tmforum

<u>Product Conformance Certification Report</u>

Business Process Framework (eTOM) v22.5

<u>VANRISE</u>

V-BOSS v1.4

October 2023

Table of Contents

List of Figures

1 Introduction

1.1 Executive Summary

This document provides details of **Vanrise Solutions** self-assessment and TM Forum's Product Conformance Assessment for the **V-BOSS Suite v1.4**
The assessment included a review of the methodology approach to process modeling and data modelling against the following TM Forum frameworks:

- Business Process Framework (eTOM) version 22.5

For more information on **Vanrise Solutions – V-BOSS Suite** please contact:

Wiaam Kassab
wkassab@vanrise.com

Sari Mansour
smansour@vanrise.com

For any additional information on this Conformance Certification Report, please contact TM Forum at: conformance@tmforum.org.

2 Product Functionality/Capability Overview

2.1 V-BOSS - Overview

V-BOSS is a full-fledge digital enablement suite that covers all aspects of the OSS/BSS realm, comprised of CRM, Billing, OCS, Provisioning, Mediation, Voucher Management, and Network Inventory Management. The flexibility and the modular architecture of the solution design, ensures seamless integration among the different components and enables full automation of the business processes with minimal intervention and high data integrity and accuracy levels.

The system provides a service-oriented approach for rationalizing operational IT, processes and systems, significantly reducing operational costs and improving business agility. The product management, data model, and rating engine, support full convergence of products and packages, and its SOA architecture, facilitates the overall solution's openness, business flow orchestrations and ease of integration, both internally and with external 3rd party systems.

The solution is rich with its out-of-the-box and DIY functionalities and configuration capabilities, which help avoid huge customizations, enable agility, reduce Opex and Time to Market (TTM) and raise operators' competitive edge. This is achieved through streamlined end-2-end business processes' automation, mainly customer creation, order capturing and feasibility check, up till the last mile of fulfillment, through service provisioning and activation.

This, all, is accompanied with an advanced customer information & interaction manager (offering a 360-degree view of the customer), customer omni-channel experience, online charging capabilities, strong events' mediation, precise billing & invoicing, and service provisioning fulfillment and assurance.

2.2   Vanrise V-BOSS v1.4 - Benefits

V-BOSS embraces the following features & benefits:

- **Digital Services Agnostic**, enabling digital verticals and services, as well as multiple business models' support, like B2C, B2B & B2B2X.

- **E2E Automation of Service Order Capturing and Fulfillment**, minimizing human intervention and service fulfillment interruptions.

- **Fast TTM Supporter**, allowing quick rollouts of new/upgraded services, and reducing configuration/customization costs & time to market.

- **Service Monetization Enabler**, paving the way towards utilizing CSPs' customer base and digital services to increase revenue and monetization.

- **Opex-efficient,** with no-code/low-code dynamicity, reducing costly & long change requests, TCO and operational adaptability.

- **Real-time 360-degree View,** providing full visibility on customer information & behavior, to enable cross/up selling, and reduce customers' time to serve.

- **Advanced Business Process Management**, allowing easy/close monitoring of activities and enabling authorized users to track cases in a predefined work cycle.

- **Open Architecture**, leveraging rich OOTB integration capabilities to speed up integrations and transformations as well as reduce cost.

- **Dynamic Reports & Analytics**, supporting the right business decision-making process, with access to performance metrics, customer behavior trends, revenue analysis, as well as other critical data.

- **Unified Product Catalog Management**, dropping the hassle of managing & maintaining multiple product catalogues, while enabling commercial teams to manage their offerings, through a centralized user-friendly interface.

