# Quick Reference to SAP Revenue Recognition

Rajesh Gusidi

# Contents

1.	Abstract	3
2.	Introduction	4
2.1	Revenue	4
2.2	Revenue Recognition	4
3.	Revenue Recognition	5
3.1	Revenue-Recognition Principles	5
3.2	Financial Statements - Revenue Recognition Methods and Implications	5
4.	Revenue Recognition US GAAP Vs IFRS	8
4.1	Similarities	8
4.2	Significant differences	8
5.	Business Benefits from Accurate Revenue Recognition	10
6.	Activation of Revenue Recognition in SAP	11
6.1	Introduction	11
6.2	Minimum System Requirements	12
6.3	Steps to Activate Revenue Recognition in SAP ECC 6.0	12
7.	Setting up Revenue Recognition in SAP	14
7.1	G/L Account Settings	14
7.2	Account Determination Settings	16
7.3	Item Category settings	17
8.	Transactions & Month End Posting in SAP	18
8.1	Transaction Posting	18
8.2	Month End Transactions	23
9.	Customer Enhancements & SAP Notes	27
9.1	Customer Enhancements	27
9.2	SAP Notes	33
10.	DO's & Dont's	34

## 1. Abstract

This document would help to understand the concepts of the Revenue recognition, along with its definition in various accounting concepts and practices. It also provides information on how to activate the Revenue Recognition in SAP and various methods or ways in which the Revenue Recognition can be implemented in SAP. Also illustrates an example of Transaction & Month end posting for a one method of Revenue Recognition and provides information on ehancement options available in SAP for Revenue Recognition.

## 2. Introduction

#### 2.1 Revenue

REVENUE is the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in an increase in equity, other than increases relating to contributions from equity participants.

The income generated from sale of goods or services, or any other use of capital or assets, associated with the main operations of the organization before any costs or expenses are deducted. Revenue is shown usually as the top item in an Income (profit and loss) Statement from which all charges, costs, and expenses are subtracted to arrive at the income.

## 2.2 Revenue Recognition

REVENUE RECOGNITION is the process of recording revenue, under one of the various acceptable methods, in the accounting period. In each period of revenue recognition, all related expenses should be matched to revenue. The most common method of recognizing revenue is at the time of sale or provisioning of service.

An accounting principle under Generally Accepted Accounting Principles (GAAP) that determines the specific conditions under which income becomes realized as revenue. Generally, revenue is recognized only when a specific critical event has occurred and the amount of revenue is measurable.

The matching principle of GAAP dictates that revenues must be matched with expenses. Thus, income and expenses are reported when they are earned and incurred, even if no cash transaction has been recorded.

## 3. Revenue Recognition

## 3.1 Revenue-Recognition Principles

SFAS 5 specifies that two conditions must be met for revenue recognition to take place:

#### 1. Completion of the Earnings Process

This means the company has provided all or virtually all of the goods and services for which it is to be paid. Furthermore, it means the company can measure the total expected cost of providing the goods and services, and the company must have no significant remaining obligations to its customers. Both must be true for this condition to be met.

#### 2. Assurance of Payment

There must be a quantification of the cash or assets that will be received for realized goods and services. Furthermore, the company must be able to accurately estimate the reliability of payment. Both must be true for this requirement to be met.

#### 3.2 Financial Statements - Revenue Recognition Methods and Implications

#### a. Sales-basis Method

Under the sales-basis method, revenue is recognized at the time of sale, which is defined as the moment when the title of the goods or services is transferred to the buyer. The sale can be made for cash or credit. This means that, under this method, revenue is not recognized even if cash is received before the transaction is complete.

For example, a monthly magazine publisher receives \$240 a year for an annual subscription will recognize only \$20 of revenue every month (assuming that it delivered the magazine).

**Implication:** This is the most accurate form of revenue recognition.

#### b. Percentage-of-completion method

This method is popular with construction and engineering companies, who may take years to deliver a product to a customer. With this method, the company responsible

for delivering the product wants to be able to show its shareholders that it is generating revenue and profits even though the project itself is not yet complete. A company will use the percentage-of-completion method for revenue recognition if two conditions are met:

- a. There is a long-term legally enforceable contract.
- b. It is possible to estimate the percentage of the project that is complete, its revenues and its costs.

Under this method, there are two ways in which revenue recognition can occur:

- 1. Using milestones A milestone can be, for example, a number of stories completed, or a number of miles built for a railway.
- 2. Cost incurred to estimated total cost- Using this method, a construction company would approach revenue recognition by comparing the cost incurred to date by the estimated total cost.)

**Implication**: This can overstate revenues and gross profits if expenditures are recognized before they contribute to completed work.

#### c. Completed-contract method

Under this method, revenues and expenses are recorded only at the end of the contract. This method must be used if the two basic conditions needed to use the percentage-of-completion method are not met (there is no long-term legally enforceable contract and/or it is not possible to estimate the percentage of the project that is complete, its revenues and its costs.)

**Implication**: This can understate revenues and gross profit within an accounting period because the contract is not accounted for until it is completed.

#### d. Cost-recoverability method

Under the cost-recoverability method, no profit is recognized until all of the expenses incurred to complete the project have been recouped.

