRAY/GRAPHITE MCTO521NHL	TAB

We created a Purchase Order through MRP

AFS Stock/Requirements List

Show overview tree Grid value / category <Base values>

Material: 70047830 950 TORLEA GRAY/GRAPHITE MCTO521NHL

Plant: 9010 MRP type: PD Material Type: FERT Unit: EA

E - Sales Order stock I - Additional information

Deliv. date	Rq...	Order number	Item	Sizes	Σ	Quantity	It...	Stock number	Stock ty...	Date	SLoc	EM	Customer name
09/04/2013	KE	0000658336	000010	634		100	10	4500041660	B	09/04/2013	PRVA		SEATTLE SHIRT
				638		100					PRVA		SEATTLE SHIRT
	KE					200							
09/04/2013						200							
						200							

The following dates in PO have arrived in the document as follow:

- Delivery Date** : 09/04/2013 - This one is arrived from the Sales Order delivery date
- Stat. Deli date** : 09/04/2013 - is same as Delivery date
- Receipt date** : -09/04/2013 - This one is calculated by adding GR Processing Time (working days) to delivery date (09/04/2013). Here the GR Processing time is NIL
- Ex-Factory date**: 08/03/2013 – is got by subtracting Transportation Lead time 32 days to Delivery date in the PO (09/04/2013)
- Capacity .Consumption Date** : 08/03/2013 – is same as Ex-factory Date

Refer below screen shots for PO details

Screen A – Delivery Schedule Tab

Standard PO 4500041660 Created by VENJAL

Document Overview On Print Preview Messages Personal Setting

NB Standard PO 4500041660 Vendor 202666 UNITED CROWN INT'L M... Doc. date 09/04/2012

Header

S	Itm	Material	Short Text	PO Quantity	O.	Deliv. Date	Net Price	Cu...	Per	O.	Matl Group	Plnt
	10	M 70047830	5950 TORLEA GRAY/GR...	200	EA	09/04/2013	2.90	USD	1	EA	Headwear	Dropship Plant

Item 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Material Data Quantities/Weights **Delivery Schedule** Delivery Invoice Conditions Account Assignment Texts Delivery Ad...

S	Delivery ...	Grid V...	A.	O...	U...	Reference ...	Ref...	Net price	Net value	Scheduled Qty	Time	Stat. De
	D 09/04/2013	638		99.0	0.0	658336	10	2.90	290.00	100	09/04/2	
	D 09/04/2013	634		99.0	0.0	658336	10	2.90	290.00	100	09/04/2	

Screen B- Material Data Tab

Item 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Material Data Quantities/Weights Delivery Schedule **Delivery** Invoice Conditions Account Assignment Te...

Material group 1 Revision Level

Vendor mat. no. EAN/UPC

Vendor sub-range Cross-plant CM 90022600 Configuration

Batch Vendor Batch ☒ InfoUpdate

Mat.grid no. 5950 Val.-from date 01/01/2000 ☒ AFS material

Cap. cons. date 08/03/2013 Ex Factory date 08/03/2013 ☐ Ex fact. aut.

Ex fact dat man

2) Case 2 : When delivery date is changed after PO creation,

Refer PO # 4500041661

This PO is created with reference to a Sales Order 658337 having the delivery date of 07/04/2013 to the Customer

On creation of PO , the dates are as follow:

- 1) Delivery date : 07/03/2013 - it is picked from Sales order
- 2) Receipt date : 07/03/2013 – it is calculated by adding GR Processing Time to Delivery Date
- 3) Capacity Consumption date : 06/01/2013 – is derived by subtracting the Transportation Lead Time 32 days (from Info Record)
- 4) Ex-Factory date : 06/01/2013 – is calculated same as Capacity Consumption Date

Screen-A – Material Data Tab

The screenshot shows the 'Material Data' tab in SAP. The item is '1 [10] 70047830 , 5950 TORLEA GRAY/GRA...'. The fields are organized as follows:

Material group	p1	Revision Level	
Vendor mat. no.		EAN/UPC	
Vendor sub-range		Cross-plant CM	90022600
Batch		Vendor Batch	
Mat.grid no.	5950	Val.-from date	01/01/2000
Cap. cons. date	06/01/2013	Ex Factory date	06/01/2013
		Ex fact dat man	

On the right side, there are checkboxes for 'Configuration', 'InfoUpdate', 'AFS material', and 'Ex fact. aut.'.