2.3 Vanrise V-BOSS v1.4 - Modules

V-BOSS Solution includes the following modules, which can be deployed in a stand-alone or as part of the full suite:

Module	Functions
V-CRM Customer Relationship Management	- Customer mgt., Campaign mgt., Case mgt., Business process mgt. and Document mgt. - Order mgt., Integrated retail inventory, Workforce mgt., Commercial catalog, Order care and SLA mgt. - Web Customer Service, Knowledge Management and Ticketing - Campaign Management, Lead Management, Data Management, Marketing Measurement, Sales and Marketing Alignment
V-Billing Convergent Billing	- Billing & Rating - Billing Product Catalogue - Bill Invoicing & Distribution Mgt. - Dispute Handling - Bill Payments & AR Mgt. - Pricing, Discounting & Taxation Mgt. - One time Charging, Recurring Charging and Aggregation Mgt.
V-Mediator Mediation System	- CDRs/EDRS pulling, Validation, Normalization, Conversion, Correlation & Dispatching - Duplicate Capturing
V-NIM Network Inventory Management	- Define and manage network inventory - Define sites and assets - Plan and maintain network inventory resources - Manage facilities and customer circuits - Manage physical and logical inventory - Design and plan network, and work with topology and templates - Manage Numbers - Manage IPs
V-Activator	- Smooth and successful e2e provisioning of customers' services whether online (on-

Provisioning System	demand or scheduled), or offline (through batch files executed on the NEs), for both mobile & fixed NEs - Advanced provisioning operational reports and analytics, with no-code customization capabilities, to enable CSPs have an eagle view of all provisioning aspects
V-VoMS Voucher Management	- Full lifecycle management of various vouchers' portfolios with different specifications, like Prepaid calling vouchers, Internet Top-up, International Top-up, GSM Top-up, Public WiFi, and Money Vouchers - Close monitoring/tracking and updated voucher status, from file generation, to dealer distribution, archiving, and after-sales management - Quick, open, and secure integrations with other systems, using its OOTB APIs and encrypted vouchers' information
V-SOM Service Orchestration Manager	- Enabled with a visual designer and configuration/customization GUI - Advanced workflow execution capabilities, supporting business rules & rollback actions - Ability to handle huge number of instances and nodes, in sequence or in parallel, one-by-one or in bulk, through flexible scalability

2.4 Vanrise V-BOSS v1.4 - Supported Installation Models

V-BOSS is a client-server application that supports both on-premise and on-cloud installations, on physical or virtual servers.
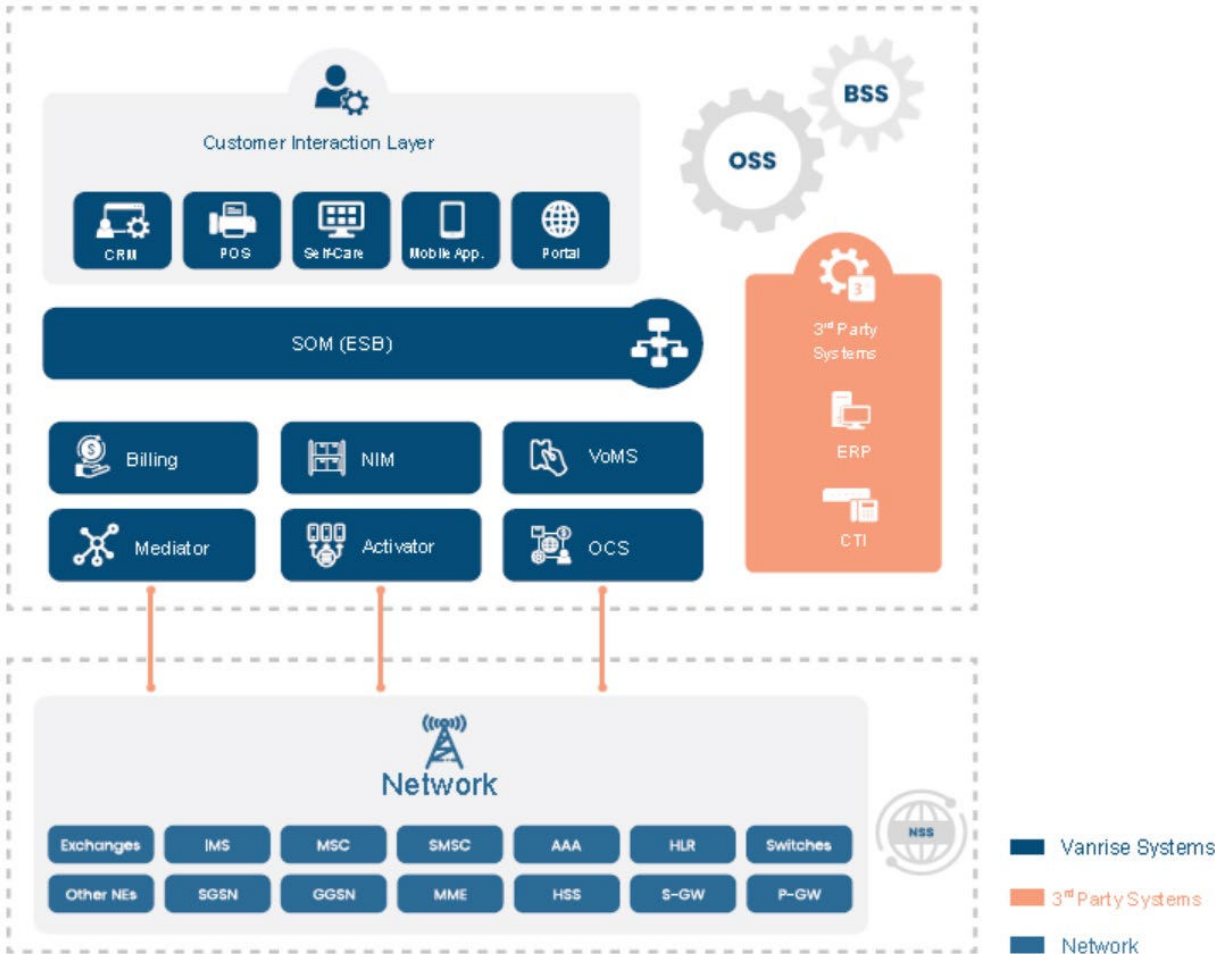

