

Solution Conformance Certification Report

Business Process Framework (eTOM) v23.0
&
Information Framework (SID) v23.5

For:

Jio Platforms Limited

**JIO B2C System - ODA-C-JAM-JCE
(JIO-AM Alarm Management
JIO-CE Correlation Engine)**

February 2025

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1 Introduction

1.1 Executive Summary

This document provides details of JIO B2C System for JIO-AM Alarm Management and JIO-CE Correlation Engine (JAM JCE), against the following ODA Core Frameworks:

- Business Process Framework (eTOM) version 23.0
- Information Framework (SID) version 23.5

The assessment included a review of the methodology approach to process and information modeling, respectively against the TM Forum's Business Process Framework (eTOM) and the Information Framework (SID) according to the specific processes and entities submitted in scope for the Assessment.

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2 Solution Overview

2.1 About JIO

Reliance Jio Infocomm Limited (Jio) is India's largest telecom operator with over 470 Mn subscribers. Jio's advanced 4G network is future ready and can be easily upgraded to support advanced technologies of 5G, 6G and beyond.

Jio has revolutionized the telecommunication sector by democratizing access to high-speed internet and digital services. This empowered millions of people across India and bridged the digital divide and fostered inclusive growth. Jio has brought transformational changes in the Indian digital services space to enable the vision of Digital India for 1.3 billion Indians and propel India into gloSEI leadership in the digital economy.

Jio has been focused on developing in-house applications spanning various technology domains to support all industry verticals from education to healthcare, are designed to streamline processes, enhance efficiency, and improve accessibility. These carefully crafted strategic plans to leverage digital transformation for the benefit of the Indian population at large have been, alongside company growth, proactively addressing societal needs.

Jio has created an eco-system comprising of network, devices, applications and content, service experience and affordable tariffs for everyone to live the Jio Digital Life. Since launch of its commercial operations in 2016, it has been redefining benchmarks, setting new milestones, inspiring unprecedented adoption, usage, and service metrics that are among the best in the industry.

For more information on our products and services, visit our website at: www.jio.com

2.2 Solution Functionality / Capability

The JIO JAM-JCE (Jio AM Alarm Management & Jio-CE Correlation Engine) is an umbrella fault management system that is capable of consuming alarms from various domain managers, enrich them with inventory attributes, correlate and present them to various NOC stakeholders.

2.2.1 Key Features:

Key Features of JIO JAM-JCE:

1. Alarm and Event Management:

Generates alerts and notifications for abnormal network behaviour or faults, enabling timely troubleshooting and resolution.

2. Correlation with network parameters:

The powerful correlation engine is highly scalable, utilizing event-based, time-based, and topology-based correlation. It also features closed-loop automation.

3. Real-time reporting and TT generation:

Provides real-time dashboards, reports, and Toruble tickets to network administrators, enabling them to promptly respond to fault issues and make data-driven decisions.

2.2.2 Architecture

The Jio JAM-JCE acts as standardized client interface to Alarm Management systems for creating, tracking and managing alarms among partners. The interface supports alarm management on both resources and services. The alarm objects are not restricted to any technology or a vendor, so the API can be used in a wide variety of fault management cases and across all Jio network domains