Screen B- Delivery Schedule Tab

The screenshot shows the 'Delivery Schedule' tab in SAP. The item is '1 [10] 70047830 , 5950 TORLEA GRAY/GRA...'. The table below shows the delivery schedule data:

S	Delivery ...	Grid V...	A.	O...	U...	Reference ...	Ref...	Net price	Net value	Scheduled Qty	Time	Stat. De
	07/03/2013	678		99.0	0.0	658337	10	2.90	290.00	100		07/03/2
	07/03/2013	700		99.0	0.0	658337	10	2.90	290.00	100		07/03/2
				0.0	0.0		0	0.00	0.00			
				0.0	0.0		0	0.00	0.00			

For the same PO , when the Delivery Date is changed from 07/03/2013 to 06/03/2013 30 days

Following dates are effected

- 1) Receipt date - 06/03/2013 - earlier is was 07/03/2013
- 2) Capacity Consumption date – 05/02/2013 – earlier it was 06/01/2013
- 3) Ex-Factory Date - 05/02/2013 – earlier it was 06/01/2013.

Screen A- Material Data Tab

Item 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Account Assignment Texts

Material group 01 Revision Level

Vendor mat. no. EAN/UPC

Vendor sub-range Cross-plant CM 90022600

Batch Vendor Batch

Mat.grid no. 5950 Val.-from date 01/01/2000

Cap. cons. date 05/02/2013 Ex Factory date 05/02/2013

Ex fact dat man

Configuration
☒ InfoUpdate
☒ AFS material
☐ Ex fact. aut.

Screen B- Delivery Schedule Tab

Standard PO 4500041661 Created by VENJAL

Document Overview On | Print Preview | Messages | Personal Setting

NB Standard PO 4500041661 Vendor 202666 UNITED CROWN INT'L M... Doc. date 09/04/2012

Header

S	Itm	Material	Short Text	PO Quantity	O.	Deliv. Date	Net Price	Cu...	Per	O.	Matl Group	Plnt
10	M	70047830	5950 TORLEA GRAY/GR...	200	EA	06/03/2013	2.90 USD		1	EA	Headwear	Dropship Plant

Add Planning Component Availability

Item 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Account Assignment Texts Delivery Ad...

S	Delivery ...	Grid V...	A.	O...	U...	Reference ...	Ref...	Net price	Net value	Scheduled Qty	Time	Stat. De
06/03/2013	678		99.0	0.0	658337	10	2.90	290.00		100	07/03/2	
06/03/2013	700		99.0	0.0	658337	10	2.90	290.00		100	07/03/2	
			0.0	0.0		0	0.00	0.00				
			0.0	0.0		0	0.00	0.00				

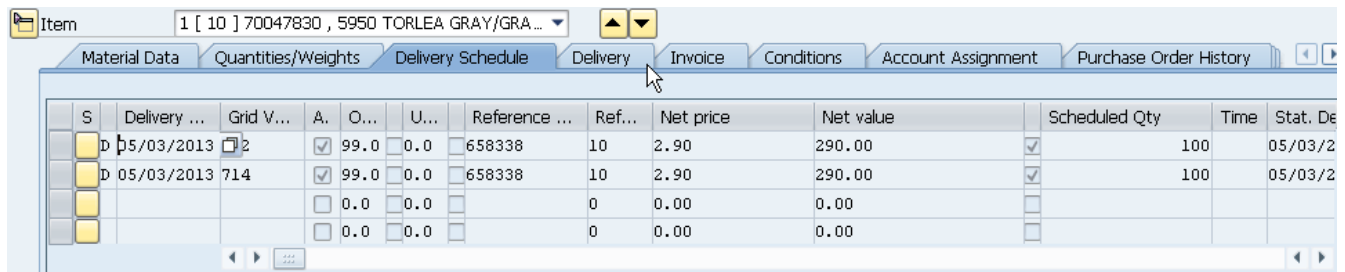
Scenario 2 : After GR

Here we have considered a PO for which GR receipts has be completed.
The PO # 4500041662 is created with reference to Sales Order # 658338 which is having the delivery date for customer as 09/04/2013
We changed the Delivery Date in the PO after the GR Receipts is done and found that the Ex-Factory Date also changes by same number of days by which Delivery date was modified.

