



# Infor LN Project User Guide for Contract Management

### **Important Notices**

The material contained in this publication (including any supplementary information) constitutes and contains confidential and proprietary information of Infor.

By gaining access to the attached, you acknowledge and agree that the material (including any modification, translation or adaptation of the material) and all copyright, trade secrets and all other right, title and interest therein, are the sole property of Infor and that you shall not gain right, title or interest in the material (including any modification, translation or adaptation of the material) by virtue of your review thereof other than the non-exclusive right to use the material solely in connection with and the furtherance of your license and use of software made available to your company from Infor pursuant to a separate agreement, the terms of which separate agreement shall govern your use of this material and all supplemental related materials ("Purpose").

In addition, by accessing the enclosed material, you acknowledge and agree that you are required to maintain such material in strict confidence and that your use of such material is limited to the Purpose described above. Although Infor has taken due care to ensure that the material included in this publication is accurate and complete, Infor cannot warrant that the information contained in this publication is complete, does not contain typographical or other errors, or will meet your specific requirements. As such, Infor does not assume and hereby disclaims all liability, consequential or otherwise, for any loss or damage to any person or entity which is caused by or relates to errors or omissions in this publication (including any supplementary information), whether such errors or omissions result from negligence, accident or any other cause.

Without limitation, U.S. export control laws and other applicable export and import laws govern your use of this material and you will neither export or re-export, directly or indirectly, this material nor any related materials or supplemental information in violation of such laws, or use such materials for any purpose prohibited by such laws.

### **Trademark Acknowledgements**

The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other company, product, trade or service names referenced may be registered trademarks or trademarks of their respective owners.

### **Publication Information**

Release: Infor LN 2022.x

Publication Date: December 5, 2022

Document code: ln\_2022.x\_tpctmug\_\_en-us

# Contents

<b>About this Guide.....</b>	<b>5</b>
Contacting Infor.....	6
<b>Chapter 1: Using Contract Management.....</b>	<b>7</b>
Introduction.....	7
Contract types.....	7
Contract Prices and Rates.....	9
<b>Chapter 2: Defining a Contract.....</b>	<b>10</b>
To define a contract.....	10
Contract data set-up.....	12
Contract lines data setup.....	13
Contract deliverables data set-up.....	15
<b>Chapter 3: Scheduling contract deliverables.....</b>	<b>18</b>
To create a delivery schedule.....	18
Backorders for Contract Deliverables.....	18
Return orders for contract deliverables.....	19
Contract Deliverables Monitor.....	20
Deliverables link to Service.....	21
Export Compliance Check for Contract Deliverables.....	21
Retrieving sales price for project deliverable items.....	22
<b>Chapter 4: Linking a CLIN to a Project structure.....</b>	<b>24</b>
Linking CLIN to a project structure.....	24
How to link a CLIN to a project structure.....	26
<b>Chapter 5: Contract Funding.....</b>	<b>27</b>
Using Contract Funding.....	27
Funding Distribution by Sequence.....	28
Funding Distribution by Percentage.....	30

Funding Distribution by Amount.....	32
To use the rate determiner.....	34
<b>Chapter 6: Fees and Penalties.....</b>	<b>36</b>
Create fees and penalties for contract.....	36
To create contract fees and penalties.....	37
<b>Chapter 7: Progress Payment Requests.....</b>	<b>38</b>
Using progress payment requests.....	38
To define a progress payment request.....	38
Creating progress payment request.....	39
<b>Chapter 8: Processing contract invoices.....</b>	<b>41</b>
Installment invoicing.....	41
Using advance payments.....	41
To use progress invoicing.....	42
To use cost plus invoicing.....	43
Releasing cost plus transactions.....	44
Billable Costs.....	44
To use unit rate invoicing.....	45
To use delivery-based invoicing.....	45
<b>Chapter 9: Integration with Service (TS).....</b>	<b>46</b>
Extended Integration between Project and Service for After Sales Services.....	46
Processing the after sales service lines to Service.....	47
To copy a project structure to Service.....	47
<b>Index.....</b>	<b>49</b>

## About this Guide

This guide provides information about the process to define and use contracts.

### Objectives

The objectives of this book are to describe the purpose of contract management, what you can accomplish using a contract, and the process to set up and use contracts.

### Intended Audience

This book is intended for those who want to learn the process to use contracts, contract lines, contract deliverables, contract funding, contract invoicing, and to set up the contract data in the way that best serves their purposes. Both end users and users on administrator level will find the information they require.

### Assumed Knowledge

Familiarity with the business processes involved in handling contracts in projects, and general knowledge of the LN functionality will help you understand this book. In addition, Project training courses are also available.

### Document summary

The first chapter, Introduction, describes the purpose and the general characteristics of contracts.

The following chapters deal with the contract data setup, describe how contract lines and deliverables are created, how contracts are linked to project pegs, and describe contract funding and invoicing.

This guide describes procedures that users carry out using contract deliverables, backorders and return orders and provides some information on the underlying processes that LN carries out. The most important session windows and fields involved are discussed, but a full description of all software components is outside the scope of this guide. For details, refer to the online Help.

### How to read this document

This document was assembled from online Help topics. As a result, references to other sections in the manual are presented as shown in this example:

Refer to the Table of Contents to locate the referred section.

Underlined terms indicate a link to a glossary definition. If you view this document online and you click on underlined text, you jump to the glossary definition at the end of this document. Non-underlined references do not represent a link to glossary definitions or other elements.

## Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

The latest documentation is available from [docs.infor.com](https://docs.infor.com) or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact [documentation@infor.com](mailto:documentation@infor.com).

# Chapter 1: Using Contract Management

## Introduction

A contract defines the agreement with a customer, the terms and conditions such as deliverables, billing plan, and payment terms. The contract contains customer information and contacts, the contract price and funding. Shipping information, title passage, and delivery terms are also defined on the contract. You can also define the contract types and invoicing methods to be implemented.

Contract management is used to create and maintain contract data which includes these concepts:

- Contract types
- Contract lines
- Contract deliverables
- Contract line links to project pegs
- Backorders and Returns
- Contract funding
- Contract invoicing

## Contract types

The contract types or billing terms list the conditions and agreements to invoice contracts to the customer.

You can define the following types of contracts:

- **Fixed Price:** A contract that is carried out for an agreed fixed price. The price is agreed when the contract is signed. It is often used when the lead-time of a contract is long and the value of the contract is high.
  - The default method of invoicing is installments.
  - Delivery based invoices are sent when items are shipped or when services are delivered. Delivery based invoices can be used as an alternative to installment invoices.
  - In case of installment payments, also called milestone payments, stage payments or performance based payments, a part of the agreed price is paid based on reaching certain milestones.
  - Advance payment requests can also be used in combination with installments and progress invoices. Advance payments requests can be made for all contract types. The advance must be linked to one of the contract lines and you can link an advance to an element or activity.
- **Cost Reimbursement:** A contract that is carried out based on cost reimbursement and a profit percentage. The billing is done on a periodic basis based on cost. However, sometimes not all unit costs can be billed. A limit, ceiling or a not-to-exceed amount can be agreed upon with the customer.

In general, direct costs, like material, labor, and so on are billed directly to the customer. However there are certain restrictions:

- **Legal:**  
Some cost may not be billed to the customer because of legal regulations. For example in some countries it is not allowed to charge several types of cost to the customer such as donations, entertainment cost or cost for bad credit control.
- **Due diligence:**  
For example, inventory adjustments. If materials are purchased for the contracts, and parts of the contract are canceled. And, the materials need to be scrapped, the cost incurred can be charged to the customer.
- **Agreements:**  
A customer can assign a certain percentage of the material cost to scrap. If the cost of scrap is not more than the agreed level, these costs can be charged to the customer as direct material cost. In case the cost of scrap exceeds this level, the customer pays only the allowed percentage.
- **Time & Materials:** This contract type is usually used for long term research and development projects. It is a type of contract that is invoiced for the material and the labor at an agreed sales rate. The sales rate can be a fixed amount, a markup percentage or the cost incurred. Example: For labor cost, a fixed amount could be determined dependent on the rate of the employee, department or job category the employee belongs to. The rates and prices can be contract specific. Also, for time and material contracts, a ceiling limit can be applicable. The billing process of indirect cost is similar to cost-reimbursement contracts.

	Install- ment	Cost Plus	Unit Rate	Progress In- voice	Delivery Based
Fixed Price	Yes	No	Yes	Yes	Yes
Cost Reimburse- ment	No	Yes	Yes	No	No
Time & Materials	No	Yes	Yes	No	No

#### Invoicing methods

Following are the invoicing methods for the above mentioned contract types:

- Installment invoicing
- To use progress invoicing
- To use cost plus invoicing
- To use unit rate invoicing
- To use delivery-based invoicing

**Note:** You can initiate the invoicing process only if the status of the contract, the contract line and, in case of delivery based invoicing, the contract deliverables line is set to Active.

Other invoice types:

- Using advance payments
- Using holdback



## Contract Prices and Rates

The contract price is the price defined for the goods or services to be received or delivered as per the contract agreement. The prices and rates for the contract are defined based on the cost objects such as labor, sundry costs, or material.

Use the **Specific Labor Rates (tcppl0192m000)** session to create and maintain contract, project-specific labor and/or customer-specific rates.

You can use the **Contract Price Sundry Costs (tpctm0140m000)** session to create and maintain sundry cost sales prices for the contract or contract line.

You can maintain standard *cost objects* of the following cost types:

- **Labor**
- **Materials**
- **Equipment**
- **Subcontracting**
- **Sundry Costs**
- **Overhead**

In each case, the recorded information includes details of:

- The *control code* and control function used for the cost object.
- The *cost component* used for the cost object.
- The *standard cost* and *sales price or rate* used for the cost object.
- Whether or not *interim results* are recorded by default for the cost object.
- Whether or not the cost object has an attached text.

Material cost objects are treated differently:

- Use the **Items (tcibd0501m000)** session to set up material items.
- Use the **Items - Project (tppdm0505m000)** session to make material items available for use in projects or contracts.

## Chapter 2: Defining a Contract

In LN you can define the contract and the contract line data which includes the deliverables, billing cycles, and invoicing.

