

**Framework 12
Product Conformance
Certification Report**

**Infonova
R6 Concept-to-Cash Platform V6.5**

**May 2013
Version 1.0.1**



Table of Contents

Table of Contents	2
List of Tables	4
List of Figures	4
1 Introduction	6
1.1 Executive Summary	6
2 Product Functionality/Capability Overview	7
2.1 Infonova's R6 Concept-to-Cash – Product Overview	7
3 Business Process Framework Assessment Overview	8
3.1 Mapping Technique Employed.....	8
3.2 Business Process Framework Level 2 Process Scope	9
3.3 Product Scope	12
4 Business Process Framework – Process Mapping Descriptions	13
4.1 Level 2: Customer Interface Management (1.1.1.2)	13
4.1.1 Level 3: Manage Contact 1.1.1.2.1	14
4.1.2 Level 3: Manage Request (Including Self Service) 1.1.1.2.2	16
4.1.3 Level 3: Analyze & Report on Customer 1.1.1.2.3	19
4.1.4 Level 3: Mediate & Orchestrate Customer Interactions 1.1.1.2.4.....	21
4.1.5 Supporting Evidence References (Works Cited).....	24
4.1.6 Level 2: Customer Interface Management (1.1.1.2) – Conformance Scores	25
4.2 Level 2: Order Handling (1.1.1.5)	26
4.2.1 Level 3: Determine Customer Order Feasibility (1.1.1.5.1).....	26
4.2.2 Level 3: Authorize Credit (1.1.1.5.2).....	30
4.2.3 Level 3: Track & Manage Customer Order Handling (1.1.1.5.4)	32
4.2.4 Level 3: Complete Customer Order (1.1.1.5.5)	36
4.2.5 Level 3: Issue Customer Orders (1.1.1.5.6).....	39
4.2.6 Level 3: Report Customer Order Handling (1.1.1.5.7)	45
4.2.7 Level 3: Close Customer Order (1.1.1.5.8).....	50
4.2.8 Supporting Evidence References (Works Cited).....	52
4.2.9 Level 2: Order Handling (1.1.1.5) - Conformance Scores.....	53
4.3 Level 2: 1.1.1.10 - Bill Invoice Management (1.1.1.10)	54
4.3.1 Level 3: Apply Pricing, Discounting, Adjustments & Rebates 1.1.1.10.1	55
4.3.2 Level 3: Create Customer Bill Invoice 1.1.1.10.2.....	59
4.3.3 Level 3: Produce & Distribute Bill 1.1.1.10.3.....	65
4.3.4 Supporting Evidence References (Works Cited).....	75
4.3.5 Level 2: 1.1.1.10 - Bill Invoice Management (1.1.1.10) – Conformance Scores	76
4.4 Level 2: Bill Payments & Receivables Management (1.1.1.11)	77
4.4.1 Level 3: Manage Customer Billing 1.1.1.11.1	77
4.4.2 Level 3: Manage Customer Payments 1.1.1.11.2	79
4.4.3 Level 3: Manage Customer Debt Collection 1.1.1.11.3	87
4.4.4 Supporting Evidence References (Works Cited).....	98
4.4.5 Level 2: 1 Bill Payments & Receivables Management (1.1.1.11) – Conformance Scores	99
4.5 Level 2: Bill Inquiry Handling (1.1.1.12).....	100
4.5.1 Level 3: Create Customer Bill Inquiry Report 1.1.1.12.1	100
4.5.2 Level 3: Assess Customer Bill Inquiry Report 1.1.1.12.2	107
4.5.3 Level 3: Authorize Customer Bill Invoice Adjustment 1.1.1.12.3	112
4.5.4 Level 3: Track & Manage Customer Bill Inquiry Resolution 1.1.1.12.4	117
4.5.5 Level 3: Report Customer Bill Inquiry 1.1.1.12.5	124
4.5.6 Supporting Evidence References (Works Cited).....	129
4.5.7 Level 2: Bill Inquiry Handling (1.1.1.12) – Conformance Scores	130
4.6 Level 2: Charging (1.1.1.13)	131
4.6.1 Level 3: Perform Rating 1.1.1.13.1.....	131
4.6.2 Level 3: Apply Rate Level Discounts 1.1.1.13.2	133



4.6.3	Level 3: Aggregate Items For Charging 1.1.1.13.3	135
4.6.4	Level 3: Manage Customer Charging Hierarchy 1.1.1.13.4	136
4.6.5	Level 3: Analyze Billing Trend 1.1.1.13.5 [Not Assessed].....	138
4.6.6	Supporting Evidence References (Works Cited).....	138
4.6.7	Level 2: Charging (1.1.1.13) – Conformance Scores.....	139
4.7	Level 2: Manage Billing Events (1.1.1.14)	140
4.7.1	Level 3: Enrich Billing Events 1.1.1.14.1	141
4.7.2	Level 3: Guide Billing Events 1.1.1.14.2	144
4.7.3	Level 3: Mediate Billing Events 1.1.1.14.3	147
4.7.4	Level 3: Report Billing Event Records 1.1.1.14.4	150
4.7.5	Supporting Evidence References (Works Cited).....	154
4.7.6	Level 2: Manage Billing Events (1.1.1.14) – Conformance Scores	155
4.8	Level 2: Product & Offer Development & Retirement (1.2.1.5).....	156
4.8.1	Level 3: Gather & Analyze New Product Ideas 1.2.1.5.1	157
4.8.2	Level 3: Assess Performance of Existing Products 1.2.1.5.2	161
4.8.3	Level 3: Develop New Product Business Proposal 1.2.1.5.3	164
4.8.4	Level 3: Develop Product Commercialization Strategy 1.2.1.5.4	166
4.8.5	Level 3: Develop Detailed Product Specifications 1.2.1.5.5	170
4.8.6	Level 3: Manage Product Development 1.2.1.5.6	176
4.8.7	Level 3: Launch New Products 1.2.1.5.7	178
4.8.8	Level 3: Manage Product Exit 1.2.1.5.8	182
4.8.9	Supporting Evidence References (Works Cited).....	188
4.8.10	Level 2: Product & Offer Development & Retirement (1.2.1.5) – Conformance Scores	189
5	Information Framework Assessment Overview	190
5.1	Mapping Technique Employed.....	190
5.2	Information Framework Assessment - ABE Scope.....	190
5.3	Product Scope	191
6	Framework Conformance Result	192
6.1	Business Process Framework – Scoring Rules	192
6.2	Business Process Framework - Conformance Result Summary.....	193
6.3	Business Process Framework – Detailed Conformance Results.....	195
6.4	Information Framework – Scoring Rules	204
6.5	Information Framework – Conformance Result Summary	206
6.6	Information Framework – Detailed Conformance Result.....	208

List of Tables

Table 4.1 - Customer Interface Management (1.1.1.2) – Conformance Scores	25
Table 4.2 - Order Handling (1.1.1.5) - Conformance Scores.....	53
Table 4.3 - Bill Invoice Management (1.1.1.10) – Conformance Scores	76
Table 4.4 - Bill Payments & Receivables Management (1.1.1.11) – Conformance Scores	99
Table 4.5 - Bill Inquiry Handling (1.1.1.12) – Conformance Scores	130
Table 4.6 - Charging (1.1.1.13) – Conformance Scores.....	139
Table 4.7 - Manage Billing Events (1.1.1.14) – Conformance Scores.....	155
Table 4.8 - Product & Offer Development & Retirement (1.2.1.5) – Conformance Scores	189
Table 6.1 – Business Process Framework: Detailed Conformance Results.....	195
Table 6.2 - Information Framework: Detailed Conformance Result.....	208

List of Figures

Figure 3.1 - Operations Level 2 process coverage for Infonova's R6 Concept-to-Cash Assessment.....	9
Figure 3.2 - SIP Level 2 process coverage for Infonova's R6 Concept-to-Cash Assessment.....	10
Figure 3.3 - Level 3 process coverage for Infonova's R6 Concept-to-Cash Assessment	11
Figure 3.4 - R6 Concept-to-Cash Product Footprint with Scope for eTOM Assessment	12
Figure 4.1: Customer Interface decomposition into level 3 processes	13
Figure 4.2: Manage Contact decomposition into level 4 processes.....	14
Figure 4.3: Manage Request (Including Self Service) decomposition into level 4 processes	16
Figure 4.4: Analyze & Report on Customer decomposition into level 4 processes	19
Figure 4.5: Mediate & Orchestrate Customer Interactions decomposition into level 4 processes	21
Figure 4.6 - Order Handling decomposition into level 3 processes.....	26
Figure 4.7 - Track & Manage Customer Order Handling decomposition into level 4 processes	32
Figure 4.8 - Complete Customer Order decomposition into level 4 processes.....	36
Figure 4.9 - Issue Customer Orders decomposition into level 4 processes	39
Figure 4.10 - Report Customer Order Handling decomposition into level 4 processes.....	45
Figure 4.11 - Bill Invoice Management decomposition into level 3 processes	54
Figure 4.12 - Apply Pricing, Discounting, Adjustments & Rebates decomposition into level 4 processes ..	55
Figure 4.13 - Create Customer Bill Invoice decomposition into level 4 processes	59
Figure 4.14 - Produce & Distribute Bill decomposition into level 4 processes.....	65
Figure 4.15 - Bill Payments & Receivables Management decomposition into level 3 processes	77
Figure 4.16 - Manage Customer Payments decomposition into level 4 processes	79
Figure 4.17 - Manage Customer Debt Collection decomposition into level 4 processes	87
Figure 4.18 - Bill Inquiry Handling decomposition into level 3 processes	100
Figure 4.19 - Create Customer Bill Inquiry Report decomposition into level 4 processes.....	100
Figure 4.20 - Assess Customer Bill Inquiry Report decomposition into level 4 processes	107
Figure 4.21 - : Authorize Customer Bill Invoice Adjustment decomposition into level 4 processes	112
Figure 4.22 - Track & Manage Customer Bill Inquiry Resolution decomposition into level 4 processes ...	117
Figure 4.23 - Report Customer Bill Inquiry decomposition into level 4 processes	124
Figure 4.24 - Charging decomposition into level 3 processes.....	131
Figure 4.25 - Manage Customer Charging Hierarchy decomposition into level 4 processes	136
Figure 4.26 - Manage Billing Events decomposition into level 3 processes.....	140
Figure 4.27 - Enrich Billing Events decomposition into level 4 processes.....	141
Figure 4.28 - Guide Billing Events decomposition into level 4 processes.....	144
Figure 4.29 - Mediate Billing Events decomposition into level 4 processes	147



Figure 4.30 - Report Billing Event Records decomposition into level 4 processes 150

Figure 4.31 - Product & Offer Development & Retirement decomposition into level 3 processes 156

Figure 4.32 - Product & Offer Development & Retirement decomposition into level 3 processes 157

Figure 4.33 - Develop Product Commercialization Strategy decomposition into level 4 processes 166

Figure 4.34 - Develop Detailed Product Specifications decomposition into level 4 processes 170

Figure 4.35 - Launch New Products decomposition into level 4 processes 178

Figure 4.36 - Manage Product Exit decomposition into level 4 processes 182

Figure 5.1 - Level 1 ABEs in scope for Infonova's R6 Concept-to-Cash Assessment 190

Figure 5.2 - R6 Concept-to-Cash Product Footprint: Product Scope for SID Assessment 191

Figure 6.1 - TM Forum Business Process Framework: Conformance Scoring Rules 192

Figure 6.2 – Business Process Framework: Conformance Result Summary CRM [1/2] 193

Figure 6.3 - Business Process Framework: Conformance Result Summary CRM [2/2] and Marketing & Offer Mgt 194

Figure 6.4 - TM Forum Information Framework: Conformance Scoring Rules 204

Figure 6.5 - Information Framework: Conformance Result Summary CBE & Customer Domains 206

Figure 6.6 - Information Framework: Conformance Result Summary Product, Service & Supplier/Partner Domains 207

1 Introduction

1.1 Executive Summary

This document provides details of Infonova's self-assessment and TM Forum's Conformance Assessment of **Infonova's R6 Concept-to-Cash Platform** product, against the following Framework 12 components:

- Business Process Framework Version 12
- Information Framework Version 12

The assessment included a review of:

- The methodology approach to process modeling against the TM Forum's Business Process Framework Release 12 according to the specific processes submitted in scope for the Assessment.
- Conformance to the Information Framework Release 12 Domains/Aggregate Business Entities according to the specific ABEs submitted in scope for the Assessment.

2 Product Functionality/Capability Overview

2.1 Infonova's R6 Concept-to-Cash – Product Overview

R6 is an E2E Concept-to-Cash BSS for a primary operator & multiple tenants. It is a fully J2EE platform that supports real multi-tenant concept-to-cash operations for fully convergent and complex cross-industry business models while also supporting Telco 1.0 simultaneously.

The R6 platform has been specifically designed to be technology and service agnostic and offers comprehensive service bundling, enabling multiple tenant operators to configure, bundle and price their own product & service portfolios including Cloud (IaaS, PaaS & SaaS), Broadband IP, VoIP, IPTV, PSTN, Mobile with other third party services, e.g. media, insurance, device distribution, content, water, gas and power - for their target markets.

R6 delivers partnering orchestration, monetization & automated revenue sharing allocation of products & services for multiple suppliers & partners. R6 enables providers and enterprises to partner together and define terms of trade. This allows them to transact with confidence because money due to each party is automatically allocated when customers buy products and services.

Infonova's R6 is a highly pre-integrated solution stack sitting on top of a SOA-aligned integration platform. The proven product family components cover the enhanced 'Concept-to-Cash' lifecycle: Platform and Business Management, Product Management, Customer Management, Order Management, Billing and Finance - which each of the tenants access in their own right and with their own business rules so that they can manage their own customers, orders, billing and receivables.

The solution has a comprehensive Integration Platform and powerful wholesale, virtualization and white labeling capabilities. This enables R6 to be readily deployed in both incumbent and attacker configurations, supporting triple/quadruple play and business service portfolios (e.g. PSTN, internet, IP telephony, mobile, security, TV/IPTV, content, hosted applications, etc.), with complex business and/or organization models (e.g. wholesale, consumer, business, enterprise business, reseller, dealer, sales channel, etc.).

3 Business Process Framework Assessment Overview

3.1 Mapping Technique Employed

Business Process Framework Level 3 descriptions are analyzed by looking for implied tasks. (This is similar to how process decomposition can use Semantic Analysis). Each Business Process Framework process is supported by descriptive text. In many cases, each process is aligned and mapped to appropriate company documentation references solution, methodology or modeling material.

The Business Process Framework Level 3 descriptions are analyzed by looking for implied tasks. Color coded text as highlighted below is used as part of the process mapping whereby highlighted text indicates the level of support for a Level 3 process implied task:

- **GREEN** is used to highlight key words or key statements that are fully supported
- **YELLOW** is used to highlight key words/key statements that are partially supported
- **GREY** is used to highlight key words/key statements that are not supported
- No highlighting is used for words/statements that are irrelevant, just for reference or needed to complete the sentence.

Manual and Automated Support

It is important to determine whether the implied task is supported by manual steps, automated steps, or a combination of both. In this document, “A”, “M”, or “AM” is used for each task to indicate that the step or steps is/are automated (A), manual (M), or both (AM).

TM Forum Note 1: *When process mappings are presented against Level 4 processes, the mappings are provided against the text in the “Mandatory” field for the process. In the event of the Mandatory field not being used, the process mappings are in that case provided against the Level 4 Brief/Extended descriptions.*

TM Forum Note 2: *Note that if a Level 3 process has not been decomposed to Level 4 processes in the Business Process Framework, in such cases the process mapping support is provided against the Level 4 process descriptions (Brief & Extended).*

3.2 Business Process Framework Level 2 Process Scope

The following figures represent the Business Process Framework Level 2 processes that were presented in scope for the assessment, and the textual callouts represent the components of Infonova's R6 Concept-to-Cash Platform that were assessed and support the corresponding Business Process Framework processes according to the results in Chapter 6 Framework Conformance.

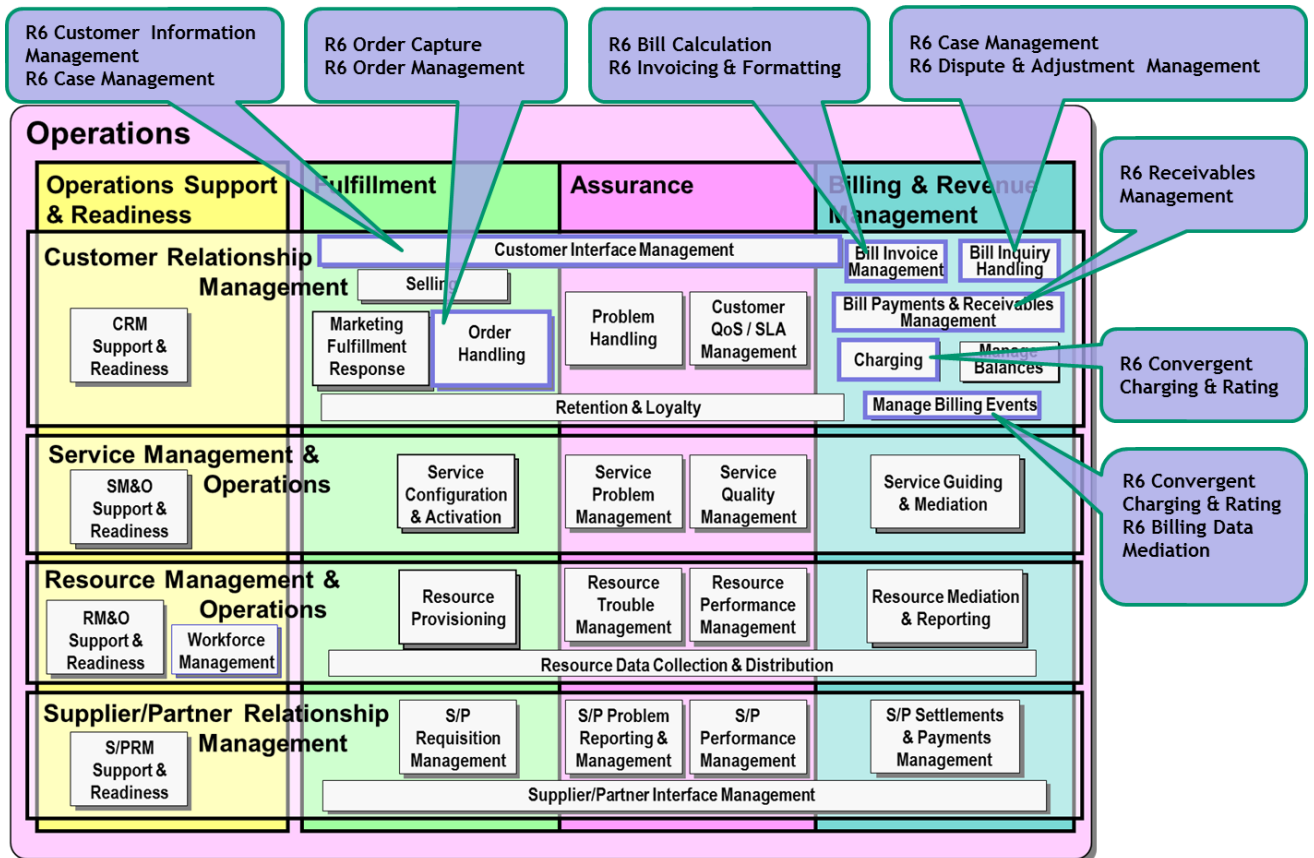


Figure 3.1 - Operations Level 2 process coverage for Infonova's R6 Concept-to-Cash Assessment

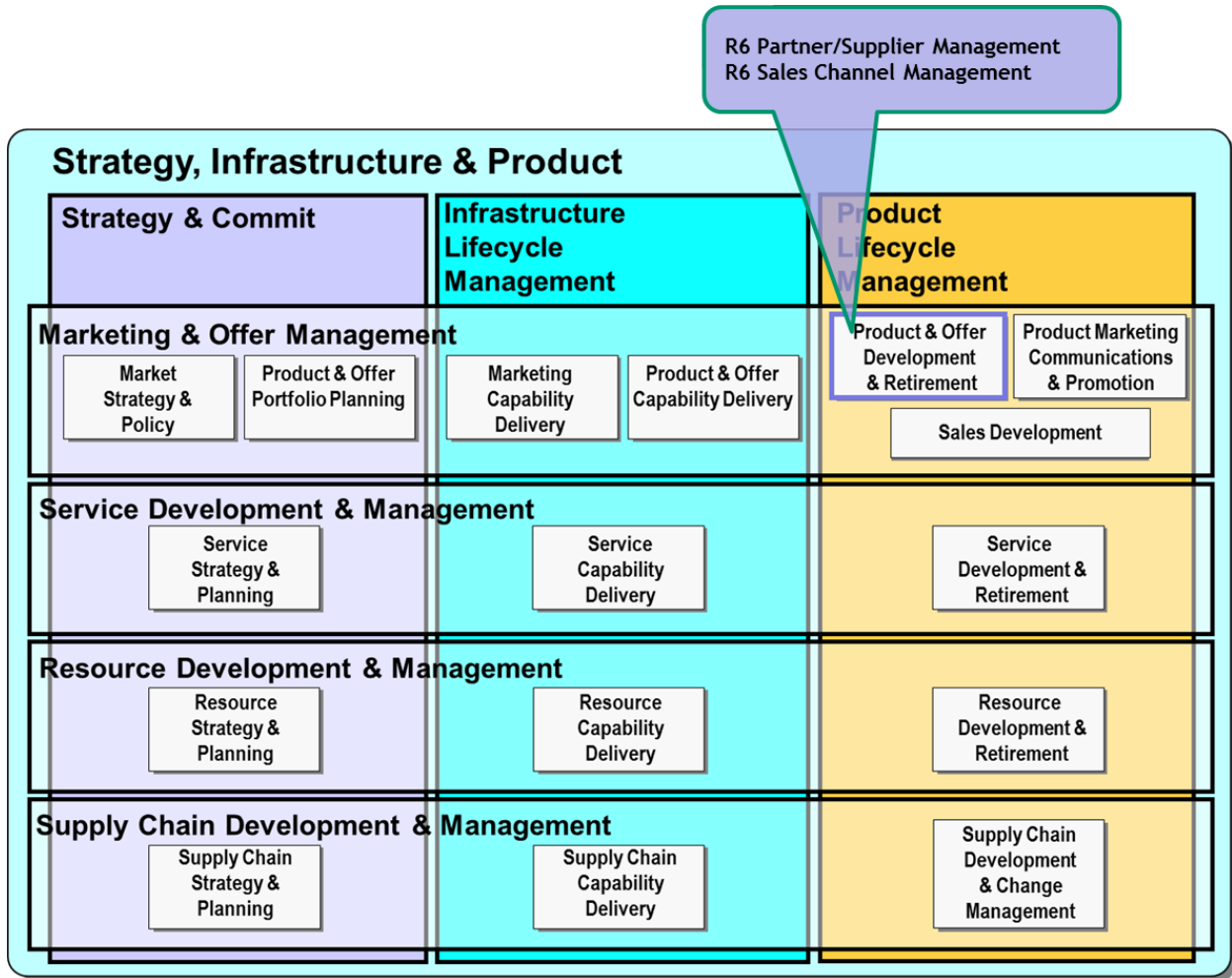


Figure 3.2 - SIP Level 2 process coverage for Infonova's R6 Concept-to-Cash Assessment

The following diagram identifies the number of Level 3 processes that were submitted for assessment, for each Level 2 process that was submitted in scope for the Assessment.

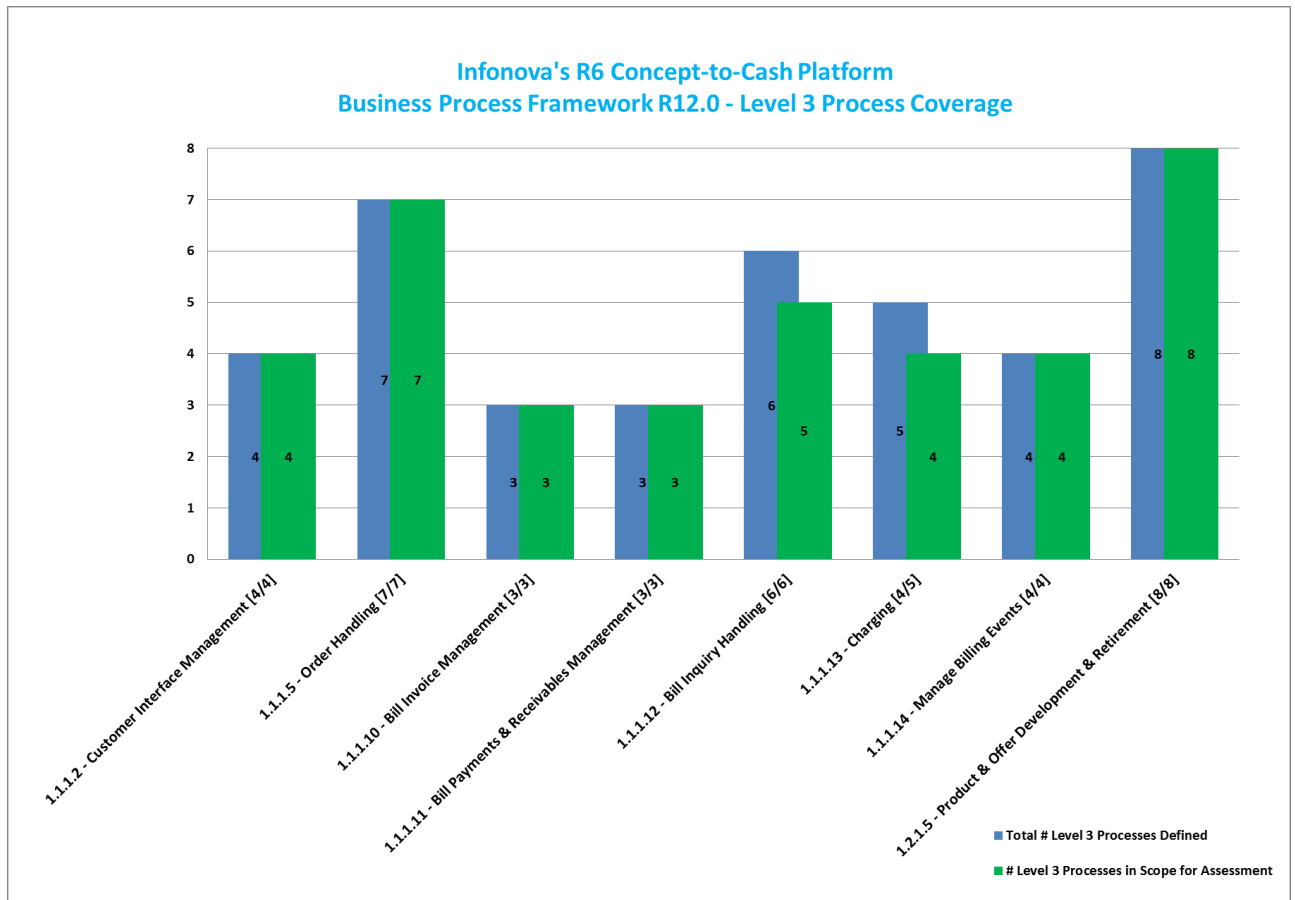


Figure 3.3 - Level 3 process coverage for Infonova's R6 Concept-to-Cash Assessment

3.3 Product Scope

The diagram in Figure 3.4 represents Infonova's R6 Concept-to-Cash Platform and how it is mapped to the Business Process Framework processes that were assessed as part of this Framework Conformance Assessment.

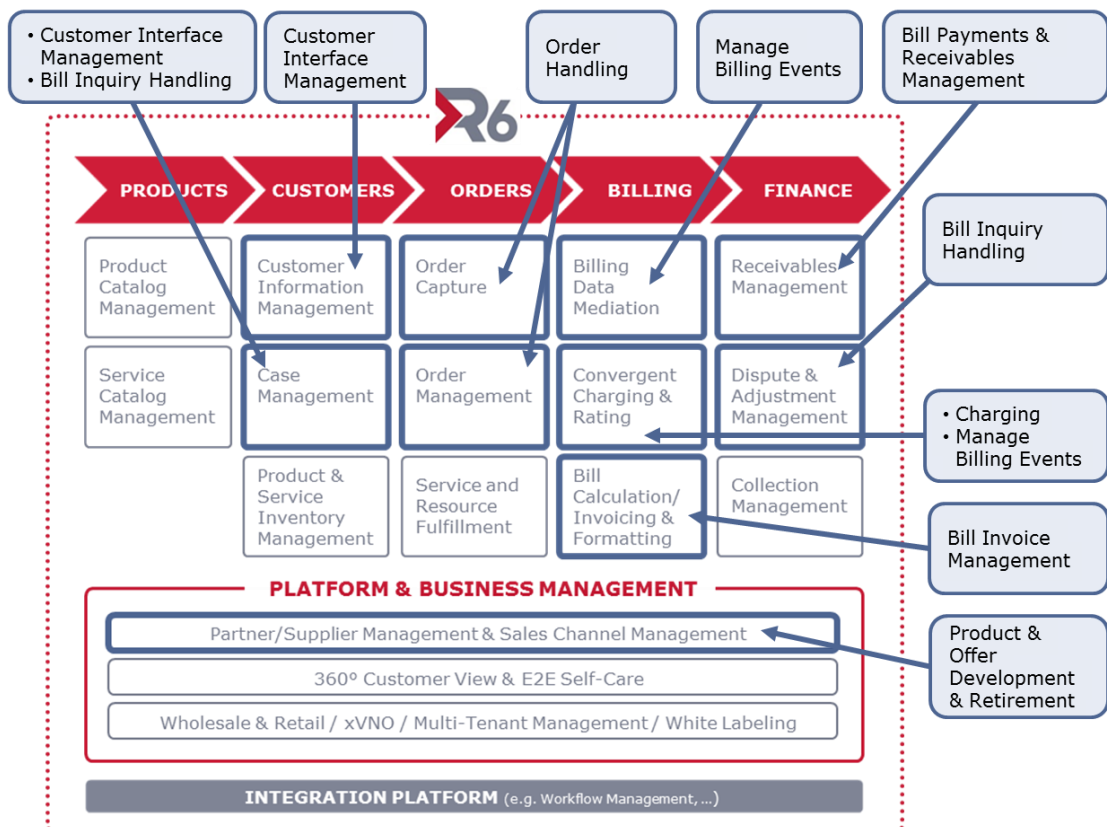


Figure 3.4 - R6 Concept-to-Cash Product Footprint with Scope for eTOM Assessment

4 Business Process Framework – Process Mapping Descriptions

This section provides the Process Mapping output from Infonova's Self-Assessment which was reviewed by TM Forum Subject Matter Experts alongside supporting documentation for Infonova's R6 Concept-to-Cash Platform.