JIO B2C - JAM-JCE System Component Level Architecture

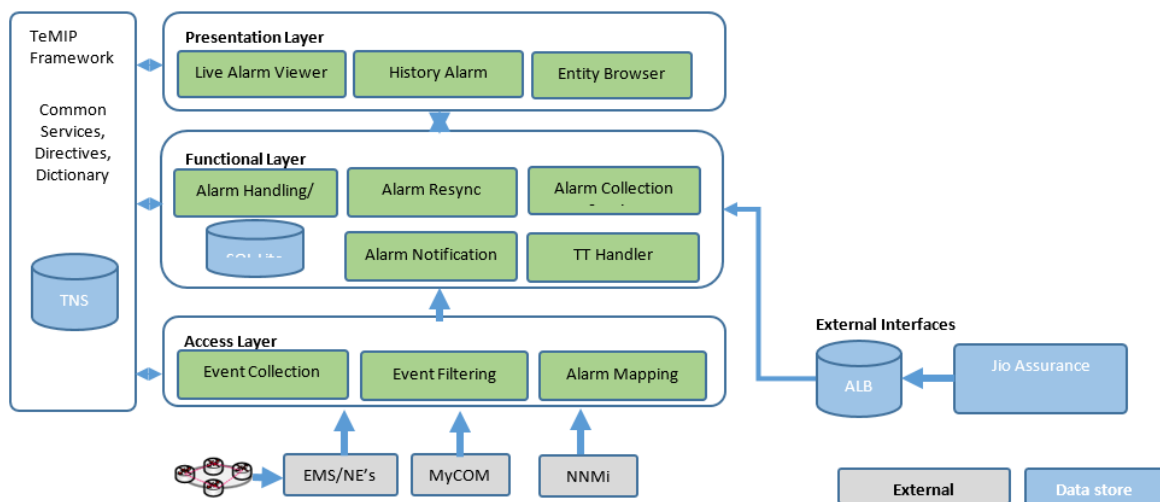


Figure 1 – JIO B2C System for JIO JAM-JCE –Architecture Diagram

2.3 JIO B2C JAM-JCE – Benefits

Interactive Dashboards:

JAM-JCE provides interactive dashboards with user friendly interfaces and visualizations to display alarms and metrics relevant to specific network stakeholders.

Scalability and Flexibility:

Scalable architecture that can accommodate growing network infrastructures and evolving technology requirements without compromising performance.

Integration Capabilities:

JAM-JCE is integrated with other network management systems, OSS/BSS platforms, and third-party tools through TMF based standard APIs or standardized protocols for seamless data exchange and interoperability.

Cloud-based Deployment:

JAM-JCE supports deployment in cloud environments for increased scalability, agility, and cost-effectiveness, while also providing remote access and management capabilities.

Business Process Framework v23.0 – JIO B2C System for JAM-JCE – Conformance Scope