For example, a company develops an application for \$200,000. In the first year, the company licenses the application to several companies and generates \$150,000. Under this method, the company recognizes sales of \$150,000 and expenses related to the development of \$150,000 (assuming no other costs were incurred). As a result, nothing would appear in net income until the total cost is offset by sales.

**Implication:** This can understate gross profits initially and overstate profits in future years.

#### e. Installment method

If customer collections are unreliable, a company should use the installment method of revenue recognition. This is primarily used in some real estate transactions where the sale may be agreed upon but the cash collection is subject to the risk of the buyer's financing falling through. As a result, gross profit is calculated only in proportion to cash received.

For example, a company sells a development project for \$100,000 that cost \$50,000. The buyer will pay in equal installments over six months. Once the first payment is received, the company will record sales of \$50,000, expenses of \$25,000 and a net profit of \$25,000.

**Implication:** This can overstate gross profits if the last payment is not received.

## 4. Revenue Recognition US GAAP Vs IFRS

#### 4.1 Similarities

Revenue recognition under both US GAAP and IFRS is tied to the completion of the earnings process and the realization of assets from such completion.

Under IAS 18 *Revenue*, revenue is defined as "the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows result in increases in equity other than increases relating to contributions from equity participants."

Under US GAAP (which is primarily included in ASC 605 *Revenue Recognition*), revenues represent actual or expected cash inflows that have occurred or will result from the entity's ongoing major operations. Under both US GAAP and IFRS, revenue is not recognized until it is both realized (and realizable) and earned.

Basically, both GAAPs states that revenue recognition is on the transfer of risks and attempt to determine when the earnings process is complete.

## 4.2 Significant differences

Despite the similarities, differences in revenue recognition may exist as a result of differing levels of specificity between the two GAAPs.

There is extensive guidance under US GAAP, which can be very prescriptive and often applies only to specific industries. For example, under US GAAP there are specific rules for the recognition of software revenue and sales of real estate, while comparable guidance does not exist under IFRS.

In addition, the detailed US rules often contain exceptions for particular types of transactions. Further, public companies in the US must follow additional guidance provided by the SEC staff. Conversely, a single standard (IAS 18) exists under IFRS, which contains general principles and illustrative examples of specific transactions. Exclusive of the industry-specific differences between the two GAAPs, following are the major differences in revenue recognition.

	US GAAP	IFRS
Sale of goods	Public companies must follow SAB 104 Revenue Recognition, which requires that delivery has occurred (the risks and rewards of ownership have been transferred), there is persuasive evidence of the sale, the fee is fixed or determinable, and collectability is reasonably assured.	Revenue is recognized only when risks and rewards of ownership have been transferred, the buyer has control of the goods, revenues can be measured reliably, and it is probable that the economic benefits will flow to the company.
Rendering of services	Certain types of service revenue, primarily relating to services sold with software, have been addressed separately in US GAAP literature. Application of long-term contract accounting ASC 605-35 Construction-Type and Production-Type Contracts, (formerly SOP 81-1), is not permitted for non-construction services.	Revenue may be recognized in accordance with long-term contract accounting, including considering the stage of completion, whenever revenues and costs can be measured reliably, and it is probable that economic benefits will flow to the company.
Multiple elements	Public Specific criteria are required in order for each element to be a separate unit of accounting, including delivered elements that must have standalone value, and undelivered elements that must have reliable and objective evidence of fair value. If those criteria are met, revenue for each element of the transaction can be recognized when the element is complete.	IAS 18 requires recognition of revenue on an element of a transaction if that element has commercial substance on its own; otherwise the separate elements must be linked and accounted for as a single transaction. IAS 18 does not provide specific criteria for making that determination.
Deferred receipt of receivables	Discounting to present value is required only in limited situations.	Considered to be a financing agreement. Value of revenue to be recognized is determined by discounting all future receipts using an imputed rate of interest.
Construction contracts	Construction contracts are accounted for using the percentage-of-completion method if certain criteria are met. Otherwise completed contract method is used.	Construction contracts are accounted for using the percentage-of-completion method if certain criteria are met. Otherwise, revenue recognition is limited to recoverable costs incurred. The completed contract method is not permitted.
	Construction contracts may be, but are not required to be, combined or segmented if certain criteria are met.	Construction contracts are combined or segmented if certain criteria are met.

## 5. Business Benefits from Accurate Revenue Recognition

Recognizing Revenue, Realizing Business Benefits:-

With revenue recognition analytics, your organization can quickly access revenue metrics and manage information transparently to comply with regulations.

- > Improve your bottom line in a tough economic environment by accurately predicting deferred revenue streams and capitalizing on opportunities to recognize revenue as early as possible.
- Minimize the risk of noncompliance by making decisions based on validated revenue data.
- Gain unique perspectives on the market by combining risk and strategy management.
- Reduce costs and increase productivity by eliminating manual processes and speeding the amount of time required to access revenue numbers.
- > Enhance the decision-making process with KPIs and analytics drawn from multiple sources to overcome the obstacles posed by information silos.
- > Gain a holistic view of revenue positions by combining data from multiple sources.
- > Maximize the value of existing investments by leveraging data you already have.