4.1 Level 2: Customer Interface Management (1.1.1.2)

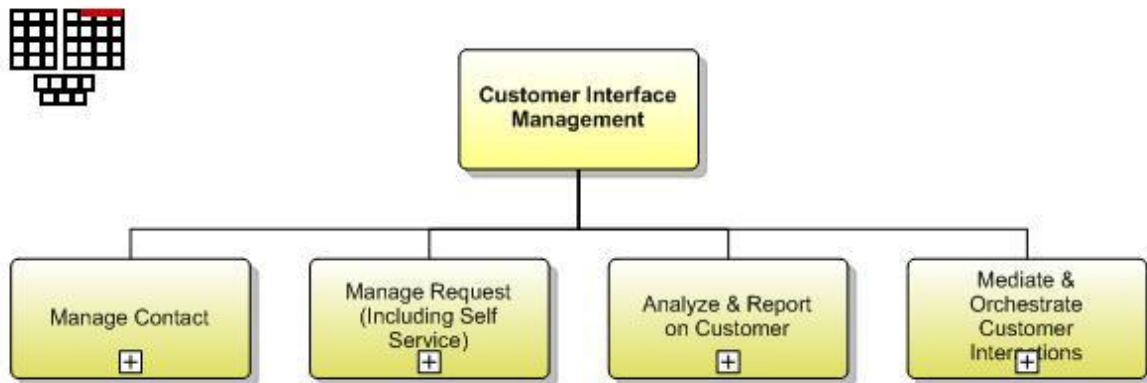


Figure 4.1: Customer Interface decomposition into level 3 processes

4.1.1 Level 3: Manage Contact 1.1.1.2.1

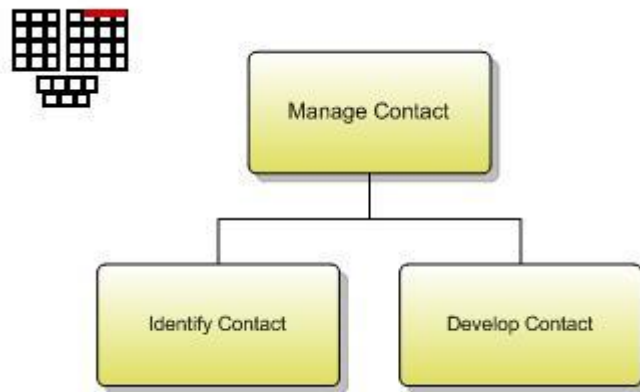


Figure 4.2: Manage Contact decomposition into level 4 processes

4.1.1.1 Level 4: Identify Contact (1.1.1.2.1.1) – Mapping Details

Process Identifier: 1.1.1.2.1.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Contact (1.1.1.2.1.1)
<p>Brief Description Deals with the identification of the contact</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory This could be an individual as a consumer, or part of a business organization (small, medium or corporate) as defined by customer segmentation prevalent in the organization</p>
<p>Mandatory Verify the individual / entity (organization) responsible for making contact A + M</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Manage an Existing Customer <ul style="list-style-type: none"> ○ Find an existing customer ○ Manage customer profile
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>

4.1.1.2 Level 4: Develop Contact (1.1.1.2.1.2) – Mapping Details

Process Identifier: 1.1.1.2.1.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Develop Contact (1.1.1.2.1.2)
<p>Brief Description Deals with development, enhancement and update of the contact</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory For a new customer contact, this will include capturing mandatory details which could be subject to validation.</p>
<p>Mandatory Expand the detail attributes of the contact A + M</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Manage an Existing Customer <ul style="list-style-type: none"> ○ Find an existing customer ○ Add an authorized user to the billing account
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>

4.1.2 Level 3: Manage Request (Including Self Service) 1.1.1.2.2

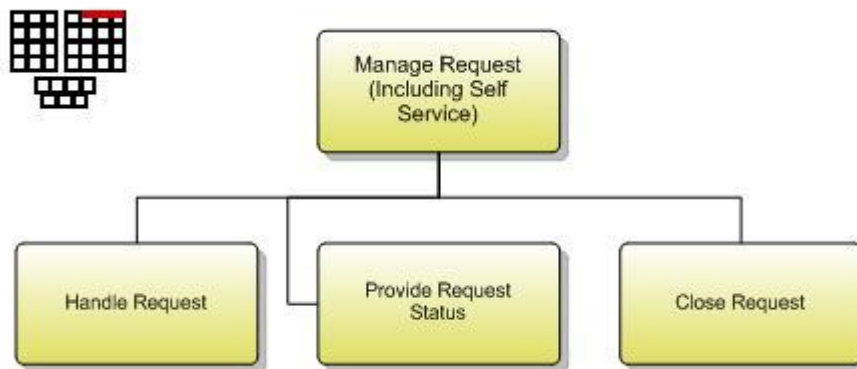


Figure 4.3: Manage Request (Including Self Service) decomposition into level 4 processes

4.1.2.1 Level 4: Handle Request (1.1.1.2.2.1) – Mapping Details

Process Identifier: 1.1.1.2.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Handle Request (1.1.1.2.2.1)
<p>Brief Description Receives the request and either enables its originator to automatically fulfill it, or identifies and activates the opportune process to accomplish the request</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Handle a request to make changes This could be a request to change to enable customer/ subscriber, to start or stop making use of specific products and services.</p>
<p>Mandatory Receives the request and either enables its originator to automatically fulfill it, or identifies and activates the opportune process to accomplish the request. Determine type of stakeholder request A + M</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Tasks and Enquiries <ul style="list-style-type: none"> ○ Create an enquiry for a customer ○ Find and manage enquiries
<p>Optional Not required for process mapping</p>

Interactions

Not required for process mapping

4.1.2.2 Level 4: Provide Request Status (1.1.1.2.2.2) – Mapping Details

Process Identifier: 1.1.1.2.2.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Provide Request Status (1.1.1.2.2.2)
<p>Brief Description Manages the status of the request and is able to provide status information at any moment in which the request is active</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Not used for this process element</p>
<p>Mandatory Manages the status of the request and is able to provide status information at any moment in which the request is active. Track business events using the request status; each of which is governed by rules, followed by a set of actions to reach the next status A+ M</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Tasks and Enquiries <ul style="list-style-type: none"> ○ Find and manage enquiries
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>

4.1.2.3 Level 4: Close Request (1.1.1.2.2.3) – Mapping Details

Process Identifier: 1.1.1.2.2.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Close Request (1.1.1.2.2.3)
<p>Brief Description Formally closes the request when all related activities have been terminated</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Not used for this process element</p>
<p>Mandatory Formally closes the request when all related activities have been terminated A + M</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Tasks and Enquiries <ul style="list-style-type: none"> ○ Find and manage enquiries <ul style="list-style-type: none"> ▪ Manage and find tasks
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>

4.1.3 Level 3: Analyze & Report on Customer 1.1.1.2.3

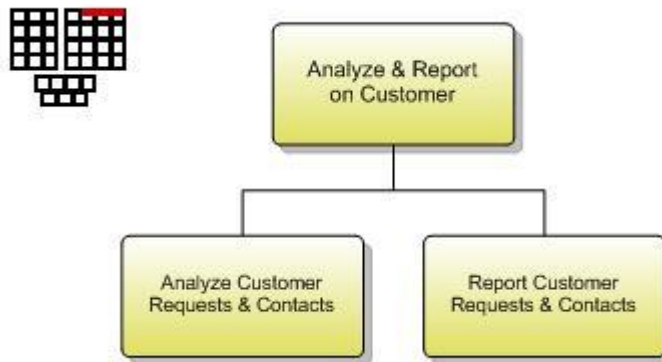


Figure 4.4: Analyze & Report on Customer decomposition into level 4 processes

4.1.3.1 Level 4: Analyze Customer Requests & Contacts (1.1.1.2.3.1) – Mapping Details

Process Identifier: 1.1.1.2.3.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Analyze Customer Requests & Contacts (1.1.1.2.3.1)	
Brief Description	Perform all necessary analysis on closed (completed or unfulfilled) requests and on customer contacts
Extended Description	Not used for this process element
Explanatory	Not used for this process element
Mandatory	<p style="background-color: #00FF00;">Perform all necessary analysis on closed (completed or unfulfilled) requests and on customer contacts AM</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Tasks and Enquiries <ul style="list-style-type: none"> ○ Find and manage enquiries • R6_Integration_ThirdPartyandReportingViews.pdf <ul style="list-style-type: none"> ○ CUS_TROUBLE_TICKET ○ CUS_TROUBLE_TICKET_NOTE
Optional	Not required for process mapping

Interactions

Not required for process mapping

4.1.3.2 Level 4: Report Customer Requests & Contacts (1.1.1.2.3.2) – Mapping Details

Process Identifier: 1.1.1.2.3.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Report Customer Requests & Contacts (1.1.1.2.3.2)
<p>Brief Description Generates related reports, to be utilized for process improvement activities, proactive problems prevention, up-sell opportunities definition, etc</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Not used for this process element</p>
<p>Mandatory Generates related reports, to be utilized for process improvement activities, proactive problems prevention, up-sell opportunities definition, etc. AM</p> <ul style="list-style-type: none"> • WebAC User Manual - VSO - 1.1.1.2 Chapter: Tasks and Enquiries <ul style="list-style-type: none"> ○ Create an enquiry for a customer • R6_Integration_ThirdPartyandReportingViews.pdf <ul style="list-style-type: none"> ○ CUS_TROUBLE_TICKET ○ CUS_TROUBLE_TICKET_NOTE
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>

4.1.4 Level 3: Mediate & Orchestrate Customer Interactions 1.1.1.2.4

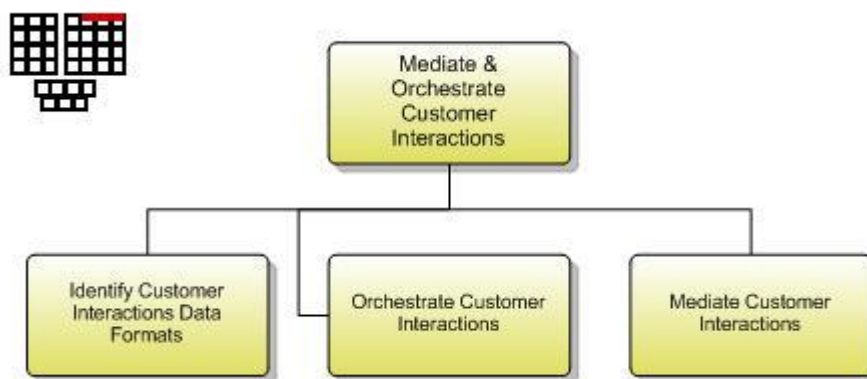


Figure 4.5: Mediate & Orchestrate Customer Interactions decomposition into level 4 processes

4.1.4.1 Level 4: Identify Customer Interactions Data Formats (1.1.1.2.4.1) – Mapping Details

Process Identifier: 1.1.1.2.4.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Customer Interactions Data Formats (1.1.1.2.4.1)
<p>Brief Description Performs identification of the necessary data formats to be sent externally. Increasingly transactions with external parties (e.g. customers using RosettaNet or Web Services standards) will need to conform to message and data formats defined by third parties or third party organizations. The actual agreement between the parties to use specific interaction standards is part of the Support Customer Interface Management and Support Selling Level 3s.</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Increasingly transactions with external parties (e.g. customers using RosettaNet or Web Services standards) will need to conform to message and data formats defined by third parties or third party organizations</p>
<p>Mandatory Performs identification of the necessary data formats to be sent externally A + M</p> <ul style="list-style-type: none"> • <i>r6-rest-api-docs-6.4.5.3-SNAPSHOT.zip</i> <ul style="list-style-type: none"> ○ <i>model/rest-api-customers.xsd</i>

<p>Optional Not required for process mapping</p> <p>Interactions Not required for process mapping</p>

4.1.4.2 Level 4: Orchestrate Customer Interactions (1.1.1.2.4.2) – Mapping Details

Process Identifier: 1.1.1.2.4.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Orchestrate Customer Interactions (1.1.1.2.4.2)</p>
<p>Brief Description Where required, orchestrates interactions with external parties so that messages and transactions are undertaken with defined and agreed orchestration for message exchange.</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Not used for this process element</p>
<p>Mandatory Where required, orchestrates interactions with external parties A + M</p> <p><i>R6 as a platform provides capabilities for full workflow orchestration, message queue and ESB capabilities, which includes the customer interaction interfaces</i></p> <ul style="list-style-type: none"> • <i>How to Use Remote Action Handlers.pdf</i>
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>



4.1.4.3 Level 4: Mediate Customer Interactions (1.1.1.2.4.3) – Mapping Details

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Mediate Customer Interactions (1.1.1.2.4.3)
<p>Brief Description Manages conversion of externally received messages into the required internal enterprise formats, based on the specific transaction type and involved external party.</p>
<p>Extended Description Not used for this process element</p>
<p>Explanatory Not used for this process element</p>
<p>Mandatory Manages conversion of externally received messages into the required internal enterprise formats, based on the specific transaction type and involved external party. A+ M</p>
<p><i>Conversion is managed through XSLT transformation, towards the XSD in the r6-rest-api-docs-6.4.5.3-SNAPSHOT file:</i> r6-rest-api-docs.zip</p> <ul style="list-style-type: none"> ○ model/rest-api-customers.xsd
<p>Optional Not required for process mapping</p>
<p>Interactions Not required for process mapping</p>



4.1.5 Supporting Evidence References (Works Cited)

- [Ref 1] < WebAC User Manual - VSO - 1.1.1.2 >
- [Ref 2] < r6-rest-api-docs.zip >
- [Ref 3] < R6_Integration_ThirdPartyandReportingViews.pdf >
- [Ref 4] < How to Use Remote Action Handlers.pdf >



4.1.6 Level 2: Customer Interface Management (1.1.1.2) – Conformance Scores

Table 4.1 - Customer Interface Management (1.1.1.2) – Conformance Scores

Level 2: 1.1.1.2 - Customer Interface Management [3/4]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
1.1.1.2.1 - Manage Contact		5
	1.1.1.2.1.1 - Identify Contact	100%
	1.1.1.2.1.2 - Develop Contact	100%
1.1.1.2.2 - Manage Request (Including Self Service)		5
	1.1.1.2.2.1 - Handle Request	100%
	1.1.1.2.2.2 - Provide Request Status	100%
	1.1.1.2.2.3 - Close Request	100%
1.1.1.2.3 - Analyze & Report on Customer		5
	1.1.1.2.3.1 - Analyze Customer Requests & Contacts	100%
	1.1.1.2.3.2 - Report Customer Requests & Contacts	100%
1.1.1.2.4 - Mediate & Orchestrate Customer Interactions		5
	1.1.1.2.4.1 - Identify Customer Interactions Data Formats	100%
	1.1.1.2.4.2 - Orchestrate Customer Interactions	100%
	1.1.1.2.4.3 - Mediate Customer Interactions	100%

4.2 Level 2: Order Handling (1.1.1.5)

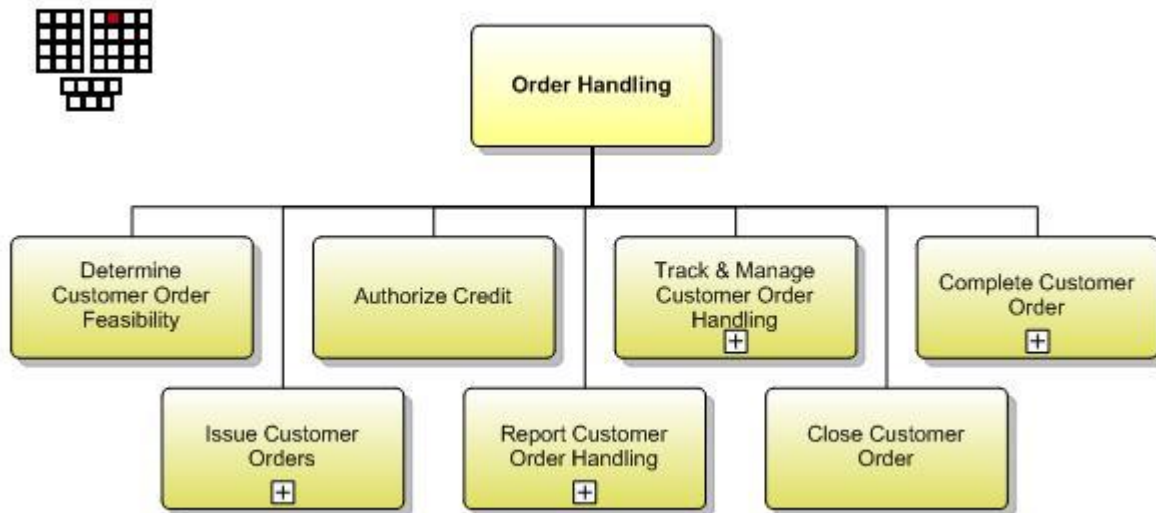


Figure 4.6 - Order Handling decomposition into level 3 processes

Process Identifier: 1.1.1.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.1 Level 3: Determine Customer Order Feasibility (1.1.1.5.1)

Process Identifier: 1.1.1.5.1

Process Context

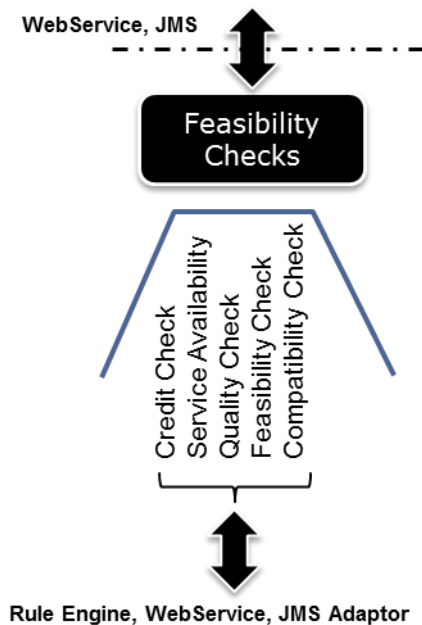
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.1.1 Level 3: Determine Customer Order Feasibility (1.1.1.5.1) – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.1 Determine Customer Order Feasibility
<p>Brief Description</p> <p>Check the availability and/or the feasibility of providing and supporting standard and customized product offerings where specified to a customer. AM</p> <p>Infonova's R6 Order Management supports automated and manual availability/feasibility checks as part of the order entry (synchronously) as well as part of the order processing (asynchronously).</p> <p>Extended description</p> <p>The purpose of the Determine Customer Order Feasibility process is to check the availability and/or the feasibility of providing and supporting standard and customized product offerings where specified as part of the standard product offering process flow, to a customer. AM</p> <p>For synchronous availability/feasibility checks during the order entry, Infonova's R6 Order Entry offers catalog filters that limit the product offerings available to the customer based on the availability of the service and the feasibility of the service at the requested service address. This can include technical availability criteria (like proximity to exchange, network coverage in area, transport type/bandwidth available at site, etc) as well as business criteria (like channel alignment of the customer, payment methods agreed, customer profile details or the credit risk classification of the customer etc). This part of the process is described in the Supporting Material "R6.5_Orders-Overview.docx" on page 7 and 20. As the feasibility checks are mostly steps in the workflow which access external systems they are subject to integration. Some feasibility checks like credit risk classification are however internal checks on the available data. In the Supporting Material "R6.5_Orders-Overview.docx" on page 20-22 details and sample screenshots are provided.</p> <p>The filters can be configured and applied at Product Offering level (e.g. is xDSL available at requested service address at all, which will filter all products based on xDSL accordingly) as well as on Service Feature level (e.g. bandwidth which will filter the available options within the product offering). Sample screenshots of an availability check based in the provided address are provided in the supporting document "R6.5 Orders-Overview.docx" on page 20 - 22.</p> <p>These processes invoke requests to SM&O provisioning processes to determine the availability and supportability of product offerings to a customer. AM</p> <p>The service availability/service quality check determines whether a service is available as ordered at the specified service address. The configurable filters can invoke various</p>

interfaces (more than one for each case if needed) to query external systems. The return values from such calls are then used as attributes in the filtering mechanism. In the Supporting Material “R6.5_Orders-Overview.docx” on page 20-22 more details and some screenshots are provided.



These processes are also responsible for determining whether the offering can be supported by other CRM processes. AM

The order feasibility checks are available for all processes effecting changes to the customer product inventory. An example for a new order workflow is provided in In the Supporting Material “R6.5_Orders-Overview.docx” on page 9. For example the offering can be supported by the following processes:

- a) New order
- b) Change order (update service feature, component change)
- c) Upgrade/downgrade order
- d) Terminate product offering
- e) Churn (away/in)
- f) Relocate
- g) Change legal lessee

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions



Reserved for future use.



4.2.2 Level 3: Authorize Credit (1.1.1.5.2)

Process Identifier: 1.1.1.5.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.2.1 Level 3: Authorize Credit (1.1.1.5.2) - Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.2 Authorize Credit
<p>Brief Description</p> <p>Assess a customer's credit worthiness in support of managing customer risk and company exposure to bad debt AM</p> <p>The Credit Check process activity that is available as a step in the order handling context is working in two ways: for a new customer, data is collected and evaluated. For existing customers, the same is updated and re-evaluated or alternatively the payment history in the customer profile is evaluated.</p>
<p>Extended description</p> <p>The purpose of the Authorize Credit processes is to assess a customer's credit worthiness in support of managing customer risk and company exposure to bad debt.</p> <p>This process is responsible for initiating customer credit checks and for authorizing credit and credit terms in accordance with established enterprise risk and policy guidelines AM</p> <p>The (exemplary) data collection on order entry comprises of:</p> <ol style="list-style-type: none"> 1 Credit check tab to validate customers financial standing 2 Define way of identification (driving license, passport, etc) 3 Enter identification number 4 Enter birthday 5 Enter customers gender 6 Define how many credit cards customer has

- 7 Enter additional information like accommodation type, country of residence, etc...
- 8 Check box if customer agrees to be credit checked

There are two types of credit check possible. The first one is evoked as soon as the data above is entered. A credit check interface is integrated to return the credit rate for this potential customer which is then used in the further rules to e.g. filter the products or payment methods offered to the customer. The second type of credit check is the internal generation of a risk grade for each customer based on an algorithm taking into account the latest payments performed by this existing customer. See the Supporting Material "R6.5_Orders-Overview.docx" page 20.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.3 Level 3: Track & Manage Customer Order Handling (1.1.1.5.4)

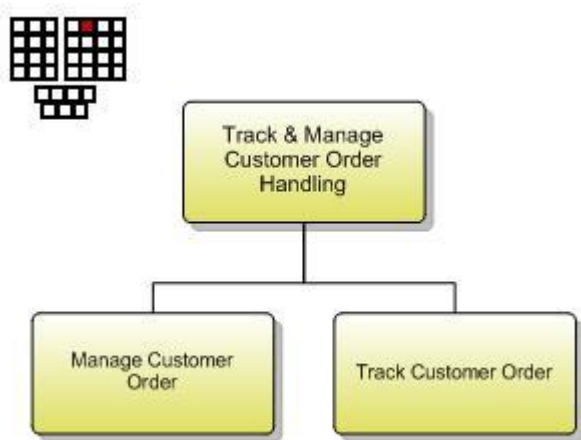


Figure 4.7 - Track & Manage Customer Order Handling decomposition into level 4 processes

Process Identifier: 1.1.1.5.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.3.1 Level 4: Manage Customer Order (1.1.1.5.4.1) – Mapping Details

Process Identifier: 1.1.1.5.4.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.3.2 Manage Customer Order (1.1.1.5.4.1) - Mapping Details

Level 4 PROCESS MAPPING DETAILS 1.1.1.5.4.1 Manage Customer Order
<p>Brief Description</p> <p>Schedule, assign and coordinate customer provisioning related activities. Generate the respective service order creation request(s) to Issue Service Orders based on specific customer orders. Escalate status of customer orders in accordance with local policy. Add additional information to an existing customer order. Modify information in an existing customer order. Cancel a customer order when the initiating sales request is cancelled. If some specific product components are delivered directly by suppliers/partners, initiate requests, through S/P Requisition Management, for the delivery by</p>

the supplier/partner of the specific product components. AM

The relevant process is implemented by a combination of the Order Management, Workflow and Task Management modules in Infonova's R6.

Order Fulfillment

Order fulfillment takes the decomposed product/service orders and fulfills the order towards the OSS layer.

The Order Fulfillment is based on a workflow engine that is integrated with a rules engine and a task management component. The standard workflows can easily be modified and extended based on business requirements. Features of the workflow engine:

- Unlimited number of process steps
- Scheduling of actions
- Parallel execution chains
- Synchronization of parallel activities
- Human tasks
- Error handling & SLAs for process steps
- Versioning of processes Monitoring and auditing of processes
- Business Process Integration

R6 comes with an out-of-the-box business process framework that supports the end-to-end lead-to-cash process. Depending on the business requirements this framework can be extended by localization of the corresponding workflows. This includes the implementation of enhanced business rules, notifications, order checks, trouble-to-resolve processes as well as the integration of 3rd party systems into the business processes.

R6 supports the implementation of individual business processes per VSO and therefore allows a great level of flexibility for VSO-specific fulfillment requirements.

Details and a process flow around the management of the customer order is provided the Supporting Material "R6.5_Orders-Overview.docx" from page 7 on.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.3.3 Level 4: Track Customer Order (1.1.1.5.4.2) – Mapping Details

Process Identifier: 1.1.1.5.4.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

<p style="text-align: center;">Level 4 PROCESS MAPPING DETAILS 1.1.1.5.4.2 Track Customer Order</p>
<p>Brief Description</p> <p style="background-color: #90ee90;">Undertake necessary tracking of the execution process. Modify the customer order status. Monitor the jeopardy status of customer orders, escalating customer orders as necessary. AM</p> <p>Infonova’s R6 offers three opportunities to track the customer orders. The one option is to include an automated monitoring procedure within the order workflow (or specific steps within the workflow like e.g. a certain stage in the service provisioning which might be based on a partners SLA). This is supported by the Order Management and the Workflow Engine within R6. The second option is to use the SID based reporting views for the order status. Specific operational reports of probes on these views allow to monitor the jeopardy status of the customer order. For both options there is the possibility to configure a certain escalation mechanism if necessary. The third option is to manually search for orders and monitor their progress in the User Interface.</p> <p>The relevant views in Infonova’s R6 data access framework for reports on order handling and order fulfillment are:</p> <ul style="list-style-type: none"> • SAL_ORDER_ACTIVITY • SRV_TASK • SRV_TASK_TLI <p>Please refer to the documentation chapters on Order State Transitions and Order Fulfillment in the Supporting Material “R6.5_Orders-Overview.docx” from page 7 on and the “R6 Details on Reporting Views.pdf” document page 13 on.</p> <p>Extended Description</p> <p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p>



Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.4 Level 3: Complete Customer Order (1.1.1.5.5)

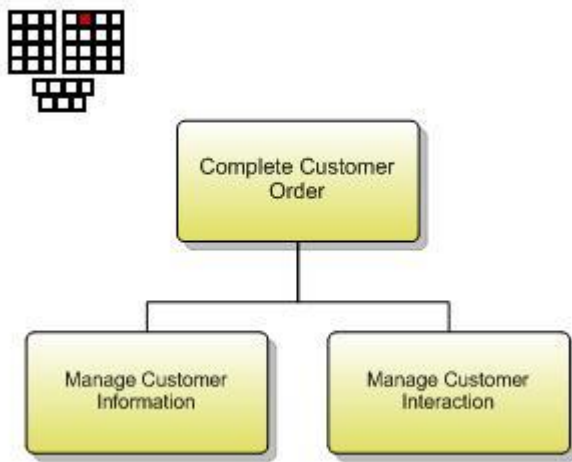


Figure 4.8 - Complete Customer Order decomposition into level 4 processes

Process Identifier: 1.1.1.5.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.4.1 Level 4: Manage Customer Information (1.1.1.5.5.1) – Mapping Details

Process Identifier: 1.1.1.5.5.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.5.1 - Manage Customer Information
<p>Brief Description</p> <p>Manage customer information after customer contracts or associated service orders have been finalized and during the order completion phase. Ensure that any customer information required by other CRM processes is updated as part of the customer order completion. AM</p> <p>In an integrated platform like R6, CRM data and service data is automatically updated as the process flow continues. In this way, the CSR and other users of the system have a</p>

continuous live view of the resulting offer/contract/service data related to the customer at all times during the fulfillment.

How a CSR can manage all customer information within R6 is shown in the provided document WebAC_User_Manual_-_VSO_-_1.1.1.2v0_0_3.docx on page 11 ff “Manage customer orders”.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.4.2 Level 4: Manage Customer Interaction (1.1.1.5.5.2) – Mapping Details

Process Identifier: 1.1.1.5.5.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 3 PROCESS MAPPING DETAILS 1.1.1.5.5.2 - Manage Customer Interaction</p>
<p>Brief Description</p> <p>Coordinate customer participation in commissioning or end-to-end testing and satisfactory delivery. Train the customer on the functionality and benefits of the solution. AM</p> <p>Infonova’s R6 is using the notification capability in the system to inform the customer of any status, use and availability information for the products / services provided during and after the fulfillment workflows.</p> <p>The customer will receive “welcome packs”, letters, e-letters and text messages, provided</p>

with the use of templates for his education about the activated services and delivered goods.

Details on R6 Notification Management are provided in R6.5_Orders-Overview.docx” page 20 as well as in figure 26 on page 35.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.5 Level 3: Issue Customer Orders (1.1.1.5.6)

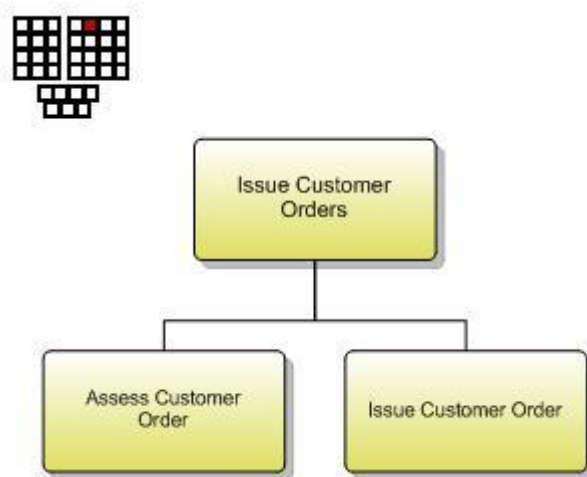


Figure 4.9 - Issue Customer Orders decomposition into level 4 processes

Process Identifier: 1.1.1.5.6

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.5.1 Level 4: Assess Customer Order (1.1.1.5.6.1) – Mapping Details

Process Identifier: 1.1.1.5.6.1

Process Context

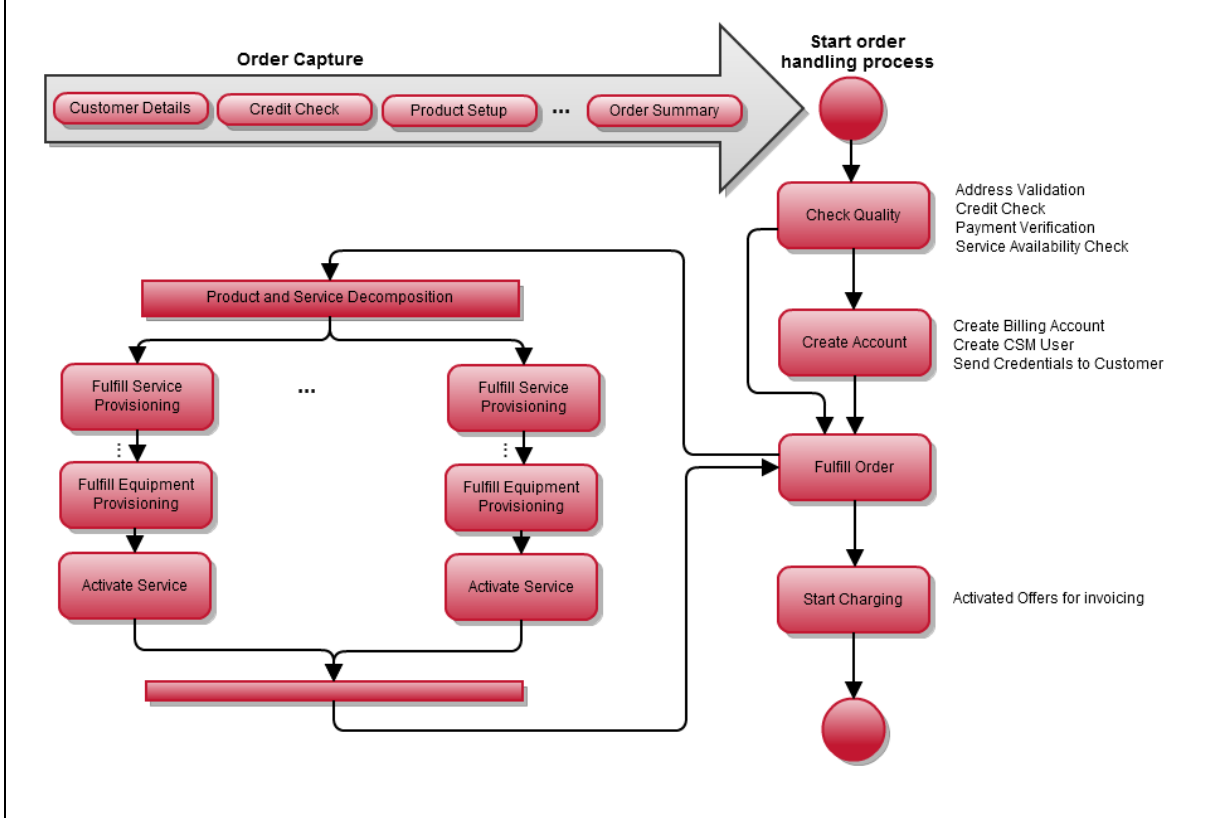
This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

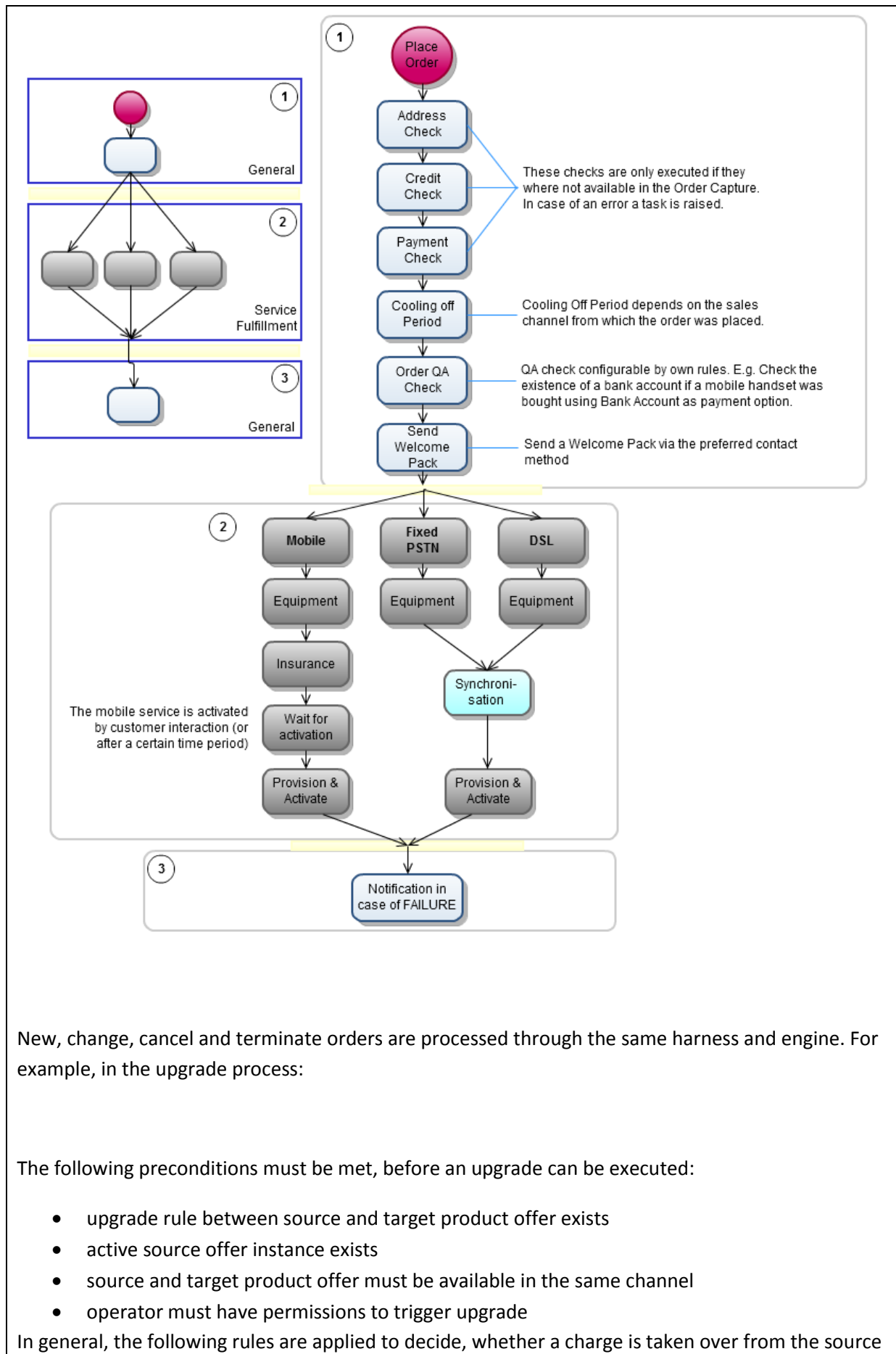
Level 3 PROCESS MAPPING DETAILS 1.1.1.5.6.1 - Issue Customer Orders
<p>Brief Description</p> <p>Assess the information contained in the customer order relating to the sales request or initiating customer process request to determine the associated customer orders that need to be issued. The issued customer order may require a feasibility assessment, may require new provisioning activities, may require a change to a previously issued customer order, or may require cancellation of a previously initiated customer order. The customer order may also relate to the cancellation of previously purchased specific services. AM</p> <p>The Infonova Order Management module comprises capabilities for the decomposition,</p>

orchestration and re-combination of multi-part orders and their components.

This is described and illustrated in the "Order Assets" documentation.

