



M. Larry McKinney, Reinhard Müller, & Frank Rothhaas

Practical Guide to SAP® FI-RA — Revenue Accounting and Reporting

- ▶ ASC 606 statutory requirements
- ▶ Integration between SAP SD, PS, FI-RA, and FI-GL
- ▶ Troubleshooting data migration challenges
- ▶ BRFPplus in revenue accounting

Table of Contents

Introduction	9
Motivation for this book	9
What the book cannot do	11
Our intention	11
1 Basic principles	13
1.1 Legal basis of ASC 606	13
1.2 Example of a contract with multiple components	19
2 Process and data flow	25
2.1 Impact of the standard on relevant SD business processes and applications	25
2.2 Impact of the standard on relevant PS business processes and applications	27
2.3 Data flow in the context of revenue accounting	27
3 Technical preparation	33
3.1 Installation	33
3.2 FI-RA versions	35
3.3 Basic customizing	38
3.4 Roles and authorizations	43
3.5 Development and data structures	46
4 Customizing in detail	51
4.1 Activation in the SD module	51
4.2 Revenue accounting contracts	54
4.3 Performance obligations	57
4.4 Fulfillment event types	61
4.5 Results Analysis	62
4.6 Postings	64

4.7	Further options for process control	67
4.8	Further control tables	70
5	Business Rules Framework (BRFplus)	73
5.1	Overview	73
5.2	Decision tables	73
5.3	Basic functions and navigation	74
5.4	BRFplus in the context of Revenue Accounting (FI-RA)	76
5.5	Other references	83
6	Example representation of business processes in the system	85
6.1	Service contract with retrospective invoicing	85
6.2	Bundle order with price allocation and right of return	102
7	Data consistency and reporting	115
7.1	Requirements and tools	115
7.2	Logistics and Revenue Accounting	117
7.3	Revenue Accounting and General Ledger	121
7.4	Revenue reports	124
8	Migration	131
8.1	Overview	131
8.2	Configuration settings	132
8.3	Operational load	134
8.4	Initial load	136
8.5	Items to consider	141
9	Transition	143
9.1	Transition process	143
9.2	Transition method	144
9.3	Transition execution	147

10 Implementation in practice	155
10.1 Timing	155
10.2 Challenges	155
10.3 Project content and structure	160
A Terminology explanations	163
B The Authors	166
C Index	168
D Disclaimer	170

2 Process and data flow

In this chapter, we outline the general process flow for revenue recognition according to ASC 606. We look at the data flow for creating and processing revenue accounting contracts and performance obligations in detail and place the postings in context with the recognized revenues in the SAP modules SD, PS, FI-RA, and FI-GL.

2.1 Impact of the standard on relevant SD business processes and applications

From the initial considerations so far, we could easily come to the conclusion that ASC 606 is a pure accounting topic. However, the regulations of the standard have far greater effects on contract management, on activities in the core of the sales and distribution processes, on supporting processes with regard to the correct timing and content for balancing accounts, as well as on further business key figures and the associated systems and applications (see Figure 2.1).

To get a complete view of the potential implications, we have to look at the following questions:

- ▶ How strongly is the company's business model affected by ASC 606?
- ▶ How relevant is the standard to existing contracts with customers and what adjustments have to be made to these contracts?
- ▶ What is the impact on the business activity of the company with regard to the future offer portfolio (bundles, multicomponent contracts, delivery and service agreements, as well as payment agreements with customers)?
- ▶ Which sales processes are affected by the impact and how much adjustment is necessary (returns processing, warranties, buy-back agreements, financing components, customer payments)?
- ▶ Which support processes—especially with regard to company and group reporting—are affected by the changes (in particular, financial statements, sales key figures, and budgeting)?

- ▶ How much adjustment is necessary for applications and systems that support the processes affected?
- ▶ To what extent are personnel processes and agreements affected (check for any required contract adjustments with regard to existing and future profit-based bonus agreements)?