### To define a contract

To define and process a contract, complete the following steps:

- 1** Create a contract  
Define the data for the contract as described in Contract Data Set-up.
- 2** Create contract lines  
Define the data for the contract line as described in Contract Line Data Set-up. Contract lines allow you to maintain additional and detailed information required for a contract.
- 3** Define billing cycles  
Define the Billing cycle using the **Billing Cycles (tpctm0130m000)** session. A billing cycle is the time interval defined to generate billing statement for the contract. You can also define the billing recurrences using the **Recurrences (tcccp0143m000)** session. **Note:** Billing cycles can be defined only for contracts of the type Cost Reimbursement and Time and Materials.
- 4** Define the contract deliverables  
Define the data for the contract deliverable (items that can be hardware or non-hardware) as described in Contract Deliverable Data Set-up.
- 5** Release items to warehousing  
Release the items (deliverables) to warehouse using the Release Deliverables to Warehousing option from the Actions menu in the **Contract Lines (tpctm1110m000)** session. **Note:** LN generates the warehouse order number. You can view on the Shipping tab, in the **Project Deliverables (tppdm7100m000)** session. LN sets the contract deliverables' status to Released to Warehousing. **Note:** To release items to warehousing the status of the contract, contract line and contract deliverable must be set to Active.
- 6** Review the shipment details  
LN generates the shipment data in the **Project Shipments (tppin0160m000)** session after the warehousing order is processed.
- 7** Review the cost transactions

Review the unit costs of the deliverables transferred to Project. LN transfers the unit costs booked on production orders or when the deliverables are procured. The cost data displayed, depends on the level at which the project is pegged. **Note:** Costs can also be reviewed for sales order lines that are project pegged.

## 8 Generate and process the invoices

For Fixed Price Contracts

Installment invoicing

- Use the **Installments (tppin4151m000)** session to create the installments.
- Select or define the *revenue code* for the installment using the **Standard Revenues (tppdm0515m000)** or the **Project - Revenues (tppdm6515m000)** session.
- You can also link the shipment lines to the installments, using the **Project Shipments (tppin0160m000)** session.
- In the Installment session, select the Approved for Invoicing checkbox to transfer to Invoicing.

Delivery Based invoicing

- Define the invoice type on the Invoicing tab in the **Contract (tpctm1600m000)** session.
  - Select Fixed Price Contract in the Agreement Type field.
  - Select Delivery Based in the Invoice Type field.
- Click Release in the **Project Deliverables (tppdm7100m000)** session to release deliverables to warehousing and ship via Warehousing.
- Select the lines to be invoiced in **Invoicing 360 (cisli3600m000)** and process and post the invoices.

For Cost Reimbursement/Time and Material Contracts

- Review the unit costs registered in the **Cost Transactions (tpppc2100m000)** session.
- Use the **Create Aggregated Billable Cost (tppin1200m000)** session to create aggregated billable cost lines. This enables you to view the contract aggregation settings based on the invoicing method and the transactions to be invoiced.
- Select the billable checkbox in the **Contract Billable Cost Lines (tppin1100m000)** session for the transactions that are billable.
- Select the approve checkbox in the **Contract Billable Cost Lines (tppin1100m000)** session to approve the transactions for invoicing.
- Use the Transfer to Invoicing option to transfer the transactions to Invoicing.
- For more detailed billing of unit costs, use the **Cost-Plus Transactions to be Invoiced (tppin2100m000)** session.

## 9 Process the invoices

- Use the **Invoicing 360 (cisli3600m000)** session to process and post the invoices. LN generates the revenues for the contract.
- Review the contract revenues in the Projects and Financials.

## 10 Close the contract

Set the contract to Closed after the deliverables are shipped and the invoicing process is completed.

## Contract data set-up

A contract refers to the overall agreement and defaults varied data for the contract line. To set up a contract in LN define the following data in the **Contract (tpctm1600m000)** session:

### Agreement tab

- 1 Create a contract ID.
- 2 Select or define your Sold-to Business Partner using the **Sold-to Business Partners (tccom4510m000)** session.
- 3 Select or define the Address of the sold-to business partner using the **Addresses (tccom4130s000)** session.
- 4 Select or define the contact data using the **Contacts by Business Partner Role (tccom4545m000)** session.
- 5 Select or define the program using the **Programs (tpctm0110m000)** session. A program is a group of related projects managed in a coordinated way to obtain more benefits and control.
- 6 Select or define the program manager using the **Employees - General (tccom0101m000)** session.
- 7 Select the *sales office* using the **Departments (tcmcs0565m000)** session or define the sales office using the **Enterprise Units (tccom0130m000)** session.
- 8 Select or define the contract manager using the **Employees - General (tccom0101m000)** session.
- 9 Select or define the project for the contract using the **Projects (tpdm6100m000)** session. Multiple projects can be linked to a contract or contract line. **Note:** Defining or linking a project is not mandatory during the initial phase of the contract. You can create a contract with a blank project.
- 10 Set the status of the contract using the Status option from the *appropriate* menu.
- 11 Set the phase of the contract to indicate the phase at which the contract is, such as bidding, sent to customer and so on.
- 12 Select the contract type. This field can have the following values:
  - Fixed Price - invoicing is Installment or delivery based.
  - Cost Reimbursement – only for Cost-Plus invoicing.
  - Time and Materials – Unit Rate and Cost-Plus invoicing.
- 13 Enter the date on which the contract is awarded.
- 14 Enter the effective date and expiry date for the contract.

### Selling tab

- LN defaults the business partner related data from the Agreement tab. However, you can modify the data.
- **Tracking** displays the creation date of the contract and name of the person who creates the contract.

### References tab

- Use the References tab to enter reference text to be printed on the invoices. For example, the name of the contact person or the customer reference number.

### Invoicing tab

- 1 Select the invoice type.
- 2 Select or define the invoicing method using the **Invoicing Methods (tcmcs0555m000)** session.
- 3 Create or define the billing cycles for the contract using the **Billing Cycles (tpctm0130m000)** session.
- 4 Create or set the billing cycle using the **Recurrence Details (tcccp0143s000)**.

- 5 Select the method to determine the *exchange rate*. **Note:** Based on the setting of the **Express in Base Currency** field in the **Currency Rates (tcmcs0108m000)** session, LN divides or multiplies the amount by the rate factor before the currency exchange-rate is applied.
- 6 Specify if Advance Payment Requests are applicable for the contract. Advanced Payment Requests can be linked to a contract or a contract line.
- 7 Enter the liquidation percentage for Advances **Note:** You can define the liquidation percentage only for contracts of the type Fixed Price.
- 8 Select the installment type (this field is enabled only for invoicing methods of the type Installments and Progress Invoices).
- 9 Create or define the installment schedule using the **Installment Schedules (tcmcs2140m000)** session. You can define the schedule only if the **Installment Type** field is set to Percentage.
- 10 Enter the number of points to be distributed to the installments for the contract. You can define the points only if the **Installment Type** field is set to Points.
- 11 Enter the liquidation percentage for installments. **Note:** You can define the percentage only for contracts of the type Fixed Price.
- 12 Specify how the holdback is applied for the contract . Following are the possible values:
  - All Invoices
  - Based on Progress
  - No Holdback
- 13 Enter the holdback percentage.
- 14 LN defaults the business partner related data from the **Agreement** tab:
  - Invoice to business partner.
  - Address
  - Contract currency
  - Exchange rate type

#### **Paying tab**

- 1 Select or define the payment terms using the **Payment Terms (tcmcs0513m000)** session.
- 2 Select or define the payment method using the **Payment/Receipt Methods (tfcmg0540m000)** session.
- 3 Select or define the bank account code using the **Bank Accounts by Pay-by Business Partner (tccom4515m000)** session. The account linked to the bank account code is displayed in the **Bank Account** field.
- 4 LN defaults the pay-by business partner, address and contact data based on the business partner related data from the **Agreement** tab.

**Note:** You can print the SF1034 and SF1035 reports (as per the US Government requirements) for contracts. These reports include the total amount invoiced (SF1034) and the breakdown of the invoiced costs (SF1035), respectively. LN prints the reports, based on the specified **Invoicing Method**. For more information, refer to Invoicing Methods (tcmcs0155s000)

## Contract lines data setup

Contract lines allow you to define and maintain additional information of the contract.

To access the **Contract Lines (tpctm1110m000)** session, you must define the following data on the contract line tab in the **Contract (tpctm1600m000)** session.

- 1 Create a contract line ID (alphanumeric code of 8 characters) and enter a description.
- 2 Enter the contract line amount.
- 3 Select the status of the contract line. **Note:** You can set the status of the contract line to **Active**, only if the status of the contract header is **Active**.
- 4 Select or define the Sold-to and Ship-to BP using the **Sold-to Business Partners (tccom4510m000)** and **Ship-to Business Partners (tccom4511m000)** sessions.
- 5 Specify the contract line execution level. The level indicates whether the contract is executed by you or is subcontracted.
- 6 LN defaults the contract type and project data from the Contract header.

#### Summary tab

- 1 Select the invoice type.
- 2 Select the invoicing method using the **Invoicing Methods (tcmcs0555m000)** session.
- 3 Enter the date on which the contract line is awarded.
- 4 Enter the effective date and expiry date of the contract line.
- 5 Enter the contract delivery date, that is the date the finished items are ready to be shipped.
- 6 LN defaults the following data from the Contract header:
  - Phase
  - Contract Type
  - Contract Currency
  - Exchange Rate Type
- 7 LN defaults the currency and exchange rate type data from the Contract header.

#### Selling tab

- 1 Define the ceiling amount, if any. **Note:** The ceiling amount is defined only for contracts of the type Cost Reimbursement and Time and Materials.
- 2 Define the markup percentage to calculate the sales price. **Note:** The percentage is defined only for contracts of the type Cost Reimbursement and Time and Materials.
- 3 LN defaults the Sold-to BP data from the Contract header.
- 4 Specify the **Funded Amount** and the **Funding Distribution** for the contract. Based on these funding limits, the maximum amount that can be invoiced to the customer is set.

#### References tab

- 1 Enter the customer order number and the names of the first and second reference.
- 2 Select or define the prime contractor using the **Business Partners (tccom4500m000)** session.
- 3 Enter the reference name of the prime contractor.
- 4 Select or define the Defense Priority Allocation System (DPAS) code using the **DPAS (tcmcs0172m000)** session. DPAS is used to provide priority rating for the contracts ( Example: defense orders). LN prioritizes orders for which priority rating is defined.