Figure 1- V-BOSS Architecture

2.5   Vanrise V-BOSS v1.4 - Product Scope

V-BOSS is innovatively designed to revolutionize telecom business management where it is meticulously crafted to simplify and streamline CSPs' operations, to become very efficient and user-friendly.

It is a full-fledge digital enablement suite that covers all aspects of the OSS/BSS realm, comprised of CRM, Billing, OCS, Provisioning, Mediation, Voucher Management, and Network Inventory Management.

The flexibility and the modular architecture of the solution design, ensures a standalone independency, merged with seamless integration among the different solution components, enabling full automation of the business processes, with minimal intervention and high data integrity and accuracy levels.

One of the standout features of V-BOSS, is its ability to effortlessly handle individual and organization profiles, where users can easily manage contact details, billing information, and other essential data, through the 360-degree visibility of up-to-date customer information. Furthermore, the system empowers users to create highly personalized telecom and digital subscriptions, tailoring services to meet the unique demand of each customer.

Regarding Billing, Billing is a breeze with V-BOSS Billing Module which handles invoicing with precision, by automatically calculating charges, applying discounts, and adding relevant taxes to generate detailed invoices. The system's customizable billing cycles, offer flexibility, allowing to cater to various payment preferences of customers. Additionally, the automated billing functionality, simplifies the invoicing process, guaranteeing the generation of accurate invoices for every individual and organization, while availing all AR transactions for payment channels.

Landline operators highly care for workforce Management, which is another gem in our solution's arsenal, enabling real-time tracking of work orders, by ensuring that tasks are completed promptly, and service delivery delays are reduced. This module allows networking teams to easily update the status of each work order, to provide supervisors and administrators, with valuable visibility onto ongoing tasks, and have seamless communication, without any need for manual coordination and collaboration.

The system also employs intelligent rules for work order assignments. These rules consider factors such as, the customer's geographical location, task complexity, and team expertise. As a result, work orders are automatically assigned to the most suitable team members, reducing response times and elevating service efficiency.

To further enhance operational efficiency, V-BOSS offers comprehensive stock and warehouse management capabilities, to ensure steady supply and distribution of products and equipment, and minimize the risk of service interruptions usually caused by inventory shortages.