Please refer to below PO # 4500041662 - Whose GR has been done

Initially for PO # 4500041655 after GR was done by none of the date is changed in the PO

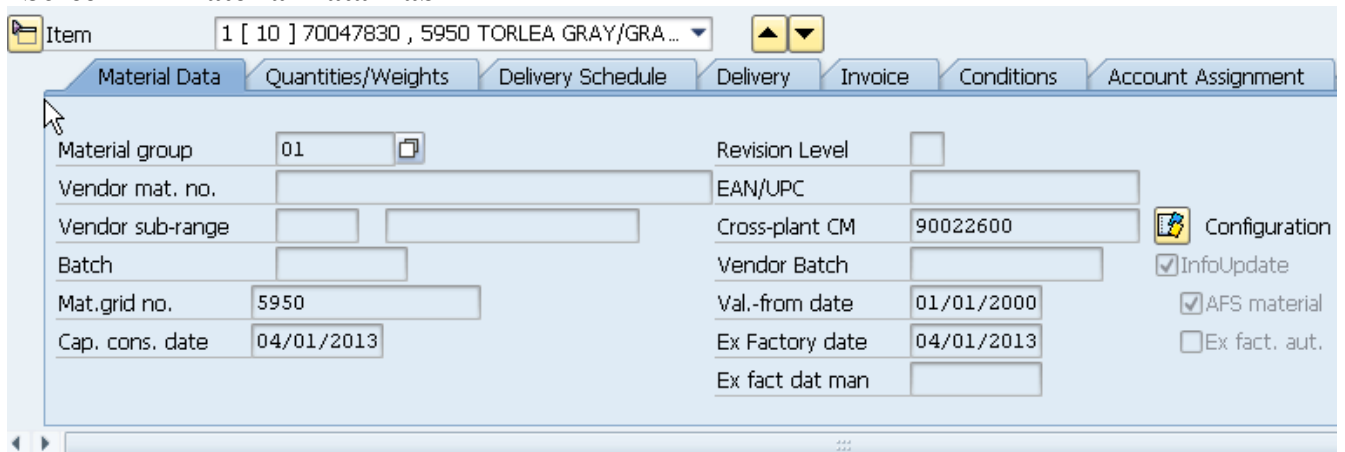
Screen A- Delivery Schedule Tab



The screenshot shows the SAP 'Delivery Schedule' tab for item 1 [10] 70047830, 5950 TORLEA GRAY/GRA... The table below represents the data visible in the 'Delivery' section of this tab.

S	Delivery ...	Grid V...	A.	O...	U...	Reference ...	Ref...	Net price	Net value	Scheduled Qty	Time	Stat. De
	05/03/2013	2	<input checked="" type="checkbox"/>	99.0	0.0	658338	10	2.90	290.00	<input checked="" type="checkbox"/>	100	05/03/2
	05/03/2013	714	<input checked="" type="checkbox"/>	99.0	0.0	658338	10	2.90	290.00	<input checked="" type="checkbox"/>	100	05/03/2
			<input type="checkbox"/>	0.0	0.0		0	0.00	0.00	<input type="checkbox"/>		
			<input type="checkbox"/>	0.0	0.0		0	0.00	0.00	<input type="checkbox"/>		

Screen B – Material Data Tab



The screenshot shows the SAP 'Material Data' tab for item 1 [10] 70047830, 5950 TORLEA GRAY/GRA... The form contains the following data:

Material group	01	Revision Level	
Vendor mat. no.		EAN/UPC	
Vendor sub-range		Cross-plant CM	90022600
Batch		Vendor Batch	
Mat.grid no.	5950	Val.-from date	01/01/2000
Cap. cons. date	04/01/2013	Ex Factory date	04/01/2013
		Ex fact dat man	

Additional options on the right side of the form:

- ☐ Configuration
- ☒ InfoUpdate
- ☒ AFS material
- ☐ Ex fact. aut.