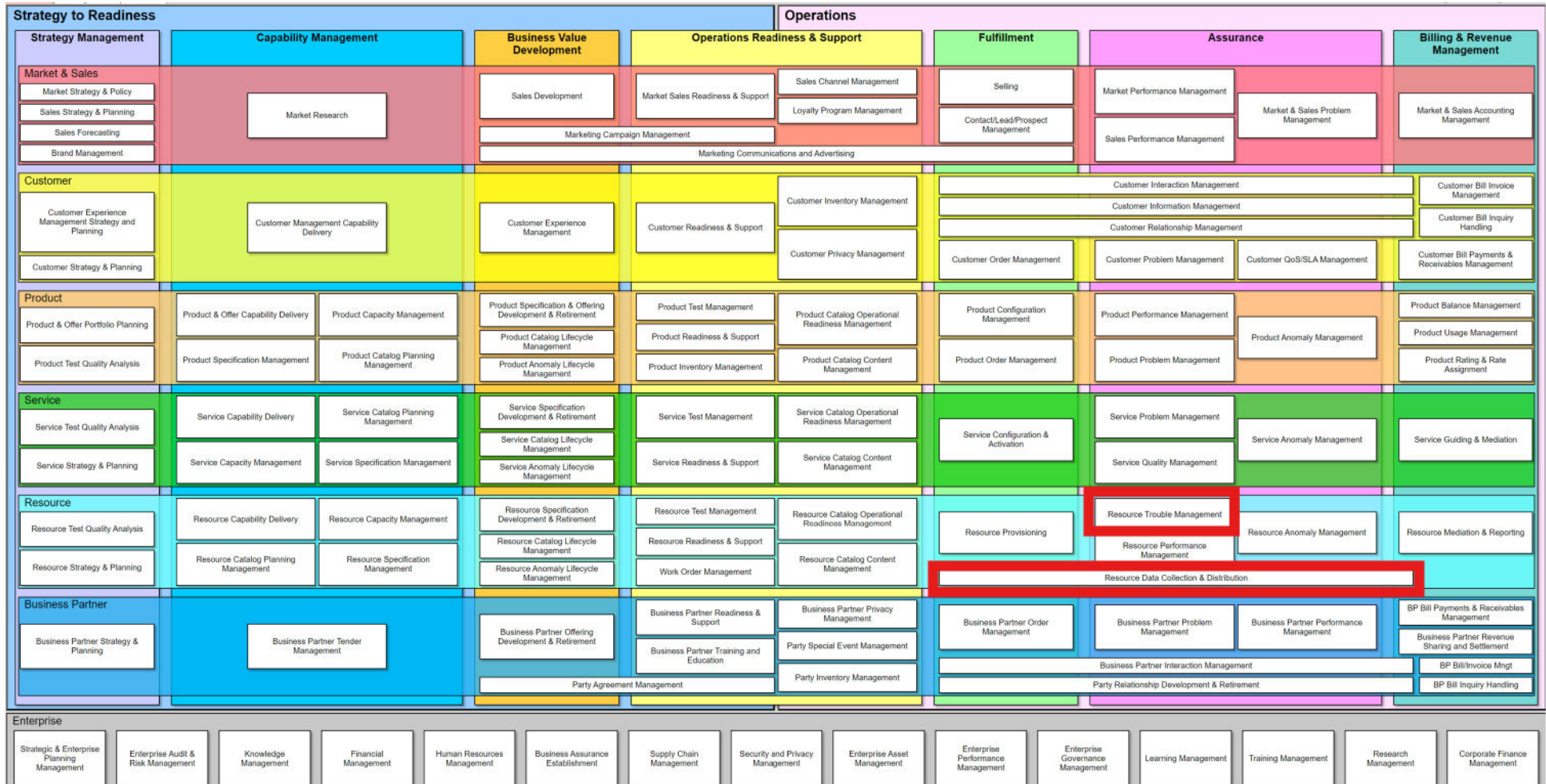


Figure 2 - Process coverage for JIO B2C System for JAM-JCE - Conformance Certification

2.4 Information Framework Assessment - ABE Scope

Information Framework (SID) - v23.5 – JIO B2C System for JAM-JCE – Conformance Footprint

