# TM Forum Frameworx 14.0 Certification L2 Processes 1.1.1.5

## Comverse ONE 3.7.7

### Self-Assessment Process Mapping Report

## Version 2 Review 0

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## About Comverse

Comverse is the world's leading provider of software and systems enabling value-added services for voice, messaging, mobile Internet and mobile advertising; converged billing and active customer management; and IP communications. Comverse's extensive customer base spans more than 125 countries and covers over 450 communication service providers serving more than two billion subscribers. The company's innovative product portfolio enables communication service providers to unleash the value of the network for their customers by making their networks smarter.

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# 1 eTOM Level 3/4 Mapping

## 1.1 L3: 1.1.1.5.1 Determine Customer Order Feasibility – Mapping Details

Note: although the L4 Process 1.1.1.5.1.1 exists (and is mapped below), we have included an L3 mapping as well to capture some aspects of customer feasibility evaluation, specifically around serviceability and service eligibility, that are not captured at the L4 level.

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**eTOM Level 3 Description**

**Brief description**

Check the availability and/or the feasibility of providing and supporting standard and customized product offerings where specified to a customer.*[AM]*

*Comverse ONE evaluates a variety of configurable rules (Eligibility, Prerequisite, Exclusion, Transition, Serviceability, Compatibility) in the customer context to determine the availability and feasibility of offerings to that customer. These rules are configured manually and executed automatically.*

**Extended description**

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]*

These processes invoke requests to SM&O provisioning processes to determine the availability and supportability of product offerings to a customer. *[AM]*

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

*Comverse ONE implements the above as shown in the following detailed process flows :*

*2.1.1.5.1.1.CMV Evaluate eligibility /Pre-requisite/Exclusion/Transition rules against subscriber/account*[A]

*2.1.1.5.1.2.CMV - Evaluate Compatibility templates against existing offering*[A]

*2.1.1.5.1.3.CMV  Evaluate Serviceability Rules*[A]

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### 1.1.1.1.1  L4: 1.1.1.5.1.1 Perform Impact Analysis

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**eTOM Level 4 Description**

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### Brief Description

Analyses the customer order for further impact particularly deals with RFCs (request for change) [M]

### Explanatory

This process is used to determine the impact on feasibility of customer orders. After determination on feasibility of customer orders, impact analysis will detect the need of change. It determine the impact on customer solution service components. [M]

*The typical customer order is evaluated by Comverse ONE as described for 1.1.1.5.1: having been entered either by a customer or a CSR, the order is automatically evaluated by the Order Handling subsystem to determine eligibility, feasibility, compatibility, etc. If the order is accepted, it is automatically executed and no further system changes are needed.*

*Most often, orders rejected by such evaluation (or more generally found to be unfeasible during automated order expansion) simply reflect errors in order entry, and are corrected immediately and the order resubmitted (cf 2.1.1.5.4.1.4.CMV Modify Order [AM]*

*and 2.1.1.5.4.1.5.CMV Modify Service Order [AM]).*

*No further system changes are needed in this case either. (In some cases, the order may be uncorrectable because the desired order is not supported in the first place, for which case see 1.4.1.1.1L4: 1.1.1.5.6.1 Assess Customer Order – Mapping Details  below.)*

*Another common source of rejections is constraints stemming from jurisdictional or infrastructure constraints. For example, a specific Offer may not be available in certain neighborhoods because the physical network on which it depends has not been deployed into that neighborhood. Comverse ONE provides no significant support for subsequent impact analysis in such cases, which often involve residential zoning restrictions and other legal constraints which are outside the tool's scope.*

*In some cases, such rejections may reflect incorrectly or incompletely configured order handling rules. For example, a subscriber may be rejected for a particular Offer or Bundle for which they* ought *to have been eligible, because an exclusion rule was improperly configured with too broad an application range. (This sort of rejection is generally captured during configuration acceptance testing; it is rare in production.) When it occurs, the tester typically logs a configuration defect or the subscriber logs a complaint (see* **Error! Reference source not found.***)*