A simple view of the decomposition and orchestration is given in the following 2 example diagrams:





New, change, cancel and terminate orders are processed through the same harness and engine. For example, in the upgrade process:

The following preconditions must be met, before an upgrade can be executed:

- upgrade rule between source and target product offer exists
- active source offer instance exists
- source and target product offer must be available in the same channel
- operator must have permissions to trigger upgrade

In general, the following rules are applied to decide, whether a charge is taken over from the source

offer instance to the target offer instance during an upgrade or not:

- component does not exist in source offer
- component exists in source offer
- component does not exist in target offer
- nothing to do
- all active+provisionable components are taken over
- installments are taken over
- contracts are terminated, termination fee applied according to rule setting
- component does exist in target offer create new instance in target offer

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use

4.2.5.2 Level 4: Issue Customer Order (1.1.1.5.6.2) – Mapping Details

Process Identifier: 1.1.1.5.6.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.6.2 - Issue Customer Orders
<p>Brief Description</p> <p>Issue a customer order, creating a record of the relevant initiating sales request and the associated customer order. Where the initiating request for a purchased product offering has special or unusual requirements, if a specific feasibility assessment has been previously undertaken, create a record of the relevant initiating request information. If a specific feasibility assessment has not been previously undertaken, mark the issued customer order as requiring special handling. AM</p> <p>Infonova's R6 Order Management has a hierarchical tracking of orders, order components (bundles of product offerings ordered as well as converged product offerings composed of multiple services). While initially passing through feasibility checks in a synchronous mode during order entry, orders (and sub-orders) can be sent into additional asynchronous feasibility checks and special treatment processes for technical (service quality at location, workforce availability for completion date) or business reasons (quarantine of order for legal/regulatory reasons, prioritization of orders for legal/business reasons etc). This is available in fully automated versions (e.g. quarantine of orders from channels with special treatment) and manual versions (manual tasks raised while blocking order).</p> <p>Task Management is fully integrated with the workflow engine and manages manual interaction with workflows</p> <ul style="list-style-type: none"> • If a task is raised by a workflow step in the Order Management process, the task is available for CSRs depending on their permissions • After the task has been resolved, the workflow is automatically or manually triggered to continue with the next step <p>Tasks are typically used for</p> <ul style="list-style-type: none"> • Semi-automated processes - e.g. manual provisioning for certain services or scenarios • Business rules - approvals or decisions that need to be made by human interaction • Error management - Stop automation on error <p>Please refer to the Supporting Material “R6.5_Orders-Overview.docx” page 6 on.</p>

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.2.6 Level 3: Report Customer Order Handling (1.1.1.5.7)



Figure 4.10 - Report Customer Order Handling decomposition into level 4 processes

Process Identifier: 1.1.1.5.7

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.6.1 Level 4: Monitor Customer Order Status (1.1.1.5.7.1) – Mapping Details

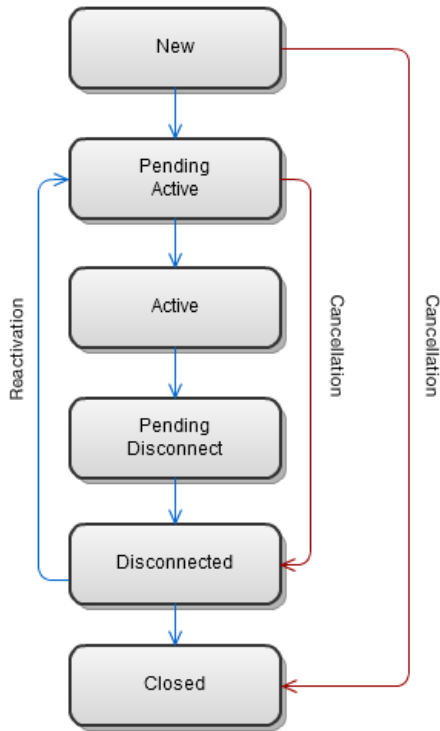
Process Identifier: 1.1.1.5.7.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.7.1 - Monitor Customer Order Status
<p>Brief Description</p> <p>Continuously monitor the status of customer orders. AM</p> <p>Infonova’s R6 as an integrated BSS platform continuously keeps track of the status of customer orders and the decomposed sub-orders. The status information is available in a summary way and can also be displayed in an individual way for each customer / order, in a hierarchical way.</p>

An example of the order status information is given in the following diagram



For detailed descriptions please refer to the Supporting Material “R6.5_Orders-Overview.docx” page 15 on State transitions and Charging Start.

An example of how the status information for orders is made available to the CSR see the following diagram:

CURRENT CUSTOMER Show more

Title: Mr Name: John Miller ← 1

Status: Active Account: 1183503059

SELECTED ORDER

Id: 2273 **Description:** Ordered offers. ← 2

Order type: New **Workflow instance:** [187474226](#)

Status: Completed

Id	Order type	Description	Status
2273	New	Ordered offers.	Completed
2274	New Offer	Start to provision offer with name RT DIAL UP OFFER	Completed
2275	New Service	Start to provision service with name SRV INTERNET DIALUP	Completed

3 items ↑ 3

4 → Overview

Extended Description

<p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p> <p>Optional</p> <p>Reserved for future use.</p> <p>Interactions</p> <p>Reserved for future use.</p>
--

4.2.6.2 Level 4: Manage Customer Order Status Notification (1.1.1.5.7.2) – Mapping Details

Process Identifier: 1.1.1.5.7.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 3 PROCESS MAPPING DETAILS 1.1.1.5.7.2 Manage Customer Order Status Notification</p>
<p>Brief Description</p> <p>Manage notifications to processes and other parties registered to receive notifications of any status changes. AM</p> <p>At each step in the order fulfillment (and related order management) workflows, a notification can be sent to human participants in the workflow (customer, CSR, operations staff). This is using configurable notification transport methods (eMail, SMS, printed letter, etc – taking into account the configured preferred communications method in the addressees profile) and using notification templates for formatting the content.</p> <p>Likewise, at each step in the same workflows, a message can be sent to other applications in the overall system architecture, directly to their API or through the embedded messaging bus.</p> <p>Please refer to the Supporting Material “R6.5_Orders-Overview.docx” page 20.</p>



Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use



4.2.6.3 Level 4: Report Customer Order Status (1.1.1.5.7.3) – Mapping Details

Process Identifier: 1.1.1.5.7.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.7.3 - Report Customer Order Status
<p>Brief Description</p> <p>Record, analyze and assess the customer order status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Order Handling process, including specific reports required by specific customers. AM</p> <p>Infonova’s R6 data access framework provides 2 access and integration methods for reports on order handling and order fulfillment:</p> <ul style="list-style-type: none"> • the SID aligned views in the database access layer • plugins for general monitoring and reporting solutions like Nagios <p>the relevant views are for instance:</p> <ul style="list-style-type: none"> • SAL_ORDER_ACTIVITY • SRV_WORKFLOW_TASK <p>The details can be found in the Supporting Material “R6 Details on Reporting Views.pdf” on page 12 and page 73.</p> <p>Extended Description</p> <p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p> <p>Optional</p> <p>Reserved for future use.</p> <p>Interactions</p> <p>Reserved for future use.</p>

4.2.7 Level 3: Close Customer Order (1.1.1.5.8)

Process Identifier: 1.1.1.5.8

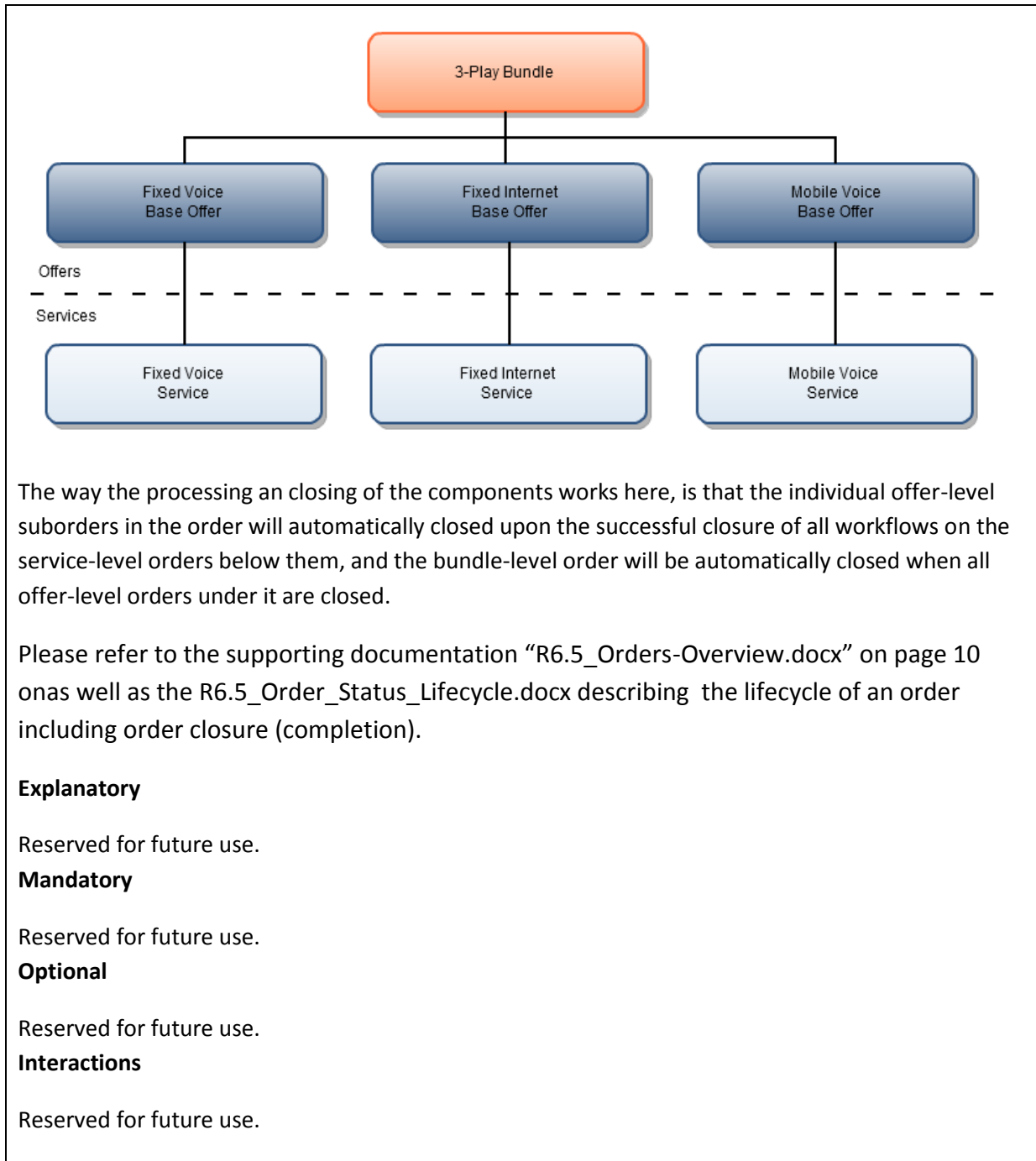
Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.2.7.1 Level 3: Close Customer Order (1.1.1.5.8) - Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS 1.1.1.5.8 - Close Customer Order
<p>Brief Description</p> <p>Close a customer order when the customer provisioning activities have been completed. Monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed. AM</p> <p>Handling of customer order closing is typically achieved fully automatically in Infonova’s R6, as all activity (manual or automated) is orchestrated from and tracked within the platform.</p> <p>Extended description</p> <p>The objective of the Close Customer Order processes is to close a customer order when the customer provisioning activities have been completed. These processes monitor the status of all open customer orders, and recognize that a customer order is ready to be closed when the status is changed to completed. AM</p> <p>All customer orders are decomposed in the system and their components are permanently tracked. The decomposition is using a fork-join mechanism that ensures that at each junction point in the hierarchical workflows the parent process waits for all child units to return successfully before automatically closing the whole chain.</p> <p>In the following diagram, the decomposition is shown in an example</p>



4.2.8 Supporting Evidence References (Works Cited)

- [Ref 1] R6 Details on Reporting Views.docx
- [Ref 2] R6.5_Orders-Overview.docx
- [Ref 3] WebAC_User_Manual_-_VSO_-_1.1.1.2v0_0_3-1.docx
- [Ref 4] R6.5_Order_Status_Lifecycle.docx
- [Ref 5] R6.5_Credit_check_interfaces.docx



4.2.9 Level 2: Order Handling (1.1.1.5) - Conformance Scores

Table 4.2 - Order Handling (1.1.1.5) - Conformance Scores

Level 2: 1.1.1.5 - Order Handling [5/7]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
1.1.1.5.1 - Determine Customer Order Feasibility		5
1.1.1.5.2 - Authorize Credit		5
1.1.1.5.4 - Track & Manage Customer Order Handling		5
	1.1.1.5.4.1 - Manage Customer Order	100%
	1.1.1.5.4.2 - Track Customer Order	100%
1.1.1.5.5 - Complete Customer Order		4.8
	1.1.1.5.5.1 - Manage Customer Information	100%
	1.1.1.5.5.2 - Manage Customer Interaction	75%
1.1.1.5.6 - Issue Customer Orders		5
	1.1.1.5.6.1 - Assess Customer Order	100%
	1.1.1.5.6.2 - Issue Customer Order	100%
1.1.1.5.7 - Report Customer Order Handling		4.7
	1.1.1.5.7.1 - Monitor Customer Order Status	100%
	1.1.1.5.7.2 - Manage Customer Order Status Notification	100%
	1.1.1.5.7.3 - Report Customer Order Status	50%
1.1.1.5.8 - Close Customer Order		4.8

4.3 Level 2: 1.1.1.10 - Bill Invoice Management (1.1.1.10)

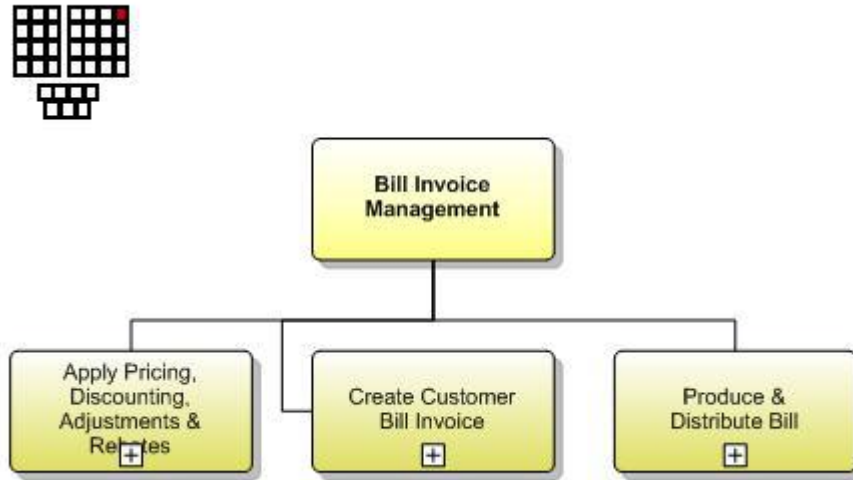


Figure 4.11 - Bill Invoice Management decomposition into level 3 processes

Process Identifier: 1.1.1.10

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.3.1 Level 3: Apply Pricing, Discounting, Adjustments & Rebates 1.1.1.10.1

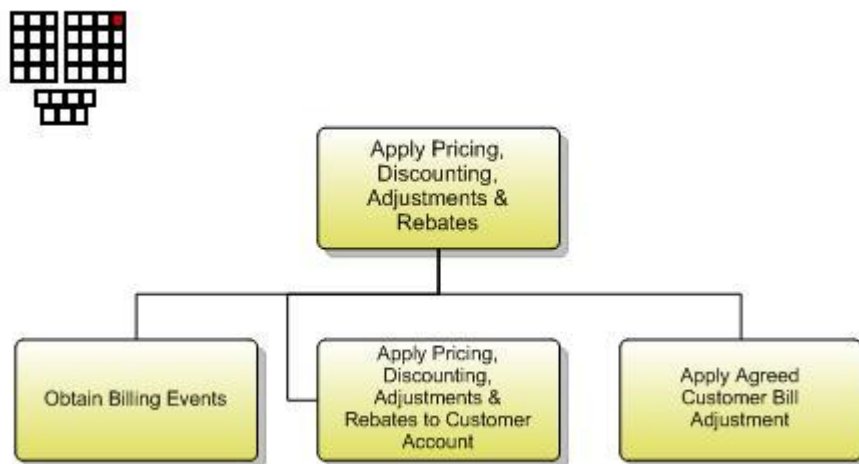


Figure 4.12 - Apply Pricing, Discounting, Adjustments & Rebates decomposition into level 4 processes

Process Identifier: 1.1.1.10.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.3.1.1 Level 4: Obtain Billing Events (1.1.1.10.1.1) – Mapping Details

Process Identifier: 1.1.1.10.1.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Obtain Billing Events (1.1.1.10.1.1)
<p>Brief Description</p> <p>Accept billing events that have been collected, translated, correlated, assembled, guided and service rated before determining the information would be applied to the customer’s bill invoice(s).</p>
<p>Extended Description</p> <p>The purpose of the Obtain Billing Events process is to ensure that all billing events for services delivered to the customer by the Service Provider are available for processing. This includes events</p>

that have been collected, translated, correlated, assembled, guided and service rated.

Explanatory

This includes events that have been collected, translated, correlated, assembled, guided and service rated.

Mandatory

The purpose of the Obtain Billing Events process is to ensure that all billing events for services delivered to the customer by the Service Provider are available for processing. AM

Starting at the earliest stage, at pre-mediation data delivery, records containing billing events are checked for validity and timeliness, as described in the document "Infonova_R6_UserDoc_IMPEX.pdf", pages 4ff.

The further support for this process in R6 is delivered in the integrated components for Mediation, Rating, Billing. This is evident from the document "R6.5_Billing-Overview.pdf", specifically in the chapters and subchapters:

- Collection, Conversion, Validation, Transformation: page 6f
- Rating (in general) pages 7f
- Invoicing tasks (26f)

Optional

Not used for this process element

Interactions

Not used for this process element

4.3.1.2 Level 4: Apply Pricing, Discounting, Adjustments & Rebates to Customer Account (1.1.1.10.1.2) – Mapping Details

Process Identifier: 1.1.1.10.1.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS
Apply Pricing, Discounting, Adjustments & Rebates to Customer Account (1.1.1.10.1.2)
Brief Description
Determine the customer account or customer specific pricing, charges, discounts, and taxation that

should be delivered to the invoice(s) for the customer.

Extended Description

The purpose of Determine Customer Account process is to determine the customer account or customer specific pricing, charges, discounts, and taxation that should be delivered to the invoice(s) for the customer and ensure that the each cost item included in customer bill invoice(s) can correspond to a correct account through which customer will pay for the cost item. It ensures that the appropriate taxes, rebates (i.e. missed customer commitments) and credits are applied to the customer's bill invoice(s). A customer who may have multiple accounts can pay different cost item with different account.

Explanatory

It ensures that the appropriate taxes, rebates (i.e. missed customer commitments) and credits are applied to the customer's bill invoice(s).

Mandatory

The purpose of Determine Customer Account process is to determine the customer account or customer specific pricing, charges, discounts, and taxation that should be delivered to the invoice(s) for the customer and ensure that the each cost item included in customer bill invoice(s) can correspond to a correct account through which customer will pay for the cost item. AM

The support for this process element in R6 is delivered in the integrated component for Rating. This is evident from the document "R6.5_Billing-Overview.pdf", specifically in the chapters and subchapters:

- General Concept page 4
- Rating pages 7f
- Calculation of sums and taxes in rating and billing page 28

Optional

A customer who may have multiple accounts can pay different cost item with different account. AM

See above and in detail on page 27, account hierarchies and line item transfers.

Interactions

Not used for this process element



4.3.1.3 Level 4: Apply Agreed Customer Bill Adjustment (1.1.1.10.1.3) – Mapping Details

Process Identifier: 1.1.1.10.1.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Apply Agreed Customer Bill Adjustment (1.1.1.10.1.3)
<p>Brief Description</p> <p>Apply and review any adjustment agreed in the previous billing period and make these included to the bill invoice.</p>
<p>Extended Description</p> <p>The purpose of the Apply Agreed Customer Bill Adjustment process is to ensure that any adjustments which have been agreed between customer and Service Provider are included in the customer bill invoice. In general, the adjustments are due to errors in customer bill invoices in previous billing periods or problems related to products and services delivered to the customer by the Service Provider or partners.</p>
<p>Explanatory</p> <p>In general, the adjustments are due to errors in customer bill invoices in previous billing periods or problems related to products and services delivered to the customer by the Service Provider or partners.</p>
<p>Mandatory</p> <p>The purpose of the Apply Agreed Customer Bill Adjustment process is to ensure that any adjustments which have been agreed between customer and Service Provider are included in the customer bill invoice. AM</p> <p>see above and in detail on page 29: Billing Enquiry, Dispute and Adjustment Management</p>
<p>Optional</p> <p>Not used for this process element</p>
<p>Interactions</p> <p>Not used for this process element</p>

4.3.2 Level 3: Create Customer Bill Invoice 1.1.1.10.2

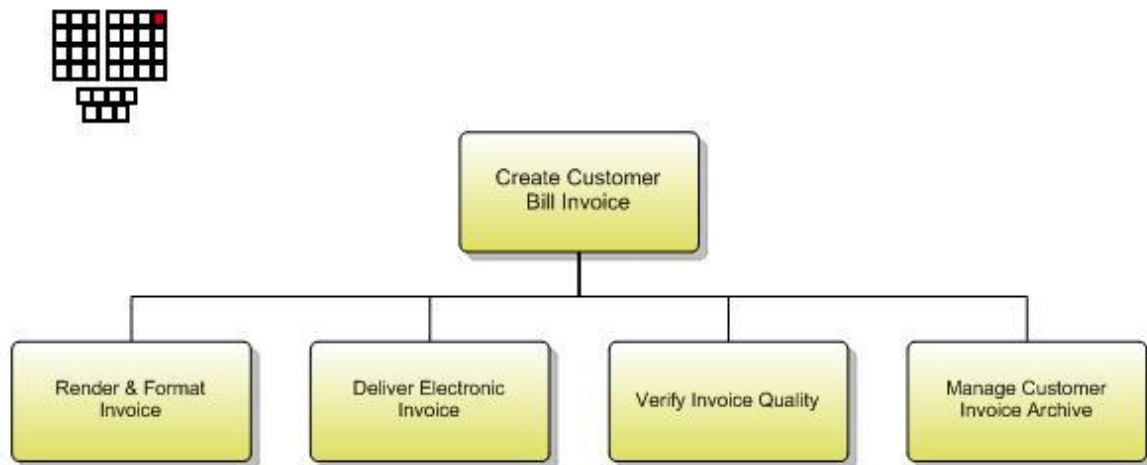


Figure 4.13 - Create Customer Bill Invoice decomposition into level 4 processes

Process Identifier: 1.1.1.10.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.3.2.1 Level 4: Render & Format Invoice (1.1.1.10.2.1) – Mapping Details

Process Identifier: 1.1.1.10.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Render & Format Invoice (1.1.1.10.2.1)	
Brief Description	Render and format the customer bill invoice.
Extended Description	

This process provides formatting of invoices in different ways and to achieve different publishing possibilities, and supports the creation of different invoice formats for different publication media. The process is further responsible for splitting and re-arranging invoices for customers (particularly customers with complex account structures) according to agreements made with these customers.

Explanatory

Not used for this process element

Mandatory

This process provides formatting of invoices in different ways and to achieve different publishing possibilities, and supports the creation of different invoice formats for different publication media. The process is further responsible for splitting and re-arranging invoices for customers (particularly customers with complex account structures) according to agreements made with these customers.

AM

The support for this process element in R6 is delivered in the integrated component for Invoicing. This is evident from the document “R6.5_Invoice_Templates.pdf”. Additional information is provided in “R6.5_Billing-Overview.pdf”, specifically in the chapters and subchapters:

- General Concept page 4
- Invoicing pages 24ff
- Account Hierarchies and Line Item Transfers, page 27

Optional

Not used for this process element

Interactions

Not used for this process element

4.3.2.2 Level 4: Deliver Electronic Invoice (1.1.1.10.2.2) – Mapping Details

Process Identifier: 1.1.1.10.2.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Deliver Electronic Invoice (1.1.1.10.2.2)</p>
<p>Brief Description</p>

Deliver the electronic copy of an invoice to customers.

Extended Description

The purpose of Deliver Electronic Invoice process is to deliver the electronic copy of an invoice to customers. The flow of this process can be viewed as an extension of the company's e-business strategy. In this case, the Service Provider would render an invoice electronically, via the Internet for example.

Explanatory

The flow of this process can be viewed as an extension of the company's e-business strategy. In this case, the Service Provider would render an invoice electronically, via the Internet for example.

Mandatory

The purpose of Deliver Electronic Invoice process is to deliver the electronic copy of an invoice to customers. A

Besides printed paper bills R6 supports the rendering of pdf invoice formats through templates. This is evident from the description of the invoice template technology embedded

- See document "R6.5_Invoice_Template.pdf", pages 3ff.

Electronic invoices are provided to the customer via customer self care as described in the "R6.5_Electronic_Bill_Presentation.docx" document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.3.2.3 Level 4: Verify Invoice Quality (1.1.1.10.2.3) – Mapping Details

Process Identifier: 1.1.1.10.2.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Verify Invoice Quality (1.1.1.10.2.3)</p>

Brief Description

Verify invoice quality before distribution to the customer in electronic form and the process responsible for physical invoice production and distribution.

Extended Description

The purpose of Verify Invoice Quality process is to verify invoice quality prior to distribution to the customer in electronic form, or to the process responsible for physical invoice production and distribution. Verifying invoice quality is either a manual operation or an automatic behaviour. The process is responsible for ensuring the invoice format and content can meet customer requirements. When verifying invoice quality is failed, the process is also responsible for sending the invoice back to another process to reprocess.

Explanatory

Not used for this process element

Mandatory

The purpose of Verify Invoice Quality process is to verify invoice quality prior to distribution to the customer in electronic form, or to the process responsible for physical invoice production and distribution. Verifying invoice quality is either a manual operation or an automatic behaviour. The process is responsible for ensuring the invoice format and content can meet customer requirements. When verifying invoice quality is failed, the process is also responsible for sending the invoice back to another process to reprocess. AM

The support for this process element in R6 is delivered in the integrated component for Invoicing and Bill Run Management. This is evident from the document “R6.5_Billing-Overview. pdf”, specifically in the chapters and subchapters:

- General Concept page 4
- Invoicing pages 24ff
- Bill Run Management, page 30f
- Bill Run Simulation, page 32

Optional

Not used for this process element

Interactions

Not used for this process element



4.3.2.4 Level 4: Manage Customer Invoice Archive (1.1.1.10.2.4) – Mapping Details

Process Identifier: 1.1.1.10.2.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Customer Invoice Archive (1.1.1.10.2.4)
<p>Brief Description</p> <p>Store the customer invoice for a period of time is to address regulation and/or internal requirements, during which they can be accessed to support any customer or regulator agency inquiries on bill invoices.</p>
<p>Extended Description</p> <p>The purpose of Management Customer Invoice Archive process is to store the customer invoice for a period of time, to perform regulation and/or serve internal requirements, during which they can be accessed to support any customer or regulator agency inquiries on bill invoices, and the process is further responsible for archiving the customer invoices to historical customer invoice after a period of time according to Service Provider's management requirements. Furthermore the process is responsible for managing and maintaining archiving cycle.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Management Customer Invoice Archive process is to store the customer invoice for a period of time, to perform regulation and/or serve internal requirements, during which they can be accessed to support any customer or regulator agency inquiries on bill invoices, and the process is further responsible for archiving the customer invoices to historical customer invoice after a period of time according to Service Provider's management requirements. Furthermore the process is responsible for managing and maintaining archiving cycle. AM</p>
<p>The retention of Customer Invoices is provided and configured in the R6 solution with the use of the BSD Server and the Infonova Autotask Framework for all, including regulatory requirements. Please refer to document “Infonova_R6_Data_Archiving. pdf”, especially pages 4-6, 7f, 10.</p>
<p>Optional</p>



Not used for this process element

Interactions

Not used for this process element

4.3.3 Level 3: Produce & Distribute Bill 1.1.1.10.3

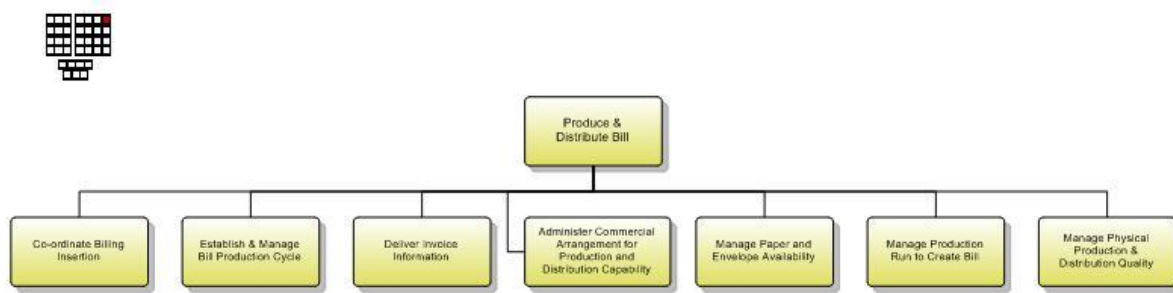


Figure 4.14 - Produce & Distribute Bill decomposition into level 4 processes

Process Identifier: 1.1.1.10.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.3.3.1 Level 4: Co-ordinate Billing Insertion (1.1.1.10.3.1) – Mapping Details

Process Identifier: 1.1.1.10.3.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Co-ordinate Billing Insertion (1.1.1.10.3.1)
<p>Brief Description</p> <p>Co-ordinate with promotional processes for any billing insertions to be included with the bill.</p>
<p>Extended Description</p> <p>The purpose of Co-ordinate Billing Insertion process is to co-ordinate with promotional processes for any billing insertions to be included with the bill. This process is responsible for determining the content of insertion and the position of insertion in invoice. The insertion can be the service information provided by Service Provider, advertisements and recommendation of billing for customers. This process is also responsible for ensuring the billing insertion attracting the customer interests and not leading to customer complaints. This process can base customer feedbacks on the</p>

insertion to adjust or remove the insertion.

Explanatory

The purpose of Co-ordinate Billing Insertion process is to co-ordinate with promotional processes for any billing insertions to be included with the bill.

Mandatory

This process is responsible for determining the content of insertion and the position of insertion in invoice. The insertion can be the service information provided by Service Provider, advertisements and recommendation of billing for customers. This process is also responsible for ensuring the billing insertion attracting the customer interests and not leading to customer complaints. AM

R6 supports the insertion and positioning of bill messages through templates. This is evident from the description of the invoice template technology embedded

-
- R6.5_Invoice messages.docx

Optional

This process can base customer feedbacks on the insertion to adjust or remove the insertion.

Interactions

Not used for this process element

4.3.3.2 Level 4: Establish & Manage Bill Production Cycle (1.1.1.10.3.2) – Mapping Details

Process Identifier: 1.1.1.10.3.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Establish & Manage Bill Production Cycle (1.1.1.10.3.2)
<p>Brief Description</p> <p>Establish and manage the physical bill production cycle.</p>

Extended Description

The purpose of Establish & Manage Bill Production Cycle process is to establish and manage the physical bill production cycle. This process is responsible for identifying the deadline of the customer requiring physical bill productions, time cycle for producing and distributing to ensure that the physical bill production can be received by the customer on time. This process is responsible for ensuring that physical bills are produced in time to be received by customers on time. This process takes production and distribution cycle timing into account when establishing bill production schedules.

Explanatory

The purpose of Establish & Manage Bill Production Cycle process is to establish and manage the physical bill production cycle.

Mandatory

This process is responsible for identifying the deadline of the customer requiring physical bill productions, time cycle for producing and distributing to ensure that the physical bill production can be received by the customer on time. This process is responsible for ensuring that physical bills are produced in time to be received by customers on time. This process takes production and distribution cycle timing into account when establishing bill production schedules. AM

The support for this process element in R6 is delivered in the integrated component for Invoicing. This is evident from the document “R6.5_Billing_Overview. pdf”, specifically in the chapters and subchapters:

- General Concept page 4
- Bill Cycle Management, page 29f

Optional

Not used for this process element

Interactions

Not used for this process element

4.3.3.3 Level 4: Deliver Invoice Information (1.1.1.10.3.3) – Mapping Details

Process Identifier: 1.1.1.10.3.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Deliver Invoice Information (1.1.1.10.3.3)
<p>Brief Description</p> <p>Deliver the invoice information to the physical production processes.</p>
<p>Extended Description</p> <p>The purpose of the Deliver Invoice Information process is to ensure that the invoice information can be delivered to invoice physical production process. The invoice information includes both billing information and insertion information. This process is also responsible for monitoring the status of information delivery channel and ensuring the channel availability.</p>
<p>Explanatory</p> <p>The invoice information includes both billing information and insertion information.</p>
<p>Mandatory</p> <p>The purpose of the Deliver Invoice Information process is to ensure that the invoice information can be delivered to invoice physical production process. This process is also responsible for monitoring the status of information delivery channel and ensuring the channel availability. AM</p> <p>The support for this process element in R6 is delivered in the integrated component for Invoicing. This is evident from the document “R6.5_Billing_Overview. pdf”, specifically in the chapters and subchapters:</p> <ul style="list-style-type: none">• General Concept page 4• Bill Run Management, page 30f
<p>Optional</p> <p>Not used for this process element</p>
<p>Interactions</p>



Not used for this process element

4.3.3.4 Level 4: Administer Commercial Arrangement for Production and Distribution Capability (1.1.1.10.3.4) – Mapping Details

Process Identifier: 1.1.1.10.3.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Administer Commercial Arrangement for Production and Distribution Capability (1.1.1.10.3.4)
<p>Brief Description</p> <p>Establish the requirements for, and manage the agreed commercial arrangements with, appropriate outsourced suppliers of the production and distribution capabilities.</p>
<p>Extended Description</p> <p>The purpose of Administer Commercial Arrangement for Production and Distribution Capability process is to establish the requirements for, and manage the agreed commercial arrangements with, appropriate outsourced suppliers of the production and distribution capabilities. This process is responsible for output of the production and distribution requirements to outsourced supplier and amending the requirements based on the negotiation between Service Provider and outsourced supplier. This process is also responsible for drafting commercial contracts terms, including the responsibilities, payment condition, payment type, SLA, and signing the commercial contract with outsource supplier.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: yellow;">The purpose of Administer Commercial Arrangement for Production and Distribution Capability process is to establish the requirements for, and manage the agreed commercial arrangements with, appropriate outsourced suppliers of the production and distribution capabilities. This process is responsible for output of the production and distribution requirements to outsourced supplier and amending the requirements based on the negotiation between Service Provider and outsourced</p>

supplier. This process is also responsible for drafting commercial contracts terms, including the responsibilities, payment condition, payment type, SLA, and signing the commercial contract with outsource supplier. AM

R6 does partially support these arrangements and SLAs governing their execution though the Interface SLA management in the ImpEx module in general

- described in the document “Infonova_R6_UserDoc_IMPEX. pdf”, pages 4ff, 59f.

Optional

Not used for this process element

Interactions

Not used for this process element

4.3.3.5 Level 4: Manage Paper and Envelope Availability (1.1.1.10.3.5) – Mapping Details

Process Identifier: 1.1.1.10.3.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Manage Paper and Envelope Availability (1.1.1.10.3.5)</p>
<p>Brief Description</p> <p>Manage availability of paper and envelope volumes to meet the needs of the physical production process, if internal processes are used.</p>
<p>Extended Description</p> <p>The purpose of the Manage Paper and Envelope Availability process is to ensure the quantities of papers and envelopes are enough before starting invoice physical production. This process is responsible for ensuring the quality of paper and envelopes that fit the requirements from subsequent invoice physical production processes. For example the volume of envelope is suitable. If the requirements don't fit, this process is responsible for detecting the problems and reporting to other processes if required.</p>

<p>Explanatory</p> <p>Not used for this process element</p> <p>Mandatory</p> <p>The purpose of the Manage Paper and Envelope Availability process is to ensure the quantities of papers and envelopes are enough before starting invoice physical production. This process is responsible for ensuring the quality of paper and envelopes that fit the requirements from subsequent invoice physical production processes. For example the volume of envelope is suitable. If the requirements don't fit, this process is responsible for detecting the problems and reporting to other processes if required. AM</p> <p>R6 does partially support these QA checks though the Interface SLA management in the ImpEx module in general and the R6 workflow engine.</p> <ul style="list-style-type: none"> described in the document "Infonova_R6_UserDoc_IMPEX. pdf", pages 4ff, 59f. described in the document "R6.5_Process_Integration. pdf". <p>Optional</p> <p>Not used for this process element</p> <p>Interactions</p> <p>Not used for this process element</p>

4.3.3.6 Level 4: Manage Production Run to Create Bill (1.1.1.10.3.6) – Mapping Details

Process Identifier: 1.1.1.10.3.6

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS</p> <p>Manage Production Run to Create Bill (1.1.1.10.3.6)</p>
<p>Brief Description</p> <p>Manage the production runs to create the bills, if internal production facilities are used.</p>

Extended Description

The purpose of Manage Production Run to Create Bill process is to manage the production runs to create the bills, if internal production facilities are used. This process is responsible for producing the physical bill based on the invoice information and, if necessary, wrapping bills into envelopes. The process also is responsible for monitoring that the produced bills are ready to be distributed.