#### Shipping tab

- 1 Select or define the default delivery terms using the **Delivery Terms (tcmcs0141m000)** session.
- 2 Select or define the *point of title passage* using the **Points of Title Passage (tcmcs0142m000)** session.

- 3 Select or create the default carrier for the contract deliverables, using the **Carriers/LSP (tcmcs0580m000)** session.
- 4 LN defaults the **Sold-to Business Partner** data from the Contract header.

#### Invoicing tab

- 1 Select or define the invoice delivery method using the **Invoice Delivery Methods (tcmcs0156m000)** session.
- 2 Enter the percentage of discount on the invoice.
- 3 LN defaults the Invoice-to business partner data from the Contract header.

#### Tax tab

- 1 Define the tax classifications for the contract line using the **Tax Classifications (tctax0116m000)** session.
- 2 Select the **Exempt** checkbox, if *tax exemption* is applicable.
- 3 Select or define the tax country using the **Countries (tcmcs0510m000)** session.
- 4 Select or define the tax code using the **Tax Codes by Country (tcmcs0536m000)** session.
- 5 Select or define the BP tax country using the **Countries (tcmcs0510m000)** session.
- 6 Enter the tax certificate number issued by the tax authorities. When goods or services are purchased, the certificate number is provided to the supplier for tax exemption.
- 7 Select or define the reason for tax exemption using the **Reasons (tcmcs0105m000)** session.

#### Paying tab

- LN defaults the Pay-by Business Partner data from the Contract header.

#### Classification tab

- 1 Select or define the *line of business* using the **Lines of Business (tcmcs0131m000)** session.
- 2 Select or define the contract acquiring method using the **Acquiring Methods (tppdm0140m000)** session.
- 3 Select or define the financing method code for the contract using the **Financing Methods (tppdm0139m000)** session.
- 4 Select or define the geographical area to group business partners, customers, suppliers and employees using the **Areas (tcmcs0145m000)** session.
- 5 Select or define the category of the contract (a classification layer that is useful for sorting and grouping projects) using the **Categories (tppdm0146m000)** session.
- 6 Define the business sector for the contract, using the **Business Sectors (tppdm0137m000)** session.
- 7 Define the contract group using the **Groups (tppdm0141m000)** session. Groups are used for classifying and sorting contracts.

## Contract deliverables data set-up

A contract deliverable is a tangible or intangible item that is produced or purchased as a result of a contract. The deliverables of the contract are defined in the **Contract Deliverables (tppdm7100m100)** session.

To access the **Contract Deliverables (tppdm7100m100)** session, you must define the following data on the contract deliverables tab in the **Contract (tpctm1600m000)** session.

- 1 Select or define the contract line number using the **Contract Lines (tpctm1110m000)** session.

- 2 Select the item type, following are the possible values:
  - Hardware ( *manufactured item* and *purchased item* only).
  - Non-hardware (cost or service item only).
- 3 Select or define the project code using the **General Projects (tcmcs0552m000)** session.
- 4 Select or define the item to be delivered using the **Items (tcibd0501m000)** session.
- 5 Enter the ordered quantity of the item, select the unit of measure of the quantity using the **Units by Unit Set (tcmcs0112m000)** session.

#### Item tab

- 1 Select or define the ICS Code (an external, alternate way of coding items) using the **Item Code System - Items (tcibd0104m000)** session.
- 2 Select the effectivity unit, if required.
- 3 Select the delivery method of the *lot item*. Following are the possible values:
  - **Any:** You can draw the shipment from multiple lots. This is the default value.
  - **Same:** You can select any lot for delivery, but the entire shipment must be drawn from the same lot.
  - **Specific:** You can use only one specific lot. This lot is entered in the Lot field.

**Note:** This field is not mandatory.
- 4 Select the method for *serial number* selection. Following are the possible values:
  - **Any:** No specific serial number must be linked to the deliverable. As a result, the serial number is determined by Warehousing, or by Purchase Control in case of non-inventory items.
  - **Specific:** You can manually select the serial number that must be linked to the deliverable from the **Item - Serials and Warehouses (whlts5100m000)** session. You can only select an item for which the **Serials in Inventory** check box is selected in the **Item - Warehousing (whwmd4600m000)** session.

**Note:** This field is not mandatory
- 5 LN defaults the Contract data from the Contract header.
- 6 Specify the ordered quantity of the item, select the unit of measure of the quantity using the **Units by Unit Set (tcmcs0112m000)** session. **Note:** LN displays the scheduled quantity from the **Contract Deliverables Schedule (tpdpm7100m200)** session, if the contract deliverable is split over multiple schedule lines.
- 7 Specify the quantity delivered. You must specify the quantity only for non-hardware deliverables that are not handled using Warehousing. For deliverables (hardware and non-hardware) that are handled using Warehousing, LN displays the value specified in the **Project Shipments (tppin0160m000)** session.
- 8 Specify the accepted quantity of the item. **Note:** LN defaults the values of the ordered quantity from the **Contract (tpctm1600m000)** session.
- 9 Set the status of the contract deliverable.
  - You can set the contract deliverable line to Active only when the contract line status is Active and the deliverable is pegged, that is the deliverable is linked to a project, element or activity.
- 10 Select the contract delivery and confirmed delivery date and time.
- 11 Select the planned delivery date and planned receipt date and time.
- 12 Create a schedule for the deliverables using the **Contract Deliverables Schedule (tpdpm7100m200)** session or click the Schedule button. This is not mandatory.
- 13 Click Get Sales Price, LN retrieves the sales price of the deliverables. The **Price Origin** field displays the origin; from where the item sales price is retrieved. For more information see Retrieving sales price for project deliverable items.

#### Selling tab



- 1 Click **Get Sales Price**, LN retrieves the sales price of the deliverables. The **Price Origin** field displays the origin from where the item sales price is retrieved. For more information see Retrieving sales price for project deliverable items. **Note:** You can also define the sales price details in the **Item** tab and the details are defaulted in the **Price** group box on the **Selling** tab.
- 2 Select or create the price stage for the deliverable item using **Price Stages (tcmcs2112m000)** session.
- 3 Specify the **Discount Percentage** and **Discount Amount** for the deliverable item, if any. The **Discount Origin** field displays the origin from where the discount value is retrieved.

### Shipping tab

- 1 Select or define the delivery points for the deliverables using the **Delivery Points (tccom4134m000)** session.
- 2 Select or create the Ship-to Contact data using the **Contacts by Business Partner Role (tccom4545m000)** session.
- 3 Select the Shipping Constraints of the goods, if any.  
You can specify the following Shipping Constraint:
  - **Ship Line Complete:** This means that the total quantity of the line must be shipped as one single shipment.
  - **Ship Line & Cancel:** If sufficient inventory exists, this results in a complete shipment of the line. A lack of inventory does not result in a back order but in the cancellation of the order for the remaining quantity. LN links a predefined cancel reason to the order line.
  - **None:** Shipping constraint is not applicable.
- 4 Select the **Unit Binding** checkbox to freeze the quantity to be shipped.
- 5 Define the delivery terms using the **Delivery Terms (tcmcs0141m000)** session. This field is not mandatory.
- 6 Define the route for the shipments from the warehouse to the ship-to or ship-from business partner's warehouse using the **Routes (tcmcs0104m000)** session.
- 7 Define the duration of transportation using the **Freight Service Levels (tcmcs0175m000)** session. **Note:** The warehouse order number is displayed only when the deliverables are released to warehousing.
- 8 LN defaults the Ship-to BP data from the Contract line.

### Project tab

- 1 Select or define the project to be linked to the contract deliverable line using the **Projects (tppdm6100m000)** session. Select the element, activity and/or the milestone. **Note:** You must specify this project related data to peg the cost for the contract. **Note:** You must specify the project, element and/or activity for the status of a deliverable to be set to Active.
- 2 Select or define the cost component using the **Cost Components (tcmcs0148m000)** session.

### Tax tab

- LN defaults the Tax data from the Contract header.

### Additional Information tab

- LN defaults any additional information from the Contract header.

## Chapter 3: Scheduling contract deliverables

Use the Contract Deliverables Schedule (tppdm7100m200) session to create and maintain schedules for the contract deliverable lines.

### To create a delivery schedule

If the contract deliverables are scheduled to be delivered in multiple shipments or to multiple delivery destinations, you can create, plan, and monitor the delivery schedule for the shipments using the **Contract Deliverables Schedule (tppdm7100m200)** session.

**Note:** The item cannot be defined on the schedule line. The item must be defined on the deliverable line to which the schedule is linked.

### Backorders for Contract Deliverables

When a contract deliverable is partially delivered, LN creates a *backorder* for the contract deliverable line. When this order is delivered partially, a backorder for the remaining goods is created.

For example, during the delivery of the goods, if the goods are damaged in the warehouse or if the truck carrying the goods has insufficient capacity, the damaged or the remaining goods cannot be delivered and the order remains incomplete.

The backorder quantity is calculated based on the formula:

$$\text{Backorder Quantity} = \text{Ordered Quantity} - \text{Delivered Quantity}$$

#### Parameter setting for backorders

Use the Contract Parameters (tpctm0100m000) session to set the parameters for the backorders. If the Activate Backorders automatically checkbox is selected, LN sets the status of the backorder to **Active**. If the Release Backorders automatically to Warehousing checkbox is selected, LN releases the backorders with **Active** status to the warehouse.

### Creating a backorder

For a contract deliverable that has the status **Delivered**, if the delivered quantity is less than the ordered quantity, LN creates a backorder line for the undelivered goods in the Contract Deliverables (tpdpm7100m100) session. LN selects the Backorder Present checkbox indicating that a backorder is created for the deliverable line. LN also creates a deliverable schedule line for the backorder, if the Backorder checkbox is selected in the Contract Deliverables Schedule (tpdpm7100m200) session.

Backorders can be created for hardware and non-hardware deliverables. The backorder data can be viewed in the Backorders (tpdpm7100m300), Contract Deliverables Monitor (tpdpm7100m400), Contract Deliverables (tpdpm7100m100) and the Contract Deliverables Schedule (tpdpm7100m200) sessions.