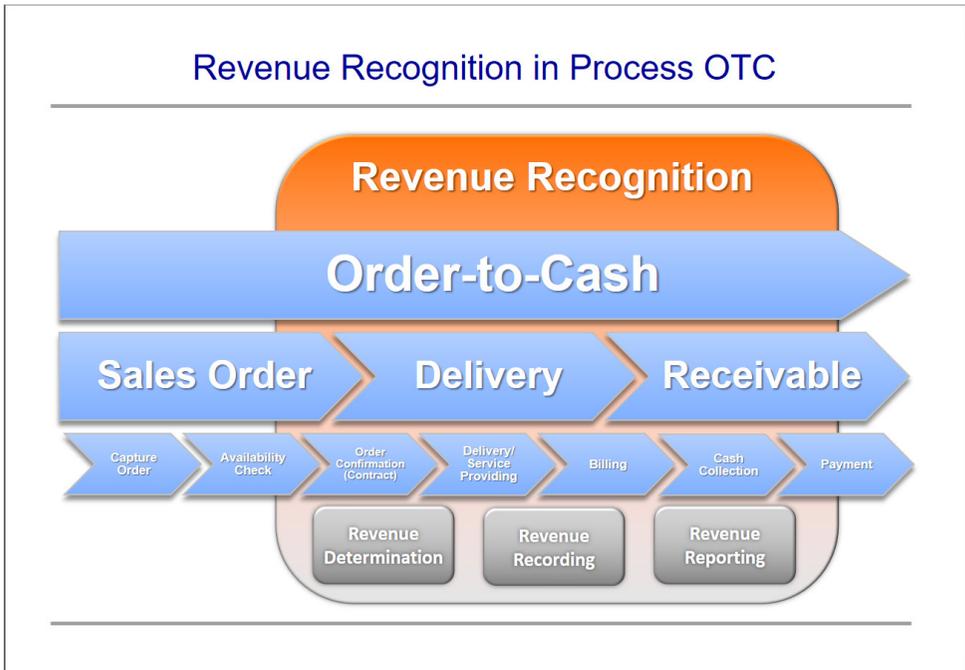


Figure 2.1: Business processes

At this point, it becomes particularly clear that contract, sales, and distribution processes (including the underlying systems and applications) have to be analyzed and, where applicable, redefined in terms of the extensive separation of operational activities from accounting and revenue recognition.

At the same time, when implementing the requirements, it is essential to make sure that in the future, more detailed information from these processes will be made accessible to the accounting process and the creation of the financial statements. What we can conclude from this is explained at the end of the book in Section 10.2.

2.2 Impact of the standard on relevant PS business processes and applications

Just as we have discussed the standard SD business process flow, the PS-based process flows are also potentially impacted. In a typical scenario, for example Milestone Billing, we would now need to make sure that those are captured and allocated against other items associated with the project. One option would be to link the WBS to an SD sales order line item. Notwithstanding the execution, the underlying revenue requirement is there.

There are also scenarios around resource-related billing and how it would flow through to Revenue Accounting (FI-RA). There is the option, through configuration, to create an RA contract from the invoice generated from resource-related billing. There are also options to create a custom RAI class referencing WBS elements.

Regardless of the technical solution, the point that should be emphasized is how does the new revenue standard impact my current business processes? In analyzing that question, you will need to consider what business process changes are required to meet the new standard and how they can be implemented in the most efficient and expedient way.

2.3 Data flow in the context of revenue accounting

To begin our look at the technical treatment of data for this topic, we will use the following example of the data flow for a standard order (or customer contract) in SD, and in particular, in combination with the creation and processing of revenue accounting contracts (see Figure 2.2). The symbols used in the illustration each represent the objects and results from the relevant modules SD, FI-RA, and FI-GL.

We will address details with regard to the installation and the process control settings, as well as further examples from practice, with reference to a system in the following chapters.

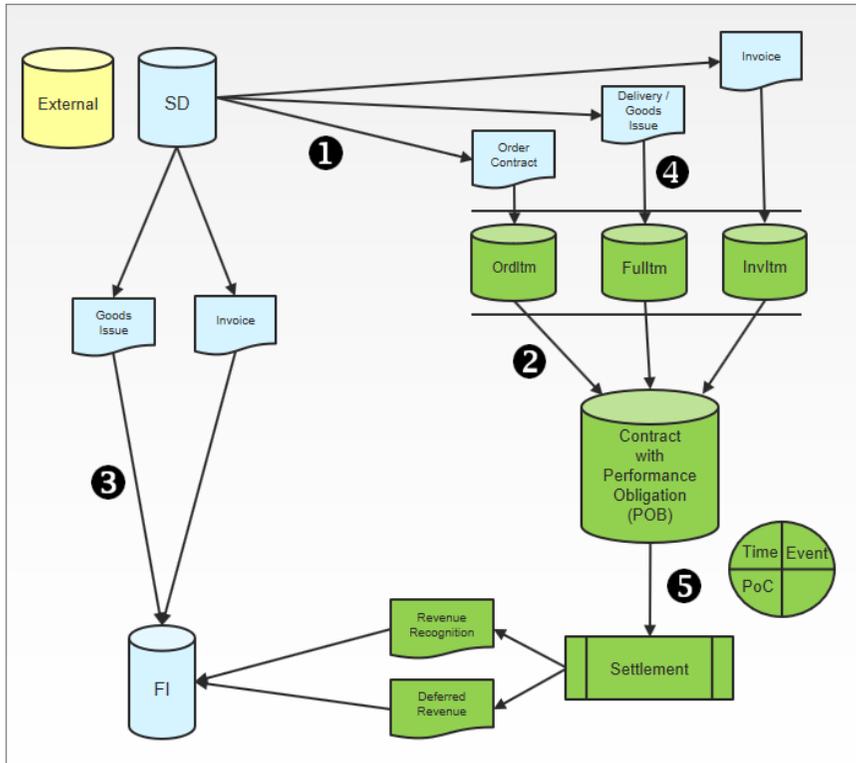


Figure 2.2: Data flow (contract and delivery)