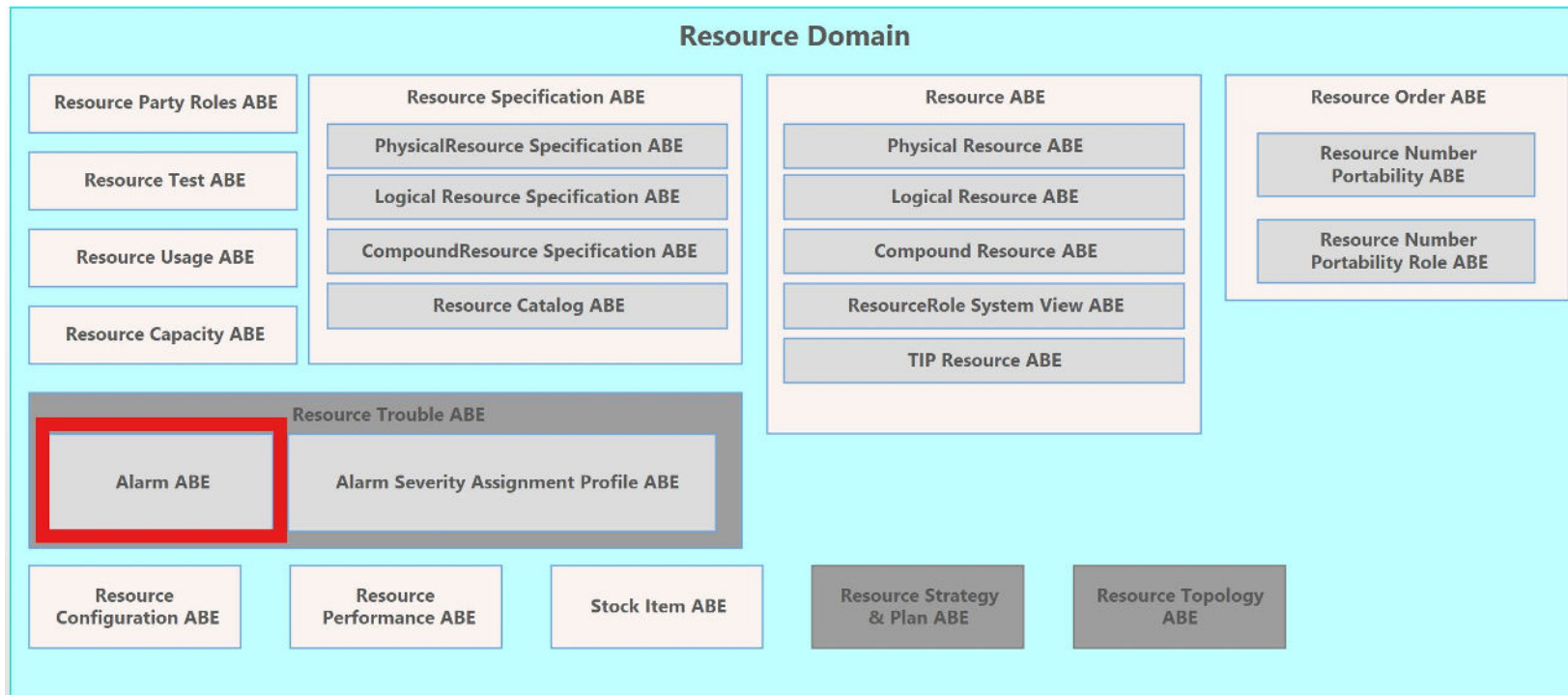


Figure 3 - Level 1 ABEs - SID coverage for JIO B2C System for JAM-JCE Conformance Certification

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 3 or a Level 4 implied task within a process element:

- **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 3 processes, such mappings are provided against the process’ extended description. If an Extended Description is not defined, then the mapping is provided against the Brief Description.

3.2 Scope of Conformance Certification Graph (eTOM)

This document conveys information about the Business Processes implemented by for JIO B2C System for JAM-JCE in accordance to the TM Forum Business Process Framework. It also maps the processes with the Level 2 and Level 3 frameworks' business activities. The document covers the following L3 Processes in scope for certification.