For the contract deliverables of the type **Hardware**, the backorder deliverables are released to warehousing; only if the status of the backorder line is **Active** and the Release Backorders automatically to Warehousing checkbox in the Contract Parameters (tpctm0100m000) session is selected. LN updates the status of the backorder line to **Released to Warehousing**. The status of the backorders can be manually changed to **Released to Warehousing**, as required.

LN allows you to create multiple backorder lines for a single deliverable. You can also delete or cancel a backorder line.

**Note:** For a contract deliverable line linked to a deliverable schedule line, the Backorder Quantity displays the total backorder quantity of all the backorders linked to the schedule. When the quantity on a backorder schedule is modified, LN updates the backorder quantity in the **Contract Deliverables(tpdpm7100m100)** session and the **Contract Deliverables Schedule (tpdpm7100m200)** session.

The backorder data can be printed only as a part of the contract acknowledgment if the **Contract Deliverables** check box and the **Include Backorder Lines** check box is selected in the **Print Contract Acknowledgments (tpctm1400m000)** session.

## Return orders for contract deliverables

When a customer returns contract deliverable items, a *return order* must be created for the deliverable line in the Create Return Deliverables (tpdpm7200m100) session. Return orders can be created for deliverables of the type **Hardware** and **Non Hardware**. A return order for a contract deliverable can be manually entered or created from the contract deliverable line, deliverable schedule, contract shipment or contract invoice. You can also create multiple return orders for a single deliverable line.

**Note:** A return order for a contract deliverable can be created only if the status of the deliverable line is set to **Delivered**.

The return order data can be viewed in the Contract Deliverables (tpdpm7100m100) and the Contract Deliverables Schedule (tpdpm7100m200) sessions. When a return order is created, a negative deliverable with a negative order quantity and a negative sales amount is created. The quantity of the returned goods is displayed as the negative order quantity.

**Note:** A return order can be created only if the goods are returned after receiving a return request from the customer. If the goods are returned without a return request (or an indication) from the customer, the returned goods are recorded as unexpected receipts.

### Creating a return order

You can create a return order from the Create Return Deliverables (tppdm7200m100) session. You must specify the reason for the return of the goods. This session can be started from these sessions:

- Contract Deliverables (tppdm7100m100).
- Contract Deliverables Schedule (tppdm7100m200).
- Contracts (tpctm1100m000).

To create a return order from a contract shipment, select the Contract Shipment option and specify the shipment code in the Contract Shipment field in the Create Return Deliverables (tppdm7200m100) session.

To create return order from a contract invoice, select the Contract Invoice option and specify invoice data in the Contract Invoice fields in the Create Return Deliverables (tppdm7200m100) session.

LN creates a negative deliverable line in the Contract Deliverables (tppdm7100m100) and the Contract Deliverables Schedule (tppdm7100m200) sessions, with a negative order quantity (quantity of returned goods) and a negative sales amount.

When a negative deliverable is created from a return order, the *order balance* is reduced due to the negative sales amount. LN updates data in the Contract History (tpctm1102m000) and the Contract Deliverables Monitor (tppdm7100m400) sessions.

**Note:** The return order data can be printed only as a part of contract acknowledgement if the Contract Deliverables checkbox and the Include Return Deliverables checkbox is selected in the Print Contract Acknowledgments (tpctm1400m000) session.

## Contract Deliverables Monitor

The **Contract Deliverables Monitor (tppdm7100m400)** session is designed to help you plan and monitor the delivery process of the contract. This session displays all contract deliverables and deliverable schedule lines.

You can filter the data using the following options:

- **Contract Manager**
- **Internal Sales Representative**
- **Contract Delivery Date**
- **Planned Delivery Date**
- a range of dates for the Contract Delivery Date or the Planned Delivery Date

You can also filter the contract deliverable data using the following options

- **Delivered On Time**
- **Delivered Late**
- **Expected On Time**
- **At Risk**

## Deliverables link to Service

Contract deliverables (that are serialized items) are automatically transferred to Service after the goods are shipped to the customer. The deliverables must be maintained in Service. The specified *installation group* links the contract deliverables to Service. The value of the installation group is defaulted from the **Projects (tppdm6100m000)** session.

## Export Compliance Check for Contract Deliverables

The Global Trade Compliance functionality can be used to check if specific items can be exported to a specific country or from / to a specific business partner. It is a process that verifies if specific export requirements are met. For this purpose, this process performs various checks on the contract deliverables. It is possible to execute internal and external checks. The authorized users can overwrite compliance check errors generated by LN, in which case the Export block is overruled.

### Prerequisites

The *global trade compliance* functionality is enabled, only if:

- The **Trade Management** check box is selected in the **Concepts (Logistics)** tab, in the **Implemented Software Components (tccom0100s000)** session.
- The **Export** check box is selected in the **Trade Management Parameters (tcgtc0100m000)** session.

### Compliance Check

A contract deliverable is subject to an export compliance check if:

- The deliverable is of the type, **Hardware** and is processed in Warehousing.
- The cost item deliverables are of the type, **Non Hardware** and are released to Warehousing.
- The **Subject to Trade Compliance** check box is selected in the **Items (tcibd0501m000)** session.
- The deliverables are shipped to another country, that is, the **Ship-from** address (based on the value specified in Warehousing) and the **Ship-to Address** specified in the **Contract Deliverables (tppdm7100m100)** session, are located in different countries.

#### Note:

- The **Subject to Trade Compliance** indicator is added to the **Contract Deliverables (tppdm7100m100)** session. This check mark indicates if the **Subject to Trade Compliance** check box is selected in the **Items (tcibd0501m000)** session. If this indicator is not selected, by default, the **Document Compliance Status** is set to **Not Applicable**, and the **Check Export Compliance** option is disabled.
- If the deliverable for which the trade compliance check is already executed is modified, the check is executed again. This is applicable even if the planned delivery date, or confirmed delivery date, the quantity, or sales amount data for the deliverable is modified.
- During the internal check, LN verifies if the **Outbound Trade Compliance** and **Restricted by Components** check boxes are selected in the **Items (tcibd0501m000)** session. A license is required for certain countries based on the item and the export restrictions.

Following are the two scenarios for the export compliance check:

## Scenario 1

- 1 In the **Contract Deliverables (tppdm7100m100)** session, create a deliverable.
- 2 Click **Activate**. When you activate the deliverable, the export compliance check is executed.
  - If validated ( **Document Compliance Status** is set to **Validated**), the status of the deliverable is set to **Active** and the deliverable can be released to Warehousing using the **Release** option.
  - If a validation error occurs ( **Document Compliance Status** is set to **Validation Error**), the deliverable status remains **Free**.
- 3 When the deliverable is validated and released, a warehouse order is created in the **Warehousing Order (whinh2100m100)** session. After the shipment line is confirmed, LN sets the contract deliverables **Status** to **Delivered** in the **Contract Deliverables (tppdm7100m100)** session.

**Note:** You can override the check using the **Document Compliance Check Results (tcgtc1610m000)** session. Override option is enabled for failure results.

## Scenario 2

- 1 In the **Contract Deliverables (tppdm7100m100)** session, create a deliverable.
- 2 Click **Check Export Compliance**.
- 3 If validated, ( **Document Compliance Status** is set to **Validated**), click **Activate**.
- 4 Click **Release**.

**Note:** If you create a return deliverable in the **Contract Deliverables Schedule (tppdm7100m200)** session, LN sets the **Document Compliance Status** to **Not Applicable** and the **Check Export Compliance** option is disabled.

## Retrieving sales price for project deliverable items

LN retrieves the sales price for the deliverable items either from sales contract or from a price book or from the item sales data.

If a sales contract exists for the project deliverable item, LN retrieves the sales price from the sales contract. If no sales contract exists for the project deliverable, LN retrieves the sales price from the applicable price books, else the price is defaulted from item sales data.

- 1 Retrieving sales price from a sales contract: LN first checks whether a valid *special contract* and next a valid *normal contract* is defined for the deliverable item. You can define sales contract prices in the Sales Contract Lines (tdsls3501m000) session.
- 2 Retrieving sales price from price book: If a sales contract is not defined for the deliverable item, LN retrieves the sales price from a *price book*.

LN uses the following search logic:

- Price book linked to a price matrix: LN searches for price books that are linked to valid price matrices. LN looks for price matrices with the matrix definition and matrix attributes that match the attributes of the relevant order and retrieves the price defined. **Note:** All the matrix attributes must match the attributes of the order. If more than one valid price matrix exists, price retrieval is controlled by the Price Control (Sales)/ Price Control (Purchase) parameters in the **Pricing Parameters (tdpcg0100m000)** session.

- Default price book: LN searches for a default sales price book, as entered in the **Default Service Price Book** field of the **Pricing Parameters (tdpcg0100m000)** session to retrieve sales prices.

- 3 Retrieving sales price from Item-Sales data: In case a sales contract or price book is not defined for the deliverable item, LN defaults the price from the **Item - Sales (tdisa0601m000)** session.

**Note**

- If the **Use Upgrade Prices** check box is selected in the **Unit Effectivity Parameters (tcuef0100s000)** session and the *effectivity unit* is specified for the order line, *upgrade prices* are added to the sales price.
- You can manually enter or modify the item sales price.

- 4 Infor LN defaults the price with the standard cost price when the price from Item-Sales data is 0.

## Chapter 4: Linking a CLIN to a Project structure

### Linking CLIN to a project structure

You can link multiple contract lines (CLINs) to a project ( *element structure/ activity structure*). This enables you to track direct costs, compare revenues, and also estimate indirect costs (such as project management or testing) at the CLIN level. This functionality is applicable for all contract types ( **Fixed Price**, **Time & Materials** and **Cost Reimbursement**, see Contract types for more information).