*and the CSR evaluating that complaint determines that the configuration is at fault and logs a configuration defect; this is a manual operation which occurs outside of Comverse ONE itself and the specific procedures involved vary depending on the client organization executing the process and the tools on which they rely. Ultimately this results in a reconfiguration of the service (cf* **Error! Reference source not found.** **[AM]***).*

*In some cases, such rejections may reflect incorrectly entered account or subscriber information. For example, a subscriber may be rejected for a particular Offer or Bundle for which they* ought *to have been eligible because their address was entered incorrectly and an exclusion rule applies to the incorrect address. When this occurs, the CSR evaluating a subscriber complaint (as above) determines that the subscriber data is at fault and makes the appropriate corrections in the Customer Inventory (cf previously submitted 1.1.1.1.10 processes).*

*For the above cases, Comverse ONE additionally provides an Order Investigation Unit which supports the review, classification, and analysis of failed Order requests. Users of OIU (cf* **Error! Reference source not found.** **[AM]***)*

*can consequently initiate the corrections described above even in the absence of subscriber-initiated complaints.*

## 1.2 L3: 1.1.1.5.4 Track & Manage Customer Order Handling

### eTOM Level 3 Description

The objective of the Track & Manage Customer Order Handling processes is to ensure customer provisioning activities are assigned, managed and tracked efficiently to meet the agreed committed availability date.

Responsibilities of these processes include, but are not limited to:

· Scheduling, assigning and coordinating customer provisioning related activities;

· Generating the respective service order creation request(s) to Issue Service Orders based on specific customer orders;

· Escalating status of customer orders in accordance with local policy;

· Undertaking necessary tracking of the execution process;

· Adding additional information to an existing customer order;

· Modifying information in an existing customer order;

· Modifying the customer order status;

· Canceling a customer order when the initiating sales request is cancelled;

· Monitoring the jeopardy status of customer orders, and escalating customer orders as necessary; and

· Indicating completion of a customer order by modifying the customer order status.

Note that some specific product components may be delivered directly by suppliers/partners.  In these cases the Track & Manage Customer Order Handling process is responsible for initiating requests, through S/P Requisition Management for the delivery by the supplier/partner of the specific product components.

#### 1.2.1.1.1  L4: 1.1.1.5.4.1 Manage Customer Order – Mapping Details

| eTOM Level 4 Description |
| --- |

*Brief Description*

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.[AM]

*Comverse ONE implements the above as shown in the following detailed process flows :*

- *2.1.1.5.4.1.1.CMV Order Fulfillment* *[AM]*
- **Error! Reference source not found.** *[A]*

Escalate status of customer orders in accordance with local policy.*[AM]*

*Comverse ONE implements the above as shown in the following detailed process flows :*

- **Error! Reference source not found.** *[AM]*
- *2.1.1.5.4.1.2.CMV Cancel Order[AM]*
- *2.1.1.5.4.1.3.CMV Cancel Service Order or Order Item* *[AM]*
- *2.1.1.5.4.1.4.CMV Modify Order* *[AM]*
- *2.1.1.5.4.1.5.CMV Modify Service Order[AM]*

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.*[AM]*

*Comverse ONE implements the above as shown in the following detailed process flows :*

- *2.1.1.5.4.1.2.CMV Cancel Order* *[AM]*
- *2.1.1.5.4.1.3.CMV Cancel Service Order or Order Item* *[AM]*
- *2.1.1.5.4.1.4.CMV Modify Order* *[AM]*
- *2.1.1.5.4.1.5.CMV Modify Service Order[AM]*

If some specific product components are delivered directly by suppliers/partners, initiate requests, through S/P Requisition Management, for the delivery by the supplier/partner of the specific product components.*[AM]*

*The Comverse ONE Order Management domain, as diagrammed and described for 2.1.1.5.4.1.1.CMV Order Fulfillment[AM],*