## 6. Activation of Revenue Recognition in SAP

#### **6.1 Introduction**

In order to comply with the latest bookkeeping principles and current regulations, like Generally Accepted Accounting Principles (US-GAAP), International Accounting Standards (IAS) / International Financial Reporting Standards (IFRS), SAP provides some general recommendations and best practices for customers using SAP R/3 revenue recognition in the Sales and Distribution component (SD).

- 1. To use the revenue recognition functionality in the productive environment, the implementation must be subject to a pre go-live assessment to avoid a negative impact on the financial statement.
- 2. As revenue recognition provides a data stream into the financial system, the setup of the function is not only an SD task. FI consultants with experience in the area of Balance Sheet and P&L customizing have to setup the account assignment and need to review the processes that are customized in the SD area.
- 3. Program modifications in a revenue recognition relevant process are discouraged because they may have unexpected effects and may result in an incorrect data stream for FI. Any modifications made must be very closely monitored to prevent any negative impacts to the revenue recognition process. Additionally modifications have to be reviewed to check whether they are still in line with legal finance guidelines and regulations.
- 4. If the revenue recognition functionality is activated once in the productive system landscape, a deactivation has to be declined due to the direct impact to the accounting and the danger of data inconsistencies.

#### **6.2 Minimum System Requirements**

- ➤ ECC 6.0 :- at least Support Package 12
- ECC 5.0 :- at least Support Package 19
- ➤ R/3 4.7 :- Release is outside the 'Mainstream Maintenance'. 'Extended maintenance' is required and you must have imported Support Package 30.
- > R/3 4.6C :- Release is outside the 'Mainstream Maintenance'. 'Extended Maintenance' is required and you must have imported Support Package 56.
- > There is no support for older releases from SAP.

## 6.3 Steps to Activate Revenue Recognition in SAP ECC 6.0

Below provided are steps to activate Revenue Recognition

Step 1:- Call transaction SE38

**Step 2:-** Enter L0800F0F as the program name and choose "Display".

**Step 3:-**. In the module, MODULE SET\_STATUS OUTPUT, place the cursor on the statement GET PARAMETER and double-click the ID RR USER.

**Step 4:-** A dialog box is then displayed, that ask whether you want to create the user parameter. Choose "Yes".

**Step 5:-**. Enter "Customizing for Revenue Recognition" as the short text.

**Step 6:-** Assign the new object R3TR PARA RR\_USER to the development class or package VFE.

**Step 7:-**. Save and activate your entries.

**Step 8:-** Use transaction SU3 to insert the new user parameter with the parameter value "A" into the profile of the user who is to maintain the Customizing for revenue recognition. It is strongly recommended to assign the user parameter for selected users, those who can understand the impact of Revenue Recognition.

## 7. Setting up Revenue Recognition in SAP

Various methods of Revenue Recognition in SAP are mentioned below

- Revenue recognition at the point of billing (standard method)
- Time-related revenue recognition (the revenues are realized between specific set dates)
- Service-related revenue recognition (the revenues are realized on the basis of a specific event, e.g. the goods issue for a delivery)
- Credit/Debit memo request with reference to preceding document
- Service based revenue recognition, billing related (only for IS-M solution)

This document would explain in detail about Time-related revenue recognition's configuration and Master Data settings and also illustrates a scenario including month end activities. For the setup of the Revenue Recognition process, below are few preliminary steps that need to be followed

- > FI G/L accounts and their settings
- > SD item categories and their settings
- > Account determination

Let us see in detail regarding the pre steps that need to be followed

## 7.1 G/L Account Settings

Below provides list of G/L accounts thare required for the Revenue Recognition and few basic settings that to be strictly followed

- Revenue account (recognized revenues)
- Receivables account (customer account)
- Revenues to be deferred (deferred revenue account or D/R account)
- Unbilled receivables (unbilled receivables account or U/R account)

## I. Revenue account

Transaction	FS00
Path	Financial Accounting $\rightarrow$ General Ledger Accounting $\rightarrow$ G/L Accounts $\rightarrow$ Master Records $\rightarrow$ G/L Account Creation and Processing $\rightarrow$ Edit G/L Account (Individual Processing) $\rightarrow$ Edit G/L Account Centrally

## II. Deferred Revenue Account:-

Transaction	FS00
Path	Financial Accounting $\rightarrow$ General Ledger Accounting $\rightarrow$ G/L Accounts $\rightarrow$ Master Records $\rightarrow$ G/L Account Creation and Processing $\rightarrow$ Edit G/L Account (Individual Processing) $\rightarrow$ Edit G/L Account Centrally

## III. Unbilled Receivables

Transaction	FS00
Path	Financial Accounting $\rightarrow$ General Ledger Accounting $\rightarrow$ G/L Accounts $\rightarrow$ Master Records $\rightarrow$ G/L Account Creation and Processing $\rightarrow$ Edit G/L Account (Individual Processing) $\rightarrow$ Edit G/L Account Centrally

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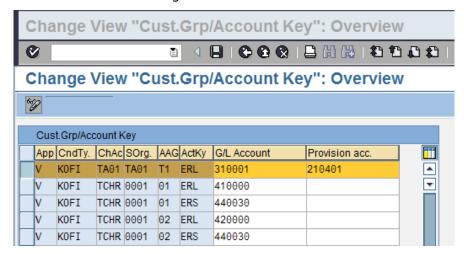
## 7.2 Account Determination Settings

Below settings would help for Revenue Account determination

## I. G/L Accounts for Revenue & Deffered Revenue

Transaction	VKOA
Path	Implementation Guide Sales and Distribution → Basic Functions → Account
	assignment / Costing → Revenue Recognition → Maintain Account Determination

In the SD module both the revenue account and the account for deferred amounts must be maintained in revenue account determination. The Deferred account is maintained on the Provision acc. column against each revenue account.