Explanatory

Not used for this process element

Mandatory

The purpose of Manage Production Run to Create Bill process is to manage the production runs to create the bills, if internal production facilities are used. This process is responsible for producing the physical bill based on the invoice information and, if necessary, wrapping bills into envelopes. The process also is responsible for monitoring that the produced bills are ready to be distributed.

AM

Infonova's R6 supports this process element by integrating with internal or external printer street management capabilities, driven by the Bill Run Management and Workflow from R6 , as described in document "R6.5_Billing-Overview. pdf", specifically in the chapters and subchapters:

- General Concept page 4
- Bill Run Management, pages 30ff

Optional

Not used for this process element

Interactions

Not used for this process element



4.3.3.7 Level 4: Manage Physical Production & Distribution Quality (1.1.1.10.3.7) – Mapping Details

Process Identifier: 1.1.1.10.3.7

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Manage Physical Production & Distribution Quality (1.1.1.10.3.7)</p>
<p>Brief Description</p> <p>Manage quality of the physical production and distribution processes, if internal production facilities are used.</p>
<p>Extended Description</p> <p>The purpose of Manage Physical Production & Distribution Quality process is to manage quality of the physical production and distribution processes, if internal production facilities are used.</p> <p>This process is responsible for monitoring the whole physical production and distribution running, check the quality and validity of production and observing the distribution time cycle.</p> <p>The quality and validity of production can include correct association of customer, bill and time period of bill, printing quality, format of the production.</p> <p>This process is responsible for ensuring that the contents of production, including billing parts and insertion parts, are satisfied by customers and the productions can be delivered to customers' address on time and accurately.</p> <p>This process is also responsible for monitoring the efficiency of production process to ensure that the production process can timely produce a large number of productions to avoid distribution delay.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Manage Physical Production & Distribution Quality process is to manage quality of</p>

the physical production and distribution processes, if internal production facilities are used.

This process is responsible for monitoring the whole physical production and distribution running, check the quality and validity of production and observing the distribution time cycle.

This process is responsible for ensuring that the contents of production, including billing parts and insertion parts, are satisfied by customers and the productions can be delivered to customers' address on time and accurately.

This process is also responsible for monitoring the efficiency of production process to ensure that the production process can timely produce a large number of productions to avoid distribution delay.

AM

Infonova's R6 supports this process element by integrating with internal or external printer street management capabilities, driven by the Bill Run Management and Workflow from R6 , as described in document "R6.5_Billing-Overview.pdf", specifically in the chapters and subchapters:

- General Concept page 4
- Bill Run Management, pages 30ff

Optional

The quality and validity of production can include correct association of customer, bill and time period of bill, printing quality, format of the production.

Interactions

Not used for this process element

4.3.4 Supporting Evidence References (Works Cited)

- [Ref 1] R6.5_Billing-Overview.pdf
- [Ref 2] Infonova_R6_Data_Archiving.pdf
- [Ref 3] Infonova_R6_UserDoc_IMPEX.pdf
- [Ref 4] R6.5_Invoice_Templates.pdf
- [Ref 5] R6.5_Process_Integration.pdf
- [Ref 6] R6.5_Invoice messages.docx
- [Ref 7] R6.5_Electronic_Bill_Presentment.docx



4.3.5 Level 2: 1.1.1.10 - Bill Invoice Management (1.1.1.10) – Conformance Scores

Table 4.3 - Bill Invoice Management (1.1.1.10) – Conformance Scores

Level 2: 1.1.1.10 - Bill Invoice Management [3/3]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
1.1.1.10.1 - Apply Pricing, Discounting, Adjustments & Rebates		4.8
	1.1.1.10.1.1 Obtain Billing Events	100%
	1.1.1.10.1.2 Apply Pricing, Discounting, Adjustments & Rebates to Customer Account	100%
	1.1.1.10.1.3 Apply Agreed Customer Bill Adjustment	75%
1.1.1.10.2 - Create Customer Bill Invoice		4.6
	1.1.1.10.2.1 Render & Format Invoice	50%
	1.1.1.10.2.2 Deliver Electronic Invoice	100%
	1.1.1.10.2.3 Verify Invoice Quality	75%
	1.1.1.10.2.4 Manage Customer Invoice Archive	100%
1.1.1.10.3 - Produce & Distribute Bill		4.3
	1.1.1.10.3.1 Co-ordinate Billing Insertion	100%
	1.1.1.10.3.2 Establish & Manage Bill Production Cycle	100%
	1.1.1.10.3.3 Deliver Invoice Information	100%
	1.1.1.10.3.4 Administer Commercial Arrangement for Production and Distribution Capability	50%
	1.1.1.10.3.5 Manage Paper and Envelope Availability	25%
	1.1.1.10.3.6 Manage Production Run to Create Bill	50%
	1.1.1.10.3.7 Manage Physical Production & Distribution Quality	25%

4.4 Level 2: Bill Payments & Receivables Management (1.1.1.11)

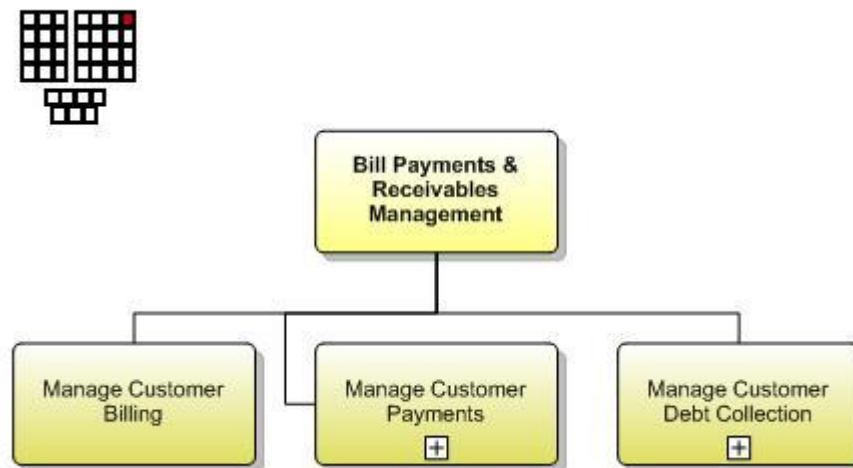


Figure 4.15 - Bill Payments & Receivables Management decomposition into level 3 processes

Process Identifier: 1.1.1.11

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.4.1 Level 3: Manage Customer Billing 1.1.1.11.1

Ensure effective management of the customer’s billing account as it relates to the products purchased and consumed throughout the appropriate billing cycle.

4.4.1.1 Level 3: Manage Customer Billing 1.1.1.11.1 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS
Manage Customer Billing 1.1.1.11.1
<p>Brief Description</p> <p>Ensure effective management of the customer’s billing account as it relates to the products purchased and consumed throughout the appropriate billing cycle. AM</p> <p>Infonova’s R6 Billing Module provides the respective billing functionality to create bills for the customers corresponding to their customer inventory and usage. The supporting documentation “R6.5_Billing-Overview.pdf” provides the detailed description of the billing module. The invoicing description how the purchased and consumed products are invoices can be found on the pages 24-25.</p>

Extended Description

The primary purpose of this process pertains to effective management of the customer's billing account as it relates to the products purchased and consumed throughout the appropriate billing cycle. This process focuses on managing changes to the customer's billing account (for example, customer billing address, etc.) as it relates to the customer's service portfolio, such as ensuring that the correct purchased products are assigned to the customer's billing account for accurate billing. AM

Infonova's R6 provides a fully integrated CRM, Billing, Order Management system which means that the changes in the customer billing account (e.g. an address change or a new product ordered at a certain point in time) are available at all times for the billing. The Rating with respect to the usage data ("R6.5_Billing-Overview.pdf" page 7) and the invoicing ("R6.5_Billing-Overview.pdf" page 24). A screen shot how the frontend offers the start of a bill run is provided on page 33 in the document "R6.5_Billing-Overview.pdf".

R6 allows an operator also to make various changes on an existing customer billing account. The operator can change data like:

- personal data e.g. name, title, etc. (WebAC User Manual - VSO - 1.1.1.2.docx page 6)
- contact details like primary address, contact address, billing address (WebAC User Manual - VSO - 1.1.1.2.docx page 7)
- Payment details, payment method, bill cycle, invoice interval, invoice type, billing address (WebAC User Manual - VSO - 1.1.1.2.docx page 9)

It's also possible to change the customers products/service subscriptions via an up- or downgrade or change of offer componetns as described in WebAC User Manual - VSO - 1.1.1.2.docx page 15 "Manage customer base offer"

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.4.2 Level 3: Manage Customer Payments 1.1.1.11.2

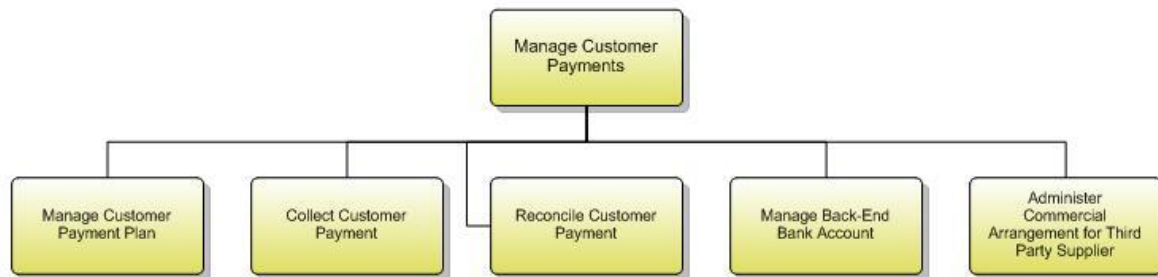


Figure 4.16 - Manage Customer Payments decomposition into level 4 processes

Process Identifier: 1.1.1.11.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.4.2.1 Level 4: Manage Customer Payment Plan (1.1.1.11.2.1) – Mapping Details

Process Identifier: 1.1.1.11.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Customer Payment Plan (1.1.1.11.2.1)
<p>Brief Description</p> <p>Manage payment plans made with the customer.</p>
<p>Extended Description</p> <p>The purpose of Manage Customer Payment Plan process is to establish new payment plans, modify or remove existing payment plans. Customer can decide payment plans to automatically pay bills from a designated account that can be credit card, back account, third party and etc. It also enables</p>

paying a bill in installment. For example, customer can apply make a payment \$20 per month for \$100 bill in 5 months.

The payment plan can enable making a payment by pre-defined payment method. For example, customer defines paying mobile monthly line rental fee by direct debt and paying digital TV programmes by cash.

Explanatory

Customer can decide payment plans to automatically pay bills from a designated account that can be credit card, bank account, third party and etc. It also enables paying a bill in installment. For example, customer can apply make a payment \$20 per month for \$100 bill in 5 months.

The payment plan can enable making a payment by pre-defined payment method. For example, customer defines paying mobile monthly line rental fee by direct debt and paying digital TV programmes by cash.

Mandatory

The purpose of Manage Customer Payment Plan process is to establish new payment plans, modify or remove existing payment plans. AM

Within Infonova's R6 the payment method can be configured within the Customer Management module. The payment plan can be configured with each order. The automatic payment is handled via Infonova's R6 Finance module. Depending on the payment plan and method the payments are automatically collected via the integrated interface. This module also allows a customer to perform a one-time payment. In the supporting document "R6.5_Finance-Overview.pdf" we provide some details and a screenshot of this screen on page 35-37 and page 7 on how to establish a new payment plan and how to modify or remove it.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.2.2 Level 4: Collect Customer Payment (1.1.1.11.2.2) – Mapping Details

Process Identifier: 1.1.1.11.2.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS

Collect Customer Payment (1.1.1.11.2.2)

Brief Description

Collect payments made by the customer.

Extended Description

The purpose of Collect Customer Payment process is to collect the payments from the customer. These processes can include credit/debit/EFT payments using various channels, either directly or through third parties, and cash or check payments, either directly or through third parties. To the extent that processing of any payments is undertaken internally, i.e. check processing, these processes are responsible for managing the operation and quality of the internal processing.

Note that the Establish Back-End Bank Account process is used to create the link to collection customer payment via bank.

Explanatory

Note that the Establish Back-End Bank Account process is used to create the link to collection customer payment via bank.

Mandatory

The purpose of Collect Customer Payment process is to collect the payments from the customer. To the extent that processing of any payments is undertaken internally, i.e. check processing, these processes are responsible for managing the operation and quality of the internal processing. AM

Infonova's R6 supports the different payment methods. In the registration of the customer details the payment method is defined. This payment method is then used by Infonova's R6 Finance Module to collect the payments in an automated process. There is also the possibility to manually enter payments which come via cash or cheque. In case such a payment method is configured the one or other way R6 supports the respective collection process which uses the integrated payment interface to collect payments. To manage the operation and the quality of the internal processing there are two options. The one is the use of the standard reporting views within R6. In the supporting document " R6 Details on Reporting Views.docx" there are respective reporting views available (e.g. section 2.8.6. ENT_FINANCIAL_TRANSACTION). The second option is the use and configuration of the available collection process which automatically ensures that the payment is managed appropriately (for details see the supporting document "R6.5_Finance-Overview.pdf" from page 8 on.

Optional

These processes can include credit/debit/EFT payments using various channels, either directly or through third parties, and cash or check payments, either directly or through third parties.

Interactions

Not used for this process element

4.4.2.3 Level 4: Reconcile Customer Payment (1.1.1.11.2.3) – Mapping Details

Process Identifier: 1.1.1.11.2.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Reconcile Customer Payment (1.1.1.11.2.3)</p>
<p>Brief Description</p> <p>Reconcile the payments to the invoices.</p>
<p>Extended Description</p> <p>The purpose of Reconcile Customer Payment process is to reconcile the payments to the invoices. This process is meant to match these payments with the services/invoices delivered to this customer. Where payments do not match invoices, this process is responsible for informing the Manage Customer Debt Collection processes of any underpayments, and the Bill Inquiry Handling processes for any over-payments. Underpayments and overpayments are handled appropriately by these separate processes. These processes are responsible for reconciling the money received into the bank accounts against the payments expected in the invoices. Additionally these processes inform the Financial Management on all those payments for updating the ledger.</p>
<p>Explanatory</p> <p>Underpayments and overpayments are handled appropriately by Manage Customer Debt Collection and Bill Inquiry Handling processes.</p>
<p>Mandatory</p> <p>The purpose of Reconcile Customer Payment process is to reconcile the payments to the invoices. This process is meant to match these payments with the services/invoices delivered to this customer. Where payments do not match invoices, this process is responsible for informing the</p>



Manage Customer Debt Collection processes of any underpayments, and the Bill Inquiry Handling processes for any over-payments. These processes are responsible for reconciling the money received into the bank accounts against the payments expected in the invoices. Additionally these processes inform the Financial Management on all those payments for updating the ledger. AM

The central purpose of R6 Finance Management is to reconcile payments to invoices, and trigger collections processes where applicable. To provide this functionality, R6 Account Receivables collects account and invoice data for each customer, and is connected to a variety of payment channels. The Finance business process covers the receivable management processes for a mass market customer base and consists of the Accounts Receivable Module as well as the management of debtors. A module within R6 Finance Management is R6 Accounts Receivable (A/R) which is the core of the financial management system. Its central purpose is to reconcile payments to invoices, and to trigger collection processes where applicable. The Accounts Receivable component triggers or receives payments, handles payment-reversals or payment-dishonours, triggers refunds, and assigns payments to customer accounts and invoices. The R6 Accounts Receivables process is initiated, when a customer receives an invoice for payment. The process includes managing and validating payments, debiting and crediting customer accounts, balance management, reconciliation, and reporting. R6 Accounts Receivables interacts with various internal and external system components like R6 CRM and R6 Invoicing. For example, accounts receivable receives invoice data from billing, and payments from the customer through various payment channels. For more details please refer to the supporting material "R6.5_Finance-Overview.pdf" page 3 on.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.2.4 Level 4: Manage Back-End Bank Account (1.1.1.11.2.4) – Mapping Details

Process Identifier: 1.1.1.11.2.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Manage Back-End Bank Account (1.1.1.11.2.4)</p>
<p>Brief Description</p>

Manage back-end bank accounts for receipt of the customer payments and for the transfer of funds collected by third parties.

Extended Description

The purpose of Manage Back-End Bank Account process is to manage back-end bank accounts for receipt of the customer payments and for the transfer of funds collected by third parties. These processes are responsible for managing payment commercial agreement agreed with banks and the payment interfaces for collecting the customer payments.

Explanatory

Not used for this process element

Mandatory

The purpose of Manage Back-End Bank Account process is to manage back-end bank accounts for receipt of the customer payments and for the transfer of funds collected by third parties. These processes are responsible for managing payment commercial agreement agreed with banks and the payment interfaces for collecting the customer payments. AM

Infonova's R6 supports standard workflows for the integration with back-end bank accounts. More details on the payment integration is provided in the supporting document "R6.5._Finance-Overview.pdf" on page 34.

Banks are created within R6 similar to customers. They get an own account including a contact person, a history tab storing all interactions, a notification tab where all notifications the bank received is stored and an attachment tab where attachments can be stored like commercial agreements. Screenshots are provided in "R6.5._Finance-Overview.pdf" on page 57 in the chapter "Manage Back-End Bank Account".

Optional

Not used for this process element

Interactions

Not used for this process element



**4.4.2.5 Level 4: Administer Commercial Arrangement for Third Party Supplier
(1.1.1.11.2.5) – Mapping Details**

Process Identifier: 1.1.1.11.2.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Administer Commercial Arrangement for Third Party Supplier (1.1.1.11.2.5)
<p>Brief Description</p> <p>Establish the requirements for, and manage any commercial arrangements agreed with, third party suppliers.</p>
<p>Extended Description</p> <p>The purpose of Administer Commercial Arrangement for Third Party Supplier process is to establish the requirements for, and manage any commercial arrangements agreed with, third party suppliers of payment services. The requirements can include payment transfer cycle, payment interface requirements and payment methods requirements. After commercial arrangements are agreed, this process is responsible for monitor the execution of the commercial arrangements.</p> <p>Note that the Supply Chain Capability Delivery process is used to deliver the commercial agreements.</p>
<p>Explanatory</p> <p>The requirements can include payment transfer cycle, payment interface requirements and payment methods requirements. Note that the Supply Chain Capability Delivery process is used to deliver the commercial agreements.</p>
<p>Mandatory</p> <p>The purpose of Administer Commercial Arrangement for Third Party Supplier process is to establish the requirements for, and manage any commercial arrangements agreed with, third party suppliers of payment services. After commercial arrangements are agreed, this process is responsible for monitor the execution of the commercial arrangements. AM</p>
<p>Commercial Agreements for Third Party Suppliers are handled similar to commercial agreements</p>

with Banks as described in the process before. The third party supplier of payment services has an own account within R6 including contact person, history and an attachment tab, where all agreements can be stored.

Optional

Not used for this process element

Interactions

Note that the Supply Chain Capability Delivery process is used to deliver the commercial agreements.

4.4.3 Level 3: Manage Customer Debt Collection 1.1.1.11.3

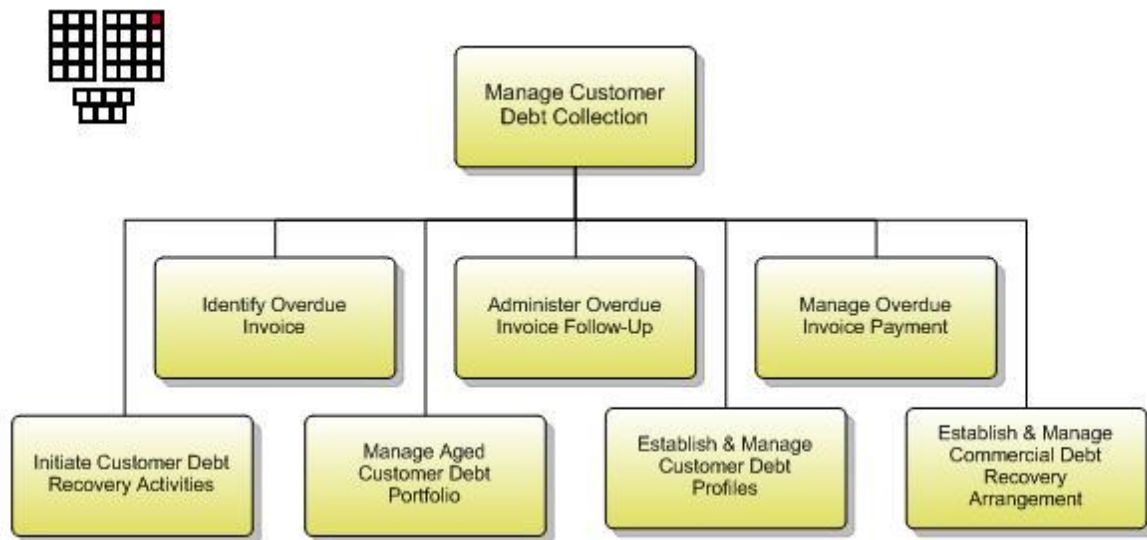


Figure 4.17 - Manage Customer Debt Collection decomposition into level 4 processes

Process Identifier: 1.1.1.11.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.4.3.1 Level 4: Identify Overdue Invoice (1.1.1.11.3.1) – Mapping Details

Process Identifier: 1.1.1.11.3.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Overdue Invoice (1.1.1.11.3.1)
<p>Brief Description</p> <p>Identify invoices which are overdue for payment.</p>
<p>Extended Description</p> <p>The purpose of Identify Overdue Invoice process is to identify invoices which are overdue for</p>

payment. It monitors the amount due from the customer, i.e. check whether the payments are made on time, and implements necessary activities and policies to recover amounts overdue.

Explanatory

i.e. check whether the payments are made on time, and implements necessary activities and policies to recover amounts overdue.

Mandatory

The purpose of Identify Overdue Invoice process is to identify invoices which are overdue for payment. It monitors the amount due from the customer , i.e. check whether the payments are made on time, and implements necessary activities and policies to recover amounts overdue. AM

Infonova's R6 Finance module supports this requirement with its Collection functionality. If the customer has an overdue balance the account is managed in a debtor handling process defined by rules. Details on this functionality is provided in the supporting documentation "R6.5_Finance-Overview.pdf" from page 8 on. In the process on page 9 of this document there is a configurable grace period after which an invoice is classified as overdue and implements further steps to recover the overdue amounts.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.3.2 Level 4: Administer Overdue Invoice Follow-Up (1.1.1.11.3.2) – Mapping Details

Process Identifier: 1.1.1.11.3.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Administer Overdue Invoice Follow-Up (1.1.1.11.3.2)</p>
<p>Brief Description</p>

Initiate and manage follow-up with customers having overdue amounts.

Extended Description

The purpose of Administer Overdue Invoice Follow-Up process is to initiate and manage follow-up with customers having overdue amounts. These processes can be set up routinely or manually.

This process is responsible for setting up the follow-ups based on the policies. The policies are associated to customer's profile such as customer credit, customer group, overdue amounts, debt occurrence times, purchased products and etc. This process is also responsible for modifying or removing the designated follow-ups when the policies or situations are changed.

The follow-ups can include overdue invoice reminding, customer credit control, service restriction, establishing customer debt profile, selling parts of debt portfolios to third party for debt recovery.

Explanatory

These processes can be set up routinely or manually. The follow-ups can include overdue invoice reminding, customer credit control, service restriction, establishing customer debt profile, selling parts of debt portfolios to third party for debt recovery.

Mandatory

The purpose of Administer Overdue Invoice Follow-Up process is to initiate and manage follow-up with customers having overdue amounts. This process is responsible for setting up the follow-ups based on the policies. The policies are associated to customer's profile such as customer credit, customer group, overdue amounts, debt occurrence times, purchased products and etc. This process is also responsible for modifying or removing the designated follow-ups when the policies or situations are changed. AM

Infonova's R6 Finance module supports the administration of the overdue invoice follow-up process. The process is administered by a configuration table as explained in the supporting documentation "R6.5_Finance-Overview.pdf" on page 10-11. There can be e.g. specific rules for customers of a specific customer type or credit_risk_group. Certain steps in this process can also be configured to be manual tasks (e.g. for a business customer one might to have an agent calling before any service is barred). In the administration portal such customers do have a notification that the account is in dunning as shown in the screenshot below.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.3.3 Level 4: Manage Overdue Invoice Payment (1.1.1.11.3.3) – Mapping Details

Process Identifier: 1.1.1.11.3.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Overdue Invoice Payment (1.1.1.11.3.3)
<p>Brief Description</p> <p>Arrange and monitor payment plans to allow customers to pay overdue amounts in installments.</p>
<p>Extended Description</p> <p>The purpose of Manage Overdue Invoice Payment process is to arrange and monitor payment plans</p>

to allow customers to pay overdue amounts in installments. This process arranges payment plans to allow customers to pay overdue amounts, leads to an agreement with the customers, and monitors the execution of the payment plans.

The payment plan is associated to customer's profile such as the customer's credit, payment history, customer group or purchased products. This process should consider the payment amounts in installment whether can be undertaken by the customer.

Explanatory

The payment plan is associated to customer's profile such as the customer's credit, payment history, customer group or purchased products.

Mandatory

The purpose of Manage Overdue Invoice Payment process is to arrange and monitor payment plans to allow customers to pay overdue amounts in installments. This process arranges payment plans to allow customers to pay overdue amounts, leads to an agreement with the customers, and monitors the execution of the payment plans. This process should consider the payment amounts in installment whether can be undertaken by the customer. AM

Infonova's R6 Finance module supports the management of overdue invoice payments in the payment and transaction history. In the supporting documentation "R6.5_Finance-Overview.pdf" on page 40-42 the process is illustrated in R6. If a customer can't pay the whole overdue amount at once, an installment plan that allows the customer to pay the overdue amount in installments can be generated and added to his accounts. Details and screenshots are provided in "R6.5_Finance-Overview.pdf" on page 54-56.

Optional

Not used for this process element

Interactions

Not used for this process element



4.4.3.4 Level 4: Establish & Manage Customer Debt Profiles (1.1.1.11.3.6) – Mapping Details

Process Identifier: 1.1.1.11.3.6

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Establish & Manage Customer Debt Profiles (1.1.1.11.3.6)
<p>Brief Description</p> <p>Establish and manage customer debt profiles to assist in managing debt recovery and debt risk on a customer, product or customer group basis.</p>
<p>Extended Description</p> <p>The purpose of Establish & Manage Customer Debt Profiles process is to establish and manage customer debt profiles to assist in managing debt recovery and debt risk on a customer, product or customer group basis. The customer debt profile is a part of customer’s profile, which can include customer credit, customer group, overdue date, overdue amounts, overdue occurring times, debt recovery means and occurring times, customer debt recovery response and etc. Other process can base the customer debt profile to upgrade or downgrade the customer credit or apply other controls. This process is responsible for keeping updates of the customer debt profiles according to results from Initiate Customer Debt Recovery Activities process.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Establish & Manage Customer Debt Profiles process is to establish and manage customer debt profiles to assist in managing debt recovery and debt risk on a customer, product or customer group basis. The customer debt profile is a part of customer’s profile, which can include customer credit, customer group, overdue date, overdue amounts, overdue occurring times, debt recovery means and occurring times, customer debt recovery response and etc. This process is responsible for keeping updates of the customer debt profiles according to results from Initiate Customer Debt Recovery Activities process. AM</p> <p>Infonova’s R6 Finance Module offers the functionality that if an account is handled in debtor management, the account’s dunning status and the overdue balance are displayed in the WebAc</p>

header. Furthermore a dunning tab is displayed in the customer profile section including detailed information about the debtor process such as current and next dunning status, overdue balance and a history of the debtor process currently in progress. Evidence is provided in the supporting material "R6.5_Finance-Overview.pdf" page 54.

Optional

Not used for this process element

Interactions

Other process can base the customer debt profile to upgrade or downgrade the customer credit or apply other controls.

4.4.3.5 Level 4: Establish & Manage Commercial Debt Recovery Arrangement (1.1.1.11.3.7) – Mapping Details

Process Identifier: 1.1.1.11.3.7

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Establish & Manage Commercial Debt Recovery Arrangement (1.1.1.11.3.7)</p>
<p>Brief Description</p> <p>Establish and manage commercial arrangements with third parties for the recover of aged debt, and/or for the write-off and selling of parts of the debt portfolio to third parties.</p>
<p>Extended Description</p> <p>The purpose of Establish & Manage Commercial Debt Recovery Arrangement process is to establish and manage commercial arrangements with third parties for the recovery of aged debt, and/or for the write-off and selling of parts of the debt portfolio to third parties. This process is responsible for filtering and packaging the aged customer debt portfolios based on the Service Provider's policies, deciding the third parties' action items and monitoring the status of the arrangements.</p> <p>Note that the Supply Chain Capability Delivery process is used to deliver the commercial agreements.</p>

Explanatory

Not used for this process element

Mandatory

The purpose of Establish & Manage Commercial Debt Recovery Arrangement process is to establish and manage commercial arrangements with third parties for the recovery of aged debt, and/or for the write-off and selling of parts of the debt portfolio to third parties. This process is responsible for filtering and packaging the aged customer debt portfolios based on the Service Provider's policies, deciding the third parties' action items and monitoring the status of the arrangements. AM

Infonova's R6 Finance Module offers the possibility to freely configure the debt handling process. This includes the functionality of a specific state in the process which interfaces with a debt agency to sell aged customer dept portfolio based on definable rules. This process also supports the configuration of write-offs after a defined period of time and process state. For more details refer to the supporting document "R6.5._Finance-Overview.pdf" from page 9 on.

Optional

Not used for this process element

Interactions

Note that the Supply Chain Capability Delivery process is used to deliver the commercial agreements.

4.4.3.6 Level 4: Initiate Customer Debt Recovery Activities (1.1.1.11.3.4) – Mapping Details

Process Identifier: 1.1.1.11.3.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Initiate Customer Debt Recovery Activities (1.1.1.11.3.4)</p>

Brief Description

Initiate debt recovery activities in accordance with appropriate commercial practice and policies.

Extended Description

The purpose of Initiate Customer Debt Recovery process is to initiate customer debt recovery activities in accordance with appropriate commercial practice and policies. This process includes deciding appropriate recovery activities based on debt recovery policies, launching debt recovery activities and monitoring the executions.

The debt recovery policies are associated to the customer's profile such as payment history, customer group, purchased products, overdue amounts. This process includes overdue invoice reminding via phone call, SMS, email, by manually or automatically, by humans or applications. This process is also responsible for terminating customer debt recovery activities when the customer pays.

Explanatory

Not used for this process element

Mandatory

The purpose of Initiate Customer Debt Recovery process is to initiate customer debt recovery activities in accordance with appropriate commercial practice and policies. This process includes deciding appropriate recovery activities based on debt recovery policies, launching debt recovery activities and monitoring the executions.

The debt recovery policies are associated to the customer's profile such as payment history, customer group, purchased products, overdue amounts. This process includes overdue invoice reminding via phone call, SMS, email, by manually or automatically, by humans or applications. This process is also responsible for terminating customer debt recovery activities when the customer pays. AM

The R6 Finance module supports the customer dept recovery process. Based on configurable parameters and rules the process is managed. If the customer pays the activities in this process are ended. Please find more evidence in the supporting material "R6.5_Finance_Overview.pdf" pages 8-21.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.3.7 Level 4: Manage Aged Customer Debt Portfolio (1.1.1.11.3.5) – Mapping Details

Process Identifier: 1.1.1.11.3.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Aged Customer Debt Portfolio (1.1.1.11.3.5)
<p>Brief Description</p> <p>Manage the aged customer debt portfolio.</p>
<p>Extended Description</p> <p>The purpose of Manage Aged Customer Debt Portfolio process is to manage the aged customer debt portfolio. When the customer debt can't be recovered in a period of time decided by Service Provider, this process is responsible to transform this customer debt to aged customer debt portfolio.</p> <p>This process is responsible for transforming the overdue invoice to the aged customer debt portfolio when it didn't be recovered after a time of period or based on other triggers according to the Service Provider's policies. The aged customer debt portfolio should include all the information of the customer debt profiles. The process is also responsible for managing and maintaining transforming cycle.</p> <p>When the overdue payment is recovered after transforming, this process is responsible to remove the aged customer debt portfolio and notice Establish & Manage Customer Debt Profiles process to update the customer debt profile.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Manage Aged Customer Debt Portfolio process is to manage the aged customer debt portfolio. When the customer debt can't be recovered in a period of time decided by Service Provider, this process is responsible to transform this customer debt to aged customer debt</p>

portfolio.

This process is responsible for transforming the overdue invoice to the aged customer debt portfolio when it didn't be recovered after a time of period or based on other triggers according to the Service Provider's policies. The aged customer debt portfolio should include all the information of the customer debt profiles. The process is also responsible for managing and maintaining transforming cycle.

When the overdue payment is recovered after transforming, this process is responsible to remove the aged customer debt portfolio and notice Establish & Manage Customer Debt Profiles process to update the customer debt profile. AM

Infonova's R6 offers the functionality to manage the whole collection process including the aged customer debt. The process is dependent on specific rules and parameters which can be configured accordingly (as shown in the supporting material "R6.5_Finance-Overview.pdf" page 8-21). To manage especially aged customer debts via predefined reporting views please find the description in the supporting material "R6.5_Finance-Overview.pdf" page 30-32.