In the era of data-driven decision-making, the Reports and Dashboards capabilities are a treasure trove of insights within V-BOSS. It provides insightful reports and analytics, allowing businesses to leverage data to drive growth and decision making.

- The Warehouses Summary ensures efficient inventory management across multiple locations, guaranteeing a smooth stock replenishment process.
- The Tickets Summary allows for the tracking of customer support activities, ensuring timely issue resolution and enhanced service efficiency.
- With Report Generation, detailed billing, subscription, and customer analytics reports become readily accessible, supporting data-driven decision-making.
- Furthermore, the Data/Voice Records feature provides valuable usage data, facilitating the customization of subscription plans based on individual and organizational preferences.

When it comes to security, upon logging in, users are granted secure access to an array of robust features and functionalities, which are managed and controlled through a set of predefined security measures/rules, related to the system and users' privileges and accessibility.

In a rapidly evolving telecom industry, V-BOSS stands as a digital enabler, helping businesses stay ahead of the curve, by efficiently managing services, resources, and customer relationships, as well as establish and maintain, different types of partnerships with digital verticals and partners/suppliers.

2.6 Business Process Framework Level 2 Process Scope

The following figure represents the Business Process Framework Level 2 processes that were presented in scope for conformance certification.

eTOM - v22.5 – Vanrise V-BOSS v1.4 - Conformance Footprint

Figure 2 - Level 2 process coverage for Vanrise v-BOSS v1.4 - Conformance Assessment
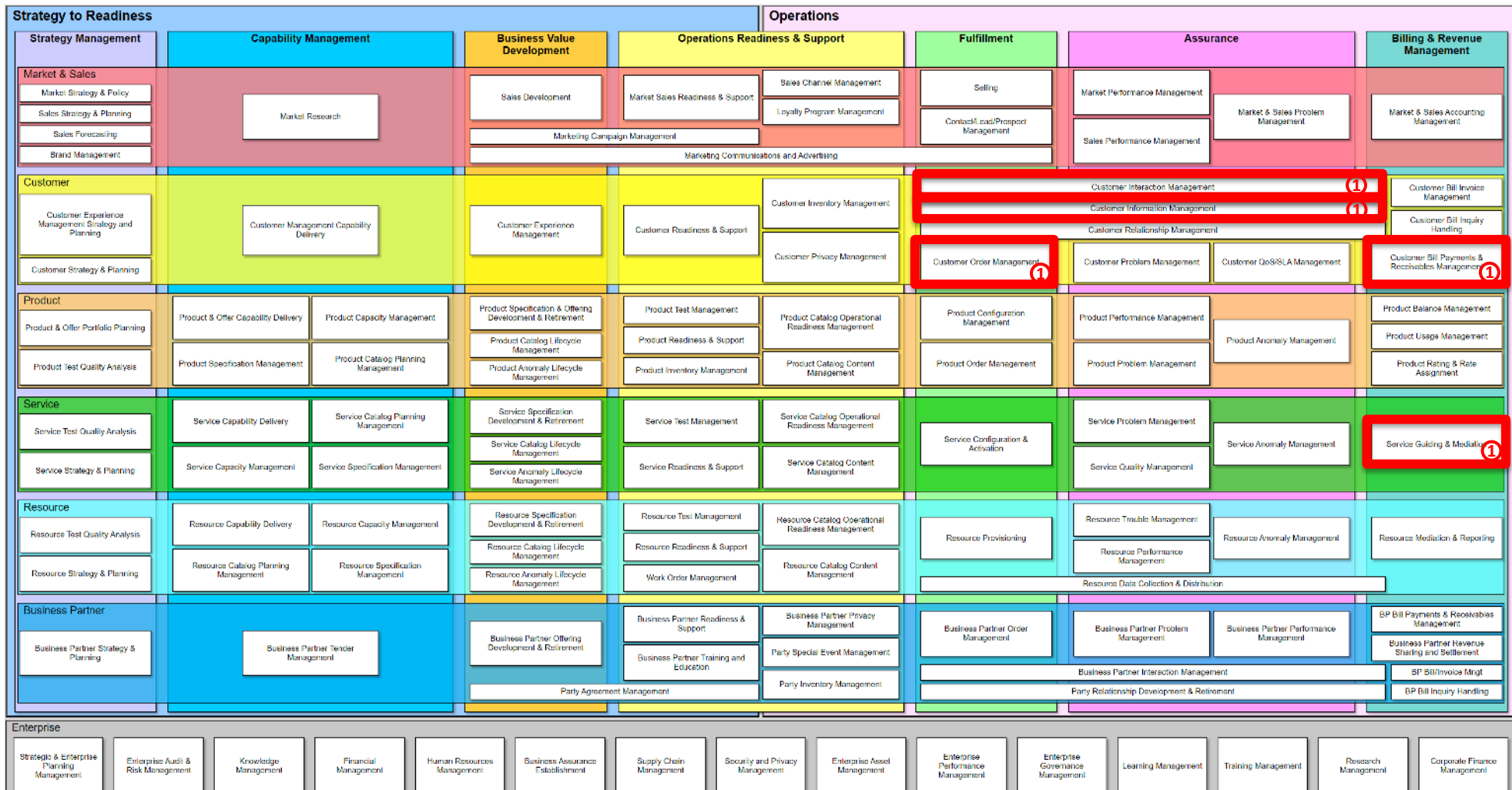
(#) **Number of L3 process elements in scope for certification**