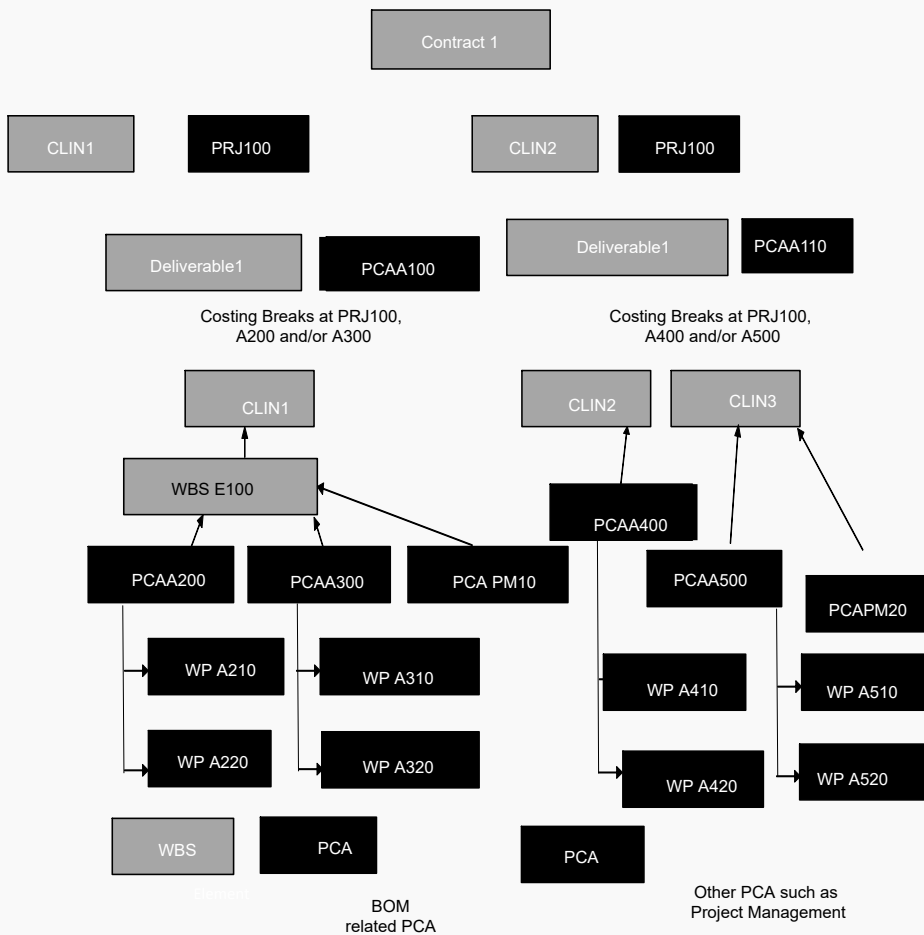
The related costs are displayed in the **Cost Transactions (tpppc2100m000)** and **Financial Transactions (tpppc2100m100)** sessions.

**Note:**

- You can link a specific project peg (element/activity) to only one contract line.
- You cannot link a project to multiple contract lines, if the contract types are different, because a project can have only one revenue recognition option.



## Example



A contract with two contract lines (CLIN1 and CLIN2) is linked to the project PRJ100. Each CLIN has an activity of the type *Control Account*, linked to a deliverable. However, you can only view the unit costs associated with the activities linked to the deliverable, because the other activities recording the unit costs are not linked to the CLIN. The WBS element (WBS E100) is the parent to PCA200, PCA300 and PCA PM10. The activities (WP A210, A220, A310, A320) record the unit costs that are associated with costing breaks. Since there is no link between the WBS Element or activities to the CLIN, LN cannot recognize which CLIN must be linked with the unit costs of these activities.

Therefore, for project PRJ100 with activity PCAA100, the WBS Element E100 is linked to CLIN1, effectively all the levels below E100 are also linked to CLIN1, enabling you to view all the related costs.

For the project PRJ100 with activity PCAA100, you can link specific activities to specific CLINs, in case the WBS element (WBS E100) is not considered.

### Link a CLIN to an element

A CLIN can be linked to multiple deliverables and each deliverable is linked to an *element*, which allows you to view the unit costs for the deliverable. However, only elements for which the *cost control* levels are checked, in the **Project Parameters (tpdpm0100s000)** session, are linked to a CLIN, as unit costs can be collected only for these elements.

### Link a CLIN to an activity

*Activities*, of the type *Control Account* and *Work Package*, can only be linked to a CLIN as these activities record the actual costs of the project.

LN links all activities, not linked to a CLIN deliverable, to the related contract line. You can map the WBS of the *element type* activities to CLINs because, by default, Control Accounts are linked to WBS elements.

If WBS elements are not used, LN determines the CLINs applicable to a Work Package, based on the *parent/child relationship* between a Control Account and a Work Package.

### Link an element and activity structure

A project can also be element and activity controlled. You can link an element with an *element structure* and then add activities, as required. If the elements are linked to an activity that is cost controlled, both the element and activity, by default, are linked to the contract line.

**Note:** When the element and activities relationships are not specified, only elements that are cost controlled can be linked to a CLIN.

To see the process to link a CLIN to a project structure, see *How to link a CLIN to a project structure*.

## How to link a CLIN to a project structure

Use the **Contract Link to Project Structure (tpctm0160m000)** session to link contract lines to a project structure. You can also access the session using the **Link to Project Structure** option in the References menu, in the **Contract (tpctm1600m000)** and **Contract Lines (tpctm1110m000)** sessions.

- 1 Specify a contract, the related CLINs, and link activities of the type **Control Account**.
- 2 If the project has no control accounts, link activities, of the type **Work Package**, to the CLINs.
- 3 If the **Cost Incurred** and **Revenue Present** check boxes are selected in this session, it indicates that unit costs and revenue are incurred and the CLIN link cannot be modified or deleted.

#### Note

- You can only modify a CLIN before unit costs or revenues are booked for a specific activity.
- If a project (with a Work Package and Control Account structure) is linked to two CLINs, and unit costs are only incurred at the parent (Control Account) level, you can only modify the CLIN at the child (Work Package) level.
- In case, only the element is specified, LN, by default, links all activities related to the element to the CLIN. You can also specify the activities as required.

## Chapter 5: Contract Funding

### Using Contract Funding

In LN, for certain types of *contracts* (for example, Aerospace and Defense contracts) specific funding limits (amounts) can be defined. Based on these limits, the maximum amount that can be invoiced to the customer is set.

#### Funding Distribution

You can distribute the funding amount by:

- **Sequence:** The funded amount for the contract line is distributed based on the sequence defined by the user.
- **Percentage:** The funded amount for the contract line is distributed based on the percentage specified by the user. **Note** The total percentage of all the distribution lines must be 100%.
- **Funded Amount:** The funded amount for the contract line is distributed based on the amount specified in the **Funded Amount** field. LN populates the percentage value of the amount in the **Percentage** field.

#### Defining funding limits

You can specify the funding limit (amount to be invoiced) available to the contractor from the total funded amount allocated for the contract. Funding limits can be applied to all contract types ( **Fixed Price, Time & Materials** and **Cost Reimbursement**, see Contract types for more information).

To define the funding limit, in the **Contract Lines (tpctm1110m000)** session:

- 1 Enter the funding amount for each contract line, in the **Funded Amount** field.
- 2 Select the distribution method using the **Funding Distribution** field.
- 3 Click the **Distribution** button. The **Funding Distribution (tpctm0170m000)** session starts, wherein you distribute the amount by creating distribution lines.

**Note:** Funding amount must be equal to or lower than the contract line amount.

You can also view the total funded amount and specify the distribution method in the **Contract (tpctm1600m000)** session. Using the **Funding Distribution** field, in the **Selling** tab, LN defaults the value of the distribution method field in the **Contract Lines (tpctm1110m000)** session.

#### Invoicing

Before the contract line is invoiced, you must adjust the funded amount to ensure that the amount does not exceed the contract line amount. LN only approves the distribution line for invoicing, if the amount to be invoiced is less than or equal to the funded amount.

**Note:** The funding amount must not exceed the ceiling amount, if defined in the **Contract Lines (tpctm1110m000)** session.

LN invoices the distribution lines based on the distribution sequence. The distribution line with the lowest sequence number is processed first. In case, the invoice amount is more than the amount linked to the distribution line, LN selects the next distribution line consequentially.

#### By Sequence

For example, a funded amount of 8000 Euro is allotted for a distribution line of sequence 1. The amount of 12,000 Euro is allotted for a distribution line of sequence 2. For an invoice of 15,000 Euro the distribution line with sequence 1 is processed first. For the remaining amount of 7000 Euro, LN selects the distribution line with sequence 2 and invoiced amount is processed by 7000 Euro. To process the next invoice, LN considers the distribution line with sequence 2 that has the unallocated amount of 5000 Euro and only then considers the subsequent distribution line (sequence 3, 4 and on), if existing.

#### By Percentage/Amount

For example, the specified percentage for a distribution line A is 10% and distribution line B is 5%. For an invoice of 20000 Euro for the contract line, 2000 Euro (10% of the invoice) is invoiced for the distribution line A and 1000 Euro (5% of the invoice) for distribution line B.

After the contract line is invoiced, LN displays the **Approved Amount**, **Invoiced Amount**, and the **Composed Amount** (initially hidden) in the **Funding Distribution (tpctm0170m000)** session.

**Note:**

- The funding distribution sequence defined for the contract line cannot be modified after the contract line is approved.
- LN does not consider the advance payments for the contract line, when calculating the amounts to be approved.

To see the examples of distributing the funded amount, see Funding Distribution by Sequence, Funding Distribution by Percentage, Funding Distribution by Amount.

## Funding Distribution by Sequence

To specify the funding limit, you can use the Funding Distribution (tpctm0170m000) session to distribute funds by **Sequence, Percentage, or Amount**.

### An Example of distributing funds by sequence:

Funding amount:

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	0	0	0
B	200	0	0	0
C	200	0	0	0

1. Approve the fund based on the **Invoice Type**.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	50	0	0
B	200	0	0	0
C	200	0	0	0

## 2. Compose the approved amount.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	50	50	0
B	200	0	0	0
C	200	0	0	0

## 3. Post the invoice.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	50	50	50
B	200	0	0	0
C	200	0	0	0

**An Example of distribution of funds when a new approved amount is added:**

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	100	50	50
B	200	50	0	0
C	200	0	0	0

## 1. Add a new approved amount (350 Euro).

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	100	50	50
B	200	200	0	0
C	200	200	0	0

## 2. Compose the approved amount.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	100	100	50
B	200	200	200	0
C	200	200	200	0

## 3. Post the invoices.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	100	100	100	100
B	200	200	200	200
C	200	200	200	200

## Funding Distribution by Percentage

To specify the funding limit, you can use the Funding Distribution (tpctm0170m000) session to distribute fund by **Sequence, Percentage, Or Amount**.