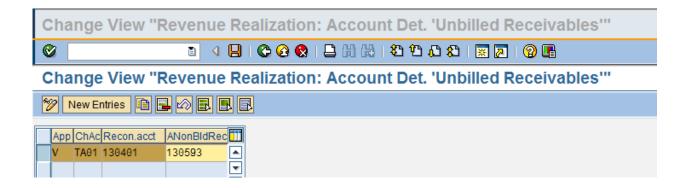


#### II. Determination for Unbilled account

Transaction	OVUR
Path	Implementation Guide Sales and Distribution → Basic Functions → Account
	assignment / Costing → Revenue Recognition → Maintain Account Determination

In the customizing we need to maintain the account for Unbilled Receivables (U/R account) depending on the reconciliation account and the associated chart of accounts. The

Reconciliation Account must be similar to the one maintained in the Customer Master record of the payer.



## 7.3 Item Category settings

This is important configuration where we define the method of Revenue Recognition that need to be used, details are given below

Transaction	OVEP
Path	Implementation Guide Sales and Distribution → Basic Functions → Account
	assignment / Costing → Revenue Recognition

Revenue Recognition: - Determines the method of the Revenue Recognition to be used.

**Accrual Period Start:** - Determines the start of the period in which revenues should be recognized

**Revenue distribution type**: - Distribution gives the possibility of linking the distribution of revenues over the posting periods in the revenue lines to the value distribution of the billing plan dates. This means that each individual billing plan date is represented in terms of its time period and billing plan value on the relevant posting periods in the revenue lines.

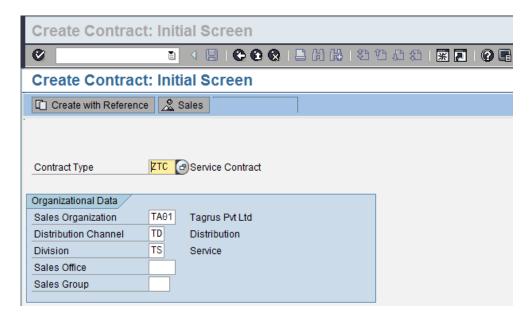
**Revenue event**: - The event is relevant for third-party business transactions where the revenues are allowed to be recognized after the incoming invoice has arrived.

## 8. Transactions & Month End Posting in SAP

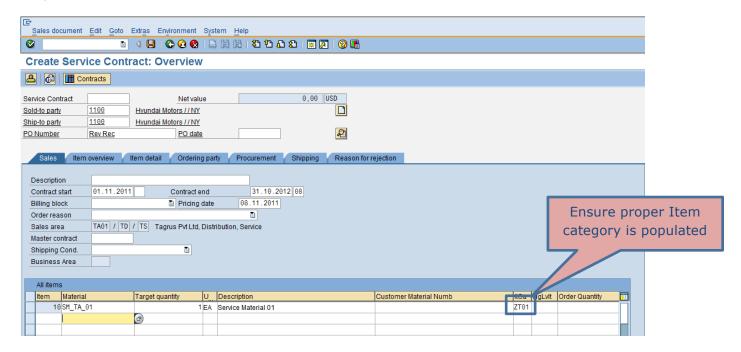
Based on the above transaction let us see few transactions posting and Month End posting that are made in SAP