*is responsible for initiating requests for the delivery of the specific product components, either through network provisioning or through physical service delivery.*

### 1.2.1.1.2  L4: 1.1.1.5.4.2 Track Customer Order – Mapping Details

| eTOM Level 4 Description |
|---|

**Brief Description**

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]*

*Comverse ONE implements the above as shown in the following detailed process flows :*

- *2.1.1.5.4.2.1.CMV Track order status through OIU [AM]*

- *2.1.1.5.4.2.2.CMV Track order status through CSS [AM]*

- *2.1.1.5.4.2.3.CMV Track order status through  Customer Center [AM]*

- *2.1.1.5.4.2.4.CMV Track order status through Worklist Handler [AM]*

- *2.1.1.5.5.2.2.CMV Perform Workflow (Example Workflow Template ) for Account Level Service Order [AM]*

- *2.1.1.5.4.1.4.CMV Modify Order [AM]*

- *2.1.1.5.4.1.5.CMV Modify Service Order [AM]*

### 1.2.1.1.3  L4: 1.1.1.5.4.3 Update Order Repository – Mapping Details

| eTOM Level 4 Description |
|---|

**Extended Description**

Not used for this process element

**Explanatory**

Update repository at each level in order handling. The state of order will be changed at each level according to work flow:
- All those issued customer order which are not preauthorized are set in 'pending' state
- Validate order will passed to 'acknowledged' state (if invalid, order gets 'rejected')
- Feasible order (completing the impact analysis) will be 'committed' in case order is not 'cancelled' (leads to cancelled state) (if infeasible , order gets 'rejected')
- As the order progress for completion will set to 'completed' (in case not cancelled)
- The 3 terminal states: completed, cancelled and rejected will finally leads to 'closed customer order' *[AM]*.

**Mandatory**

Create, update and delete order information and update order state into order inventory/ repository*[AM]*.

**Interactions**

This process will directly interact with the repository, in order to update the order state/status information. *[AM]*.

*The order tracking flows referenced in the 1.1.1.5.4.2 mapping above are implemented using the Workpoint Engine and the Comverse ONE S-API, as illustrated in 2.1.1.5.5.2.2.CMV Perform Workflow (Example Workflow Template ) for Account Level Service Order [AM].*

*S-API in turn exposes the underlying Order repository which is maintained in an underlying Oracle database (this is not included in the flow diagram).*

*Each step in the workflow defined for an Order can, depending on workflow configuration, include a status update for that Order. The valid statuses are also defined via configuration, through the ORD_ORDER_STATUS_REF table (see attached ORD_ORDER_STATUS PDF file). Values such as "pending," "acknowledged", "committed", "cancelled," "completed", "closed", are defined as rows in ORD_ORDER_STATUS_REF, and their natural-language descriptions are defined in ORD_ORDER_STATUS_VALUES, and the status attribute for each Order is set by the workflow engine to a valid order status value that reflects the actual status of the Order.*

*The entire history of the Order, including (though not limited to) the status history, is also maintained in the repository. Outdated order information is **not** deleted as part of the Order Handling process itself, nor in our opinion is it desirable for it to be, as it is potentially needed for audit purposes. By default only the current order attributes are displayed via the Order interface, however. Comverse ONE additionally supports an Archiving business process which automatically archives (or purges, if desired) stored data that meets aging thresholds.*

*Incidentally, there is nothing special about the six status values in the 1.1.1.5.4.3 description; additional values (for example, "awaiting supervisor approval," "pending fraud review," "reopened," "overdue," etc. etc. etc. etc.) can also be configured, depending on the desired client workflow. Similarly, there is nothing special about the Order workflow steps included in the 1.1.1.5.4.3 description, nor the mappings of status values to those steps; any workflow can be defined and any status value can be mapped to any workflow step to reflect the client's desired flow and flow tracking. Similarly, any desired text description can be provided for the statuses and multiple descriptions in multiple languages can be defined for a single status.*

## 1.3   L3: 1.1.1.5.5 Complete Customer Order

### eTOM Level 3 Description

. *Extended Description*

The purpose of the Complete Customer Order processes is to manage customer information and interactions after customer contracts or associated service orders have been finalized and during the order completion phase. The customer may participate in commissioning or end-to-end testing and then satisfactory delivery. The customer is trained in the functionality and benefits of the solution. These processes are responsible for ensuring that any customer information required by other CRM processes is updated as part of the customer order completion. *[AM]*.