3 Business Process Framework Assessment Overview

3.1 Mapping Technique Employed

Business Process Framework Level 3 descriptions are analyzed by focusing on implied tasks also referred to as implied functional requirements. (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.

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 4 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.

As of February 2018, TM Forum allows mappings to be provided against Level-3 process elements when:

- L3s have relevant, consistent full detailed descriptions reflecting all L4 process elements in their decomposition (usually implied tasks identified and separated by bullet points)
- No decomposition to Level 4 processes was available for a particular L3 process, but the Level-3 mappings fulfil the condition described above, therefore the score awarded hereafter is for the Level 3 process in its entirety.

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 most often provided against the text in the "Mandatory" field for the process. In the event of the Mandatory field not being defined in the eTOM specification, the process mappings are in that case provided

against the Level 4 Extended description. If an Extended description is not defined, then the mapping is provided against the Brief description.

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 3 process descriptions using the Mandatory/Extended/Brief description as per the guidelines explained for Level 4 based mappings in the previous note.

3.2 Scope of Conformance Certification (eTOM L3 Processes)

TM Forum Assessment Scoping Document - Business Process Framework (eTOM) v22.5		
Member:		*Vanrise*
Assessment Name:		*V-BOSS*
Assessment Type		*Product*
Number of L3 Processes in Scope:		5
Level 1	**Level 2**	**Level 3**
1.3 - Customer Domain		
	1.3.3 - Customer Order Management	
		1.3.3.1 - Determine Customer Order Feasibility
	1.3.5 - Customer Interaction Management	
		1.3.5.5 - Notify Customer
	1.3.6 - Customer Information Management	
		1.3.6.5 - Build a unified customer view
	1.3.10 - Customer Bill Payments & Receivables Management	
		1.3.10.1 - Manage Customer Billing Account
1.4 - Service Domain		
	1.4.8 - Service Guiding & Mediation	
		1.4.8.1 - Mediate Service Usage Records

Figure 3 - Business Process Frameworx (eTOM) Assessment Scope

3.3   Scope of Conformance Certification – Chart (eTOM)

The following figure provides a view of the scope of Level 3 processes that were selected in scope for conformance certification, compared to the total number of defined L3 processes in the Business Process Framework.

The bars in blue represent the total number of L3 processes defined in the Business Process Framework.