## **8.1 Transaction Posting**

Step 1 :- Creation of Contract

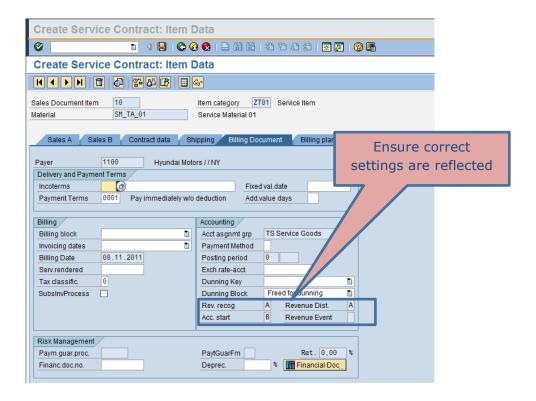


Step 2:- Creation of Sales Contract Line item

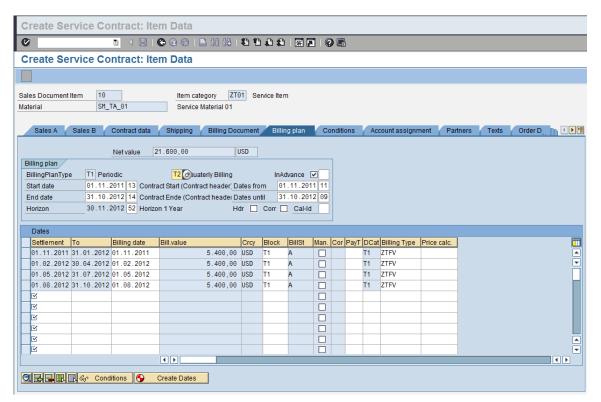


Step 3:- Check the Billing Document tab

- - - - - -

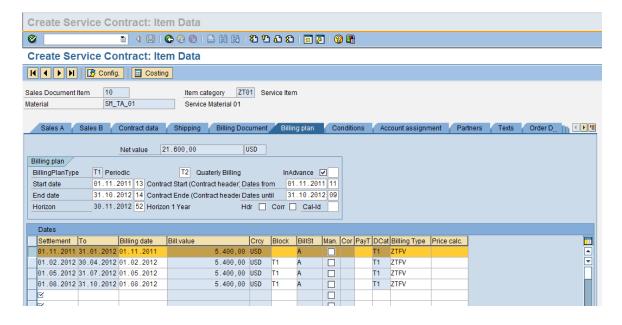


Step 4 :- Assign appropriate Billing type (Quarterly Billing)

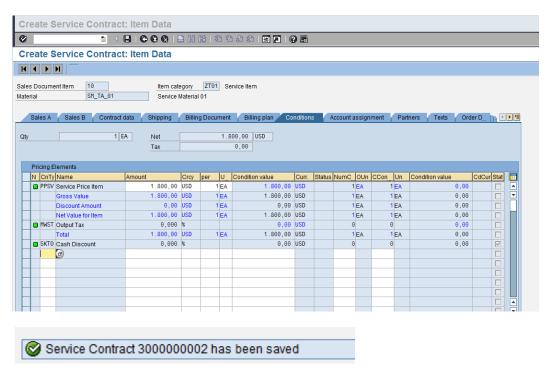


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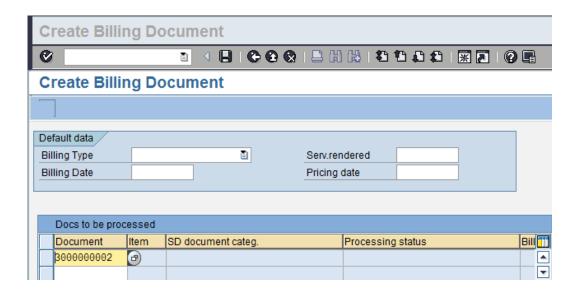
Step 5 :- Remove the Billing Block to create billing for the first period.

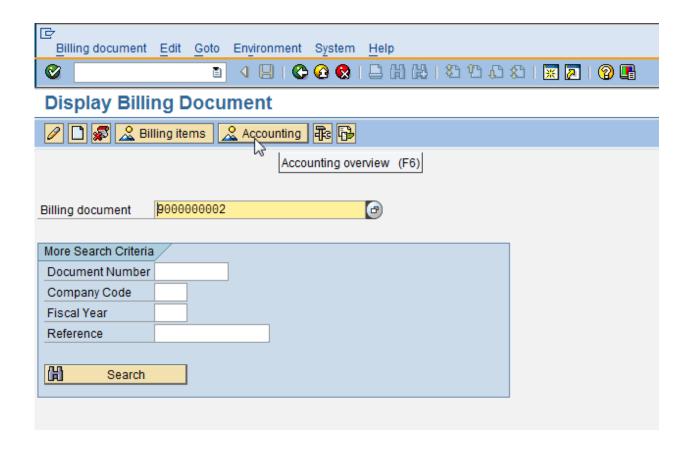


Step 6:- Update price based on the contract terms & save the Contract

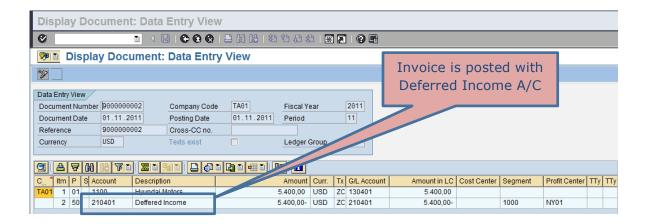


Step 7:- Create Billing Document





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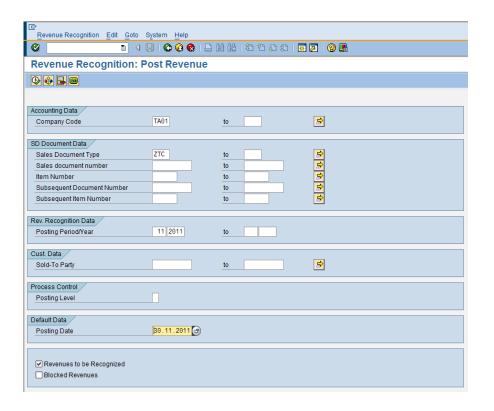
#### 8.2 Month End Transactions