Optional

Not used for this process element

Interactions

Not used for this process element

4.4.4 Supporting Evidence References (Works Cited)

[Ref 1]	R6.5_Billing-Overview.pdf
[Ref 2]	R6.5_Finance-Overview.pdf
[Ref 3]	R6 Details on Reporting Views.docx
[Ref 4]	WebAC User Manual - VSO - 1.1.1.2.docx



4.4.5 Level 2: 1 Bill Payments & Receivables Management (1.1.1.11) – Conformance Scores

Table 4.4 - Bill Payments & Receivables Management (1.1.1.11) – Conformance Scores

Level 2: 1.1.1.11 - Bill Payments & Receivables Management [3/3]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
	1.1.1.11.1 - Manage Customer Billing	5
	1.1.1.11.2 - Manage Customer Payments	5
	1.1.1.11.2.1 - Manage Customer Payment Plan	100%
	1.1.1.11.2.2 - Collect Customer Payment	100%
	1.1.1.11.2.3 - Reconcile Customer Payment	100%
	1.1.1.11.2.4 - Manage Back-End Bank Account	100%
	1.1.1.11.2.5 - Administer Commercial Arrangement for Third Party Supplier	100%
	1.1.1.11.3 - Manage Customer Debt Collection	5
	1.1.1.11.3.1 - Identify Overdue Invoice	100%
	1.1.1.11.3.2 - Administer Overdue Invoice Follow-Up	100%
	1.1.1.11.3.3 - Manage Overdue Invoice Payment	100%
	1.1.1.11.3.4 - Initiate Customer Debt Recovery Activities	100%
	1.1.1.11.3.5 - Manage Aged Customer Debt Portfolio	100%
	1.1.1.11.3.6 - Establish & Manage Customer Debt Profiles	100%
	1.1.1.11.3.7 - Establish & Manage Commercial Debt Recovery Arrangement	100%

4.5 Level 2: Bill Inquiry Handling (1.1.1.12)

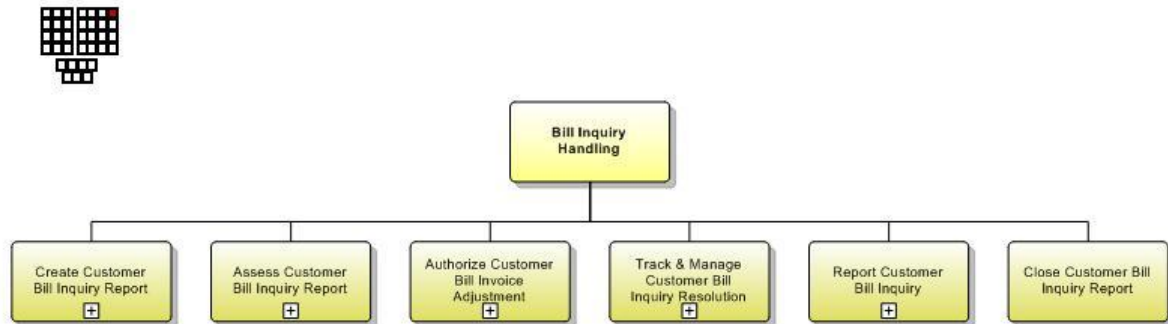


Figure 4.18 - Bill Inquiry Handling decomposition into level 3 processes

Process Identifier: 1.1.1.12

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.1 Level 3: Create Customer Bill Inquiry Report 1.1.1.12.1

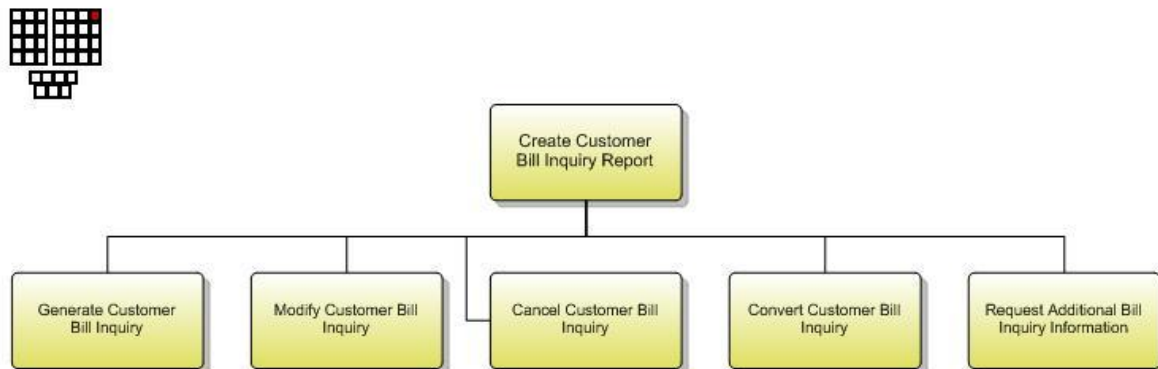


Figure 4.19 - Create Customer Bill Inquiry Report decomposition into level 4 processes

Process Identifier: 1.1.1.12.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.1.1 Level 4: Generate Customer Bill Inquiry (1.1.1.12.1.1) – Mapping Details

Process Identifier: 1.1.1.11.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Generate Customer Bill Inquiry (1.1.1.12.1.1)</p>
<p>Brief Description</p> <p>Generate a new customer bill inquiry.</p>
<p>Extended Description</p> <p>The purpose of Generate Customer Bill Inquiry is to generate a new customer bill inquiry. A new customer bill inquiry may be generated as a result of specific customer initiated bill inquiry or complaint notifications.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: #00ff00;">The purpose of Generate Customer Bill Inquiry is to generate a new customer bill inquiry. AM</p> <p>Customers can generate a new bill inquiry via raising a ticket by themselves or via an call center operator. Details are provided in chapter Generate a bill inquiry on page 3 in the evidence document “R6.5_Bill_Inquiries.docx”.</p> <p>A second way to generate a bill inquiry is to dispute a single charge as described in chapter Dispute a Charge on page 24 ff of “R6.5_Bill_Inquiries.docx”.</p>
<p>Optional</p> <p>A new customer bill inquiry may be generated as a result of specific customer initiated bill inquiry or complaint notifications.</p>
<p>Interactions</p>

Not used for this process element

4.5.1.2 Level 4: Modify Customer Bill Inquiry (1.1.1.12.1.2) – Mapping Details

Process Identifier: 1.1.1.12.1.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Modify Customer Bill Inquiry (1.1.1.12.1.2)
<p>Brief Description</p> <p>Modify existing customer bill inquiries</p>
<p>Extended Description</p> <p>The purpose of Modify Customer Bill Inquiry process is to modify existing customer bill in-quiries when the bill inquiry or complaint is changed by the customer, a CSR or other processes. This process is also responsible for changing the status of customer bill inquiries/complains.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: #00ff00;">The purpose of Modify Customer Bill Inquiry process is to modify existing customer bill inquiries when the bill inquiry or complaint is changed by the customer, a CSR or other processes. This process is also responsible for changing the status of customer bill inquiries/complains. AM</p> <p>When a bill inquiry is created its assigned to an operator who can change the status of the inquiry, the due date, gather additional information from the customer and solve the inquiry. Details are provided in chapter Manage Customer Bill Inquiries on page 4 and 5 in the evidence document “R6.5_Bill_Inquiries.docx”.</p> <p>If a dispute is raised the operator can also manage and modify the dispute as described in chapter Manage customers disputes on page 26 ff of “R6.5_Bill_Inquiries.docx”.</p>

<p>Optional</p> <p>Not used for this process element</p> <p>Interactions</p> <p>Not used for this process element</p>

4.5.1.3 Level 4: Cancel Customer Bill Inquiry (1.1.1.12.1.3) – Mapping Details

Process Identifier: 1.1.1.12.1.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Cancel Customer Bill Inquiry (1.1.1.12.1.3)</p>
<p>Brief Description</p> <p>Request cancellation of existing customer bill inquiry reports</p>
<p>Extended Description</p> <p>The purpose of Cancel Customer Bill Inquiry process is to cancel existing customer bill inquiries. The cancellation may be caused by the cancellation requests of bill inquiry from the specific customers, a CSR or processes.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: #00ff00;">The purpose of Cancel Customer Bill Inquiry process is to cancel existing customer bill inquiries. AM</p> <p>To cancel a Bill Inquiry the Operator has to close the inquiry and select a reason for that action. A screenshot is provided on page 5 in the evidence document “R6.5_Bill_Inquiries.docx”.</p>



If a dispute is raised the operator can also cancel the dispute as described in chapter **Manage customers disputes** on page 26 ff of “R6.5_Bill_Inquiries.docx”.

Optional

The cancellation may be caused by the cancellation requests of bill inquiry from the specific customers, a CSR or processes.

Interactions

Not used for this process element

4.5.1.4 Level 4: Convert Customer Bill Inquiry (1.1.1.12.1.4) – Mapping Details

Process Identifier: 1.1.1.12.1.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Convert Customer Bill Inquiry (1.1.1.12.1.4)</p>
<p>Brief Description</p> <p>Convert the received information into a form suitable for the Bill Inquiry Handling processes</p>
<p>Extended Description</p> <p>The purpose of Convert Customer Bill Inquiry process is to convert the received information into a form suitable for the Bill Inquiry Handling processes. This process is responsible for extracting data from received information, and applying the suitable template.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Convert Customer Bill Inquiry process is to convert the received information into a form suitable for the Bill Inquiry Handling processes. This process is responsible for extracting data</p>

from received information, and applying the suitable template. AM

All information has to be provided electronically whereby the CSR or the customer have to fill the provided templates. So no further data extraction is necessary.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.1.5 Level 4: Request Additional Bill Inquiry Information (1.1.1.12.1.5) – Mapping Details

Process Identifier: 1.1.1.12.1.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Request Additional Bill Inquiry Information (1.1.1.12.1.5)
<p>Brief Description</p> <p>Request additional information for the Bill Inquiry Handling processes</p>
<p>Extended Description</p> <p>The purpose of Request Additional Bill Inquiry Information process is to request additional information for the Bill Inquiry Handling processes. The additional information requiring can be happening at anytime during Bill Inquiry Handling process. This process is responsible for avoiding the duplication of the additional bill inquiry information request and ensuring the requested information hasn't already existed in customer bill inquiry.</p>
<p>Explanatory</p> <p>Not used for this process element</p>

Mandatory

The purpose of Request Additional Bill Inquiry Information process is to request additional information for the Bill Inquiry Handling processes. The additional information requiring can be happening at anytime during Bill Inquiry Handling process. This process is responsible for avoiding the duplication of the additional bill inquiry information request and ensuring the requested information hasn't already existed in customer bill inquiry. AM

All Customer Bill Inquiries are stored in the customer management module of R6. That allows an operator to have an overview on all inquiries. In addition each inquiry has its own *History and Notes* tab (as shown in the screenshot on page 5) where the responsible operator has a detailed view on all actions taken on that ticket to avoid the duplication of an additional bill inquiry information request.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.2 Level 3: Assess Customer Bill Inquiry Report 1.1.1.12.2

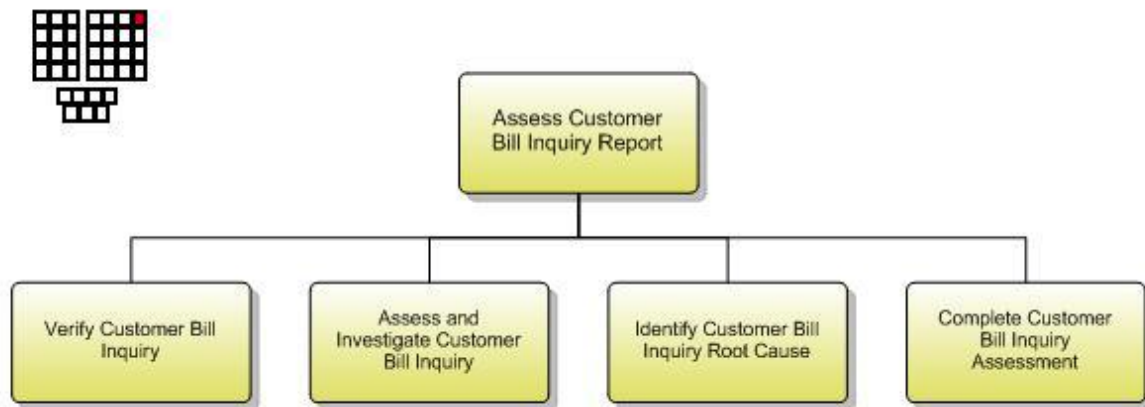


Figure 4.20 - Assess Customer Bill Inquiry Report decomposition into level 4 processes

Process Identifier: 1.1.1.12.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.2.1 Level 4: Verify Customer Bill Inquiry (1.1.1.12.2.1) – Mapping Details

Process Identifier: 1.1.1.12.2.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Verify Customer Bill Inquiry (1.1.1.12.2.1)
<p>Brief Description</p> <p>Verify whether the information supplied by the customer is correct.</p>
<p>Extended Description</p> <p>The purpose of Verify Customer Bill Inquiry process is to verify whether the information supplied by the customer is correct. For examples: verify customer name, validate customer account number,</p>

identify the association of customer and billing account.

Explanatory

For examples: verify customer name, validate customer account number, identify the association of customer and billing account.

Mandatory

The purpose of Verify Customer Bill Inquiry process is to verify whether the information supplied by the customer is correct. AM

R6 provides an 360° view on a customer. That allows an CSR to take a detailed look on all customer invoices, charges as well as on an itemized invoice trill down.

A description including screenshots is provided in chapter **View Customer Invoice Information** on page 8 as well as in chapter **Manage payment transaction history** on page 11 of the evidence document “R6.5_Bill_Inquiries.docx”.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.2.2 Level 4: Assess and Investigate Customer Bill Inquiry (1.1.1.12.2.2) – Mapping Details

Process Identifier: 1.1.1.12.2.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Assess and Investigate Customer Bill Inquiry (1.1.1.12.2.2)
<p>Brief Description</p> <p>Assess and investigate customer bill inquiry based on the customer provided information.</p>

Extended Description

The purpose of Assess and Investigate Customer Bill Inquiry is to assess and investigate customer bill inquiry based on the customer provided information to determine whether the circumstances leading to the bill inquiry is linked to the underlying services, or other processes. Update the customer bill inquiry report, as required during the assessment. Make the results of the investigation available to other processes.

Explanatory

Not used for this process element

Mandatory

The purpose of Assess and Investigate Customer Bill Inquiry is to assess and investigate customer bill inquiry based on the customer provided information to determine whether the circumstances leading to the bill inquiry is linked to the underlying services, or other processes. Update the customer bill inquiry report, as required during the assessment. AM

As described above a CSR can investigate a customer bill inquiry using the 360° view provided by R6. If the inspection of the invoice data, the latest charges, the unbilled usage or the invoice history did not resolve the problem and an underlying service caused the problem leading to the bill inquiry, the operator can raise a task that is linked to an inquiry. This task is also visible in the bill inquiry report (history and notes) as described in chapter **Manage Customer Bill Inquiries** page 6 of the evidence document "R6.5_Bill_Inquiries.docx".

Optional

Not used for this process element

Interactions

Take the results of the investigation available to other processes.

4.5.2.3 Level 4: Identify Customer Bill Inquiry Root Cause (1.1.1.12.2.3) – Mapping Details

Process Identifier: 1.1.1.12.2.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Customer Bill Inquiry Root Cause (1.1.1.12.2.3)
<p>Brief Description</p> <p>Identify the root cause on customer bill inquiry.</p>
<p>Extended Description</p> <p>The purpose of Identify Customer Bill Inquiry Root Cause is to identify the root cause on customer bill inquiry and make the results available to other processes. Once the root cause is identified, this process will notify Modify Customer Bill Inquiry process to update the customer bill inquiry report.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Identify Customer Bill Inquiry Root Cause is to identify the root cause on customer bill inquiry and make the results available to other processes. Once the root cause is identified, this process will notify Modify Customer Bill Inquiry process to update the customer bill inquiry report.</p> <p>M</p> <p>Identifying the root cause is a pure manual process within R6 as the operator has to investigate all payments and invoices of the customer. There he can check all payments of an customer as well as all invoices. A detailed description can be found in chapter <i>Manage payment transaction history</i> on page 11 of the evidence document "R6.5_Bill_Inquiries.docx".</p>
<p>Optional</p> <p>Not used for this process element</p>
<p>Interactions</p> <p>Not used for this process element</p>



4.5.2.4 Level 4: Complete Customer Bill Inquiry Assessment (1.1.1.12.2.4) – Mapping Details

Process Identifier: 1.1.1.12.2.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Complete Customer Bill Inquiry Assessment (1.1.1.12.2.4)
<p>Brief Description</p> <p>Complete the assessment when the investigation and assessment is complete.</p>
<p>Extended Description</p> <p>The purpose of Complete Customer Bill Inquiry Assessment process is to finish the assessment when the investigation and assessment is complete. This process is responsible for notifying the Track & Manage Bill Inquiry Resolution processes about the completion.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: #00FF00;">The purpose of Complete Customer Bill Inquiry Assessment process is to finish the assessment when the investigation and assessment is complete. This process is responsible for notifying the Track & Manage Bill Inquiry Resolution processes about the completion. M</p> <p>After completion of the customer bill inquiry the responsible operator can complete the bill inquiry as described in chapter <i>Manage Customer Bill Inquiries</i> page 4+5 “R6.5_Bill_Inquiries.docx”. Instead of canceling the inquiry the operator can select approved or declined in the appropriate drop down fields.</p>
<p>Optional</p> <p>Not used for this process element</p>
<p>Interactions</p> <p>Not used for this process element</p>

4.5.3 Level 3: Authorize Customer Bill Invoice Adjustment 1.1.1.12.3

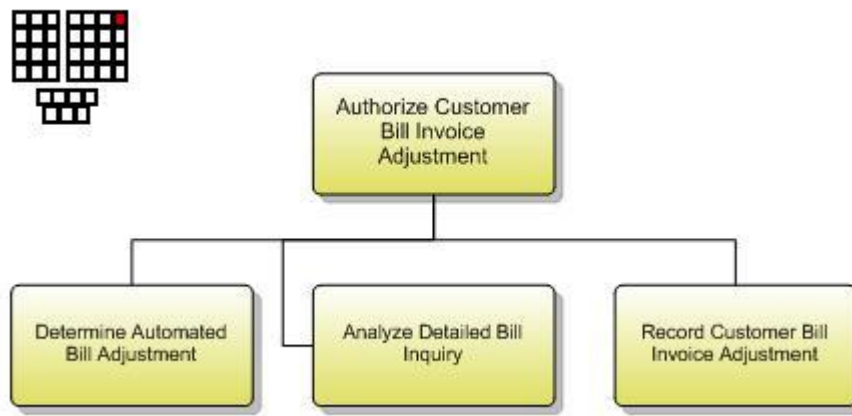


Figure 4.21 - : Authorize Customer Bill Invoice Adjustment decomposition into level 4 processes

Process Identifier: 1.1.1.12.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.3.1 Level 4: Determine Automated Bill Adjustment (1.1.1.12.3.1) – Mapping Details

Process Identifier: 1.1.1.12.3.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Determine Automated Bill Adjustment (1.1.1.12.3.1)
<p>Brief Description</p> <p>Determination of whether policy allows for automated adjustment of the customer bill invoice, and approving any resultant adjustments.</p>

Extended Description

The purpose of Determine Automated Bill Adjustment process is to determine whether policy allows for automated adjustment of the customer bill invoice and approving any resulting adjustments. When the authorization is approved, this process is responsible for notifying the relevant process to apply the adjustment

Explanatory

Not used for this process element

Mandatory

The purpose of Determine Automated Bill Adjustment process is to determine whether policy allows for automated adjustment of the customer bill invoice and approving any resulting adjustments. When the authorization is approved, this process is responsible for notifying the relevant process to apply the adjustment. AM

Adjustments are granted by approving a dispute. If an operator approves a dispute as shown in chapter *Manage customers disputes* on Figure 35 in "R6.5_Bill_Inquiries.docx" an adjustment is automatically added to the next invoice of that customer with the approved disputed amount (Figure 36).

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.3.2 Level 4: Analyze Detailed Bill Inquiry (1.1.1.12.3.2) – Mapping Details

Process Identifier: 1.1.1.12.3.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS

Analyze Detailed Bill Inquiry (1.1.1.12.3.2)

Brief Description

Analyse and investigate to determine whether a bill adjustment is acceptable.

Extended Description

The purpose of Analyze Detailed Bill Inquiry process is to undertake more detailed analysis and investigation to determine whether a bill adjustment is acceptable, including gaining appropriate management authority to make the adjustment. These processes rely on the availability of appropriate adjustment policies, which are created within the Support Bill Inquiry Handling processes, for the timely resolution of major billing disputes.

The resolution processes may require investigation of the billing processes themselves to determine whether the disputed bills are the result of quality errors within the Service Provider processes.

Explanatory

Not used for this process element

Mandatory

The purpose of Analyze Detailed Bill Inquiry process is to undertake more detailed analysis and investigation to determine whether a bill adjustment is acceptable, including gaining appropriate management authority to make the adjustment. These processes rely on the availability of appropriate adjustment policies, which are created within the Support Bill Inquiry Handling processes, for the timely resolution of major billing disputes. AM

An operator has many different opportunities to analyze a bill inquiry. As already described (chapter **View Customer Invoice Information** page 8ff and chapter **Manage payment transaction history** page 11ff in the “R6.5_Bill_Inquiries.docx” document) he can investigate all invoices, payments, unbilled usages, etc. In addition an operator can get all necessary information in the dispute details screen (Figure 35 in the “R6.5_Bill_Inquiries.docx” document). Not all operators have the right to gain a dispute. When creating an operator (e.g. a Finance Manager responsible for disputes) the rightgroups and permissions he should have, have to be added to his account. This allows to define different operators with different rights like gaining disputes. Details on creating a Finance Operator who has the right to manage disputes are provided in chapter **Define a Finance Operator** on page 28ff in the “R6.5_Bill_Inquiries.docx” document.

Optional

The resolution processes may require investigation of the billing processes themselves to determine whether the disputed bills are the result of quality errors within the Service Provider processes.

Interactions

These processes rely on the availability of appropriate adjustment policies, which are created within the Support Bill Inquiry Handling processes, for the timely resolution of major billing disputes.

4.5.3.3 Level 4: Record Customer Bill Invoice Adjustment (1.1.1.12.3.3) – Mapping Details

Process Identifier: 1.1.1.12.3.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Record Customer Bill Invoice Adjustment (1.1.1.12.3.3)</p>
<p>Brief Description</p> <p>Record the results of the adjustment if approved into the records relating to the customer’s bill invoice.</p>
<p>Extended Description</p> <p>The purpose of Record Customer Bill Invoice Adjustment process is to record the results of the adjustment if approved into the records relating to the customer’s bill invoice. This process is responsible for recording the entire adjustment events including adjustment operator, timestamp and detailed reason, for management purpose.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Record Customer Bill Invoice Adjustment process is to record the results of the adjustment if approved into the records relating to the customer’s bill invoice. This process is responsible for recording the entire adjustment events including adjustment operator, timestamp and detailed reason, for management purpose. AM</p> <p>All disputes of a customer are listed in the dispute details screen as shown in Figure 34 “R6.5_Bill_Inquiries.docx” document. The corresponding adjustments are visible in the Payment and</p>

Transaction history of each customer as shown in Figure 19.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.4 Level 3: Track & Manage Customer Bill Inquiry Resolution 1.1.1.12.4

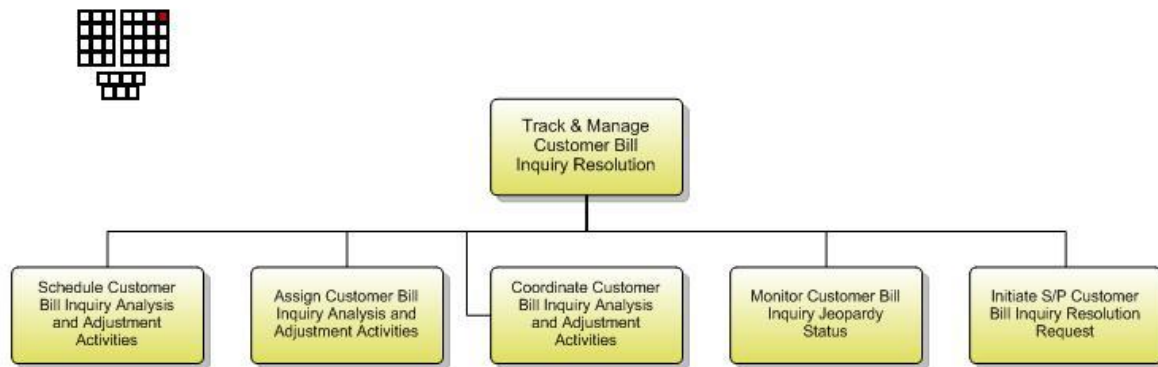


Figure 4.22 - Track & Manage Customer Bill Inquiry Resolution decomposition into level 4 processes

Process Identifier: 1.1.1.12.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.4.1 Level 4: Schedule Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.1) – Mapping Details

Process Identifier: 1.1.1.12.4.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS
Schedule Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.1)
<p>Brief Description</p> <p>Schedule analysis and specific customer bill inquiry/complaint adjustment activities.</p>
<p>Extended Description</p> <p>The purpose of Schedule Customer Bill Inquiry Analysis and Adjustment Activities process is to</p>

schedule analysis and specific customer bill inquiry/complaint adjustment activities. This process is responsible for planning the analysis and adjustment activities in specific order and allotted time.

Explanatory

Not used for this process element

Mandatory

The purpose of Schedule Customer Bill Inquiry Analysis and Adjustment Activities process is to schedule analysis and specific customer bill inquiry/complaint adjustment activities. This process is responsible for planning the analysis and adjustment activities in specific order and allotted time.
AM

All Bill Inquires raised are stored in R6 and can be monitored by all operators with the appropriate rights. All inquiries are listed according to their creation date and the status of the inquiry can be seen. To schedule the analysis of the inquires different actions can be set. An operator can take on an inquiry, assign it to another operator, unassign it if he is not the right person or close the ticket. Figure 40 in the “R6.5_Bill_Inquiries.docx” document shows all inquiries in the system with their status, category, priority and the assigned operator.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.4.2 Level 4: Assign Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.2) – Mapping Details

Process Identifier: 1.1.1.12.4.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS

Assign Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.2)

Brief Description

Assign analysis and specific customer bill inquiry/complaint adjustment activities.

Extended Description

The purpose of Assign Customer Bill Inquiry Analysis and Adjustment Activities process is to assign analysis and specific customer bill inquiry/complaint adjustment activities. This process is responsible for decomposing an activity to subsequent tasks and appointing other processes to accomplish them.

Explanatory

Not used for this process element

Mandatory

The purpose of Assign Customer Bill Inquiry Analysis and Adjustment Activities process is to assign analysis and specific customer bill inquiry/complaint adjustment activities. This process is responsible for decomposing an activity to subsequent tasks and appointing other processes to accomplish them. AM

The assignment of inquiries for analysis is shown in figure 41 in the "R6.5_Bill_Inquiries.docx" document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.4.3 Level 4: Coordinate Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.3) – Mapping Details

Process Identifier: 1.1.1.12.4.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Coordinate Customer Bill Inquiry Analysis and Adjustment Activities (1.1.1.12.4.3)
<p>Brief Description</p> <p>Coordinate analysis and specific customer bill inquiry/complaint adjustment activities.</p>
<p>Extended Description</p> <p>The purpose of Coordinate Customer Bill Inquiry Analysis and Adjustment Activities process is to coordinate analysis and specific customer bill inquiry/complaint adjustment activities. The process is responsible for ensuring that appropriate credits and/or other agreed adjustments are made available to the adjustments processes activities, coordinating all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p>The purpose of Coordinate Customer Bill Inquiry Analysis and Adjustment Activities process is to coordinate analysis and specific customer bill inquiry/complaint adjustment activities. The process is responsible for ensuring that appropriate credits and/or other agreed adjustments are made available to the adjustments processes activities, coordinating all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence. AM</p> <p>Coordination can be managed via the inquiry overview as shown in figure 40 whereby the color coding of open inquiries guarantees that no tickets get lost. If an operator creates a dispute out of a customer bill inquiry he has, according to his permissions (described in chapter <i>Define a Finance Operator</i> on page 28ff), the right to agree an adjustment. He can resolve the dispute whereby the whole amount is adjusted, he can confirm the dispute and define an amount that is granted according to his permissions or he can reject the dispute (shown in figure 35 in the “R6.5_Bill_Inquiries.docx” document.</p>

<p>Optional</p> <p>Not used for this process element</p> <p>Interactions</p> <p>Not used for this process element</p>

4.5.4.4 Level 4: Monitor Customer Bill Inquiry Jeopardy Status (1.1.1.12.4.4) – Mapping Details

Process Identifier: 1.1.1.12.4.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Monitor Customer Bill Inquiry Jeopardy Status (1.1.1.12.4.4)</p>
<p>Brief Description</p> <p>Monitor the jeopardy status of open customer bill inquiries</p>
<p>Extended Description</p> <p>The purpose of Monitor Customer Bill Inquiry Jeopardy Status process is to monitor the jeopardy status of open customer bill inquiries. This process is responsible for keeping close watch over the resolving progress. When customer bill inquiry isn't handled in time, this process will escalate customer billing inquiry for notification.</p>
<p>Explanatory</p> <p>Not used for this process element</p>
<p>Mandatory</p> <p style="background-color: #00ff00;">The purpose of Monitor Customer Bill Inquiry Jeopardy Status process is to monitor the jeopardy status of open customer bill inquiries. This process is responsible for keeping close watch over the</p>

resolving progress. When customer bill inquiry isn't handled in time, this process will escalate customer billing inquiry for notification. AM

The status of all bill inquiries can be monitored by an operator via the Inquiries menu where all inquiries are listed. Inquiries that are due or urgent and not assigned are color coded so that an operator always can see the resolving process or if some actions are necessary. A list of all inquiries is provided in Figure 40 in the "R6.5_Bill_Inquiries.docx" document including different color codes for due or new inquiries not assigned yet.

Optional

Not used for this process element

Interactions

Not used for this process element

4.5.4.5 Level 4: Initiate S/P Customer Bill Inquiry Resolution Request (1.1.1.12.4.5) – Mapping Details

Process Identifier: 1.1.1.12.4.5

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Initiate S/P Customer Bill Inquiry Resolution Request (1.1.1.12.4.5)
<p>Brief Description</p> <p>Initiate requests, through - S/P Settlements & Payments Management for resolution by the supplier/partner of the specific bill inquiries/complaints.</p>
<p>Extended Description</p> <p>The purpose of Initiate S/P Customer Bill Inquiry Resolution Request process is to Initiate requests, through - S/P Settlements & Payments Management for resolution by the supplier/partner of the specific bill inquiries/complaints. Some specific product and/or service components may be owned and managed by suppliers/partners. In these cases, this process is responsible for initiating requests, through - S/P Settlements & Payments Management for resolution by the supplier/partner of the specific bill inquiries/complaints.</p>

Explanatory

Not used for this process element

Mandatory

The purpose of Initiate S/P Customer Bill Inquiry Resolution Request process is to Initiate requests, through - S/P Settlements & Payments Management for resolution by the supplier/partner of the specific bill inquiries/complaints. Some specific product and/or service components may be owned and managed by suppliers/partners. AM

A bill inquiry request can be send to an supplier/partner via task management. As described in chapter **Manage Customer Bill Inquiries** page 6ff in the “R6.5_Bill_Inquiries.docx” document an operator can raise a task out of a customer bill inquiry if the problem is in the responsibility of a supplier/partner. These task is automatically assigned to the service provider.

Within R6 it's also possible to raise a dispute on Service Provider (VSP) side. All suppliers/partners are treated as customer within R6 that send invoices to the VSP for providing their services. Like in the VSO a responsible operator can dispute charges/invoices coming from a supplier. Screenshots are provided in chapter **Dispute a Supplier invoices** on page 25ff in the “R6.5_Bill_Inquiries.docx” document.

Optional

Not used for this process element

Interactions

In these cases, this process is responsible for initiating requests, through - S/P Settlements & Payments Management for resolution by the supplier/partner of the specific bill inquiries/complaints.

4.5.5 Level 3: Report Customer Bill Inquiry 1.1.1.12.5

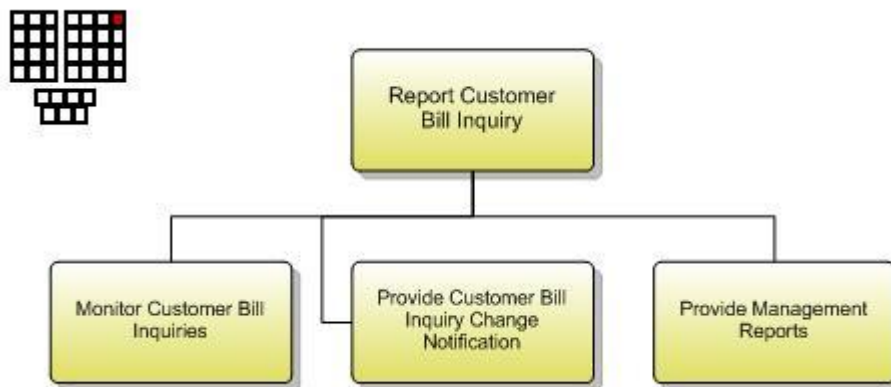


Figure 4.23 - Report Customer Bill Inquiry decomposition into level 4 processes

Process Identifier: 1.1.1.12.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.5.5.1 Level 4: Monitor Customer Bill Inquiries (1.1.1.12.5.1) – Mapping Details

Process Identifier: 1.1.1.12.5.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Monitor Customer Bill Inquiries (1.1.1.12.5.1)
<p>Brief Description</p> <p>Monitor the status of customer bill inquiries continuously.</p>
<p>Extended Description</p> <p>The purpose of Monitor Customer Bill Inquiries process is to continuously monitor the status of all customer bill inquiries. The monitoring starts when a customer bill inquiry is created until it is cancelled or closed. The process is responsible for logging all the status changes on customer bill</p>

<p>inquiries including creation, modification, cancellation and etc.</p> <p>Explanatory</p> <p>The monitoring starts when a customer bill inquiry is created until it is cancelled or closed.</p> <p>Mandatory</p> <p>The purpose of Monitor Customer Bill Inquiries process is to continuously monitor the status of all customer bill inquiries. The process is responsible for logging all the status changes on customer bill inquiries including creation, modification, cancellation and etc. AM</p> <p>How an operator can monitor customer bill inquiries is described in chapter <i>Schedule and Monitor Bill Inquiries</i> page 31 and 32 in the “R6.5_Bill_Inquiries.docx” document.</p> <p>Optional</p> <p>Not used for this process element</p> <p>Interactions</p> <p>Not used for this process element</p>

4.5.5.2 Level 4: Provide Customer Bill Inquiry Change Notification (1.1.1.12.5.2) – Mapping Details

Process Identifier: 1.1.1.12.5.2

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Provide Customer Bill Inquiry Change Notification (1.1.1.12.5.2)</p>
<p>Brief Description</p> <p>Manage notifications to other processes and to other parties.</p>
<p>Extended Description</p> <p>This purpose of Provide Customer Bill Inquiry Change Notification process is to manage noti-</p>

fications to other processes and to other parties, including customers, registered to receive notifications of any status changes. Notification lists are managed and maintained by the Support Bill Inquiry Handling processes.

Explanatory

Not used for this process element

Mandatory

This purpose of Provide Customer Bill Inquiry Change Notification process is to manage notifications to other processes and to other parties, including customers, registered to receive notifications of any status changes. AM

A customer can view the status and status changes via customer selfcare as shown in figure 45 the "R6.5_Bill_Inquiries.docx" document.

Other processes like accounts receivables are automatically notified of a change of a dispute in the sense that the payment and transaction history is automatically updated (figure 15 shows a dispute that was raised by a customer about 165,- Euro) as well as all adjustments are automatically added to the payment and transaction history as soon as a dispute was granted (figure 15).

Optional

Not used for this process element

Interactions

Notification lists are managed and maintained by the Support Bill Inquiry Handling processes.

4.5.5.3 Level 4: Provide Management Reports (1.1.1.12.5.3) – Mapping Details

Process Identifier: 1.1.1.12.5.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. "instantiated") with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS Provide Management Reports (1.1.1.12.5.3)</p>

Brief Description

Provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Bill Inquiry Handling processes.

Extended Description

The purpose of Provide Management Reports is to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Bill Inquiry Handling processes. This process records, analyzes and assesses the customer bill inquiry status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Bill Inquiry Handling processes. These specialized summaries could be specific reports required by specific audiences and/or customers.

This process also reports any identified constraints that can affect customer billing quality standards to other processes. These constraints may include specific resource (billing application and/or database, for example) failures, etc.