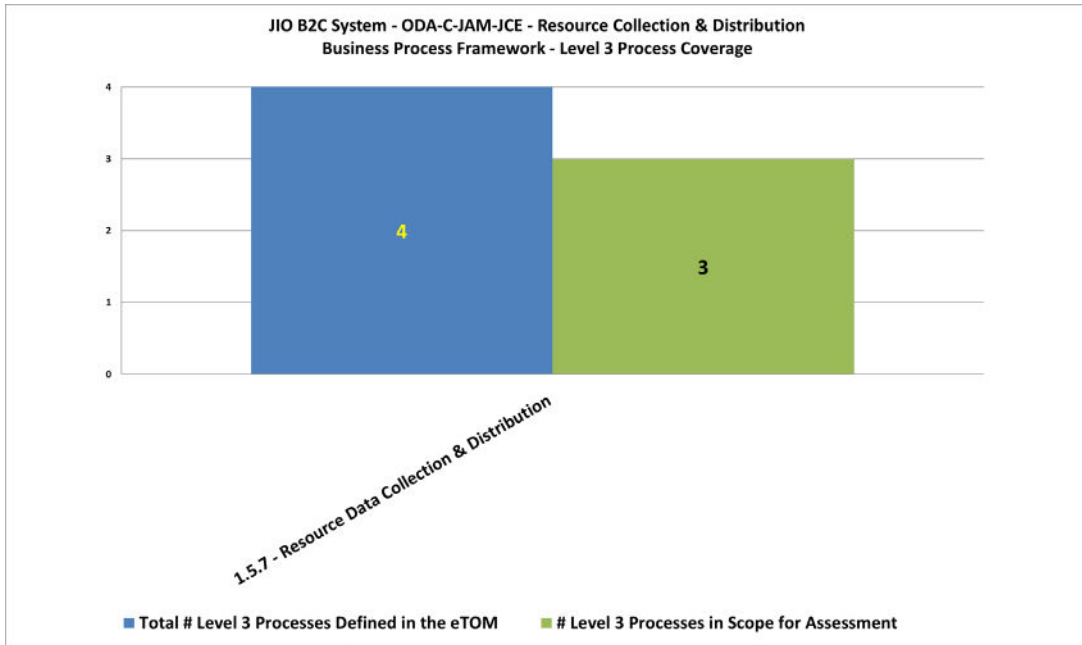


Figure 4- JIO B2C System for JAM-JCE – Resource Data Collection & Distribution - Level 3 processes in scope

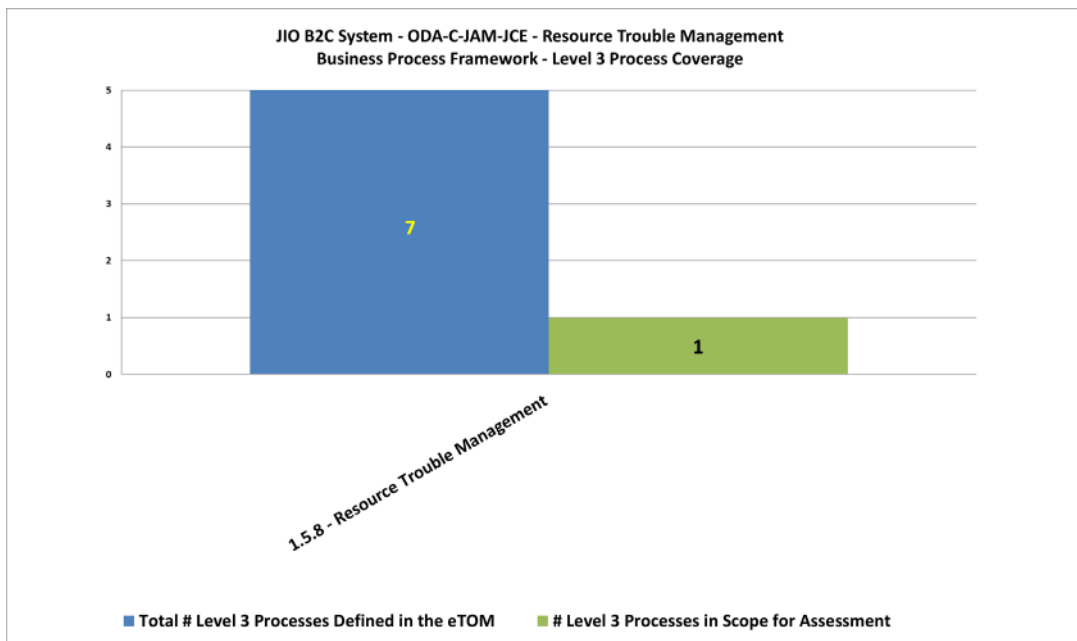


Figure 5- JIO B2C System for JAM-JCE – Resource Trouble Management - Level 3 processes in scope

3.3 Scope of Conformance Certification – Chart (eTOM)

TM Forum Assessment Scoping Document - Business Process Framework (eTOM) v23.0		
<i>Member:</i>		<i>JIO</i>
<i>Solution:</i>		<i>JIO B2C System - ODA-C-JAM-JCE</i>
<i>Assessment Type</i>		<i>Solution</i>
<i># of L3 Processes in Scope:</i>		<i>3</i>
<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>
1.5 - Resource Domain		
1.5.7 - Resource Data Collection & Distribution		
1.5.7.1 - Collect Management and Security Information & Data		
1.5.7.2 - Process Management and Security Information & Data		
1.5.7.3 - Distribute Management and Security Information & Data		