*In Comverse ONE this process is equivalent to the order tracking procedures described for 1.1.1.5.4 (in particular,* **Error! Reference source not found.[AM]***);*

*the customer orders and service orders created through the workflow engine are automatically carried through fulfillment and provisioning into the network and billing system as part of order handling.*

*If externally managed steps such as commissioning, testing, physical delivery, training, etc. are required these are simply configured as additional workflow steps and managed through the same tracking process… they are just more steps in the order-handling workflow, albeit externally implemented ones. As described for the 1.1.1.5.4.3 mapping above, the status values and their association with workflow steps are entirely configurable, so statuses such as "customer trained," "end-to-end-testing completed," and so forth can be created and associated with workflow as needed.*

*See 2.1.1.5.5.2.2.CMV Perform Workflow (Example Workflow Template ) for Account Level Service Order [AM] for an illustration of how workflow steps are executed.*

*The order repository is integrated with the customer inventory, so there is no need for a separate process updating the customer information based on the order – the customer inventory is updated with that data seamlessly with the order itself when the order is fulfilled, as part of the same transaction.*

*Similarly, every step in the handling of an order is preserved in the order history and available for review, so there is no need for an explicit persisting of history information for audit processes; that persistance is intrinsic to the order handling itself.*

## 1.4   L3: 1.1.1.5.6 Issue Customer Orders

| eTOM Level 3 Description |
| --- |
| The purpose of the Issue Customer Orders processes is to issue correct and complete customer orders. These processes ensure that all necessary information about the Customer Order (for example, type of product, install address, special requirements, etc.) is available. The customer orders may be required to satisfy pertinent customer requests from the Selling processes (in particular taking into account the purchase order from Negotiate Sales), may arise as a result of requests for customer provisioning activity to satisfy customer problem restoration activities, may arise to alleviate customer performance issues. These processes 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. Where, the initiating request for a purchased product offering has a standard customer order this process is responsible for issuing the customer order, and for 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, and a specific feasibility assessment has been previously undertaken, this process is responsible for issuing the customer order, and for creating a record of the relevant initiating request information and the associated customer order. Where the initiating request for a purchased product offering has special or unusual requirements, and a specific feasibility assessment has not been previously undertaken, this process marks the issued customer order as requiring special handling, and passes management for further processing to the Track & Manage Customer Order Handling process. The orchestration, if required, and tracking of the customer order progress is the responsibility of the Track & Manage Customer Order Handling processes. |

### 1.4.1.1.1   L4: 1.1.1.5.6.1 Assess Customer Order – Mapping Details

| eTOM Level 4 Description |
| --- |
| *Brief Description* |
| 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]*. |
| *For typical cases, this is an automated process within Comverse ONE: the customer order is entered through an order entry GUI or through SAPI and tracked and managed as described for 1.1.1.5.4 above, and the only assessment required in these cases is ensuring that the order complies with configured rules for order validity as described for 1.1.1.5.1 above.* |
| *That said, it is possible for customers to have orders which for some reason cannot be entered through the order entry interfaces or cannot be fully handled automatically.* |
| *For example, it may be that the service the customer wishes to order is not supported by the service provider in the first place. This case is not handled by Comverse ONE and is outside* |

*the scope of the tool; service providers use their own internal processes to determine what orderable services they wish to support and expose.*

*More centrally, it may be that the service is supported by the provider, but has not been configured within Comverse ONE as an orderable Offer. In this case either the CSR or the subscriber logs a complaint or requests a feature (see* **Error! Reference source not found.***)*