Explanatory

These specialized summaries could be specific reports required by specific audiences and/or customers.

Mandatory

The purpose of Provide Management Reports is to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Bill Inquiry Handling processes. This process records, analyzes and assesses the customer bill inquiry status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Bill Inquiry Handling processes. This process also reports any identified constraints that can affect customer billing quality standards to other processes. AM

Infonova's R6 data access framework provides 2 access and integration methods for reports on the overall Bill Inquiry Handling process:

- the SID aligned views in the database access layer
- plugins for general monitoring and reporting solutions like Nagios

The combination of the SID views and the Nagios plugins is currently the extent of our support here. A GUI for reporting access is not part of the product out of the box but can be integrated.

Optional

These constraints may include specific resource (billing application and/or database, for example) failures, etc.



Interactions

Not used for this process element.



4.5.6 Supporting Evidence References (Works Cited)

[Ref 1] R6.5_Bill_Inquiries.docx



4.5.7 Level 2: Bill Inquiry Handling (1.1.1.12) – Conformance Scores

Table 4.5 - Bill Inquiry Handling (1.1.1.12) – Conformance Scores

Level 2: 1.1.1.12 - Bill Inquiry Handling [6/6]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
1.1.1.12.1 - Create Customer Bill Inquiry Report		5
	1.1.1.12.1.1 - Generate Customer Bill Inquiry	100%
	1.1.1.12.1.2 - Modify Customer Bill Inquiry	100%
	1.1.1.12.1.3 - Cancel Customer Bill Inquiry	100%
	1.1.1.12.1.4 - Convert Customer Bill Inquiry	100%
	1.1.1.12.1.5 - Request Additional Bill Inquiry Information	100%
1.1.1.12.2 - Assess Customer Bill Inquiry Report		4.8
	1.1.1.12.2.1 - Verify Customer Bill Inquiry	100%
	1.1.1.12.2.2 - Assess and Investigate Customer Bill Inquiry	100%
	1.1.1.12.2.3 - Identify Customer Bill Inquiry Root Cause	75%
	1.1.1.12.2.4 - Complete Customer Bill Inquiry Assessment	75%
1.1.1.12.3 - Authorize Customer Bill Invoice Adjustment		5
	1.1.1.12.3.1 - Determine Automated Bill Adjustment	100%
	1.1.1.12.3.2 - Analyze Detailed Bill Inquiry	100%
	1.1.1.12.3.3 - Record Customer Bill Invoice Adjustment	100%
1.1.1.12.4 - Track & Manage Customer Bill Inquiry Resolution		5
	1.1.1.12.4.1 - Schedule Customer Bill Inquiry Analysis and Adjustment Activities	100%
	1.1.1.12.4.2 - Assign Customer Bill Inquiry Analysis and Adjustment Activities	100%
	1.1.1.12.4.3 - Coordinate Customer Bill Inquiry Analysis and Adjustment Activities	100%
	1.1.1.12.4.4 - Monitor Customer Bill Inquiry Jeopardy Status	100%
	1.1.1.12.4.5 - Initiate S/P Customer Bill Inquiry Resolution Request	100%
1.1.1.12.5 - Report Customer Bill Inquiry		4.7
	1.1.1.12.5.1 - Monitor Customer Bill Inquiries	100%
	1.1.1.12.5.2 - Provide Customer Bill Inquiry Change Notification	100%
	1.1.1.12.5.3 - Provide Management Reports	50%
1.1.1.12.6 - Close Customer Bill Inquiry Report		0

4.6 Level 2: Charging (1.1.1.13)

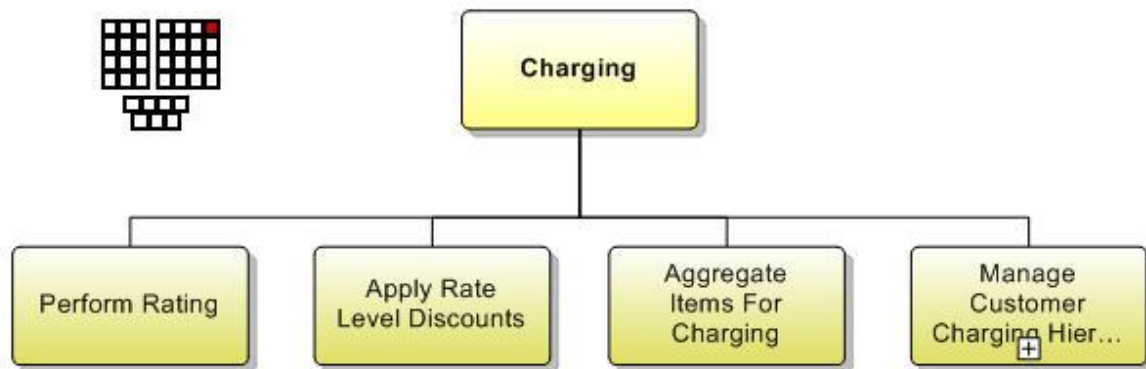


Figure 4.24 - Charging decomposition into level 3 processes

Process Identifier: 1.1.1.13

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.6.1 Level 3: Perform Rating 1.1.1.13.1

Calculating the value of the service/product, before, during or after the rendering of the service.

4.6.1.1 Level 3: Perform Rating 1.1.1.13.1 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS Perform Rating 1.1.1.13.1
<p>Extended Description</p> <p>Process responsible for calculating the value of the service/product, before, during or after the rendering of the service, based on parameters of the request (type, quantity, etc.), parameters of the customer/subscriber (tariffs, price plans, accumulated usage, contracts, etc.) and other parameters (time-of-day, taxes, etc.). The same request maybe rated differently for different subscribers based on their purchased offers or service agreements. A</p> <p>A detailed description of the R6 rating capabilities including rating function types, different calculation models as well as rating function examples are provided in chapter Rating and Invoicing in the attached “R6.5_Charging.docx” document.</p>

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.6.2 Level 3: Apply Rate Level Discounts 1.1.1.13.2

Applies discounts to product prices

4.6.2.1 Level 3: Apply Rate Level Discounts 1.1.1.13.2 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS Apply Rate Level Discounts 1.1.1.13.2
<p>Extended Description</p> <p>This process applies discounts to product prices at an individual product level. A discount may be expressed as a monetary amount or percentage, and modifies a price for a product. When a discount is expressed as a percentage, the discounting process determines the discount calculated in relation to the price for the product. AM</p> <p>How discounts for a product can be configured is described via screenshots in chapter <i>Discounts</i> page 33 in the provided “R6.5_Charging.docx” document.</p> <p>The discount may be displayed as a separate entry on the bill or may be combined with the rate for the product to only show as one entry. A</p> <p>The customer gets an invoice where he can see the discount as a separate entry as well combined with the rate for the product. The final invoice as a free-marker template can be configured using tools like Jasper reports to allow to show both options or only one.</p> <p>Details how a discount can be shown on a customer’s invoice are provided in chapter <i>Invoicing – Invoice details</i> page 28ff in the “R6.5_Charging.docx” document.</p> <p>Discounts may be a one-time event or may have some duration (days, months, life of product, etc.). Discounts may apply to a specific customer or be generally available based on selection of products (for example - bundles). Discounting structures may involve tiers, tapers, or thresholds. AM</p> <p>How a discount can be configured and attached to an offer is shown in figure 12 and 13 in the “R6.5_Charging.docx” document.</p> <p>It’s also possible to configure an discount “generic” so that it’s not directly linked to an offer. This means that this discounts can be granted to accounts (customers) independently of offers ordered as displayed in figure 14 in the “R6.5_Charging.docx” document.</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p>



Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.6.3 Level 3: Aggregate Items For Charging 1.1.1.13.3

Manages the accumulation of items that may be used in the selection of a value or in calculation of a rate/discount

4.6.3.1 Level 3: Aggregate Items For Charging 1.1.1.13.3 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS Aggregate Items For Charging 1.1.1.13.3
<p>Extended Description</p> <p>This process is responsible for accumulating contributing items, which can be quantities, values (monetary or other) or both. Aggregation can occur over time or can be initiated to gather a “snapshot” of the items at a point in time.</p> <p>The aggregated items may be used in Perform Rating or Apply Rate Level Discounts to determine the applicable price or discount and may further be used as a quantity in the calculation of a rate or discount. AM</p> <p>Aggregation of charges and accumulating contributing items is described in the chapters Calculation of sums and taxes in rating and billing at page 23f as well as in chapter Invoicing page 25 in the “R6.5_Charging.docx” document.</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p> <p>Optional</p> <p>Reserved for future use.</p> <p>Interactions</p> <p>Reserved for future use</p>

4.6.4 Level 3: Manage Customer Charging Hierarchy 1.1.1.13.4

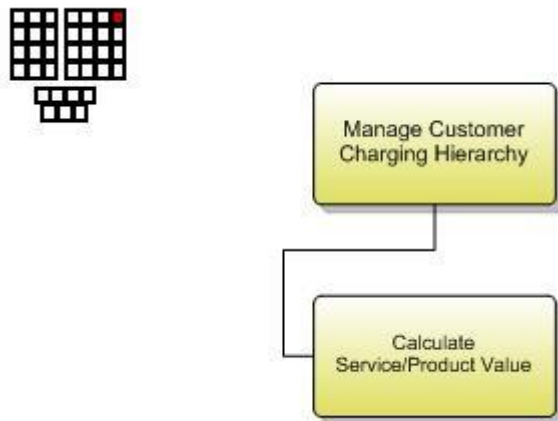


Figure 4.25 - Manage Customer Charging Hierarchy decomposition into level 4 processes

Process Identifier: 1.1.1.13.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

4.6.4.1 Level 4: Calculate Service/Product Value 1.1.1.13.4.1 – Mapping Details

Process Identifier: 1.1.1.13.4.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Calculate the value of the service/product, before, during or after the rendering of the service

Level 4 PROCESS MAPPING DETAILS
Calculate Service/Product Value 1.1.1.13.4.1
<p>Extended Description</p> <p>The purpose of Calculate Service/Product Value process is to calculate the value of the service/product, before, during or after the rendering of the service, based on parameters of the request (type, quantity, etc.), parameters of the customer/subscriber (tariffs, price plans, accumulated usage, contracts, etc.) and other parameters (time-of-day, taxes, etc.). The same</p>

request maybe rated differently for different subscribers based on their purchased offers or service agreements. AM

How account hierarchies, line item/invoice item transfers are handled within R6 is described in the chapter **Account Hierarchies** page 37 to 40 in the “R6.5_Charging.docx” document. How discounts are handled within an account hierarchy is described in sub-chapter **Discounts in the hierarchy** page 38ff.

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.



4.6.5 Level 3: Analyze Billing Trend1.1.1.13.5 [Not Assessed]

4.6.6 Supporting Evidence References (Works Cited)

[Ref 1] R6.5_Charging.docx



4.6.7 Level 2: Charging (1.1.1.13) – Conformance Scores

Table 4.6 - Charging (1.1.1.13) – Conformance Scores

Level 2: 1.1.1.13 - Charging [4/5]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
	1.1.1.13.1 - Perform Rating	5
	1.1.1.13.2 - Apply Rate Level Discounts	5
	1.1.1.13.3 - Aggregate Items For Charging	5
	1.1.1.13.4 - Manage Customer Charging Hierarchy	5
	1.1.1.13.4.1 Calculate Service/Product Value	100%
	1.1.1.13.5 - Analyze Billing Trend	0

4.7 Level 2: Manage Billing Events (1.1.1.14)

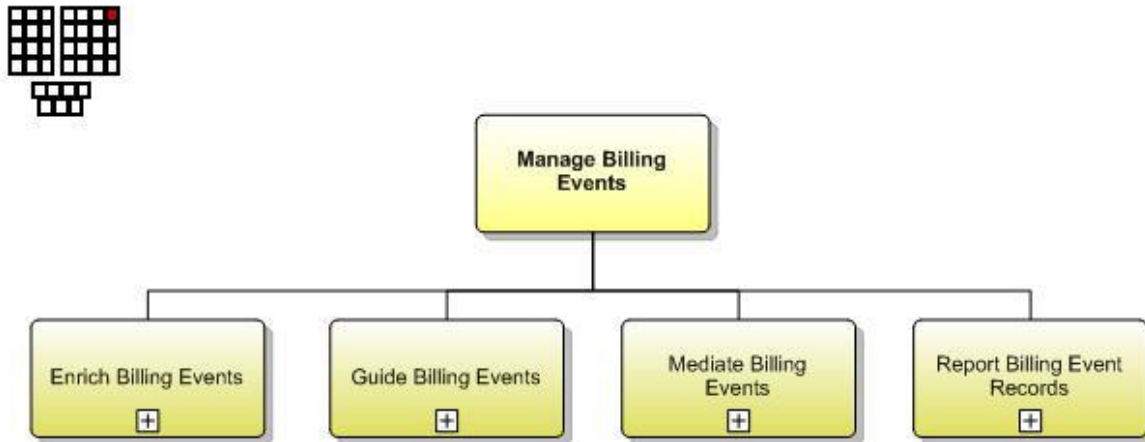


Figure 4.26 - Manage Billing Events decomposition into level 3 processes

Process Identifier: 1.1.1.14

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.7.1 Level 3: Enrich Billing Events 1.1.1.14.1

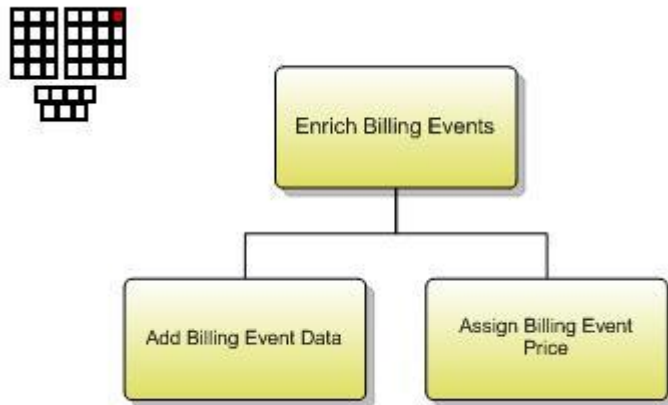


Figure 4.27 - Enrich Billing Events decomposition into level 4 processes

Process Identifier: 1.1.1.14.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.7.1.1 Level 4: Add Billing Event Data 1.1.1.14.1.1 – Mapping Details

Process Identifier: 1.1.1.14.1.1

Process Context

Add data to the records from sources such as customer, product, or other reference data to augment the billing event records.

Level 4 PROCESS MAPPING DETAILS Add Billing Event Data 1.1.1.14.1.1
<p>Extended Description</p> <p>The purpose of Add Billing Event Data process is to add data to the records from sources such as customer, product, or other reference data to augment the billing event records. This process is responsible for enriching billing events with additional data which is not provided by or known by services providing the billing events, but needed by other billing processes.</p> <p>An example of such data is service to product mapping information and subscriber identity to customer mapping information. Data can be fetched from internal configuration or be looked up in data sources. Hence this process is also responsible for obtain additional data s from corresponding data sources based on each billing events record information.</p>

Explanatory

An example of such data is service to product mapping information and subscriber identity to customer mapping information. Data can be fetched from internal configuration or be looked up in data sources.

Mandatory

The purpose of Add Billing Event Data process is to add data to the records from sources such as customer, product, or other reference data to augment the billing event records. This process is responsible for enriching billing events with additional data which is not provided by or known by services providing the billing events, but needed by other billing processes. Hence this process is also responsible for obtaining additional data from corresponding data sources based on each billing events record information. AM

This process is covered by R6 Mediation, Correlation Service step. A detailed description of Mediation is provided in chapter **1.3.1 Mediation** in the “04_Infonova_Product_Brochure_Billing” document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.1.2 Level 4: Assign Billing Event Price 1.1.1.14.1.2 – Mapping Details

Process Identifier: 1.1.1.14.1.2

Process Context

Assign a price to a billing event without consideration of specific product or customer information. The assigned price may be used to enrich the billing event record.

Level 4 PROCESS MAPPING DETAILS Assign Billing Event Price 1.1.1.14.1.2
<p>Extended Description</p> <p>The purpose of Assign Billing Event Price process is to assign a price to a billing event without consideration of specific product or customer information. The assigned price may be used to enrich</p>

the billing event record. This process performs static rating of service events without considering customer or product information. As an example, originating on-net call CDRs are priced at \$1 per started minute during peak hours, without considering customer data or agreements for the involved user which could affect the final price paid.

This process may assign a price to a billing event automatically according to pre-configured rules, or manually.

Explanatory

The assigned price may be used to enrich the billing event record. As an example, originating on-net call CDRs are priced at \$1 per started minute during peak hours, without considering customer data or agreements for the involved user which could affect the final price paid.

Mandatory

The purpose of Assign Billing Event Price process is to assign a price to a billing event without consideration of specific product or customer information. This process performs static rating of service events without considering customer or product information. A

In R6 prices are assigned to billing events during rating. A description is provided in chapter **1.3.2 Rating** in the "04_Infonova_Product_Brochure_Billing" document.

Optional

This process may assign a price to a billing event automatically according to pre-configured rules, or manually.

Interactions

Not used for this process element

4.7.2 Level 3: Guide Billing Events 1.1.1.14.2

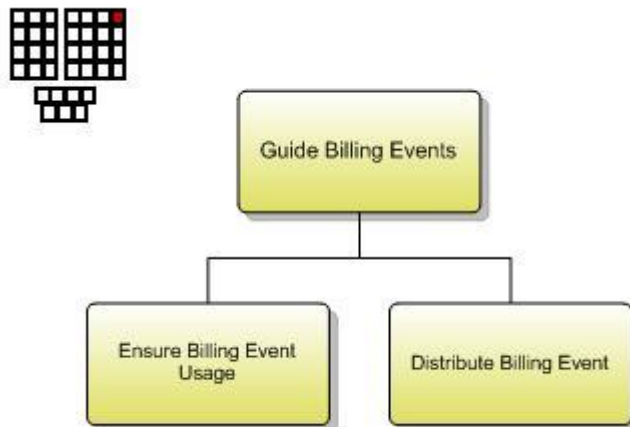


Figure 4.28 - Guide Billing Events decomposition into level 4 processes

Process Identifier: 1.1.1.14.2

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.7.2.1 Level 4: Ensure Billing Event Usage 1.1.1.14.2.1– Mapping Details

Process Identifier: 1.1.1.14.2.1

Process Context

Ensure that the event records used in the billing process relate to the correct customer billing account and products.

Level 4 PROCESS MAPPING DETAILS Ensure Billing Event Usage 1.1.1.14.2.1
<p>Extended Description</p> <p>The purpose of Ensure Event Record Usage process is to ensure that the event records used in the billing process relate to the correct customer billing account and products. A specific event record may be related to multiple customer billing accounts and subscribed products.</p>
<p>Explanatory</p> <p>A specific event record may be related to multiple customer billing accounts and subscribed products.</p>

Mandatory

The purpose of Ensure Event Record Usage process is to ensure that the event records used in the billing process relate to the correct customer billing account and products. AM

This process is covered by R6 Mediation as described in chapter 1.3.1 mediation in the “04_Infonova_Product_Brochure_Billing” document. Especially Figure 7 on page 9 describes the process of mediation. A detailed description of Correlation and Validation is provided in chapter **1.3.1.3 Validation Services** and **1.3.1.5 Correlation Service** in the “04_Infonova_Product_Brochure_Billing” document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.2.2 Level 4: Distribute Billing Event 1.1.1.14.2.2 – Mapping Details

Process Identifier: 1.1.1.14.2.2

Process Context

Distribute billing event records to other processes.

Level 4 PROCESS MAPPING DETAILS Distribute Billing Event 1.1.1.14.2.2
<p>Extended Description</p> <p>The purpose of Distribute Billing Event process is to distribute billing events to other processes which need access to billing events.</p> <p>As a typical example, billing events are transferred to Charging process for event/product charging via this process. In general, the billing events are distributed in the specific format, e.g. plain text format, binary format, XML format. This process is also responsible for recording distribution logs to avoid duplicated billing event distribution.</p> <p>Explanatory</p> <p>As a typical example, billing events are transferred to Charging process for event/product charging</p>

via this process. In general, the billing events are distributed in the specific format, e.g. plain text format, binary format, XML format.

Mandatory

The purpose of Distribute Billing Event process is to distribute billing events to other processes which need access to billing events. This process is also responsible for recording distribution logs to avoid duplicated billing event distribution. AM

In Infonova's R6 a whole interconnected process chain from concept to cash is covered and therefore also the flow from usage collection, mediation, rating, billing and bill formatting is supported.

E.g. R6 Bill Formatting gets the results from Rating and Invoicing and generates the data for the invoices for all billing accounts. It collects and summarizes charges on account, service and call detail level.

The invoice data is converted into XML files and sent to 3rd-party systems for distribution to the customer. A description of this process is provided in chapter **1.3.4 Bill Formatting** in the "04_Infonova_Product_Brochure_Billing" document.

The complete billing event distribution chain in R6 is also described in chapter:

- **1.3.1 Mediation**
- **1.3.2 Rating**
- **1.3.3 Invoicing**

in the "04_Infonova_Product_Brochure_Billing" document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.3 Level 3: Mediate Billing Events 1.1.1.14.3

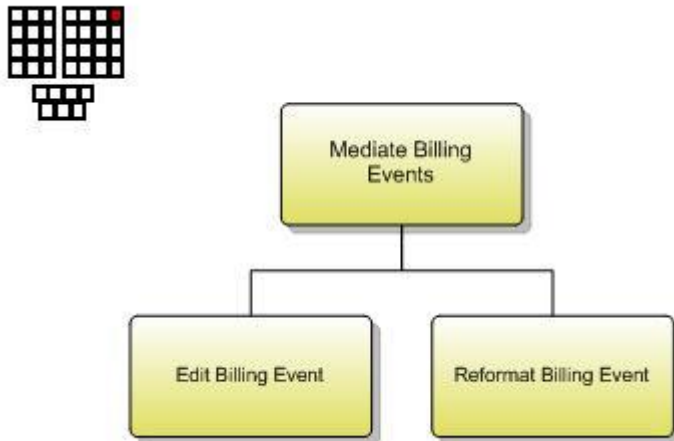


Figure 4.29 - Mediate Billing Events decomposition into level 4 processes

Process Identifier: 1.1.1.14.3

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.7.3.1 Level 4: Edit Billing Event 1.1.1.14.3.1– Mapping Details

Process Identifier: 1.1.1.14.3.1

Process Context

Edit the data record for recipient applications.

Level 4 PROCESS MAPPING DETAILS Edit Billing Event 1.1.1.14.3.1
<p>Extended Description</p> <p>This process is responsible for editing billing events to adapt to the contents expected by receiving processes and applications. This includes examining individual fields in billing events, modifying the contents of individual fields in billing events and removing unwanted data and fields, identifying billing event type.</p> <p>Additionally, this process is also responsible for billing events consolidation, billing event splitting, billing events correlation and duplicated billing events deletion if necessary.</p>

<p>Explanatory</p> <p>Not used for this process element</p> <p>Mandatory</p> <p>This process is responsible for editing billing events to adapt to the contents expected by receiving processes and applications. This includes examining individual fields in billing events, modifying the contents of individual fields in billing events and removing unwanted data and fields, identifying billing event type.</p> <p>Additionally, this process is also responsible for billing events consolidation, billing event splitting, billing events correlation and duplicated billing events deletion if necessary. AM</p> <p>The required functionality is fully covered by the whole R6 mediation process as described in chapter 1.3.1 Mediation in the “04_Infonova_Product_Brochure_Billing” document.</p> <p>Optional</p> <p>Not used for this process element</p> <p>Interactions</p> <p>Not used for this process element</p>

4.7.3.2 Level 4: Reformat Billing Event 1.1.1.14.3.2 – Mapping Details

Process Identifier: 1.1.1.14.3.2

Process Context

Reformat the data record for recipient applications.

Level 4 PROCESS MAPPING DETAILS Reformat Billing Event 1.1.1.14.3.2
<p>Extended Description</p> <p>The purpose of Reformat Billing Event process is to reformat billing events to adapt to the format expected by receiving processes and applications. This includes examining individual fields in billing events and translating billing events from one format to another</p> <p>Additionally, this process is also responsible for maintenance the input and output format template.</p>

Explanatory

Not used for this process element

Mandatory

The purpose of Reformat Billing Event process is to reformat billing events to adapt to the format expected by receiving processes and applications. This includes examining individual fields in billing events and translating billing events from one format to another

Additionally, this process is also responsible for maintenance the input and output format template.
AM

The required functionality is fully covered by the whole R6 mediation process as described in chapter **1.3.1 Mediation** in the “04_Infonova_Product_Brochure_Billing” document.

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.4 Level 3: Report Billing Event Records 1.1.1.14.4

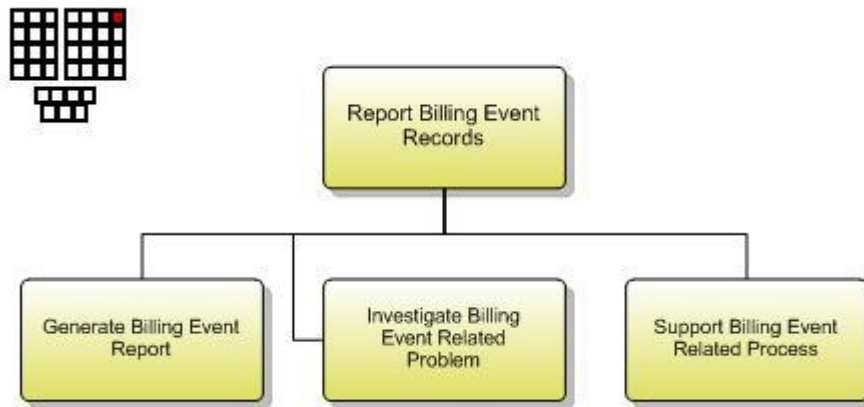


Figure 4.30 - Report Billing Event Records decomposition into level 4 processes

Process Identifier: 1.1.1.14.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.7.4.1 Level 4: Generate Billing Event Report 1.1.1.14.4.1– Mapping Details

Process Identifier: 1.1.1.14.4.1

Process Context

Generate reports on billing event records based on requests from other processes.

Level 4 PROCESS MAPPING DETAILS Generate Billing Event Report 1.1.1.14.4.1
<p>Extended Description</p> <p>The purpose of the Generate Billing Event Report process is to generate reports on billing event records. This process produces reports that may identify abnormalities, which may be caused by fraudulent activity or related to customer complaints.</p>
<p>Explanatory</p> <p>Not used for this process element</p>

Mandatory

The purpose of the Generate Billing Event Report process is to generate reports on billing event records. This process produces reports that may identify abnormalities, which may be caused by fraudulent activity or related to customer complaints. AM

R6 provides the functionality to generate reports displaying all mediation and rating errors via WebAC as shown in the example in figure 8 in the "04_Infonova_Product_Brochure_Billing" document.

In addition R6 provides plugins for general monitoring and reporting solutions like Nagios to monitor errors during mediation and rating like shown in the screenshot below:

Hosts	Services	Status	Duration	Last Check	Tries	Status information
BSS_Prod	Billrun_Status	OK	2M 4d 20h 26m 53s	05/04/2013 10:04:48	1/3 (H)	No REAL_BILL_RUN in progress.
	BSS_Status	OK	6M 3w 2d 3h 6m 26s	05/04/2013 10:04:11	1/3 (H)	OK
	Free_mediation_partitions	OK	6M 3w 1d 10h 42m 28s	05/04/2013 10:04:48	1/3 (H)	1000 partitions free!
	Free_rating_partitions	OK	6M 3w 1d 10h 42m 54s	05/04/2013 10:04:48	1/3 (H)	REAL_BILL_RUN (51), SIMULATION_RUN (1)
	Mediation_Errors_Broadband	CRITICAL	4M 3w 1d 58m 39s	05/04/2013 10:04:47	3/3 (H)	699 error records found.
	Mediation_Errors_Fixed_Voice	OK	10h 3m 49s	05/04/2013 10:04:47	1/3 (H)	No fixed mediation errors found within the last 1 days.
	Rating_counters	OK	1M 4d 13h 22m 3s	05/04/2013 10:04:48	1/3 (H)	OK - no unfreed counters found!
	UDR_ERRORS	OK	1d 20h 6m 57s	05/04/2013 10:04:49	1/3 (H)	0 entries in UDR_ERRORS
	UDR_WORK_partitions_status	OK	6M 3w 1d 10h 23m 45s	05/04/2013 10:04:46	1/3 (H)	No erroneous UDR partitions found.
	UDR_WORK_Status	OK	6M 3w 1d 10h 43m 38s	05/04/2013 10:04:46	1/3 (H)	No UDRs in UDR_WORK table!

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.4.2 Level 4: Investigate Billing Event Related Problem 1.1.1.14.4.2 – Mapping Details

Process Identifier: 1.1.1.14.4.2

Process Context

Investigate problems related to billing event records.

<p>Level 4 PROCESS MAPPING DETAILS</p> <p>Investigate Billing Event Related Problem 1.1.1.14.4.2</p>
<p>Extended Description</p> <p>The purpose of the Investigate Billing Event Related Problem process is to investigate problems related to billing event records. Where reporting indicates problems with billing event records such as data format errors, configuration problems, system or network problems this process initiates and manages an investigation and follow-up of the indicated problems.</p>

Explanatory

Not used for this process element

Mandatory

The purpose of the Investigate Billing Event Related Problem process is to investigate problems related to billing event records. Where reporting indicates problems with billing event records such as data format errors, configuration problems, system or network problems this process initiates and manages an investigation and follow-up of the indicated problems. AM

R6 allows the investigation and follow-up of billing event related problems as described in the attached "R6 – Billing Process Overview. pdf" on slides 11 – 23.

How Mediation errors are handled is described on slide 14. All Mediation Errors are stored in a separate table of the database for further processing. This can be escalation to a 3rd party, directly correct the service account or amend the configuration.

The processing of rating errors and the way to fix them is described on slide 23.

Optional

Not used for this process element

Interactions

Not used for this process element

4.7.4.3 Level 4: Support Billing Event Related Process 1.1.1.14.4.3 – Mapping Details

Process Identifier: 1.1.1.14.4.3

Process Context

Support other processes such as customer review of billing events (pre-billing and post-billing).

Level 4 PROCESS MAPPING DETAILS Support Billing Event Related Process 1.1.1.14.4.3
<p>Extended Description</p> <p>The purpose of the Support Billing Event Related Process process is to support other processes which use or consume billing events. This process manages report requests from other processes. An example of such a process is customer review of billing events (pre-billing and post-billing).</p>

Explanatory

An example of such a process is customer review of billing events (pre-billing and post-billing).

Mandatory

The purpose of the Support Billing Event Related Process process is to support other processes which use or consume billing events. A

A process within R6 using billing events is e.g. the unbilled usage functionality. This data are automatically provided to allow customers or a CSR to take a look at the usages a customer currently has. It's possible to view e.g. the remaining amount of allowances, already performed international calls or local calls, etc.. All these data are already rated, but not invoices yet.

A description is provided in the evidence document "WebAC User Manual - VSO - 1.1.1.2.docx" in the chapter **See the unbilled charges for a customer** on page 32. The screenshot (Figure: Unbilled items of a customer) on the top of page 33 shows how a customer can review is unbilled charges.

Optional

Not used for this process element

Interactions

This process manages report requests from other processes.



4.7.5 Supporting Evidence References (Works Cited)

- [Ref 1] 04_Infonova_Product_Brochure_Billing.pdf
- [Ref 2] WebAC User Manual - VSO - 1.1.1.2.docx
- [Ref 3] R6 – Billing Process Overview.pdf



4.7.6 Level 2: Manage Billing Events (1.1.1.14) – Conformance Scores

Table 4.7 - Manage Billing Events (1.1.1.14) – Conformance Scores

Level 2: 1.1.1.14 - Manage Billing Events [4/4]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
1.1.1.14.1 - Enrich Billing Events		5
	1.1.1.14.1.1 Add Billing Event Data	100%
	1.1.1.14.1.2 Assign Billing Event Price	100%
1.1.1.14.2 - Guide Billing Events		5
	1.1.1.14.2.1 Ensure Billing Event Usage	100%
	1.1.1.14.2.2 Distribute Billing Event	100%
1.1.1.14.3 - Mediate Billing Events		5
	1.1.1.14.3.1 Edit Billing Event	100%
	1.1.1.14.3.2 Reformat Billing Event	100%
1.1.1.14.4 - Report Billing Event Records		4.7
	1.1.1.14.4.1 Generate Billing Event Report	100%
	1.1.1.14.4.2 Investigate Billing Event Related Problem	75%
	1.1.1.14.4.3 Support Billing Event Related Process	75%

4.8 Level 2: Product & Offer Development & Retirement (1.2.1.5)

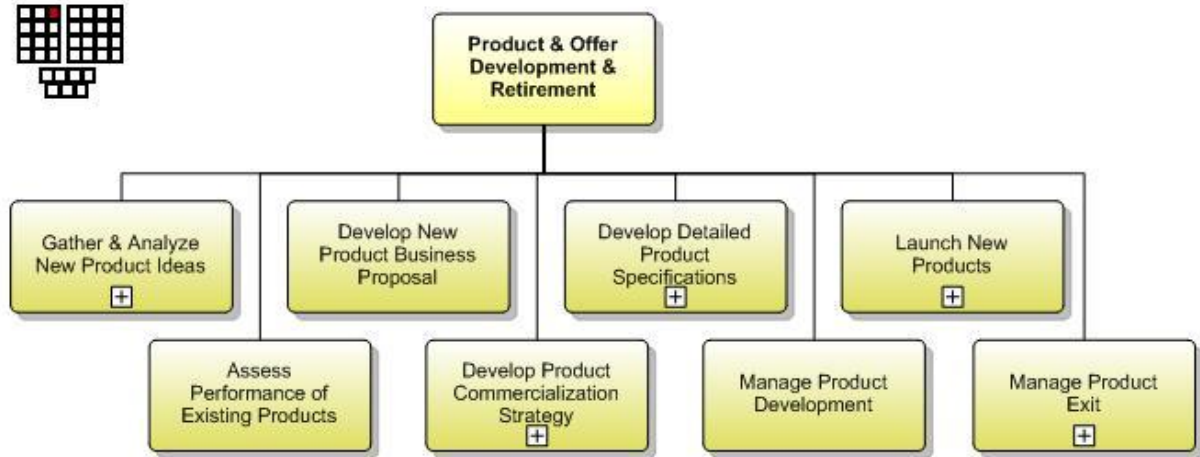


Figure 4.31 - Product & Offer Development & Retirement decomposition into level 3 processes

Process Identifier: 1.2.1.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.1 Level 3: Gather & Analyze New Product Ideas 1.2.1.5.1

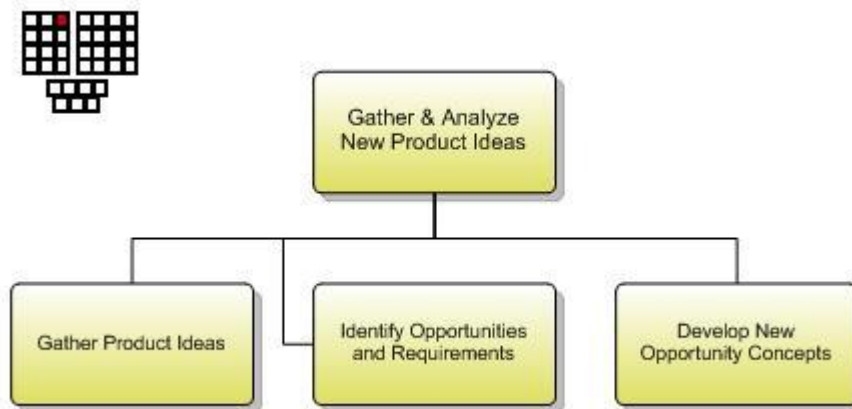


Figure 4.32 - Product & Offer Development & Retirement decomposition into level 3 processes

Process Identifier: 1.2.1.5.1

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.1.1 Level 4: Gather Product Ideas 1.2.1.5.1.1 – Mapping Details

Process Identifier: 1.2.1.5.1.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Gather Product Ideas 1.2.1.5.1.1
<p>Brief Description</p> <p>These processes research demographic, customer, technology and marketing information. AM</p> <p>This process is supported by collecting the ideas and related research information in the Product Opportunity tab in the provided Product_Planning_Sheet.</p> <p>Information entered and collected in the Product Planning Sheet can be imported to the solution</p>



data repository of R6 by processing and transforming the excel sheet data with the help of Infonova pre-defined filters and mappings using MapForce® from Altova (another fine software product from Austria ☺) and importing them using the Retail Product Offer IMPORT function in WebAC. Vice versa, also the generation of pre-filled Product Planning Sheets from data content in R6 for existing Product Offer definitions is supported.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.1.2 Level 4: Identify Opportunities and Requirements 1.2.1.5.1.2 – Mapping Details

Process Identifier: 1.2.1.5.1.2

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Opportunities and Requirements 1.2.1.5.1.2
<p>Brief Description</p> <p>These processes identify potential opportunities and capture requirements from the sales organization relating to enhancements to support their desired offers. M</p> <p>This process is supported by a Product Planning Sheet that is part of R6 as a tool for CSPs to identify</p>

opportunities, design offers, analyze the market, etc. By filling the relevant sections in the **Product Business Model Canvas tab** in the provided Product_Planning_Sheet this process can be support manually.