The bars in green represent the total number of L3 processes that were submitted for assessment by Vanrise for B-VOSS v.1.4.
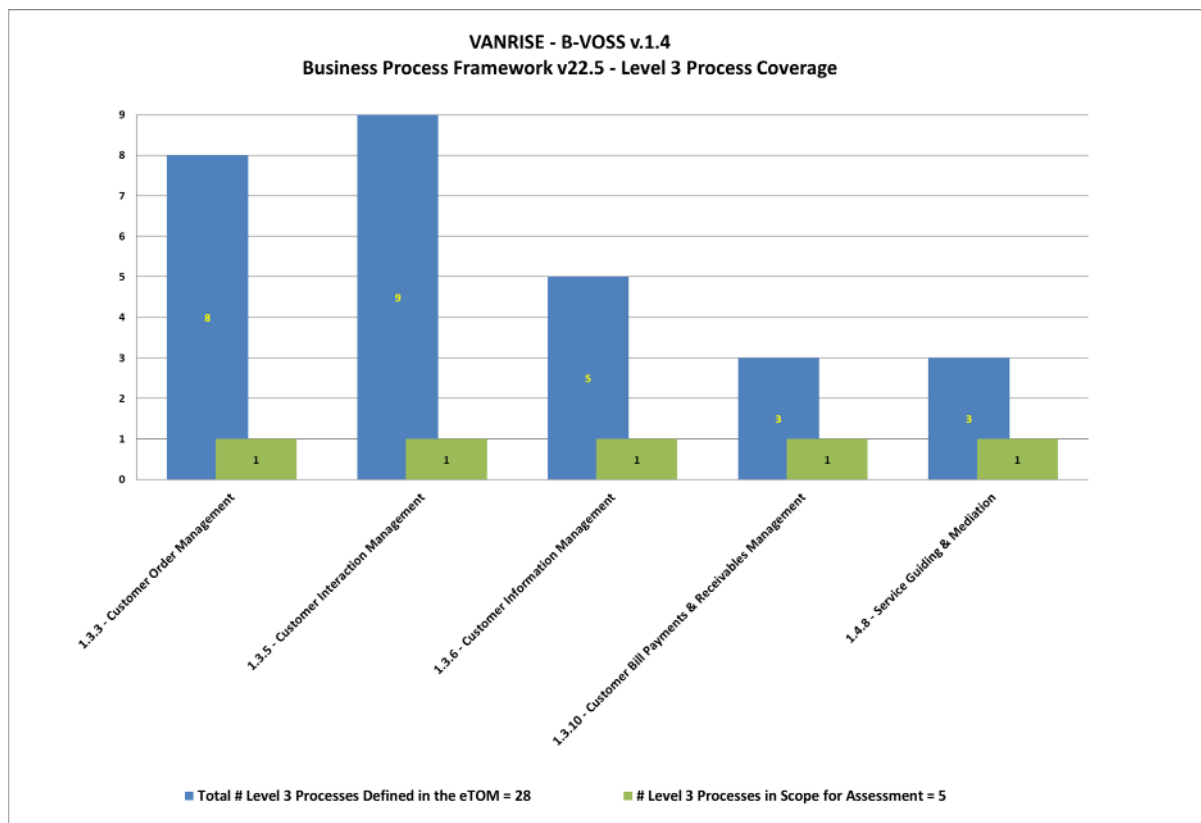

Figure 4- Level 3 processes submitted for certification vs. total number of L3s in eTOM.

3.4 Business Process Framework – Scoring Guidelines

This section provides the Process Mapping output from the self-assessment carried out by TM Forum Subject Matter Experts alongside supporting documentation made available for this purpose.