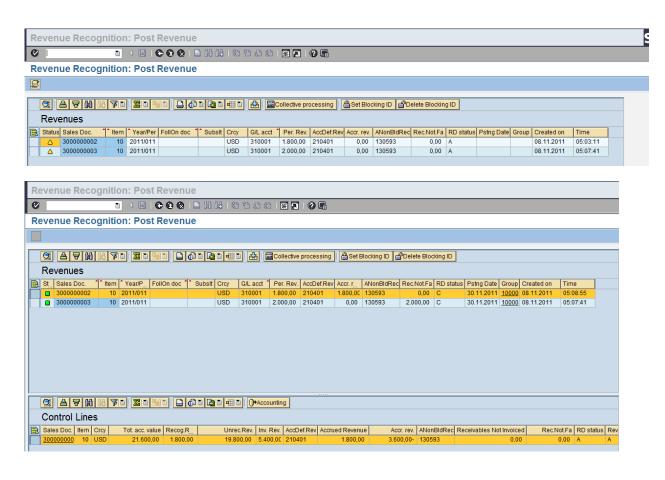
Transaction	VF44
Path	Sales and Distribution → Shipping and Transportation → Billing → Revenue Recognition → Edit Revenue List

This transaction is used to Recognize Revenue in the Month End. This transaction is executed by Company Code and it provides complete list of documents that are applicable for revenue posting.

Step 1:- Post Revenue in Transaction VF44

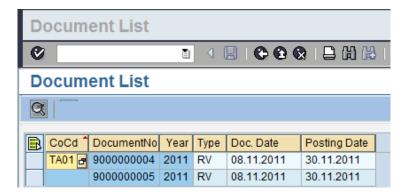
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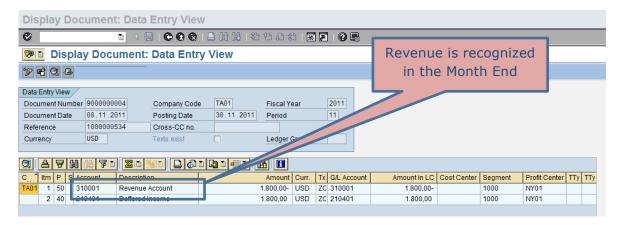


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Once the documents are posted the status turns green, then select a document and click on Accounting in the Control Line tab



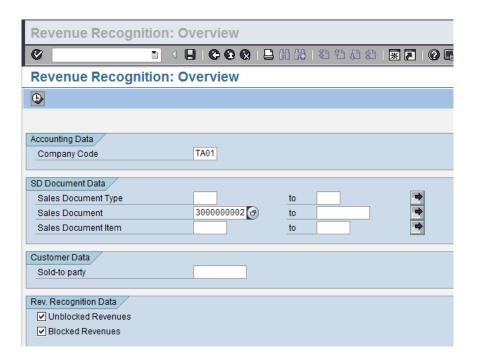
#### Accounting document generated:-

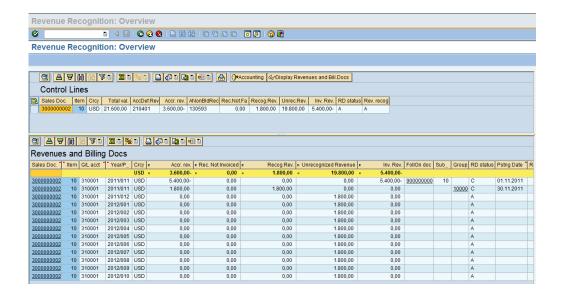


Transaction	VF45
Path	Sales and Distribution $\rightarrow$ Shipping and Transportation $\rightarrow$ Billing $\rightarrow$ Revenue Recognition $\rightarrow$ Revenue Report

This report provides information of deferred revenues, unbilled receivables, billed and realized amounts on the level of a sales document item.

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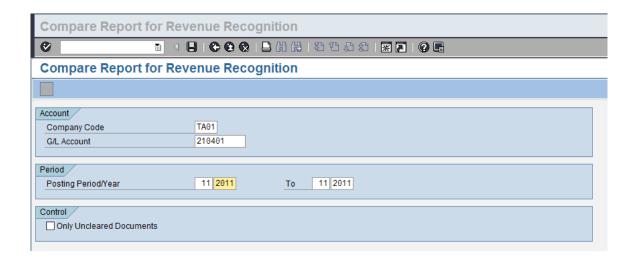


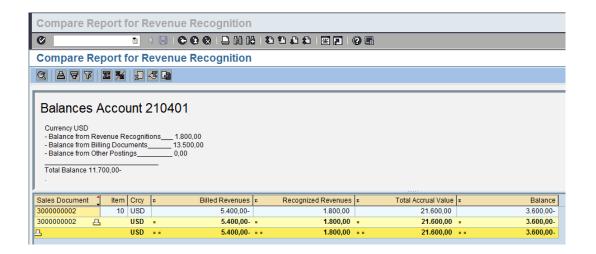


Transaction	VF48
Path	Sales and Distribution $\rightarrow$ Shipping and Transportation $\rightarrow$ Billing $\rightarrow$ Revenue Recognition $\rightarrow$ Compare Report

Transaction VF48 is a report that compares the FI and SD values on the accrual accounts. This means that transaction VF48 determines the balance on the accrual accounts from FI side (all postings to the accrual account) and from SD side

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#### 9. Customer Enhancements & SAP Notes

#### 9.1 Customer Enhancements

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There can be functions required that are not included in the R/3 standard revenue recognition functionality. In such cases SAP provides different options with predefined interfaces where additional functions can be included by the customers itself.