Furthermore, the completed sheet can be imported into the R6 data store to enable easier service specification and product specification creation derived from the gathered requirements.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.1.3 Level 4: Develop New Opportunity Concepts 1.2.1.5.1.3 – Mapping Details

Process Identifier: 1.2.1.5.1.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Develop New Opportunity Concepts 1.2.1.5.1.3
<p>Brief Description</p> <p style="background-color: #00ff00;">These processes compare current capabilities with the identified opportunities, and as a result of the analysis develop new opportunity concepts. The concepts include an analysis of the customer</p>

value proposition. M

This process is supported by a Product Planning Sheet that is part of R6. This tool helps CSPs to develop new opportunity concepts and analyzing customer value propositions by filling and comparing the information in the **Product Opportunity** tab. .

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

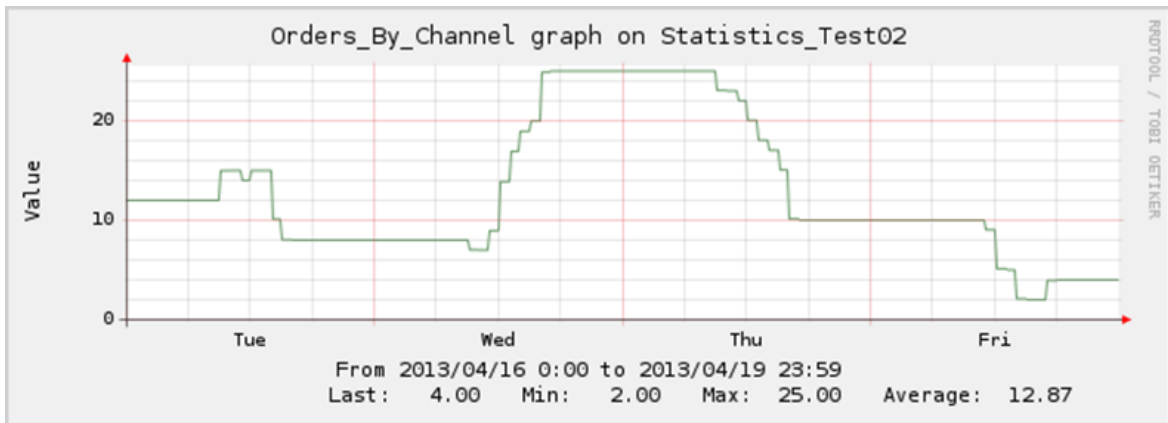
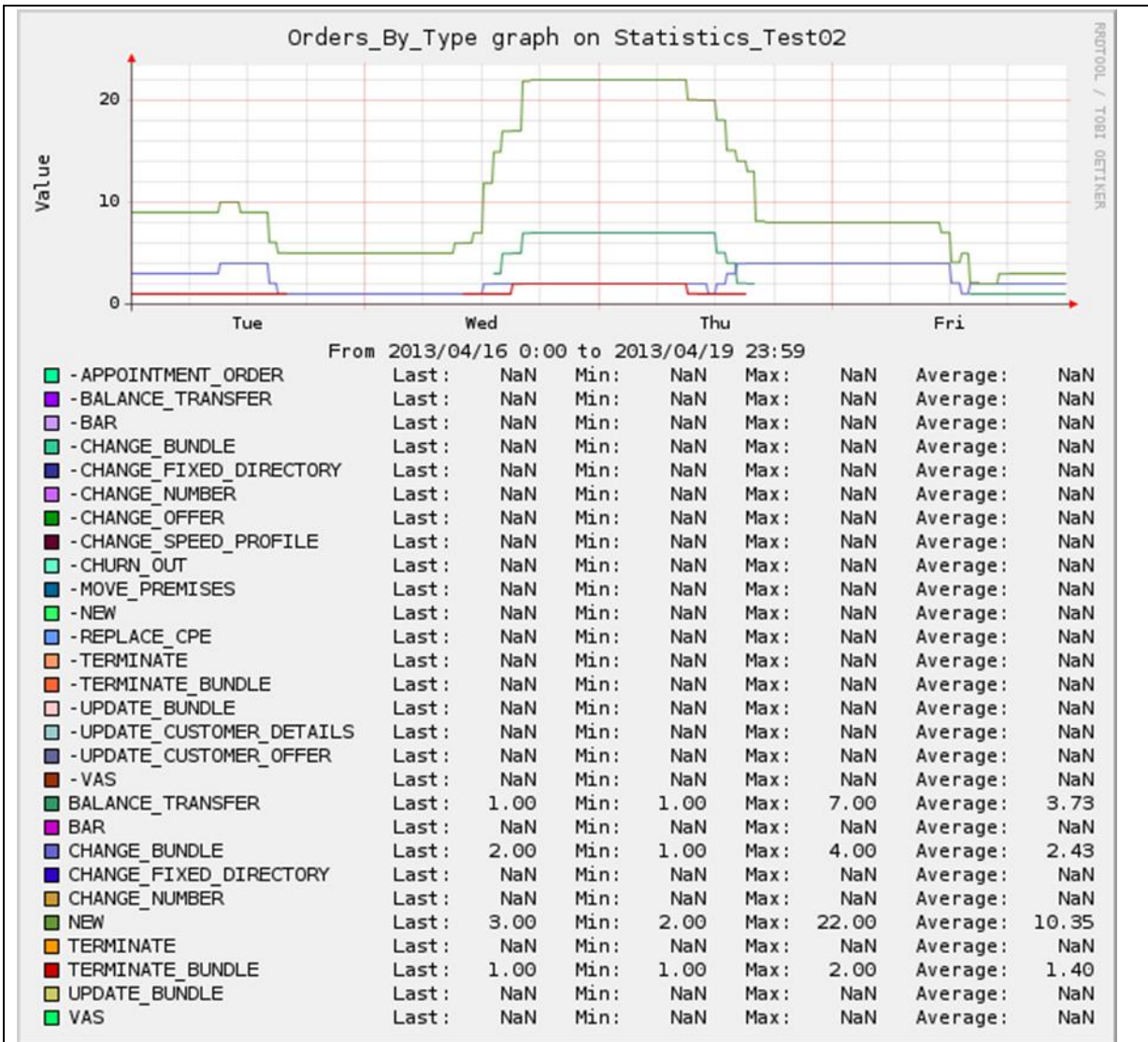
4.8.2 Level 3: Assess Performance of Existing Products 1.2.1.5.2

Analyze the performance of existing products to identify inadequacies and required improvements

4.8.2.1 Level 3: Assess Performance of Existing Products 1.2.1.5.2 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS																									
Assess Performance of Existing Products 1.2.1.5.2																									
Extended Description																									
The Assess Performance of Existing Products processes analyze the performance of existing products to identify inadequacies and required improvements. These processes use information from customers and from operational activities to identify required improvements. AM																									
<p>To analyze the performance of existing products to identify inadequacies and required improvements R6 provides 2 access and integration methods for reports on the overall customer order behavior and order management process:</p> <ul style="list-style-type: none"> the SID aligned views in the database access layer <ul style="list-style-type: none"> e.g. Report SAL_ORDER_ACTIVITY vs PRD_PRODUCT_GROUP_TOPRODUCT e.g. Report ENT_FINANCIAL_INVOICE_MAPPING vs CUS_BILLING_ACCOUNT_TLI etc plugins for general monitoring and reporting solutions like Nagios <p>The combination of the SID views and the Nagios plugins is currently the extent of our support here. A GUI for reporting access is not part of the product out of the box but can be integrated. SID aligned views are provided in the evidence document R6_Integration_ThirdPartyandReportingViews.pdf</p> <p>The screenshots below are an example of how Nagios reporting screens display information about product performance in terms of measuring order intake and execution by type or channel. The second example shows how new product orders relate to churn_out losses or terminations. In a similar way, customer inquiries, disputes, or service problem tasks relate to products.</p>																									
<table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th colspan="6">From 2013/04/16 0:00 to 2013/04/19 23:59</th> </tr> </thead> <tbody> <tr> <td>- INTERNET</td> <td>Last: 3.00</td> <td>Min: 2.00</td> <td>Max: 15.00</td> <td>Average: 7.03</td> <td></td> </tr> <tr> <td>FIXED_LINE</td> <td>Last: 1.00</td> <td>Min: 1.00</td> <td>Max: 16.00</td> <td>Average: 7.88</td> <td></td> </tr> <tr> <td>INTERNET</td> <td>Last: NaN</td> <td>Min: NaN</td> <td>Max: NaN</td> <td>Average: NaN</td> <td></td> </tr> </tbody> </table>		From 2013/04/16 0:00 to 2013/04/19 23:59						- INTERNET	Last: 3.00	Min: 2.00	Max: 15.00	Average: 7.03		FIXED_LINE	Last: 1.00	Min: 1.00	Max: 16.00	Average: 7.88		INTERNET	Last: NaN	Min: NaN	Max: NaN	Average: NaN	
From 2013/04/16 0:00 to 2013/04/19 23:59																									
- INTERNET	Last: 3.00	Min: 2.00	Max: 15.00	Average: 7.03																					
FIXED_LINE	Last: 1.00	Min: 1.00	Max: 16.00	Average: 7.88																					
INTERNET	Last: NaN	Min: NaN	Max: NaN	Average: NaN																					



Explanatory

Reserved for future use.



Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.



4.8.3 Level 3: Develop New Product Business Proposal 1.2.1.5.3

Develop and document business proposals for the identified new product concept

4.8.3.1 Level 3: Develop New Product Business Proposal 1.2.1.5.3 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS Develop New Product Business Proposal 1.2.1.5.3
<p>Extended Description</p> <p>The Develop New Product Business Proposal processes develop and document business proposals for the identified new product concept (including if necessary a business case). The business proposal (or business case) identifies the new product requirements, including the specific service components which constitute the product. The business proposal also identifies the development costs and anticipated benefits, including forecast demand, revenue gains, productivity gains, performance improvements and/or operational cost improvements. In addition, these processes define the attributes of the product which form the basis for product advertising and sales. The business proposal also includes an assessment of the risks and the competitive positioning of the product proposal. As a part of the business proposal development a feasibility assessment can be produced. Potential suppliers/partners who can assist in the development of the product are also identified. As a part of the process, the business proposal is appropriately approved, and as a result of the approval, necessary resources are made available. M</p> <p>This process I supported by the attached Product Planning Sheet that is part of R6. By filling the relevant information in the Product Opportunity tab CSPs can develop new product business proposals</p> <p>Furthermore, the completed sheet can be imported into the R6 data store to enable easier service specification and product specification creation based on the developed business proposals .</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p> <p>Optional</p> <p>Reserved for future use.</p>



Interactions

Reserved for future use

4.8.4 Level 3: Develop Product Commercialization Strategy 1.2.1.5.4

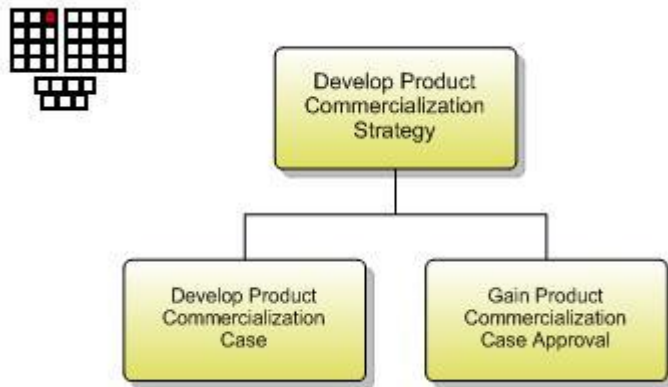


Figure 4.33 - Develop Product Commercialization Strategy decomposition into level 4 processes

Process Identifier: 1.2.1.5.4

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.4.1 Level 4: Develop Product Commercialization Case 1.2.1.5.4.1– Mapping Details

Process Identifier: 1.2.1.5.4.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Develop Product Commercialization Case 1.2.1.5.4.1
<p>Brief Description</p> <p>These processes ensure that product specific pricing, sales channel support and regulatory approvals are identified. They ensure that all commercialization aspects of the product development process associated with selling the product to the market, including pricing, rating, identification of sales support and sales channels features, are developed. Additionally these processes manage the enterprise cross-product pricing approval processes. AM</p> <p>CSPs can use the provided Product Planning Sheet to develop product commercialization cases by filling the relevant information in the majority of the sheets</p>

The complete Product Planning Sheet that is part of the R6 solution can be imported into the R6 data store to enable easier service specification and product specification creation based on the developed product commercialization case..

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.4.2 Level 4: Gain Product Commercialization Case Approval 1.2.1.5.4.2– Mapping Details

Process Identifier: 1.2.1.5.4.2

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Gain Product Commercialization Case Approval 1.2.1.5.4.2
<p>Brief Description</p> <p>These processes ensure that product specific pricing, sales channel support and regulatory approvals are agreed. They ensure that all commercialization aspects of the product development process</p>

associated with selling the product to the market are agreed. AM

The following process is supported on two levels:

- Level of network operator by assigning and approving the relevant wholesale product offers for a market focused VSO (see chapter **Assign wholesale product offer to VSO** page 39 in the provided WebAC User Manual – VSP document.)
- Level of retail operator by assigning and approving the relevant retail offers to the market focused Sales Channels (for details please refer to the provided “Create and Manage Sales Channels” document.)

Regulatory approvals are supported using pre-configured staff roles for legal and regulatory compliance approvals like shown in the screenshot below. Those roles are different from marketing and portfolio strategy approvals.

Workgroup ▲	Description
CSM - Access - Authorized User	CSM - Access - Authorized User
CSM - Access - Functionality with login	CSM - Access - Functionality with login
CSM - Access - Order without login	CSM - Access - Order without login
WebAC - Offer Management - Retail	WebAC - Offer Management - Retail
WebAC - Legal and Regulatory Compliance	WebAC - Legal and Regulatory Compliance
REST - ALL - VSO	REST - ALL - VSO
REST - ALL - VSP	REST - ALL - VSP
System Administrator	System Administrator
VSO - CSR - Channel	VSO - CSR - Channel
VSO - CSR Finance	VSO - CSR Finance
WebAC - Accounts Receivables	WebAC - Accounts Receivables
WebAC - Billing Management	WebAC - Billing Management

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions



Reserved for future use

4.8.5 Level 3: Develop Detailed Product Specifications 1.2.1.5.5

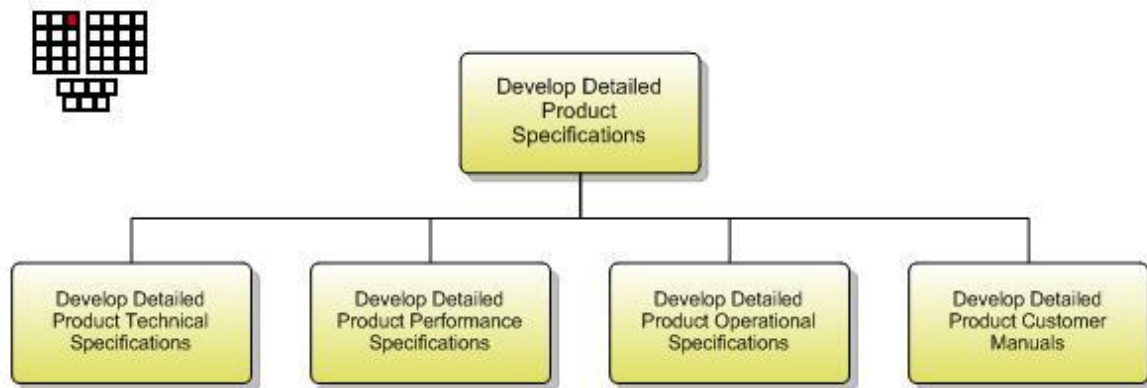


Figure 4.34 - Develop Detailed Product Specifications decomposition into level 4 processes

Process Identifier: 1.2.1.5.5

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.5.1 Level 4: Develop Detailed Product Technical Specifications 1.2.1.5.5.1– Mapping Details

Process Identifier: 1.2.1.5.5.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Develop Detailed Product Technical Specifications 1.2.1.5.5.1
<p>Brief Description</p> <p>These processes develop and document the detailed product-related technical specifications. These processes develop and document the required product features, and the specific service and resource requirements and selections. The processes ensure that all detailed specifications are produced and appropriately documented. Additionally the processes ensure that the documentation is captured in an appropriate enterprise repository. AM</p> <p>A description of how product-related technical specifications are developed and documented within</p>

R6 is provided in the **Supplier and Service Onboarding, Create a service specification** chapter page 14ff of the provided WebAC User Manual – VSP. This chapter describes how an operator is generating service specifications and how they can be managed and documented.

By developing and storing the service specification in R6 the features, requirements and selections are automatically captured in the database repository and made available to related systems.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.5.2 Level 4: Develop Detailed Product Performance Specifications 1.2.1.5.5.2– Mapping Details

Process Identifier: 1.2.1.5.5.2

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS
Develop Detailed Product Performance Specifications 1.2.1.5.5.2
<p>Brief Description</p> <p style="background-color: #00ff00;">These processes develop and document the detailed product-related performance specifications.</p> <p style="background-color: #00ff00;">These processes develop and document the specific performance requirements. The processes</p>

ensure that all detailed specifications are produced and appropriately documented. Additionally the processes ensure that the documentation is captured in an appropriate enterprise repository. M

This process is supported via the attached Product Planning Sheet that is part of the R6 solution. This tool can be used to develop detailed product performance specifications by providing the sales forecast per subscriber per year in the **Product Opportunity tab**

Furthermore, the completed sheet can be imported into the R6 data store to enable easier service specification and product specification creation.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.5.3 Level 4: Develop Detailed Product Operational Specifications 1.2.1.5.5.3– Mapping Details

Process Identifier: 1.2.1.5.5.3

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p>Level 4 PROCESS MAPPING DETAILS</p> <p>Develop Detailed Product Operational Specifications 1.2.1.5.5.3</p>
--

Brief Description

These processes develop and document the detailed product-related operational specifications. These processes develop and document the specific performance and operational requirements and support activities, along with any product specific data required for the systems and network infrastructure. The processes ensure that all detailed specifications are produced and appropriately documented. Additionally the processes ensure that the documentation is captured in an appropriate enterprise repository. M

For details of how this process is supported please refer to the attached process guide example (Sample_Product_Operational_Support.docx) from a R6 customer. Such an operational support process guide is generated for each product by Infonova operational support together with the customers operational support team.

The supplied evidence document actually is an example output of the processes in this Level 4 process group, not a description of the processes by itself. The processes themselves are mostly manual, producing documentation like the provided one by describing the necessary support activities and specifications following a structure like:

- CHANGE MANAGEMENT
- OVERVIEW
- WORKFLOW DEPLOYMENT
- BATCH PROCESSES
- CORBA
- ONLINE
- PERIODIC JOBS
- MEDIATION & RATING

As you can see this correlates to the TOC in the example Sample_Product_Operational_Support.docx document.

Examples of *product specific data* for the operation of a product are on page 22, Section 5.4.3. Interface Description, Examples for *support activities* are on page 42, chapter 8.3. Delete or Move Invoice Definitions.

Extended Description

Not used for this process element

Explanatory

Reserved for future use.

Mandatory

Reserved for future use.

<p>Optional</p> <p>Reserved for future use.</p> <p>Interactions</p> <p>Reserved for future use</p>
--

4.8.5.4 Level 4: Develop Detailed Product Customer Manuals 1.2.1.5.5.4– Mapping Details

Process Identifier: 1.2.1.5.5.4

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS</p> <p align="center">Develop Detailed Product Customer Manuals 1.2.1.5.5.4</p>
<p>Brief Description</p> <p>The Develop Detailed Product Specifications processes develop and document the detailed customer manuals. The processes ensure that all detailed specifications are produced and appropriately documented. Additionally the processes ensure that the documentation is captured in an appropriate enterprise repository. M</p> <p>Customer Manuals describing the out of the box functionality of R6 are generated and provided.</p> <p>See WebAC User Manual - VSO - 1.1.1.2.docx as well as WebAC User Manual – VSP.docx</p> <p>Extended Description</p> <p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p>



Optional

Reserved for future use.

Interactions

Reserved for future use

4.8.6 Level 3: Manage Product Development 1.2.1.5.6

Ensure the co-coordinated delivery in line with the approved business case of all required product capabilities for that business case across the enterprise

4.8.6.1 Level 3: Manage Product Development 1.2.1.5.6 – Mapping Details

NOTE: No decomposition to Level 4 processes, hence mappings provided against the Level 3 process descriptions and implied tasks.

Level 3 PROCESS MAPPING DETAILS Manage Product Development 1.2.1.5.6
<p>Extended Description</p> <p>The Manage Product Development processes ensure the co-coordinated delivery in line with the approved business case of all required product capabilities for that business case across the enterprise. These processes use project management disciplines to deliver the necessary capabilities, including process development, specific systems & network infrastructure developments, specific channel developments, specific operational procedures, etc. required to support the new product. It is predominantly a program/project management function, with the detailed management of individual capability delivery managed through separate processes in other horizontal process groupings.</p> <p>Note that delivery of products within the context of existing commercial arrangements is managed through the Supply Chain Development and Change Management process. If new suppliers/partners are required, the Supply Chain Capability Delivery process is used to deliver the necessary commercial arrangements.</p> <p>Note that the management of major new or enhanced infrastructure development to support Product & Offer Development is managed within the Product & Offer Capability Delivery process. M</p> <p>The delivery capability planning and development is started with the business model canvas in the Product Business ModelCanvas tab in the provided Product_Planning_Sheet. This sheet is part of the R6 solution and can be imported into the R6 data store to enable easier service specification and product specification creation. By using that tool CSPs can identify the capabilities, system requirements as well as the supply chain requirements. The implementation is then rolled out throughout the R6 solution in</p> <ul style="list-style-type: none"> • Supplier Management • Service Management • Product Management • Channel Management <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p>



Optional

Reserved for future use.

Interactions

Reserved for future use.

4.8.7 Level 3: Launch New Products 1.2.1.5.7

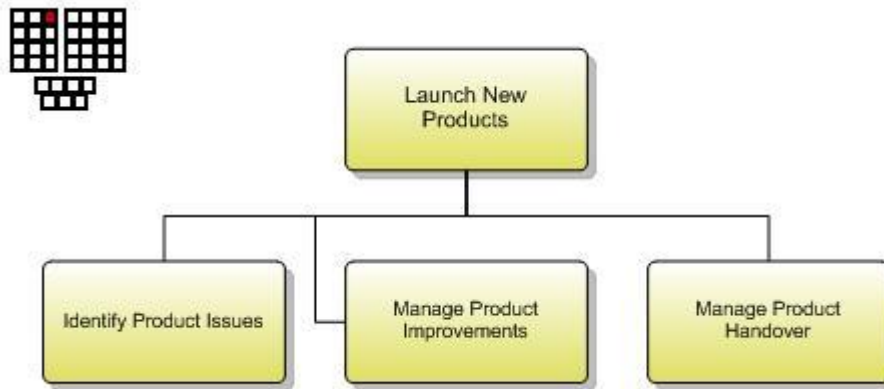


Figure 4.35 - Launch New Products decomposition into level 4 processes

Process Identifier: 1.2.1.5.7

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.7.1 Level 4: Identify Product Issues 1.2.1.5.7.1– Mapping Details

Process Identifier: 1.2.1.5.7.1

Process Context

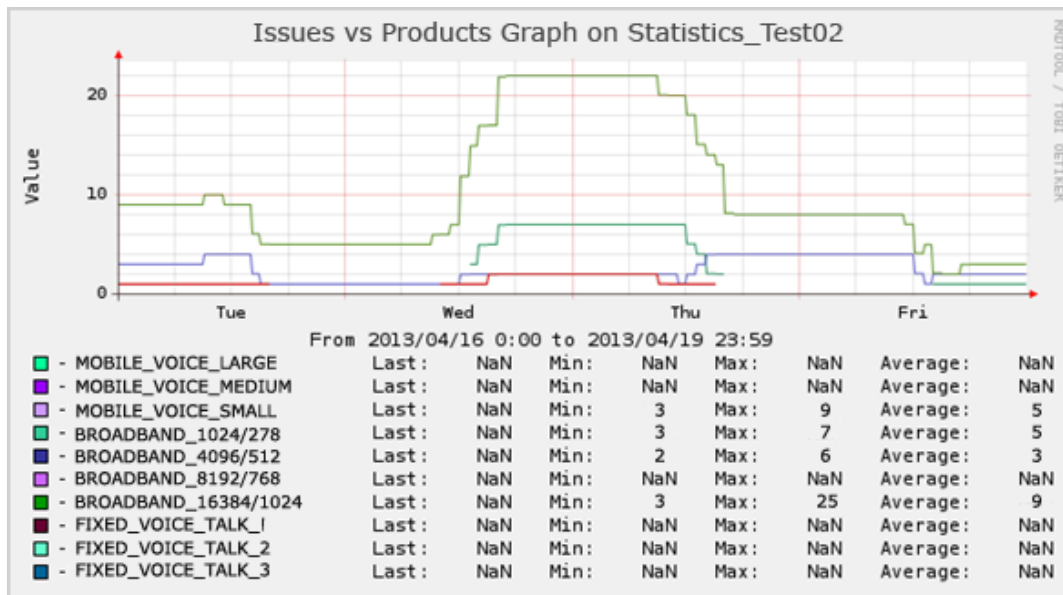
This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Product Issues 1.2.1.5.7.1
<p>Brief Description</p> <p>These processes identify the shortcomings or issues in the product. AM</p> <p>To analyze the shortcomings or issues in products R6 provides 2 access and integration methods for reports:</p> <ul style="list-style-type: none"> • the SID aligned views in the database access layer <ul style="list-style-type: none"> ○ e.g. Report SRV_TASK_TLI vs CUS_BILLING_ACCOUNT_TLI ○ e.g. Report CUS_INVOICE_DISPUTES (Y) vs CUS_BILLING_ACCOUNT_TLI ○ etc • plugins for general monitoring and reporting solutions like Nagios

The combination of the SID views and the Nagios plugins is currently the extent of our support here. A GUI for reporting access is not part of the product out of the box but can be integrated.

SID aligned views are provided in the evidence document R6_Integration_ThirdPartyandReportingViews.pdf

The screenshot provided below is an example of how Nagios reporting screens display information about product issues.



Extended Description

Not used for this process element

Explanatory

Not used for this process element

Mandatory

Not used for this process element

Optional

Not used for this process element

Interactions

Not used for this process element.

4.8.7.2 Level 4: Manage Product Improvements 1.2.1.5.7.2 – Mapping Details

Process Identifier: 1.2.1.5.7.2

Process Context

< This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Product Improvements 1.2.1.5.7.2
<p>Brief Description</p> <p style="background-color: yellow;">These processes manage the necessary improvements to the product to allow full rollout. M</p> <p>The suggested approach to this process is to use the market virtualization capability in R6 to create an additional VSO with a test brand to test and optimize variants of the product with selected friendly and a randomly selected test customer set. Once the optimum product configuration has been found (for each market segment) the product or products can be migrated over to the VSO domain carrying the main brand.</p>
<p>Extended Description</p> <p>Not used for this process element</p>
<p>Explanatory</p> <p>Reserved for future use.</p>
<p>Mandatory</p> <p>Reserved for future use.</p>
<p>Optional</p> <p>Reserved for future use.</p>
<p>Interactions</p> <p>Reserved for future use.</p>

4.8.7.3 Level 4: Manage Product Handover 1.2.1.5.7.3– Mapping Details



Process Identifier: 1.2.1.5.7.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

<p align="center">Level 4 PROCESS MAPPING DETAILS Manage Product Handover 1.2.1.5.7.3</p>
<p>Brief Description</p> <p>At the conclusion of the pilots and/or trials when the product passes its acceptance tests or defined acceptance criteria, these processes manage the handover to operations. AM</p> <p>Product definitions and specifications can be moved from test to production (and the other way around) with manual or automated import/export capabilities which can also be scripted for bulk operations. Screenshots are provided in the attached “Product Import_Export.docx”</p>
<p>Extended Description</p> <p>Not used for this process element</p>
<p>Explanatory</p> <p>Reserved for future use.</p>
<p>Mandatory</p> <p>Reserved for future use.</p>
<p>Optional</p> <p>Reserved for future use.</p>
<p>Interactions</p> <p>Reserved for future use</p>

4.8.8 Level 3: Manage Product Exit 1.2.1.5.8

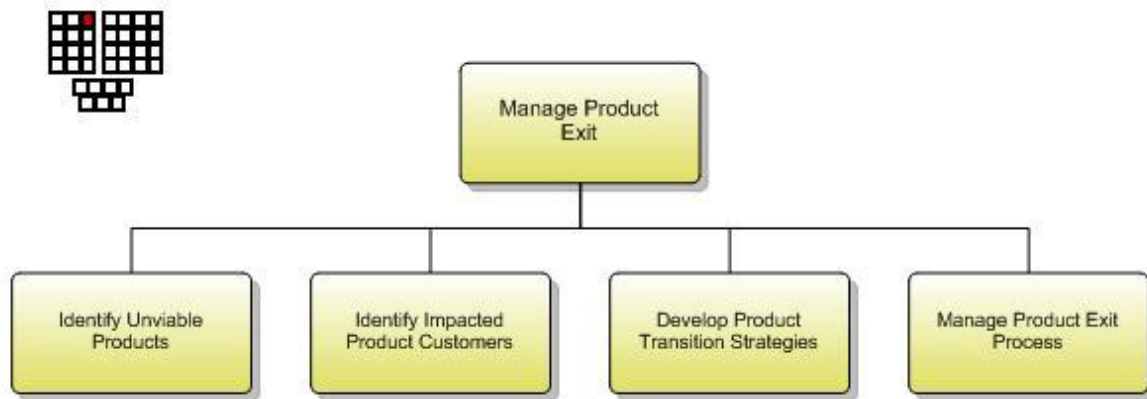


Figure 4.36 - Manage Product Exit decomposition into level 4 processes

Process Identifier: 1.2.1.5.8

Process Context

This process element represents part of the overall enterprise, modeled in business process terms, and can be applied (ie “instantiated”) with other similar process elements for application within a specific organization or domain.

4.8.8.1 Level 4: Identify Unviable Products 1.2.1.5.8.1– Mapping Details

Process Identifier: 1.2.1.5.8.1

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Unviable Products 1.2.1.5.8.1
<p>Brief Description</p> <p>These processes analyze existing products & sales offers to identify economically or strategically unviable products. AM</p> <p>To analyze unviable products, R6 provides 2 access and integration methods for reports:</p> <ul style="list-style-type: none"> • the SID aligned views in the database access layer <ul style="list-style-type: none"> ○ e.g. Report SAL_ORDER_ACTIVITY vs CUS_BILLING_ACCOUNT_TLI ○ etc

- plugins for general monitoring and reporting solutions like Nagios

The combination of the SID views and the Nagios plugins is currently the extent of our support here. A GUI for reporting access is not part of the product out of the box but can be integrated.

SID aligned views are provided in the evidence document R6_Integration_ThirdPartyandReportingViews.pdf

The screenshots provided on page 13 for the process element “Assess Performance of Existing Products 1.2.1.5.2” are an example of how Nagios reporting screens display information about product performance in terms of measuring order intake and execution by type or channel helping to identify unviable products.

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Extended Description

Not used for this process element

Explanatory

Not used for this process element

Mandatory

Not used for this process element

Optional

Not used for this process element

Interactions

Not used for this process element.

4.8.8.2 Level 4: Identify Impacted Product Customers 1.2.1.5.8.2 – Mapping Details

Process Identifier: 1.2.1.5.8.2

Process Context



This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Identify Impacted Product Customers 1.2.1.5.8.2
<p>Brief Description</p> <p style="background-color: #00FF00; padding: 2px;">These processes identify customers impacted by any exit and develop customer specific or market segment exit or migration strategies.AM</p> <p>To identify impacted product customers, R6 provides two access and integration methods for reports:</p> <ul style="list-style-type: none"> • the SID aligned views in the database access layer <ul style="list-style-type: none"> ○ e.g. Report CUS_COMPONENTS vs CUS_COMPONENT_PARAMS ○ etc • plugins for general monitoring and reporting solutions like Nagios <p>The combination of the SID views and the Nagios plugins is currently the extent of our support here. A GUI for reporting access is not part of the product out of the box but can be integrated.</p> <p>SID aligned views are provided in the evidence document R6_Integration_ThirdPartyandReportingViews.pdf</p> <p>The screenshots provided on page 13 for the process element “Assess Performance of Existing Products 1.2.1.5.2” are an example of how Nagios reporting screens display information about product performance in terms of measuring order intake and execution by type or channel and how impacted product customers can be identified.</p> <p>Extended Description</p> <p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p> <p>Optional</p> <p>Reserved for future use.</p>

Interactions
Reserved for future use.

4.8.8.3 Level 4: Develop Product Transition Strategies 1.2.1.5.8.3 – Mapping Details

Process Identifier: 1.2.1.5.8.3

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Develop Product Transition Strategies 1.2.1.5.8.3
<p>Brief Description</p> <p>These processes develop infrastructure transition and/or replacement strategies.</p>
<p>Extended Description</p> <p>Not used for this process element</p>
<p>Explanatory</p> <p>Reserved for future use.</p>
<p>Mandatory</p> <p>Reserved for future use.</p>
<p>Optional</p> <p>Reserved for future use.</p>
<p>Interactions</p> <p>Reserved for future use</p>

4.8.8.4 Level 4: Manage Product Exit Process 1.2.1.5.8.4 – Mapping Details

Process Identifier: 1.2.1.5.8.4

Process Context

This process element represents part of the overall enterprise, modelled in business process terms, and can be applied (i.e. “instantiated”) with other similar process elements for application within a specific organization or domain.