Business Process Framework - Conformance Certification Methodology		
Process Level	**Conformance Score**	**Qualifier**
Level 1 Process	*Not applicable*	Conformance Assessment shall not be carried out at this process level.
Level 2 Process	*Not applicable*	A conformance level is not awarded to Level 2 processes in Frameworx Certification. The Certification Report shall highlight the coverage within 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 in the Business Process Framework for the Level 2 process.
Level 3 Process	Conformance Score is awarded between 3.1 & 5.0	The Conformance Score is awarded for each Level 3 process 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. If a Level 3 process has not been decomposed to Level 4 processes, the Level score is awarded according to alignment to the Level 3 defined Implied Tasks.
Level 4 Process	*Level of conformance is calculated as input to parent Level 3 Process Score*	Levels of conformance are calculated for Level 4 processes according to alignment to the individual implied tasks. Level 4 scores are summed and averaged to given an overall score for the parent Level 3 process.
* In earlier Conformance Assessments, scores were awarded to Level 1 & Level 2 processes using values 1 through to 3. For this reason, the Level 3 scores start from > 3.		
Additional Notes		
Note 1 - Level 1 processes shall be presented to define the assessment scope only. i.e. they shall not be assessed as self-contained processes since the level of detail is not considered sufficient. A conformance level shall not be awarded for Level 1 processes.		
Note 2 - Level 2 processes shall be presented to define the assessment scope only. i.e. they shall not be assessed as self-contained processes since the level of detail is not considered sufficient. A conformance level shall not be awarded for Level 2 processes. However, the Certification Report shall provide good indication of the coverage of the Level 2 process in terms of number of contained Level 3 processes submitted in scope for the Assessment.		
Note 3 - The Conformance Assessment shall be carried out at process level 3 (if there are no level 4 process elements defined for a specific level 3 in scope) or at level 4 (if there are level 4 process elements defined for a specific level 3 in scope). For each Level 3 process (when there are no level 4 processes available), conformance shall be deduced according to the documented support for the process implied tasks. For each Level 4 process (when available), conformance shall be deduced according to the documented support for the process implied tasks, as decomposed and described in the Level 4 process descriptions. The score awarded for a Level 3 process, is deduced according to the support mapped to the Level 4 processes/Implied Tasks.		
Note 4 - In evaluating conformance to the standards, manual intervention shall not impact the conformance score granted. However, any level of manual support shall be noted in the Conformance Report and Detailed Results Report. This note specifically applies to Product & Solution Assessments.		
Note 5 - Processes that are supported via manual implementation only, are not considered in scope for the Assessment. This note specifically applies to Product & Solution Assessments.		

Figure 5- TM Forum Business Process Framework: Conformance Scoring Rules

3.5   Business Process Framework – Process Mapping Descriptions

This Section provides a summary of the solution mappings that were provided in the form of self-assessment.

The self-assessment was reviewed by TM Forum Subject Matter Experts alongside supporting documentation provided.

3.5.1.1   *Mapping Details & Supporting Evidence*

The documented mapping information for all Level 3 processes in scope are available from the following link:

https://www.tmforum.org/wp-content/uploads/2023/10/VANRISE-eTOM-Conformance-Mapping-V-BOSS-V2RF.pdf

3.6 Conformance Result

This Section details the Scores awarded to reflect Conformance to the Business Process Framework components of eTOM.

TM Forum Business Process Framework (eTOM) - Assessment Scope		
Member	VANRISE	
Product	V-BOSS 1.4	Conformance Scores Achieved
Assessment Type	Product	
Business Process Framework Version	22.5	
Number of L3 Processes in Scope:	5	
Level 2	**Level 3**	
1.3 - Customer Domain		
1.3.3 - Customer Order Management		
	1.3.3.1 - Determine Customer Order Feasibility	5
1.3.5 - Customer Interaction Management		
	1.3.5.5 - Notify Customer	5
1.3.6 - Customer Information Management		
	1.3.6.5 - Build a Unified Customer View	5
1.3.10 - Customer Bill Payments & Receivables Management		
	1.3.10.1 - Manage Customer Billing Account	5
1.4 - Service Domain		
1.4.8 - Service Guiding & Mediation		
	1.4.8.1 - Mediate Service Usage Records	5

Figure 6- - eTOM Conformance Scores Summary - Vanrise V-BOSS v1.4

tmforum

3.7 Business Process Framework – Conformance Result Summary

This Section provides a graphical view of the conformance levels granted to the Level 3 Processes presented in scope for Vanrise v-BOSS v1.4 conformance assessment. Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to the level of Conformance – Full Conformance (Score = 5) or Partial Conformance (Score below 5).