Figure 6- Level 3 process scope for certification – Resource Data Collection & Distribution

TM Forum Assessment Scoping Document - Business Process Framework (eTOM) v23.0		
<i>Member:</i>		<i>JIO</i>
<i>Solution:</i>		<i>JIO B2C System - ODA-C-JAM-JCE</i>
<i>Assessment Type</i>		<i>Solution</i>
<i># of L3 Processes in Scope:</i>		<i>1</i>
<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>
1.5 - Resource Domain		
1.5.8 - Resource Trouble Management		
1.5.8.1 - Survey & Analyze Resource Trouble		

Figure 7- Level 3 process scope for certification – Resource Trouble Management

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 (eTOM) - Conformance Scoring 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 Framework 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 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 definitions.
* 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		
<i>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.</i>		
<i>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.</i>		
<i>Note 3 - The Conformance Assessment shall be carried out at process level 3. For each Level 3 process, conformance shall be deduced according to the support for the process implied tasks, as decomposed and described in the underlying process descriptions. The score awarded for a Level 3 process, is deduced according to the support mapped to the Level 3 processes/Implied Tasks.</i>		
<i>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. <u>This note specifically applies to Product & Solution Assessments.</u></i>		
<i>Note 5 - Processes that are supported via manual implementation <u>only</u>, are not considered in scope for the Assessment. <u>This note specifically applies to Product & Solution Assessments.</u></i>		

Figure 8- TM Forum Business Process Framework: Conformance Scoring Rules

3.5 Business Process Framework – Process Mapping Descriptions

This section provides the mapping of Business Process Framework against the processes supported by JIO B2C System for JAM-JCE.

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

3.5.1 Mapping Details & Supporting Evidence

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

https://www.tmforum.org/wp-content/uploads/2025/02/eTOM-23.0_Conformance_Mapping_Template-JIO-B2C-System-ODA-C-JAM-JCE-VFRF.pdf

3.6 Conformance Results – Chart (eTOM)

This Section details the Scores awarded to reflect Conformance to the Business Process Framework (eTOM).

TM Forum Assessment Scoping Document - Business Process Framework (eTOM) v23.0			
<i>Member:</i>		<i>JIO</i>	
<i>Solution:</i>		<i>JIO B2C System - ODA-C-JAM-JCE</i>	
<i>Assessment Type</i>		<i>Solution</i>	
<i># of L3 Processes in Scope:</i>		<i>4</i>	
<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>	
1.5 - Resource Domain			
1.5.7 - Resource Data Collection & Distribution			
		1.5.7.1 - Collect Management and Security Information & Data	5/5
		1.5.7.2 - Process Management and Security Information & Data	5/5
		1.5.7.3 - Distribute Management and Security Information & Data	5/5

Figure 9- - eTOM Conformance Scores Summary – Resource Data Collection & Distribution

TM Forum Assessment Scoping Document - Business Process Framework (eTOM) v24.0			
<i>Member:</i>		<i>JIO</i>	
<i>Solution:</i>		<i>JIO B2C System – JIO Subscription Engine - ODA-C-TMFC040 - Product Rating & Rate Assignment</i>	
<i>Assessment Type</i>		<i>Solution</i>	
<i># of L3 Processes in Scope:</i>		<i>5</i>	
<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>	
1.5 - Resource Domain			
1.5.8 - Resource Trouble Management			
		1.5.8.1 - Survey & Analyze Resource Trouble	5/5

Figure 10- - eTOM Conformance Scores Summary – Resource Trouble Management

3.7 Conformance Results – Graph (eTOM)

This Section provides a summary graph of the scores awarded to reflect Conformance to the Business Process Framework (eTOM).