### An Example of distributing funds by percentage:

Funding amount:

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	0% 100	0	0	0
B	0% 200	0	0	0
C	0% 200	0	0	0

1. Approve the fund based on the **Invoice Type**.

Fund Identifier	Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	0% 100	10		0
B	0% 200	20		0
C	0% 200	20		0

## 2. Compose the approved amount.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	20%	100	10	10	
B	40%	200	20	20	
C	40%	200	20	20	

**Table 1: Compose the approved amount**

Fund Identifier	Percentage	Funded Amount	Approved Amount	Composed Amount	Invoiced Amount
A	20%	100	10	10	
B	40%	200	20	20	
C	40%	200	20	20	

## 3. Post the invoices.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	20%	100	10	10	10
B	40%	200	20	20	20
C	40%	200	20	20	20

**An Example of distribution of funds when a new approved amount is added:**

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	20%	100	30	10	10
B	40%	200	60	20	20
C	40%	200	60	20	20

## 1. Add a new approved amount (350 Euro).

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	20%	100	100	10	10
B	40%	200	200	20	20
C	40%	200	200	20	20

## 2. Compose the approved amount.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	10%	100	100	100	10
B	10%	200	200	200	20
C	10%	200	200	200	20

## 3. Post the invoices.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	10%	100	100	100	100
B	10%	200	200	200	200
C	10%	200	200	200	200

## Funding Distribution by Amount

To specify the funding limit, you can use the Funding Distribution (tpctm0170m000) session to distribute fund by **Sequence, Percentage, Or Amount**.

### An Example of distributing funds by amount:

Funding amount:

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	10%	100	0	0	0
B	10%	200	0	0	0
C	10%	200	0	0	0

1. Approve the fund based on the **Invoice Type**.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	10%	100	10	0	0
B	10%	200	20	0	0
C	10%	200	20	0	0



## 2. Compose the approved amount.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	<del>0%</del>	100	10	10	0
B	<del>0%</del>	200	20	20	0
C	<del>0%</del>	200	20	20	0

## 3. Post the invoices.

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	<del>0%</del>	100	10	10	10
B	<del>0%</del>	200	20	20	20
C	<del>0%</del>	200	20	20	20

## An Example of distribution of funds when a new approved amount is added:

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	<del>0%</del>	100	30	10	10
B	<del>0%</del>	200	60	20	20
C	<del>0%</del>	200	60	20	20

## 1. Add a new fund amount (600 Euro).

Fund Identifier		Funded amount (Euro)	Approved amount (Euro)	Composed amount (Euro)	Invoiced amount (Euro)
A	9.09%	100	30	10	10
B	18.18%	200	60	20	20
C	18.18%	200	60	20	20
D	54.55%	600	0	0	0

## To use the rate determiner

The rate determiner is used to determine whether you want to use a variable currency rate (rate determiner = **Document Date** or **Expected Cash Date**) for all invoice transactions, or a fixed currency rate (rate determiner = **Fixed** or **Manually Entered**). The currency rate can be determined in different ways to make sure that the method is in line with the way you run your business.

For the **Document Date** rate determiner, the currency rate is retrieved with the invoice date and the business partner exchange rate type, from the **Currency Rates (tcmcs0108m000)** session. For the **Expected Cash Date**, LN takes the Payment Days into account to calculate the invoice date to retrieve a rate from the **Currency Rates (tcmcs0108m000)** session. As a result, the invoice amounts can have different currency rates during the life cycle of the project.

If you want to use the same currency rate for a project, you can use the **Fixed** or **Manually Entered** rate determiner. For example, if you work with long-term contracts, you want to be sure that the unit cost currency in which your project is paid by your American business partner, is virtually inflation-proof. In case of a **Fixed** rate determiner, you might use currency hedging and buy dollars to counterbalance inflation risks. You invoice for a fixed business partner currency rate, which you enter in the Rate field in the **Contracts (tpctm1100m000)** session.

If you use the **Manually Entered** rate determiner, you can also enter the currency rate. This entered currency rate remains fixed for the life cycle of the project, as with **Fixed**. However, with **Manually Entered** the currency differences (currency write offs) are used in the interim result. Note that the Rate field can only be entered in these two cases and only in the **Contracts (tpctm1100m000)** session or the **Contract Lines (tpctm1110m000)** session. As a result, the invoice amounts will have the same currency rate during the project. The **Currency Rates (tcmcs0108m000)** session is not used.

In an *independent currency system* situation, the following rate determiners also apply:

- **Fixed Local:** The rate is only fixed for the local currency.
- **Fixed Hard:** The rate is fixed for the reporting currencies.
- **Fixed Local and Hard:** The rate is fixed for all three home currencies.

**Note:** The rate determiner default is retrieved from the sold-to business partner. Only, if all the invoice lines for the related business partner in Invoicing have the status **Posted**, you can change the rate determiner in the **Contracts (tpctm1100m000)** session.

### Business partner currency

By default, this is the currency of the *invoice-to business partner*. In Project, the business partner currency is used for all invoice transactions and for the contract amount. In cost plus transactions, the invoice currency can be changed to a different currency than the business partner currency. For these transactions a separate invoice is printed.

### Exchange rate type

The *exchange-rate type* in the **Contracts (tpctm1100m000)** session is used to calculate the currency rate of the business partner currency and the contract amounts. If the company uses a dependent multicurrency system, the ERT is valid between the business partner currency and the reference currency. In an independent system, the ERT determines the currency rate between the business partner currency and the three home currencies.

In the **Project Parameters (tppdm0100s000)** session, two exchange rate type settings are available:

- **Default Exchange Rate Type for Costs**

This setting is used to calculate:

- Estimated amounts in the home currencies in Estimating.
- Standard cost object amounts in the home currency.
- Amounts that are not directly project related and have no business partner.

- **Default Exchange Rate Type for Revenues**

This setting is used for invoice exceptions. The currency for sales amounts is normally defaulted from the business partner. If you do not use a business partner (for estimating or manually entered revenues in **Revenue Entry (tpppc3501m000)**, there is no exchange rate type. The **Default Exchange Rate Type for Revenues** determines the currency rate from the **Currency Rates (tcmcs0108m000)** session.

## Chapter 6: Fees and Penalties

### Create fees and penalties for contract

The *contract fees* and *penalties* are used to incentivize the contractor. The terms and conditions can be agreed upon with the *contractor* as part of the contract. You can define fees and penalties for all the **contract types**. The invoicing method is defaulted from the contract line data. However, you can change the invoicing method.

Fees and penalties are defined as part of the contract line data and must be linked to the *revenue code*. You can define a period of validity for a fee line. You can add multiple fee and penalty lines to a contract line.

You can close the project or the contract even though the fee amount and the invoice amount are not same because the invoiced amount can be lower than the fee amount or even zero (not earned by the contractor because of lack of performance).

LN considers the fees and penalties to calculate revenues. LN only considers the fee type **Fixed Fee** for revenue recognition.

The fee amount must not exceed the funded amount specified for the contract. LN allows you to approve the fees only if the funds are available for the contract. You cannot settle the advance amount using fee invoices. The funded amount of the contract cannot be increased based on the penalties.

**Note:**

- For penalties, invoice with a negative amount or *credit note* is generated.
- For fees and penalties, the *holdback* functionality is not applicable.

#### Invoicing

When you transfer a fee or penalty line to Invoicing, the fee data such as **Fee Type** and **Text** is also transferred to Invoicing.

You can also manually create the revenue transactions for fees and penalties using the invoice type, **Fees and Penalties** in the **Revenues (tpppc3101s000)** session .

When you post an invoice related to fees and penalties in Invoicing:

- LN updates the revenue transactions for fees and penalties in the **Revenue Transactions (tpppc3505m000)** session.
- The **Invoice Date** and **Invoice Document** are updated on the fee or penalty line.

The expected/ planned revenues for **Fixed Fee** are displayed in the performance measurement graphs and revenue analysis graphs, if the **Planned Revenues** check box is selected in:

- The **Performance Measurement using EVM (tppss0702m000)** session.
- The **Display Financial Analysis (tppss0701m000)** session.

When you cancel a billable line related to the fee or penalty in Invoicing, LN clears the **Transferred to Invoicing** check box for the fee or penalty line in the **Fees and Penalties (tppin0180m000)** session.

**Note:**

LN considers the invoice type, **Fees and Penalties** (only approved or **Fixed Fee**) when you update the *cash forecast* data for the projects that are not closed; if the Project Contracts check box is selected in the **Update Cash Forecast (tfcmg3210m000)** session.

If the fee is linked to a contract line with the status **Canceled** or to a project with the status **Closed**, you cannot update the cash forecast data for the fee.

To see the process to create contract fees and penalties, see [To create contract fees and penalties](#).

## To create contract fees and penalties

To create contract fees and penalties, complete the following steps:

- 1** In the **Contract Lines (tpctm1110m000)** session, on the **References** menu, select **Fees and Penalties**.
- 2** In the **Fees and Penalties (tppin0180m000)** session, click **New** to create fee and penalty lines for the selected contract line.
  - Select the **fee type**.
  - Select the *revenue code* for the fee and penalty line.
  - Select the *invoicing method*, *payment terms*, and *payment method* for the fee and penalty line.
  - Specify the project data; **Project**, **Element**, **Activity**, and **Triggering Activity**. **Note:** These values are used for revenue transactions during invoicing.
  - Specify the **Planned Invoice Date**. The **Planned Invoice Date** is defaulted with the **Scheduled Finish Date** of the activity specified in the **Triggering Activity** field. However, you can modify the date.
  - Specify the fee or penalty amount and the **Invoice Amount** (approved amount).
  - Approve the fee line using the **Approve** option.
  - Transfer the fee and penalty line to Invoicing using the **Transfer** option.
- 3** In the **Invoicing 360 (cisli3600m000)** session, compose, post, and print the invoices for the fee and penalty lines.

## Chapter 7: Progress Payment Requests

### Using progress payment requests

Progress payments requests are generated for the unit costs incurred when working on a contract with the business partner. Progress payment invoices are sent to the customer based on an agreed billing cycle and settled using the installment or delivery based invoices. The progress payment request process is used to create a US specific Standard Form 1443 invoice.