For the revenue recognition functionality the option for customer enhancements is the use of Business Transaction Events (BTEs). Here is a short description on how to use the user exit solution defined via BTE implementation:

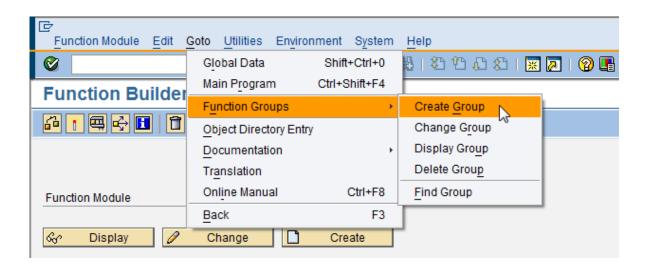
- 1. You can use transaction SPRO. Then go to Sales and Distribution -> System modifications
- -> Use business transaction events. Alternatively you can use transaction FIBF directly.
- 2. Select Environment: Info System (P/S), enter into the selection Attrib. field 'SD-ER' and execute.

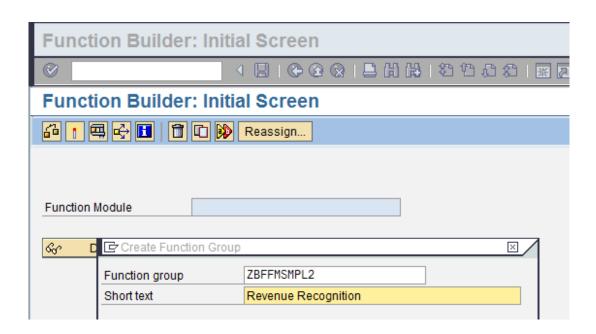
You will get a list of all BTEs predefined for the revenue recognition functionality.

Event	Text
503101	Revenue realization: Copy conditions
503102	Revenue realization: Start/end of selection period
503103	Revenue realization: Determine selection period
503104	Revenue realization: Billing <-> FI document VF47
503105	Revenue realization: Forecast revenue lines
503106	Revenue realization: Revenue amount adjustment
503107	Revenue realization: Det. Acct Non-Billed Receiv.
503108	Revenue realization: Display variants
503109	Revenue realization: Enter split criterion
503110	Revenue realization: Change accounting data
503111	Revenue realization: Change document date/type
503113	Revenue Realization: Status Change
503114	Revenue Realization: Addnl Value/Quantity Fields
503115	Revenue Realization: Set Exchange Rate Date
503116	Revenue Realization: Compression Data SD/FI

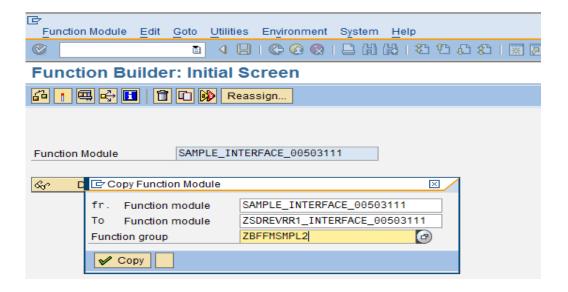
3. For implementing a BTE please proceed as follow: Select the needed BTE e.g. 0503111 Revenue realization: Change Document Type and then go to details. You will get the Sample Function Module e.g. SAMPLE\_INTERFACE\_00503111

4. You have to use this sample function for creating your own function module. Use transaction VF37 and copy the sample function into your own function. Use ZZ\* for your own function module e.g. ZZ\_INTERFACE\_00503111 and enter your own coding there.