Screen C: PO History Tab

Item: 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment | Purchase Order History

Sh...	MvT	Material Doc...	Item	Posting Date	Σ	Quantity	Delivery cost quantity	OUn	Σ	Amount in LC	L.cur	Σ	Qty in OPU
BzWE		5000127772	1	09/04/2012		0	100	EA		22.62	USD		0
BzWE		5000127772	2	09/04/2012		0	100	EA		22.62	USD		0
BzWE		5000127772	1	09/04/2012		0	100	EA		25.00	USD		0
BzWE		5000127772	2	09/04/2012		0	100	EA		25.00	USD		0
BzWE		5000127772	1	09/04/2012		0	100	EA		14.50	USD		0
BzWE		5000127772	2	09/04/2012		0	100	EA		14.50	USD		0
BzWE		5000127772	1	09/04/2012		0	100	EA		14.00	USD		0
BzWE		5000127772	2	09/04/2012		0	100	EA		14.00	USD		0
Tr./Ev. Delivery costs						0		EA		152.24	USD		0
WE	101	5000127772	1	09/04/2012		100	0	EA		290.00	USD		100
WE	101	5000127772	2	09/04/2012		100	0	EA		290.00	USD		100
Tr./Ev. Goods receipt						200		EA		580.00	USD		200

Now for the above PO we tried to change the Delivery Date in the PO for which GR was done and found that the Other dates also change with respect to Delivery Date by same number of days.

The Delivery Date was changed to 01/03/2013 from 05/03/2013

The other dates also changed :

The latest Requirement Date is now 01/03/2013

The Ex-Factory Date also changed from 04/01/2013 to 12/02/2012 ie by 30 days

The Capacity Consumption Date also changed in same manner.

Screen A – Delivery Schedule Tab

NB Standard PO | 4500041662 | Vendor | 202666 UNITED CROWN INT'L M... | Doc. date | 09/04/2012

Header | Item Overview

Item: 1 [10] 70047830 , 5950 TORLEA GRAY/GRA...

Material Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Account Assignment | Purchase Order History

S	Delivery ...	A.	O...	U...	Reference ...	Ref...	Net price	Net value	Scheduled Qty	Time	Stat. Del...
<input type="checkbox"/>	Delivery Date	99.0	0.0		658338	10	2.90	290.00	<input checked="" type="checkbox"/>	100	05/03/2013
<input type="checkbox"/>	01/03/2013	<input checked="" type="checkbox"/> 99.0	0.0		658338	10	2.90	290.00	<input checked="" type="checkbox"/>	100	05/03/2013
<input type="checkbox"/>		<input type="checkbox"/> 0.0	0.0			0	0.00	0.00	<input type="checkbox"/>		
<input type="checkbox"/>		<input type="checkbox"/> 0.0	0.0			0	0.00	0.00	<input type="checkbox"/>		

(Base values)

Screen B- Material Data Tab.

Item 1 [10] 70047830 , 5950 TORLEA GRAY/GRA... ▲ ▼

Material Data Quantities/Weights Delivery Schedule Delivery Invoice Conditions Account Assignment

Material group	p1	Revision Level	
Vendor mat. no.		EAN/UPC	
Vendor sub range		Cross-plant CM	90022600
Material Number Used by Vendor		Vendor Batch	
Batch		Val.-from date	01/01/2000
Mat.grid no.	5950	Ex Factory date	12/02/2012
Cap. cons. date	12/02/2012	Ex fact dat man	

Configuration
☒ InfoUpdate
☒ AFS material
☐ Ex fact. aut.

Conclusion:

- 1) The delivery date is calculated by considering the Planned Delivery Time (Info Record)
- 2) The Ex-Factory Date is calculated by subtracting the Transportation Lead time to the Delivery Date in the PO.
- 3) The Ex-Factory Date also changes by the same number of days if Delivery Date is changed.
- 4) The Receipt/Requirement Date which is in the Delivery Schedule Tab the sum of the Planned Delivery days (Info Record) to GR Processing Time (this one is picked from Material Master and it is the number of working days)