- 1 When Revenue Accounting (FI-RA) is activated, depending on the type of order and the types of items used in the SD document, initially a transfer area for the required data is filled: this is the *adapter reuse layer* (ARL). In this transfer area, order and contract items, as well as fulfillment and invoice items are separated into categories which, from a technical perspective, are kept in separate classes. Therefore, the standard order created is first put into the class for order items. The revenue accounting items themselves have different statuses depending on the degree of processing (Raw, Processable, Processed).

The data from the transfer area is processed further using transfer programs which are integrated in dialog or in periodically executable batch processing cycles.

- ② As a result of the data processing, a separate revenue accounting contract with corresponding performance obligations is created in the system.

The detailed characteristics of the contract and performance obligations, which at a later point become separate postings, are first determined from the customizing settings or are derived using rules defined from the BRFplus application via *decision tables*. The procedure and control parameters used here are described in detail in Section 5.4.

A complete integration of Revenue Accounting (FI-RA) with the SD module is guaranteed by the fact that, within the process described, changes (e.g., prices, deadlines, and extensions) made in an SD document after a successful transfer each lead to the revenue accounting contract created being updated.

- ③ As mentioned before, a performance obligation in a revenue accounting contract reflects a service previously agreed with the customer and recorded in an SD document taking revenue aspects into account. A revenue posting is subsequently triggered based on the parameters defined in the performance obligation. Various types of fulfillment can trigger this posting, such as the delivery or the goods issue for a contract. In principle, the following triggering events are differentiated in the system:

- ▶ Time-based
- ▶ Event-based
- ▶ Progress-based (percentage of completion)

In SD itself, the delivery (an event) triggers the creation of a goods issue, which in FI, leads to a stock change posting.

- ④ This event is also updated directly in the class for fulfillment items in Revenue Accounting (FI-RA) as information with the descriptive parameters. The related performance obligation is also updated in the revenue accounting contract the next time the periodic transfer programs are executed. A corresponding indicator shows the service agreed with the customer has been fulfilled and that, in accordance with US GAAP, recognized revenue must be reported.
- ⑤ A settlement transaction is then used to create the corresponding posting documents in FI. Because the goods issue for the contract

C Index

A

- Account determination 79
- Accounting principle 55
- Adapter Reuse Layer 28
- Allocation effect 104
- Allocation of the transaction
 - price 20
- Application log 115
- Authorization object 44

B

- BRFplus
 - application 76
 - data structure 77
 - decision table 82
 - formula 68
 - function 77
 - set of rules 81
 - workbench 74
- Business process 26

C

- Class 39

D

- Data flow 28, 31
- Database table 47
 - classes 41
 - revenue accounting contract 121
- Decision table 29, 73
 - DT_PROCESS_COMPOUND 70

- DT_PROCESS_DEFERRAL 104
- DT_PROCESS_HEADER 57
- DT_PROCESS_POB 58
- DT_PROCESS_POB_ADD 71
- DT_PROCESS_SSP 60, 102
- FARR_DT_POB_STATUS 67

- Development package 46

- Document splitting 65

E

- Enhancement spot 49

- Event type 59

F

- Five-level evaluation model
 - according to ASC 606 15

L

- Ledger 55

M

- Migration

- application log 137

- Customizing 132

- initial load 136

- load 134

- resetting 137

- status 133

- Multi-component contract 19

P

- Partial recognition of profit 18

- Performance obligation 16

Performance obligation type 57
Profit distribution 157
Profit sharing 157

R

Reconciliation key 69
Release 35
Revenue accounting
 revenue plan 91
Revenue accounting contract
 account assignment data 90
 allocation data 89
 fulfillment data 90
 general data 89
 status data 91
Revenue plan 91, 106
Revenue posting
 job 94
 job monitor 95
 simulation 93
Revenue recognition 16
 performance-based 17
 time-based 17
Right of return 110
Role 43

S

Separation 19
Source item type 42
Standalone selling price 16
Status management 79

T

Tax payment 157
Transaction
 BRF+ 74
 FARR_IMG 38, 79
 FARR_RAI_MON 58, 86, 98
 FARR_RAI_RECON 119
 FARRIC_CHECK 117
 FARRIC_OL 134
 FARRIC_OL_EXPERT 135
 FARRIC_RAI_PROC_LOAD
 136
 KEIP 127
 SAINT 33
 SE80 46
 SLG1 53, 115, 118
 VF01 97
Transaction price 16
Transfer of control 158
Type of fulfillment 29, 59, 61