Level 4 PROCESS MAPPING DETAILS Manage Product Exit Process 1.2.1.5.8.4
<p>Brief Description</p> <p style="background-color: #00FF00; padding: 2px;">These processes manage the operational aspects of the exit process. AM</p> <p>R6 supports automated bulk operations to support automated product exit processes.</p> <p>Examples are:</p> <ul style="list-style-type: none"> • Bulk select of all remaining customers on a deprecated product, bulk migrate to new product. • Bulk select of all remaining customers on a deprecated product, bulk terminate and export customer list for selling to partner • Etc. <p>For an example please refer to the already provided WebAC User Manual - VSO - 1.1.1.2 document chapter <i>Change multiple offers belonging to a single customer</i> page 52 ff. .</p> <p>For details how the products exit is managed in terms of defining and changing the retirement date of a product please refer to the provided evidence document Product Management - VSO.docx page 30 <i>Figure: Manage retail product offer</i>. Setting a retirement date automatically makes this product unavailable across channels. The procedures above (bulk select, etc.) manage the mass handling of customers who are still on a product now terminated.</p> <p>Extended Description</p> <p>Not used for this process element</p> <p>Explanatory</p> <p>Reserved for future use.</p> <p>Mandatory</p> <p>Reserved for future use.</p>



Optional

Reserved for future use.

Interactions

Reserved for future use

4.8.9 Supporting Evidence References (Works Cited)

[Ref 1]	Create and Manage Sales Channels.docx
[Ref 2]	WebAC User Manual – VSP.docx
[Ref 3]	Product_Planning_Sheet.xlsx
[Ref 4]	WebAC User Manual - VSO - 1.1.1.2.docx
[Ref 5]	Sample_Product_Operational_Support.docx
[Ref 6]	Product Import_Export.docx
[Ref 7]	R6_Integration_ThirdPartyandReportingViews.pdf
[Ref 8]	Product Management - VSO.docx



4.8.10 Level 2: Product & Offer Development & Retirement (1.2.1.5) – Conformance Scores

Table 4.8 - Product & Offer Development & Retirement (1.2.1.5) – Conformance Scores

Level 2: 1.2.1.5 - Product & Offer Development & Retirement [4/8]		
Level 3 Process	Level 4 Process	L4/L3 Process Score
	1.2.1.5.1 - Gather & Analyze New Product Ideas	4.8
	1.2.1.5.1.1 - Gather Product Ideas	100%
	1.2.1.5.1.2 - Identify Opportunities and Requirements	75%
	1.2.1.5.1.3 - Develop New Opportunity Concepts	100%
	1.2.1.5.2 - Assess Performance of Existing Products	4
	1.2.1.5.3 - Develop New Product Business Proposal	5
	1.2.1.5.4 - Develop Product Commercialization Strategy	5
	1.2.1.5.4.1 - Develop Product Commercialization Case	100%
	1.2.1.5.4.2 - Gain Product Commercialization Case Approval	100%
	1.2.1.5.5 - Develop Detailed Product Specifications	4.8
	1.2.1.5.5.1 - Develop Detailed Product Technical Specifications	100%
	1.2.1.5.5.2 - Develop Detailed Product Performance Specifications	100%
	1.2.1.5.5.3 - Develop Detailed Product Operational Specifications	50%
	1.2.1.5.5.4 - Develop Detailed Product Customer Manuals	100%
	1.2.1.5.6 - Manage Product Development	4
	1.2.1.5.7 - Launch New Products	4.2
	1.2.1.5.7.1 - Identify Product Issues	75%
	1.2.1.5.7.2 - Manage Product Improvements	50%
	1.2.1.5.7.3 - Manage Product Handover	50%
	1.2.1.5.8 - Manage Product Exit	4.3
	1.2.1.5.8.1 - Identify Unviable Products	75%
	1.2.1.5.8.2 - Identify Impacted Product Customers	75%
	1.2.1.5.8.3 - Develop Product Transition Strategies	0%
	1.2.1.5.8.4 - Manage Product Exit Process	100%

5 Information Framework Assessment Overview

5.1 Mapping Technique Employed

The certification scope defines the list of ABEs (Aggregated Business Entities) to be addressed during the assessment. The entities, association classes and dependent entities for each ABE in scope are also included in the assessment.

The mapping technique used, was based on the analysis of the SID model files and addendum specifications for the entities', association classes' in scope and its related attributes. The role of each entity', association class or attribute is then interpreted and mapped into the R6 Concept-to-Cash information model related element. This will clearly state how the SID model is supported by R6 Concept-to-Cash.

5.2 Information Framework Assessment - ABE Scope

The diagram in Figure 5.1 illustrates the Information Framework Level 1 ABEs that were presented in scope for the Assessment, and the textual callouts represent the domain areas of Infonova's R6 Concept-to-Cash that were assessed and support the corresponding SID ABEs.

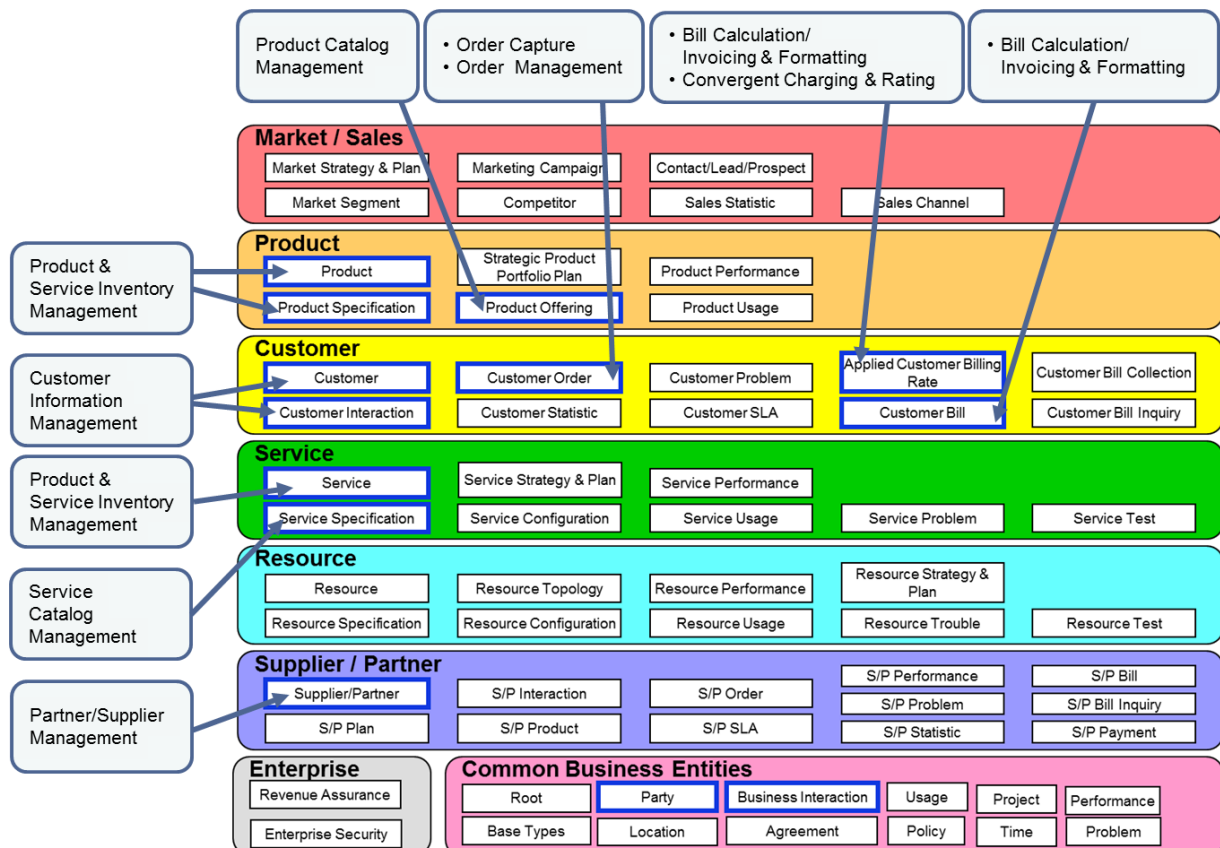


Figure 5.1 - Level 1 ABEs in scope for Infonova's R6 Concept-to-Cash Assessment

5.3 Product Scope

The diagram in Figure 5.2 represents Infonova's R6 Concept-to-Cash Platform and how it is mapped to the Information Framework Level 1 ABEs that were assessed as part of this Framework Conformance Assessment.

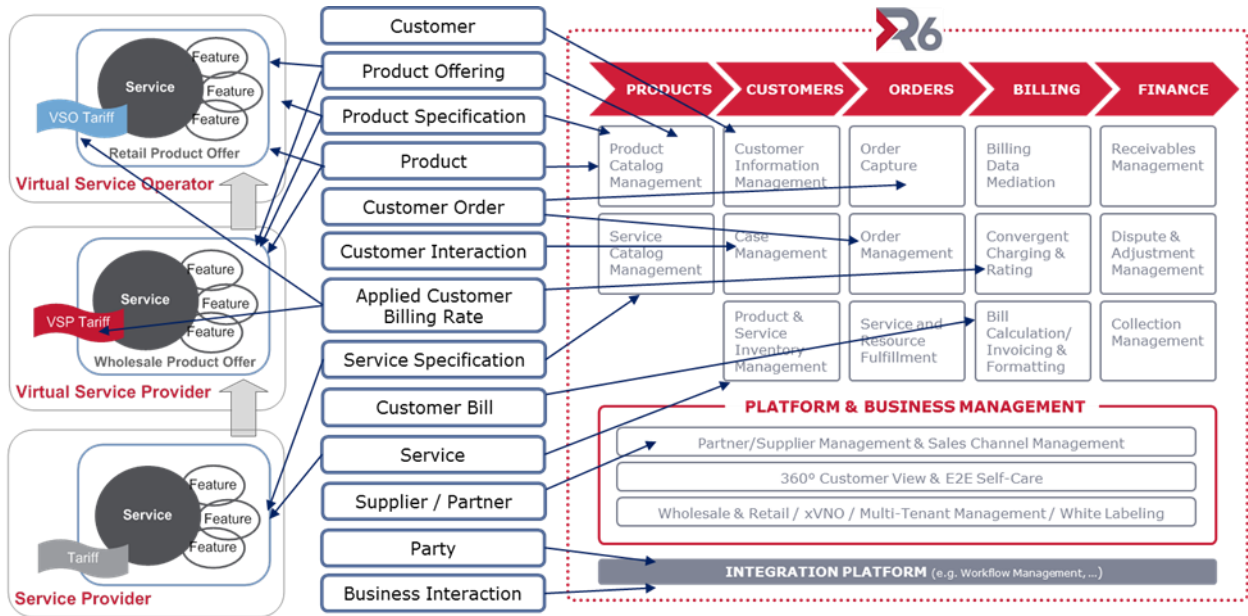


Figure 5.2 - R6 Concept-to-Cash Product Footprint: Product Scope for SID Assessment



6 Framework Conformance Result

This section details the Scores awarded to reflect Conformance of Infonova's R6 Concept-to-Cash Platform to the Business Process Framework & Information Framework components of Framework 12.

6.1 Business Process Framework – Scoring Rules

The conformance scores granted were based on the following TM Forum scoring rules:

Framework 12.0 Conformance Certification (Product/Solution/Implementation)		
Business Process Framework (eTOM) - Conformance Level Descriptions (Level 3 processes)		
Process level	Conformance Score	Qualifier
Level 1	Not applicable	Conformance Assessment shall not be carried out at this process level - hence Conformance Level shall not be awarded at this level.
Level 2	Not applicable	A conformance level is not awarded to Level 2 processes in Framework 12.0 Assessments. The Certification Report shall highlight the coverage of a Level 2 process submitted in scope for an Assessment in terms of number of Level 3 processes submitted for assessment out of the total number defined for the Level 2 process.
Level 3	Score is awarded between 3.1 & 5.	The Conformance Score is awarded for each Level 3 processes submitted in scope for the Assessment. The Conformance Score awarded can be a value between 3.1 & 5 depending on the level of coverage & conformance to the Level 3 process based on the alignment to the level 3 Implied Tasks as decomposed in the Level 4 process definitions. <i>Any manual implementation of the process support shall be noted in the Conformance Report and Detailed Results Report.</i>

Figure 6.1 - TM Forum Business Process Framework: Conformance Scoring Rules

6.2 Business Process Framework - Conformance Result Summary

The graphs in this section provide an overview of the conformance levels granted to the Level 3 Processes presented in scope for Infonova's R6 Concept-to-Cash Platform Assessment. Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to level of Conformance – Full Conformance or Partial Conformance as described in section 6.1 Business Process Framework – Scoring Rules.

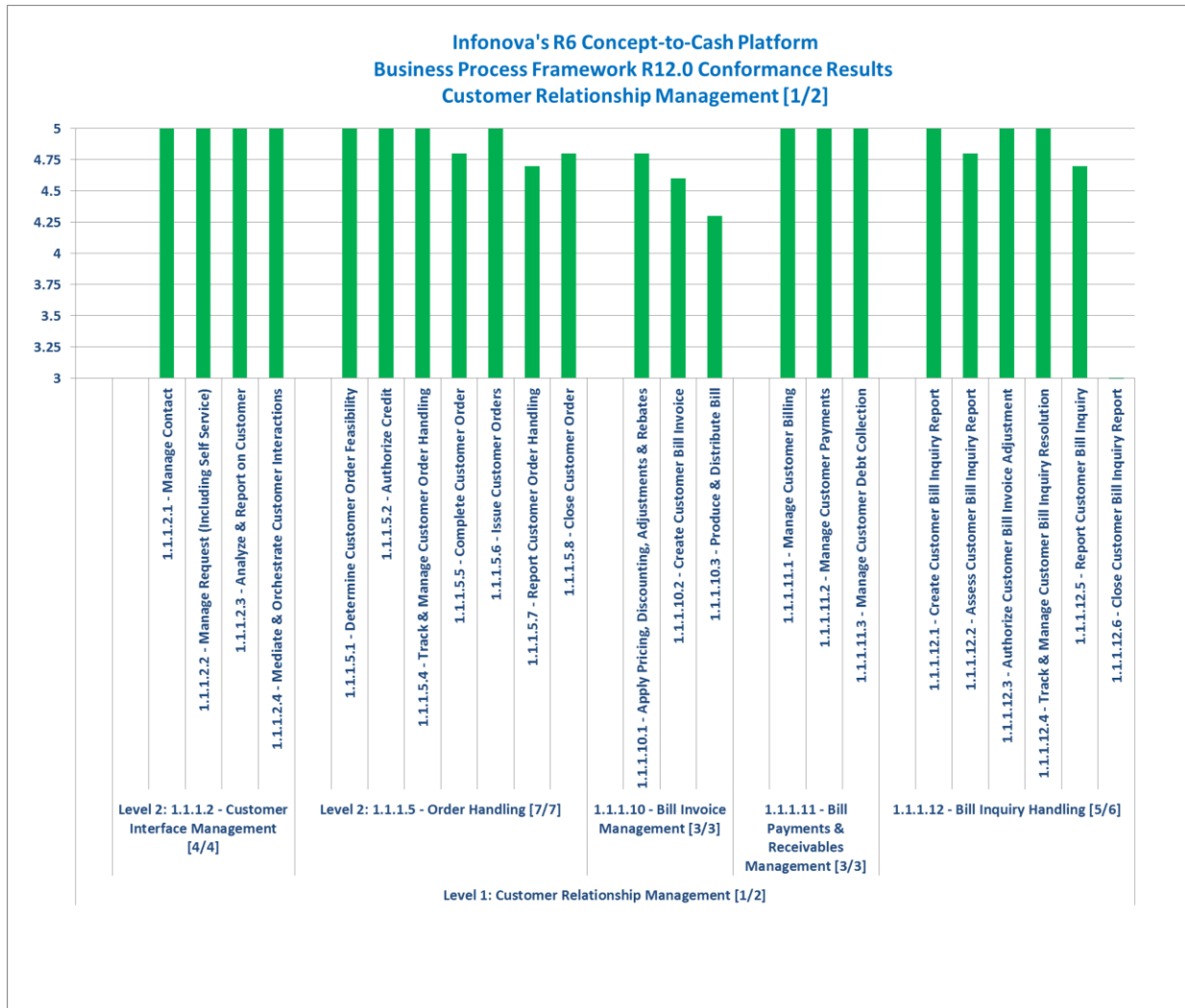


Figure 6.2 – Business Process Framework: Conformance Result Summary CRM [1/2]

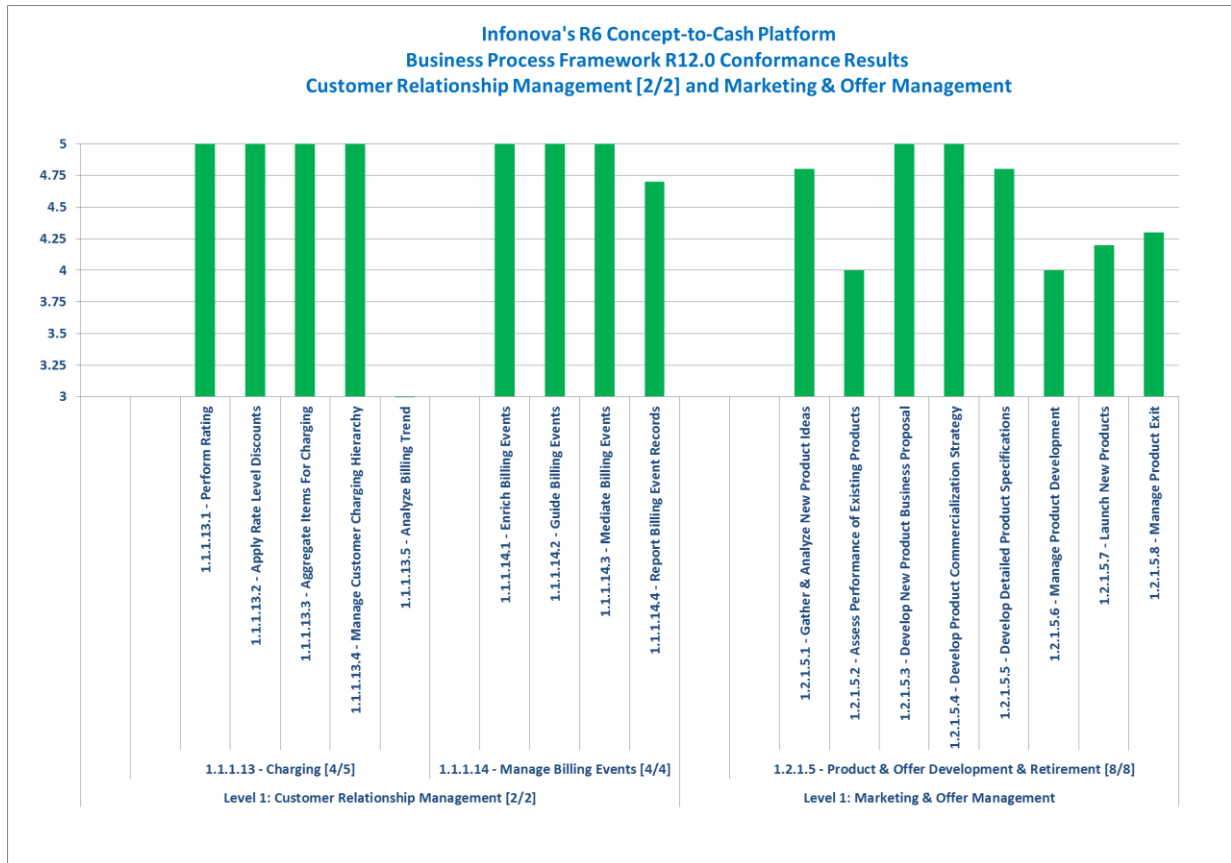


Figure 6.3 - Business Process Framework: Conformance Result Summary CRM [2/2] and Marketing & Offer Mgt



6.3 Business Process Framework – Detailed Conformance Results

The following table provides a more detailed breakdown of the scores awarded with some additional commentary

Table 6.1 – Business Process Framework: Detailed Conformance Results

Infonova's R6 Concept-to-Cash Platform Business Process Framework (eTOM) Release 12.0 Conformance		
Business Process Framework Process	Level 4/Level 3 Process Score [Coverage]	Comments
Level 1: 1.1.1 - Customer Relationship Management		
Level 2: 1.1.1.2 - Customer Interface Management	[4/4]	
1.1.1.2.1 - Manage Contact	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.2.2 - Manage Request (Including Self Service)	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.2.3 - Analyze & Report on Customer	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).



1.1.1.2.4 - Mediate & Orchestrate Customer Interactions	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
Level 2: 1.1.1.5 - Order Handling	[7/7]	
1.1.1.5.1 - Determine Customer Order Feasibility	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.2 - Authorize Credit	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.4 - Track & Manage Customer Order Handling	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.5 - Complete Customer Order	4.8	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.



1.1.1.5.6 - Issue Customer Orders	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.5.7 - Report Customer Order Handling	4.7	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
1.1.1.5.8 - Close Customer Order	4.8	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
Level 2: 1.1.1.10 - Bill Invoice Management	[3/3]	
1.1.1.10.1 - Apply Pricing, Discounting, Adjustments & Rebates	4.8	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
1.1.1.10.2 - Create Customer Bill Invoice	4.6	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations.



		See Mapping Table for more details.
1.1.1.10.3 - Produce & Distribute Bill	4.3	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
Level 2: 1.1.1.11 - Bill Payments & Receivables Management	[3/3]	
1.1.1.11.1 - Manage Customer Billing	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.11.2 - Manage Customer Payments	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.11.3 - Manage Customer Debt Collection	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
Level 2: 1.1.1.12 - Bill Inquiry Handling	[5/6]	



1.1.1.12.1 - Create Customer Bill Inquiry Report	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.12.2 - Assess Customer Bill Inquiry Report	4.8	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
1.1.1.12.3 - Authorize Customer Bill Invoice Adjustment	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.12.4 - Track & Manage Customer Bill Inquiry Resolution	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.12.5 - Report Customer Bill Inquiry	4.7	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
1.1.1.12.6 - Close Customer Bill Inquiry Report	0	Process was not submitted for Assessment.
Level 2: 1.1.1.13 - Charging	[4/5]	



1.1.1.13.1 - Perform Rating	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.13.2 - Apply Rate Level Discounts	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.13.3 - Aggregate Items For Charging	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.13.4 - Manage Customer Charging Hierarchy	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.13.5 - Analyze Billing Trend	0	Process was not submitted for Assessment.
Level 2: 1.1.1.14 - Manage Billing Events	[4/4]	
1.1.1.14.1 - Enrich Billing Events	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).



1.1.1.14.2 - Guide Billing Events	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.14.3 - Mediate Billing Events	5	Fully Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).
1.1.1.14.4 - Report Billing Event Records	4.7	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
Level 2: 1.2.1.5 - Product & Offer Development & Retirement	[8/8]	
1.2.1.5.1 - Gather & Analyze New Product Ideas	4.8	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
1.2.1.5.2 - Assess Performance of Existing Products	4	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.



1.2.1.5.3 - Develop New Product Business Proposal	5	<p>Fully Conformant</p> <p>Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).</p>
1.2.1.5.4 - Develop Product Commercialization Strategy	5	<p>Fully Conformant</p> <p>Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM).</p>
1.2.1.5.5 - Develop Detailed Product Specifications	4.8	<p>Partially Conformant</p> <p>Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations.</p> <p>See Mapping Table for more details.</p>
1.2.1.5.6 - Manage Product Development	4	<p>Partially Conformant</p> <p>Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations.</p> <p>See Mapping Table for more details.</p>
1.2.1.5.7 - Launch New Products	4.2	<p>Partially Conformant</p> <p>Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations.</p> <p>See Mapping Table for more details.</p>



1.2.1.5.8 - Manage Product Exit	4.3	Partially Conformant Supporting evidence and documentation submitted for the assessment of this level 3 process fulfilled alignment criteria with the standard Business Process Framework (eTOM) but with some deviations. See Mapping Table for more details.
---------------------------------	-----	---

6.4 Information Framework – Scoring Rules

The conformance scores granted were based on the following TM Forum scoring rules:

Framework 12.0 Conformance Certification (Product/Solution/Implementation)	
Information Framework (SID) - Conformance Score Descriptions	
Conformance Score	Qualifier
Non Conformance [Score = 1]	The content of the model is compatible with a subset of the Information Framework (SID) ABEs that define its domain coverage. This provides two interacting components/solutions with a common vocabulary and model structure. The subset represents the scope of the model, expressed in Information Framework (SID) domains
Non Conformance [Score = 2]	The model has passed level 1 conformance and the content of the ABE, part of the domain coverage and defined in the model, contains the ABE's core business entity or entities. A core business entity is an entity upon which other entities within the ABE are dependent. e.g. Service in the Service ABE. A core entity is also an entity whose
Very Low Conformance [2.0 < Score <= 3.0]	The model has passed level 2 conformance and <u>*a percentage of the required attributes of the ABE's core entity or entities</u> are defined in the model.
Low Conformance [3.0 < Score <= 4.0]	The model has passed level 3 conformance and <u>*a percentage of the dependent entities</u> within the ABE are defined in the model. A dependent entity is one whose instances are dependent on an instance of a core entity. For example, a ServiceCharacteristic instance within the Service ABE is dependent upon an instance of the Service entity.
Medium Conformance [4.0 < Score <= 5.0]	The model has passed level 4 conformance and <u>*a percentage of the required attributes</u> of the ABE's dependent entities are defined in the model.
High Conformance [5.0 < Score <= 6.0]	The model has passed level 5 conformance and <u>*a percentage of all attributes</u> of the ABE's core entities are defined in the model.
Very High Conformance [6.0 < Score < 7.0]	The model has passed level 6 conformance and <u>*a percentage of all attributes</u> of the ABE's dependent entities are defined in the model.
Full Conformance [Score = 7.0]	The model has achieved Level 7 conformance (Full Conformance) and <u>all</u> attributes of the ABE's core & dependent entities are defined in the model.
* For each level, according to what is required, a value is calculated based on the percentage of entities/attributes supported - as appropriate. This will result in a decimal figure (rounded to one decimal place).	

Figure 6.4 - TM Forum Information Framework: Conformance Scoring Rules

Notes:

A **core business entity** is an entity upon which other entities within the ABE are dependent. For example, Service in the Service ABE. A model should strive to attain as high a level of Information Framework (SID) conformance as possible. A core entity is also an entity whose absence in the ABE would make the ABE incomplete.



A **dependent entity** is one whose instances are dependent on an instance of a core entity. For example, a ServiceCharacteristic instance within the Service ABE is dependent upon an instance of the Service entity.



6.5 Information Framework – Conformance Result Summary

The following graphs provide an overview of the conformance levels granted to the ABEs presented in scope for Infonova's R6 Concept-to-Cash Platform Information Framework Assessment. Each ABE was measured using an Information Framework (SID) conformance scale of 1–7 as described in section 0.

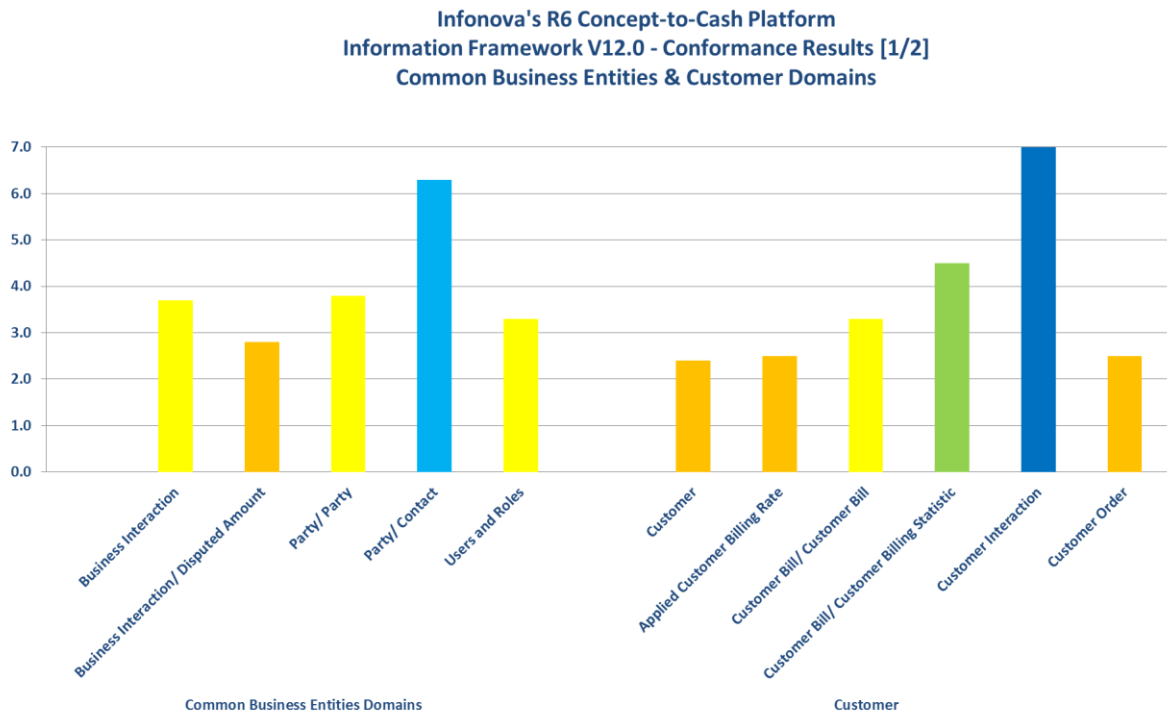


Figure 6.5 - Information Framework: Conformance Result Summary CBE & Customer Domains



**Infonova R6 Concept-to-Cash Platform
Information Framework V12.0 - Conformance Results
Product, Service & Supplier/Partner Domains**

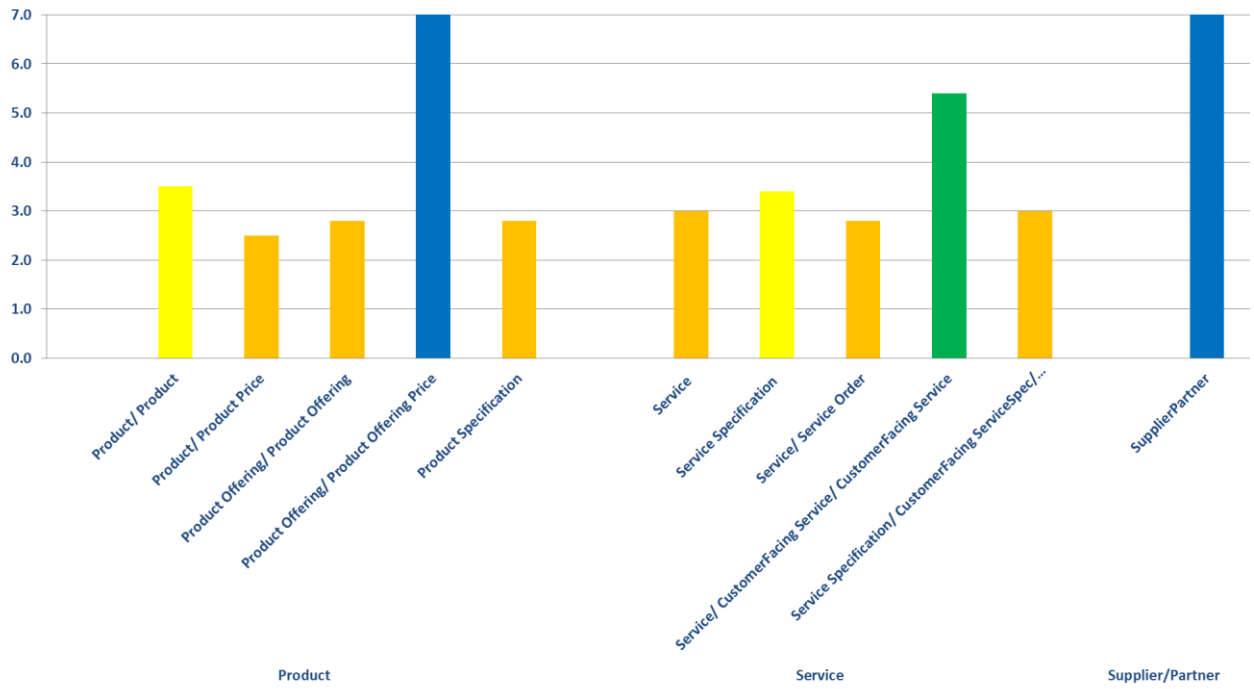


Figure 6.6 - Information Framework: Conformance Result Summary Product, Service & Supplier/Partner Domains



6.6 Information Framework – Detailed Conformance Result

The following table provides a more detailed breakdown of the scores awarded with some additional commentary.

Table 6.2 - Information Framework: Detailed Conformance Result

Infonova's R6 Concept-to-Cash Platform Information Framework (SID) Release 12.0 Conformance		
ABE	Conformance Score	Comment
Common Business Entities Domain		
Business Interaction	3.7	Core entity, required attributes, 70% of dependent entities supported.
Business Interaction/ Disputed Amount	2.8	Core entity, 80% of Core Entities required attributes.
Party/ Party	3.8	Core entity, required attributes, 80% of dependent entities supported.
Party/ Contact	6.3	Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, 30% of optional attributes of dependent entities supported.
Users and Roles	3.3	Core entity, required attributes, 30% of dependent entities supported.
Customer Domain		
Customer	2.4	Core entity, required attributes, 40% of dependent entities supported.
Applied Customer Billing Rate	2.5	Core entity, required attributes, 50% of dependent entities supported.
Customer Bill/ Customer Bill	3.3	Core entity, required attributes, 30% of dependent entities supported.
Customer Bill/ Customer Billing Statistic	4.5	Core entity, required attributes, dependent entities + 50% of required attributes supported.



Customer Interaction	7.0	Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Customer Order	2.5	Core entity, 50% of Core Entities required attributes.
Product Domain		
Product/ Product	3.5	Core entity, required attributes, 50% of dependent entities supported.
Product/ Product Price	2.5	Core entity + 50% required attributes supported.
Product Offering/ Product Offering	2.8	Core entity + 80% required attributes supported.
Product Offering/ Product Offering Price	7.0	Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Product Specification	2.8	Core entity + 80% required attributes supported.
Service Domain		
Service	3.0	Core entity + 100% required attributes supported. No dependent entities supported.
Service Specification	3.4	Core entity, required attributes, 40% of dependent entities supported.



Service/ Service Order	2.8	Core entity, 80% of Core Entities required attributes.
Service/ CustomerFacing Service/ CustomerFacing Service	5.4	Core entity & required attributes, all dependent entities, 40% or core entity optional attributes supported.
Service Specification/ CustomerFacing ServiceSpec/ CustomerFacing ServiceSpec	3.0	Core entity + 100% required attributes supported. No dependent entities supported.
Supplier/Partner Domain		
SupplierPartner	7.0	Core entity, 80% of Core Entities required attributes.