*and the CSR evaluating that complaint determines that the configuration is at fault and logs a configuration defect; this is a manual operation which occurs outside of Comverse ONE itself and the specific procedures involved vary depending on the organization executing the process and the tools on which they rely. The request is then evaluated by the service provider's management (again, an internal provider-specific process) to determine whether to act on it or not. If they decide to act on it the new offering is configured within Comverse ONE as shown in* **Error! Reference source not found. [AM]***.*

*In some cases the service is available and configured, but is incompatible with other services already provisioned to the customer or otherwise incompatible with attributes of the customer account, preventing order entry. Usually this is addressed by replacing the problematic service with a corresponding compatible service, assuming one has been defined. However, depending on the customer's preference in some cases it may be addressed by making other changes to the account, which can either be made immediately by the CSR handling the order or (e.g. if that would take too long) queued as a Case event (cf 2.1.1.2.1.2.10.CMV Generate Case Event) and handled asynchronously. Although the Case is automatically tracked, completing it satisfactorily is a manual operation.*

*A similar case is one where the desired service depends on some other service already being provisioned to the subscriber, but the prerequisite service is not present. This is handled similarly, with the necessary account changes being made either immediately by the CSR or asynchronously via a Case event.*

*In some cases, Comverse ONE may be unable to support the desired offering due to gaps in the tool's capabilities. If this gap is identified during the initial client gap analysis, it is addressed as follows:*

- *Comverse performs an IPA (Integration Points Analysis) for the client that identifies all of the points of integration between Comverse ONE and the client's overall solution. An IPA document is produced that captures these integration points.*

- *Along with the IPA, a Solution Description Document may be produced that describes the overall solution into which Comverse ONE fits. (This is typically produced when Comverse is responsible for the overall solution, but may not be if other organizations are responsible for it.)*

- *Where gaps in the desired integration exist – such as, for example, a type of order can be requested by a customer that cannot be handled by Comverse ONE – the required buildout is captured as a Project Work Request (PWR) within Comverse and goes through Requirements Analysis, Estimation, Design, Development and Test before being delivered to the customer.*

*If the gap is identified after Comverse ONE is already in production (for example, due to the provider taking on new customers with new expectations, or integrating with new external systems), the first two steps are typically skipped. A Statement of Work is negotiated with the provider for the feature addition and a PWR is created and processed as above.*

> *Once the feature is delivered, Comverse ONE is configured to make use of it as described above.*

### 1.4.1.1.2  L4: 1.1.1.5.6.2 Issue Customer Order – Mapping Details

## eTOM Level 4 Description

### *Brief Description*

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].*

*In most cases, this is equivalent to the order tracking procedures described for 1.1.1.5.4; the initiating request is captured through the order entry interfaces, and all associated information is stored, and the workflow engine triggers the appropriate request handling and tracking behavior, which in turn creates associated customer orders and service orders through S-API.There is no special handling required.*

*In cases where special handling is required beyond what can be performed by the Comverse ONE tool (or which for whatever reason the service provider has implemented outside the Comverse ONE tool) the workflow engine can initiate events against whatever third-party tools or agents are responsible for those steps. These events are configured normally and may require manual intervention to complete.*

*In cases where an external document such as a sales contract, quote, etc. is associated with the initiating request, PDF/scanned versions of those document can be linked to the Order..Additionally a Case can be opened for the transaction (cf 2.1.1.2.1.2.10.CMV Generate Case Event) and when Orders are generated based on that Case, the Case ID is automatically associated with the Order.*

*The case where no feasibility assessment has been undertaken in the first place is rare, but allows for the possibility that the required Order Types and associated rules and components have not yet been configured within Comverse ONE; the special handling required is described for 1.1.1.5.6.1. Such orders are typically handled outside of Comverse ONE altogether until the feasibility assessment has completed, although a Case can be opened to track that order if desired, and manually updated to reflect its progress, allowing even such out-of-scope orders to be tracked and included in reporting and auditing.*