#### Note

- This process can be used only if the required parameter is selected.
  - Progress Payments are only applicable for fixed price contracts.
  - The *holdback* functionality is not applicable for Progress Payment Requests.
  - Progress Payment Requests are not included in the Revenue Analysis.
- 1 Specify the revenue code in the Project Parameters (tpdpm0100s000) session.
  - 2 Select the **Progress Payment Requests** check box in the Contract Parameters (tpctm0100m000) session.
  - 3 Select the **Small Business** check box to ensure the business entity is a small business, and to print the value on the Standard Form 1443. The check box is enabled only if the **Progress Payment Requests** check box is selected.

### To define a progress payment request

- 1 Specify the contract.
- 2 Select the **Progress Payment** check box to create the progress payment request for the contract.
- 3 Specify the progress payment percentage. The percentage of cost for a contract that is considered for invoicing. The commonly used progress payment percentages range between 75-80%.
- 4 Specify the progress liquidation percentage used for calculating the amount to settle the progress payment invoices.
- 5 Specify the *invoicing method*.
- 6 Specify the *payment terms*.
- 7 Select the **Billable Cost Report** check box to print an additional report while creating the invoice.
- 8 Create a contract line(s). See: Contract lines data setup. LN defaults the progress payment data defined for the contract, on the **Progress Payment Requests** tab.

#### Note

- Progress Payment %, Progress Liquidation %, Invoicing Method, Payment Terms, and Billable Cost Report fields are enabled only if the Progress Payment check box is selected on the **Progress Payment Requests** tab, in the Contract (tpctm1600m000).
- LN allows two types of invoices on a contract line: Progress payment invoices and Installment or Delivery based invoices. An additional payment term is added to differentiate between installment/delivery based invoices and progress payment invoices.

## Creating progress payment request

To create progress payment request you must follow this process and use the relevant invoicing method and payment term specified for the contract line.

- 1 In the Cost-Plus Transactions to be Invoiced (tppin2100m000) session, select the Contract line. or select the **Billable Cost Details** option in the **Contract 360 (tpctm1300m000)** session, to create the unit costs for the contract.

On the Reference menu, click **Create Aggregated Billable Cost**; the Create Aggregated Billable Cost (tppin1200m000) session opens.

- 2 In the Create Aggregated Billable Cost (tppin1200m000) session, click Create, to create the billable cost lines.
- 3 In the Cost-Plus Transactions to be Invoiced (tppin2100m000) session:
  - Select the created billable cost line for the contract
  - On the Reference menu, click **Contract Billable Cost Lines**. The **Contract Billable Cost Lines (tppin1100m000)** session opens.
- 4 In the **Contract Billable Cost Lines (tppin1100m000)** session, select the billable cost line for the contract.
  - On the Reference menu, click **Create Progress Payment Requests**. The Create Progress Payment Requests (tppin0270m000) session opens. LN defaults the progress payment requests data from the **Contract (tpctm1600m000)/ Contract Lines (tpctm1110m000)** session.
- 5 In the Create Progress Payment Requests (tppin0270m000) session, specify the required information and click **Create**. LN creates the progress payment requests.
- 6 In the **Progress Payment Requests (tppin0170m000)** session:
  - Approve/Unapprove the progress payment requests
  - Transfer the progress payment requests to invoicing

### Note

- You can review the progress payment requests data in the **Progress Payment Requests (tppin0170m000)** session.
- You can review the settled progress payment requests data in the **Settled Progress Payment Requests (tppin0571m000)** session.

### Invoicing

You must use the relevant invoicing method and payment term specified for the contract line. Invoicing may differ based on:

- Progress Payments invoices settled at agreed intervals, based on the progress of the contract.
- Progress payment invoices including the advance payments.
- Progress payment invoices settled with installments/delivery based invoices.

**Note:**

- When Progress Payment Requests are settled using Installments or Deliverables, a reverse entry is generated in Financials.
- LN registers revenues for the requests using the revenue of the type **Progress Payment Request**, in the **Revenue Transactions (tpppc3505m000)** session.
- When generating the balances for interim results, Progress Payment Requests are included to calculate the Billed to Customer amount.
- LN also allows the user to print a US specific invoice, Standard Form 1443 (SF1443) Contractors's Request for Progress Payment. To print both these standard forms, the Infor Operational Reporting functionality is required. The SF form 1443 must also specify the unsettled advance amount.
- Progress payment requests are posted using the existing Integration Document Type Project Revenue/Revenue Analysis.



## Chapter 8: Processing contract invoices

Contract invoices, the related costs of the contract, are processed in Invoicing. In LN, these invoice types are supported:

- Installment
- Delivery Based Invoicing
- Progress Invoicing
- Cost Plus
- Unit Rate
- Extension

### Installment invoicing

Use installment invoicing to generate and control installments and *progress invoice* details. Installments are partial contract amounts that you send at regular intervals. For example, if you agree to send two invoices, one invoice is sent during the project and the other at the project completion.

In the **Contract (tpctm1600m000)** session, on the **Invoicing** tab,

- 1** Define the **Invoice Type**.
- 2** Set the **Contract Type** to **Fixed Price**.
- 3** Set the **Installment Type** to **Amount, Percentage, Or Points**

### Using advance payments

Advance payment requests are amounts requested of the *business partner* before or after the project starts. You can use these amounts to buy, for example, project material.

*Advance payments* can be made for all the invoice types. The advance must be linked to one of the contract lines. You can link an advance to an element or activity. If the invoice type of a contract line is **Installment**, you can also link the advance to the installment. You can use this installment to settle the advance. If the advance is not linked to an installment, you can settle the advance in the next invoice or define a liquidation percentage for the contract line.

To maintain an advance, you must select a revenue code from the **Standard Revenues (tppdm0515m000)** session. The advance payments are transferred to Invoicing by the application.

Posting advance payments:

- When you post an advance payment request record, Infor LN creates a revenue record.
- When the advance line is printed and posted to Financials using the **Compose/Print/Post Invoices (cisli2200m000)** session, the invoice number is populated in the advance record and in the revenue record.
- The revenue record is transferred from Invoicing to Invoicing. The application then creates a record in the **Revenue Transactions (tpppc3505m000)** session.
- This record is printed using the **Compose/Print/Post Invoices (cisli2200m000)** session, and posted to Financials using the same session.

**Note:**

The invoice number is defaulted in the revenue record.

Checks if an advance record is present. You can settle this advance line with a normal line. If an advance line exists, Infor LN adds the record to the Revenue table to counterpost the advance.

## To use progress invoicing

**Progress Invoice** is an invoice type similar to **Installment**. The installment amount depends on the project progress and the element or activity sales rates. Progress invoice specifications involve invoicing partial contract amounts at agreed intervals, for example, every four weeks. You can release this data to Invoicing.

The fixed amount of all the installments is equal to the total contract price. If progress is 100%, you can invoice the entire contract amount.

To use progress invoicing:

- 1 In the **Contract Lines (tpctm1110m000)** session, specify the invoice type:
  - a Set the **Contract Type** to **Fixed Price**.
  - b Set the **Invoice Type** to **Progress Invoice**.
- 2 Specify the element/activity data in the **Elements (tpptc1100m000)** or **Activities (tppss2100m000)** sessions. This data is the basis for setting up installment specifications such as the sales unit, sales quantity, and sales price for to the project structure (element/activity). The sales value of an element or activity is the product of the sales price and quantity.
- 3 Specify the element progress in the **Element Physical Progress (tpppc1550m000)** session or the activity progress in the **Activity Physical Progress (tpppc1560m000)** session.
- 4 Using the **Create Progress Invoice Installments (tppin1210m000)** session, generate installments based on the sales data for the elements, activities for the project, and the progress registered for the elements and activities. Evaluate the generated installment data. To evaluate installment specifications, use the **Progress Invoice Specifications (tppin1510m000)** session.
- 5 Transfer the project data to Invoicing using the **Transfer Transactions to Invoicing (tppin4200m000)** session.

In Invoicing:

- a** Confirm the future invoices.
- b** Check the invoice headers.
- c** Compose, print, and post invoices to Accounts Receivable.

The associated revenues are simultaneously processed in Project Accounting. The invoice number is displayed on the transaction when the revenues are posted.

## To use cost plus invoicing

You can maintain and control the invoicing of cost plus projects and *extensions* in Project. Invoicing amounts are based on the actual costs plus a markup, or the sales price/rate for the product, or the service extended to the customer.

LN displays the billing amounts and quantities, based on the effort spent, on the contract lines of type **Cost Reimbursement** and **Time & Materials**. You can create a business partner's invoice only when you incur the actual costs.

To use cost plus invoicing:

- 1** In the **Contracts (tpctm1100m000)** and **Contract Lines (tpctm1110m000)** sessions, ensure to do the following:
  - a** Set **Contract Type** to either **Cost Reimbursement** or **Time & Materials**,
  - b** Set **Invoice Type** to **Cost-Plus**.
  - c** Specify a project that is linked to the relevant contract line.
  - d** Register unit costs on the project. LN then registers the unit costs on the contract line.
- 2** Assign the revenue codes in the **Assign to Revenue Codes (tppin0810m000)** session.
- 3** Record the actual costs in the **Cost Entry Overview (tpppc2811m000)** session. The options are:
  - By *element/ activity*
  - By *cost type*
  - By *control code*
  - By *cost object*: If you define an element with the **Elements (tpptc1100m000)** session or an activity with the **Activities (tppss2100m000)** session, use the **Cost Control** check box to indicate whether you want to record project unit costs for the element or activity. If this check box is cleared, Project aggregates the element costs to the parent element.
- 4** Confirm the unit costs in the **Approve Costs (tpppc4811m000)** session.
- 5** Process the transactions in the **Process Transactions (tpppc4802m000)** session. Using this session you post the confirmed unit costs to the project history and Financials.

**Note:** This is relevant only for unit costs registered for a project. LN approves and processes the unit costs that are not part of the project.
- 6** Set the transactions to **To be Invoiced** using the **Cost-Plus Transactions to be Invoiced (tppin4810m000)** session.
- 7** Process the transactions to Invoicing using the **Transfer Transactions to Invoicing (tppin4200m000)** session.

In Invoicing:

- a** Confirm the future invoices.
- b** Check the invoice headers.
- c** Compose, print, and post invoices to Accounts Receivable.

The associated revenues are defaulted to Project Progress for transaction processing.