VANRISE - B-VOSS v.1.4
Business Process Framework v22.5 - Level 3 Process Conformance Scores

| | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |

Conformance Score

1.3.3.1 - DETERMINE CUSTOMER ORDER FEASIBILITY
1.3.5.5 - NOTIFY CUSTOMER
1.3.6.5 - BUILD A UNIFIED CUSTOMER VIEW
1.3.10.1 - MANAGE CUSTOMER BILLING ACCOUNT
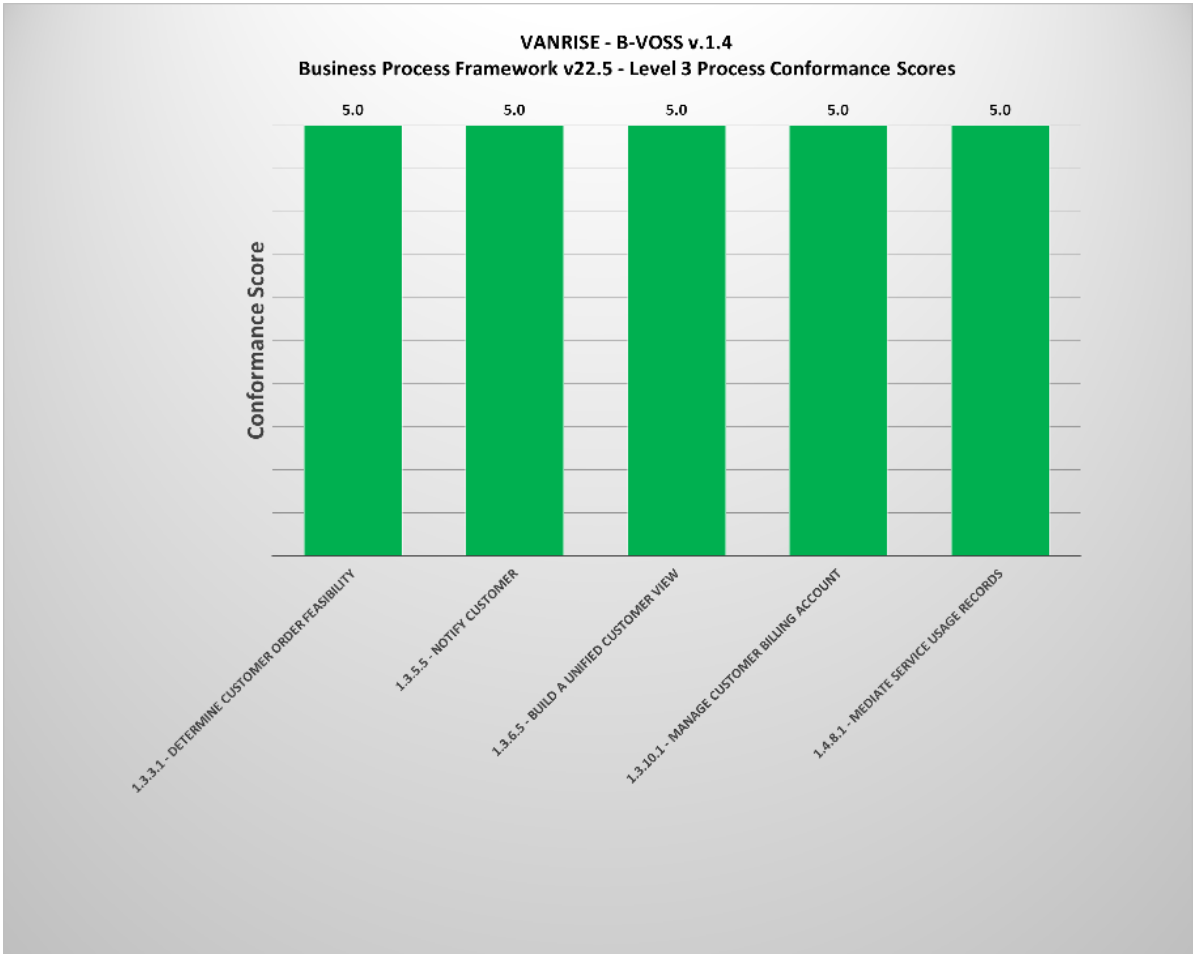1.4.8.1 - MEDIATE SERVICE USAGE RECORDS

Figure 7- eTOM Conformance Scores - Vanrise V-BOSS v1.4