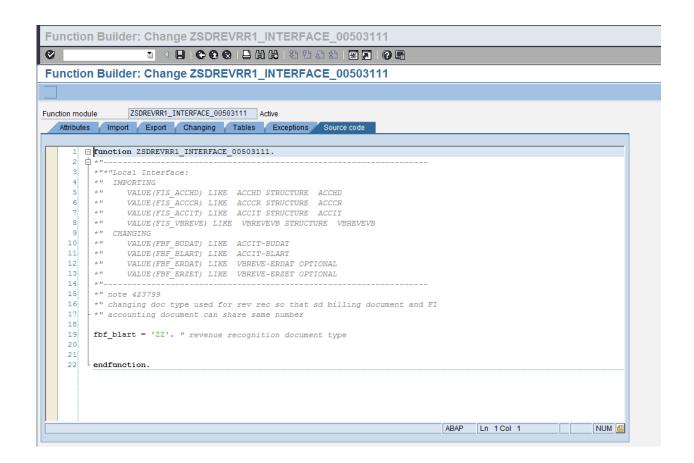




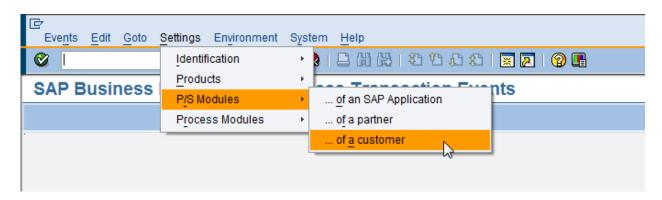
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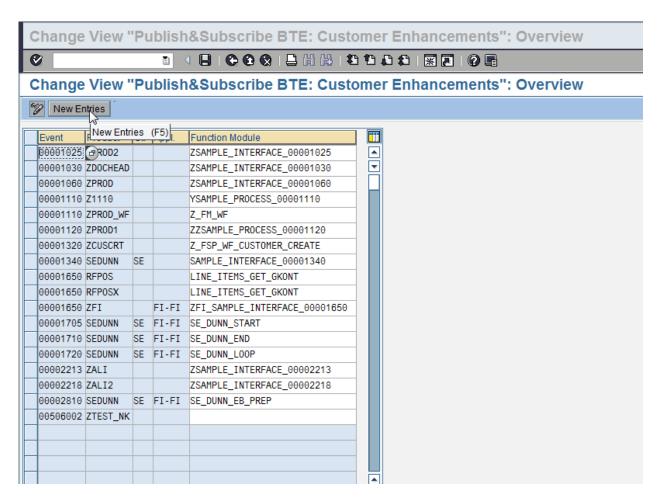


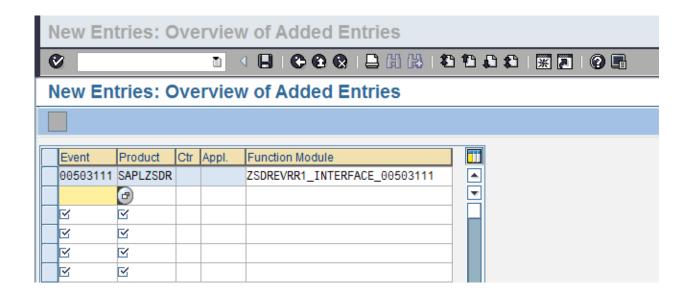
Addition of the required code change in the functional Module created



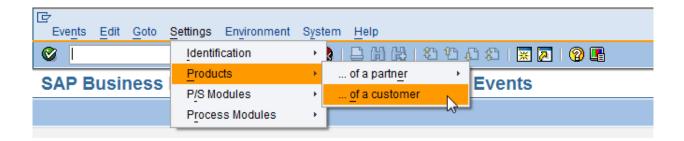
5. After you have implemented the coding into your own function module, go back to the initial screen of transaction FIBF. Select the settings: P/ S Modules: ... of a customer. Make a new entry there for the selected event. Event 00503110 and assign the name of your own function Z\_INTERFACE\_00503110)

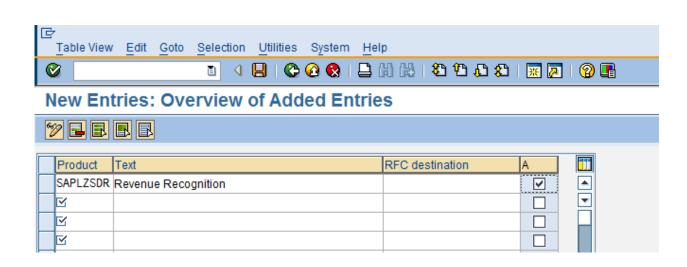






6. After the assignment is done please go back to the initial screen of transaction FIBF again. Select Settings: Products: ... of a customer. Define a product and set the 'Active' flag.





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## 9.2 SAP Notes

List of few SAP notes related to Revenue Recognition

Number	Short Text
820417	Implementation Guide for revenue recognition
782758	Prerequisites for using the Revenue Recognition
777996	Account settings for revenue recognition process
678260	Revenue recognition: Functional constraints
1172799	New version of Best Practices for Revenue Recognition
1747127	Activated Customizing for SAP SD revenue recognition
1000830	Revenue recognition through incoming invoice (third-party)
1120297	Revenue recognition by acceptance date
1025066	Revenue recognition by proof of delivery (POD)
1125456	Revenue recognition due to customer-specific event
1109406	Revenue lines incorrect in POD standard
1166848	Revenue recognition: Customizing settings 1025066

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#### 10. DO's & Dont's

#### Do's

- > In order to implement of revenue recognition functionality, customers have to request an assessment of their system landscape from SAP to avoid a negative impact on the financial statement.
- The functionality should be implemented by SAP-certified SD- and FI-Consultants.
- > The consultants will setup the accounts and other settings in the Implementation
- > It is important to understand the business scenarios that are supported by SAP for revenue recognition.
- > It is necessary to continuously monitor the data created by revenue recognition functionality. The programs and reports for monitoring are introduced in detail in this document.

#### Don't

- > NEVER perform the following actions:
- Never change the revenue recognition category for item categories that have already been productively used and under which SD documents have already been entered in the system.
- If you want to change the revenue recognition category, create a new, separate item category.
- Never remove the revenue recognition relevancy for item categories that have already been productively used and under which documents have already been created.
- > To deactivate the revenue recognition, you must take special measures in the SD and FI area to ensure that data remains consistent. Usually, this task can only be performed by experienced revenue recognition consultants.
- Never change the accounting period for categories already that are already productively used.