## Releasing cost plus transactions

You can release material, labor, equipment, subcontracting and sundry cost lines using the following overview and associated details sessions:

- **Material Transactions to be Invoiced (tppin2100m100)**
- **Labor Transactions to be Invoiced (tppin2100m200)**
- **Equipment Transactions to be Invoiced (tppin2100m300)**
- **Subcontracting Transactions to be Invoiced (tppin2100m400)**
- **Sundry Cost Transactions to be Invoiced (tppin2100m500)**
- **Overhead Transactions to be Invoiced (tppin2100m600)**

Alternatively, use the **Approve Transactions for Invoicing (tppin4257m000)** session to collectively release the cost lines for invoicing. You can also print a range of cost plus lines in the **Print Cost-Plus Transactions (tppin4457m000)** session.

You can invoice for contract extensions such as scope changes in work, provisional amounts and price/quantity fluctuation settlements.

## Billable Costs

In LN, you can create and maintain billable costs using the **Contract Billable Cost Lines (tppin1100m000)** session. The cost lines are based on the detailed cost plus transactions aggregated using the **Create Aggregated Billable Cost (tppin1200m000)** session. The aggregation levels are defined based on the invoicing method specified for the contract line.

Using this method, you can create invoices that consider specific detailed costs that can be combined in one invoice line. For example, if the customer has agreed that Labor and Material is a specified detailed cost but to total all other Direct Costs. Matching aggregation levels can then be set as part of the invoicing method. Use the **Create Aggregated Billable Cost (tppin1200m000)** session to preview how the data is combined on the invoice.

The aggregated level can be modified and used to update the detailed lines. For example, there are equipment invoice lines with varying rates. At the aggregated level the billing rate is changed and all detailed lines will be updated accordingly.

## To use unit rate invoicing

The unit rate invoice is based on the sales price of an element or an activity. The amount to be invoiced equals the sales price multiplied by the physical progress quantity.

To use unit rate invoicing:

- 1 Assign the elements or activities to revenue codes in the **Assign Elements and Activities to Revenue Codes (tppin0820m000)** session.
- 2 Select the relevant **Contract Type** and specify **Unit Rate** in the **Invoice Type** field, in the **Contract Lines (tpctm1110m000)** session.
- 3 Specify the relevant elements or activities for the project with the sales price to be used for invoicing.
- 4 Record the progress in the **Element Physical Progress (tpppc1550m000)** or the **Activity Physical Progress (tpppc1560m000)** session.
- 5 Transfer the project data with the **Transfer Transactions to Invoicing (tppin4200m000)** session.

**Note:** The **Transferred Unit Rate Invoiced Lines (tppin0550m000)** session displays the lines for a specific project, element, and activity that have successfully been transferred.

In Invoicing:

- a Confirm the future invoices.
- b Check the invoice headers.
- c Compose, print and post invoices to Accounts Receivable.

The associated revenues are simultaneously processed in Project Accounting. The invoice number is displayed on the transaction when the revenues are posted.

## To use delivery-based invoicing

Delivery-based invoices are based on the sales amounts of the contract deliverables. Delivery-based invoice specifications involve invoicing the customer, based on the shipment or delivery of the service to the customer.

- 1 In the **Contract (tpctm1600m000)** session, on the **Invoicing** tab, specify the invoice type:
  - a Set **Contract Type** to **Fixed Price**.
  - b Set **Invoice Type** to **Delivery Based**.
- 2 In the **Contract Deliverables (tpdpm7100m100)** session, click **Release to Warehousing** to release the deliverables to warehousing and ship the deliverables using Warehousing.
- 3 Select the lines to be invoiced in the **Invoicing 360 (cisli3600m000)** session.
- 4 Process and post the invoices.

## Chapter 9: Integration with Service (TS)

Integration of Project (TP) with Service (TS) for After Sales Services

### Extended Integration between Project and Service for After Sales Services

At the time of selling or delivering a product a maintenance contract is also sold as part of the value added service. In Project, for items that require service, After Sales Service is linked to the *contract deliverable*.

When selling the product, you can:

- Add warranty
- Generate a *service contract* (with a preventive maintenance plan)

#### To view and access After Sales Service

You can view the items for which **After Sales Service** is enabled in the following sessions:

- **Contract Lines (tpctm1110m000)**
- **Contract Deliverables (tppdm7100m100)**
- **Contract Deliverables Schedule (tppdm7100m200)**
- **Backorders (tppdm7100m300)**
- **Contract Deliverables Monitor (tppdm7100m400)**
- **Project Shipments (tppin0160m000)**

#### Master data

After Sales Service is enabled for the contract deliverable only if:

- The **Extended Service Integration** check box is selected in the **Contract Parameters (tpctm0100m000)** session, for the contract line to which the contract deliverable is linked.
- The **Process to Service after Delivery** check box is selected for the item in the **Items - Service (tsmdm2100m000)** session.
- The **Delivery Schedule Present** check box must be cleared in the **Contract Deliverables (tppdm7100m100)** session.
- The **Contains Customer Furnished Material** check box must be cleared in the **Contract Deliverables (tppdm7100m100)** session.

Based on the settings, the after sales service actions are executed when a delivered after sales service line is processed to Service.

## Processing the after sales service lines to Service

- 1 Create a deliverable in the **Contract (tpctm1600m000)** session.
- 2 Select the **After Sales Service** option from the References menu in the **Contract (tpctm1600m000)** session, for the deliverable linked to the contract line. An after sales service line is generated for the deliverable in the After Sales Service (tstdm5600m000) session with the status **To be Delivered**.
- 3 In the **Contract Deliverables (tpdpm7100m100)** session:
  - Click **Activate**
  - Click **Release**. LN:
  - Review the **Unprocessed After Sales Service** check box setting. LN selects this check box which indicates that after sales service line exists with the status **Delivered**, for the contract deliverable.
  - Review the status of the contract deliverable. LN sets the status to **Delivered**.
- 4 Select the **After Sales** option from the References menu in the **Contract Deliverables (tpdpm7100m100)** session. The **After Sales Service Lines (tstdm5101m000)** session opens.
- 5 Click **Process** in the **After Sales Service Lines (tstdm5101m000)** session. The Process After Sales Service Lines (tstdm2250m000) session opens.
- 6 Click **Process** in the **Process After Sales Service Lines (tstdm2250m000)** session. An after-sales service line is generated for the deliverable in the After Sales Service (tstdm5600m000) session with the status **Processed**.

The processing of the after sales service lines can be automated by selecting the **Process After Sales Service Automatically** check box on the **Shipping** tab, in the **Contract Deliverables (tpdpm7100m100)** session. LN processes the After Sales Service line linked to the Contract Deliverable when the shipment of the deliverable is confirmed.
- 7 Review the after sales service data that is generated for the contract deliverable on the **Result** tab in the **After Sales Service Lines (tstdm5101m000)** session.

## To copy a project structure to Service

The project *activity structure* or *element structure* and the actual consumed material items linked to the project, are copied to the Service *physical breakdown* structure. The process enables identifying the project items that need service and maintenance. The actual (history) data of the consumed items linked to the project is considered for this Project- Service integration.

**Note:** The copying process is handled in Service in the **Copy Project Breakdown Structure (tscfg2210m200)** session.

### **Copying actual consumed material items**

The actual consumed material items stored in Project cost history are copied. If the item is marked 'Serialized', a serial number is generated for the item, based on a predefined *mask*. If the generation of the serial number fails, an error is reported. It is possible to generate a dummy or final serial number for the material item. You can later replace the dummy serial number with the final number. For elements and activities, the number generated is considered as the final serial number.

You can only copy:

- Actual consumed material items stored in Project cost history.
- Actual consumed material items for which Service item data is defined.

You cannot copy:

- Consumables such as oil used for a project.
- Actual consumed material items for which Service item data is not defined.

### **Copying the activity structure**

The activity structure as displayed in the Activities (tppss2100m000) session is used as input for the physical breakdown structure. LN creates a serialized item for each activity. The parent activity is used as the top serialized item in the physical breakdown structure.

### **Copying the element structure**

The element structure as displayed in the Element Budget Structure (tpptc1509m000) session is used as input for the physical breakdown structure. LN creates a serialized item for each element. The top element is used as the top serialized item in the physical breakdown structure.

If the project element/activity structure undergoes changes, and the copy process must be repeated. The existing physical breakdown structure in Service is not overwritten. The new structure is added to the existing records.



# Index

## A

Activity [45](#)  
Advance payment requests [41](#)  
After sales service  
    Project [47](#)  
After Sales Service  
    Contract Line [46](#)

## B

Back order [18](#)  
billable costs [44](#)

## C

contract data set-up [12](#)  
Contract Deliverable  
    handling back orders [18](#)  
    handling return orders [19](#)  
Contract Deliverables [46](#)  
contract deliverables monitor [20](#)  
Contract Fee  
    Penalty [36–37](#)  
contract flow [10](#)  
Contract Funding [27](#)  
contract line (CLIN) link to project structure [24, 26](#)  
contract lines data [13, 15](#)  
Contract Management [7](#)  
Contract Prices and Rates [9](#)  
contract types [7](#)  
Copy structure to [47](#)  
Cost plus  
    invoicing [43](#)  
Cost plus transactions  
    releasing [44](#)

## D

Deliverables link to Service [21](#)  
Delivery based  
    invoicing [45](#)

## E

Element  
    sales price [45](#)  
Extensions [44](#)

## F

Fixed currency rates [34](#)

funding distribution  
    contract [32](#)  
Funding distribution  
    contracts [28, 30](#)

## G

Global release [44](#)  
GTC  
    Export compliance [21](#)

## H

Holdback [41](#)

## I

Installments  
    invoicing [41](#)  
Invoicing  
    cost plus [43](#)  
    delivery based [45](#)  
    installments [41](#)  
    progress [42](#)  
    unit rate [45](#)  
Invoicing method [43](#)

## P

Printing cost plus transactions [44](#)  
Progress  
    invoicing [42](#)  
Progress payment request [38](#)  
Progress payment requests [38–39](#)  
Project progress [43](#)

## R

Rate determiner  
    in [34](#)  
retrieval [22](#)  
Return Order [19](#)

## S

sales price [22](#)  
Service [47](#)

## T

To create a delivery schedule [18](#)

**U**

Unit rate

Unit rate *(continued)*  
invoicing [45](#)