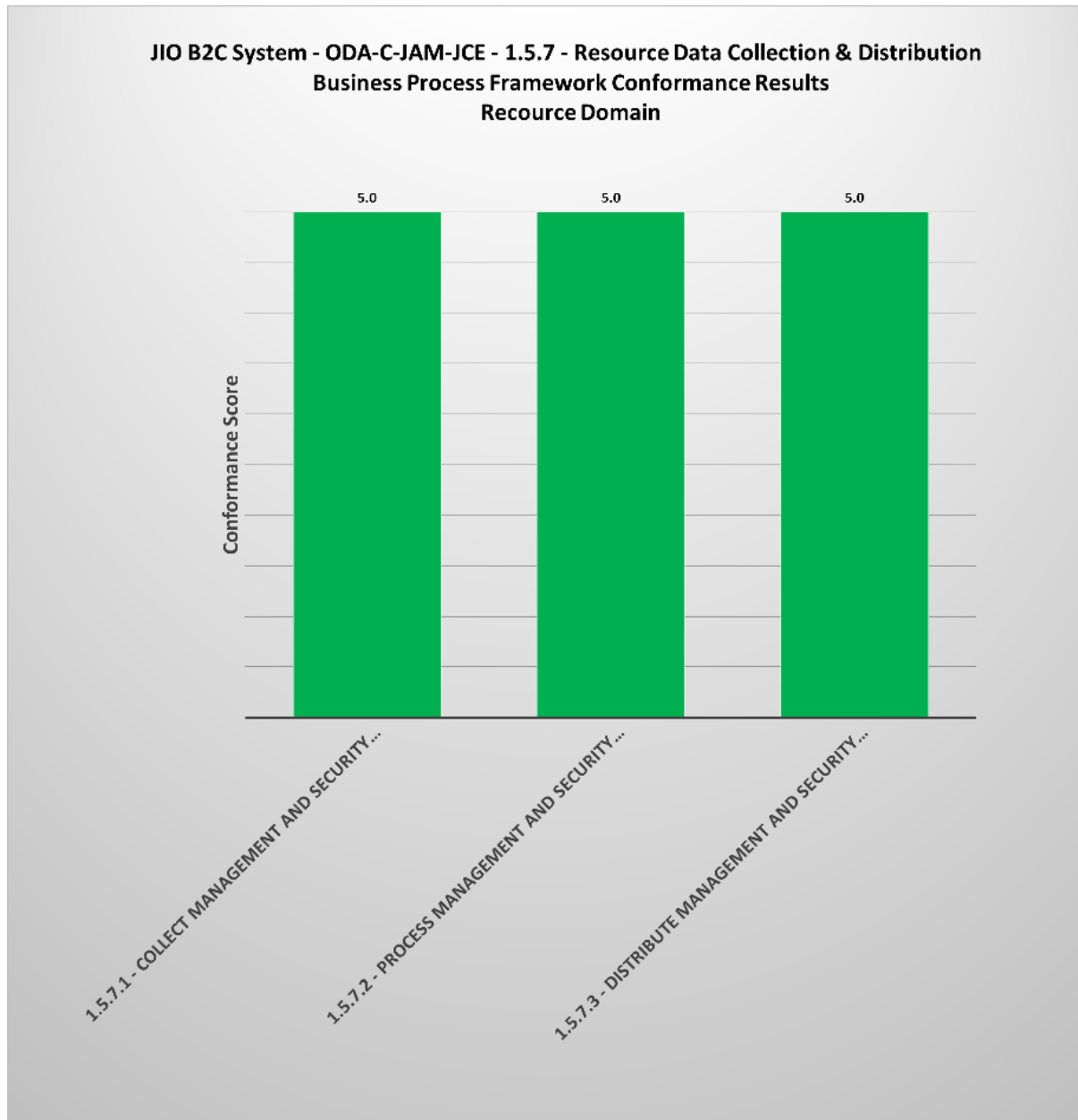


Figure 11- - eTOM Conformance Scores Summary Graph – Resource Data Collection & Distribution

JIO B2C System - ODA-C-JAM-JCE - 1.5.8 - Resource Trouble Management
Business Process Framework Conformance Results
Resource Domain

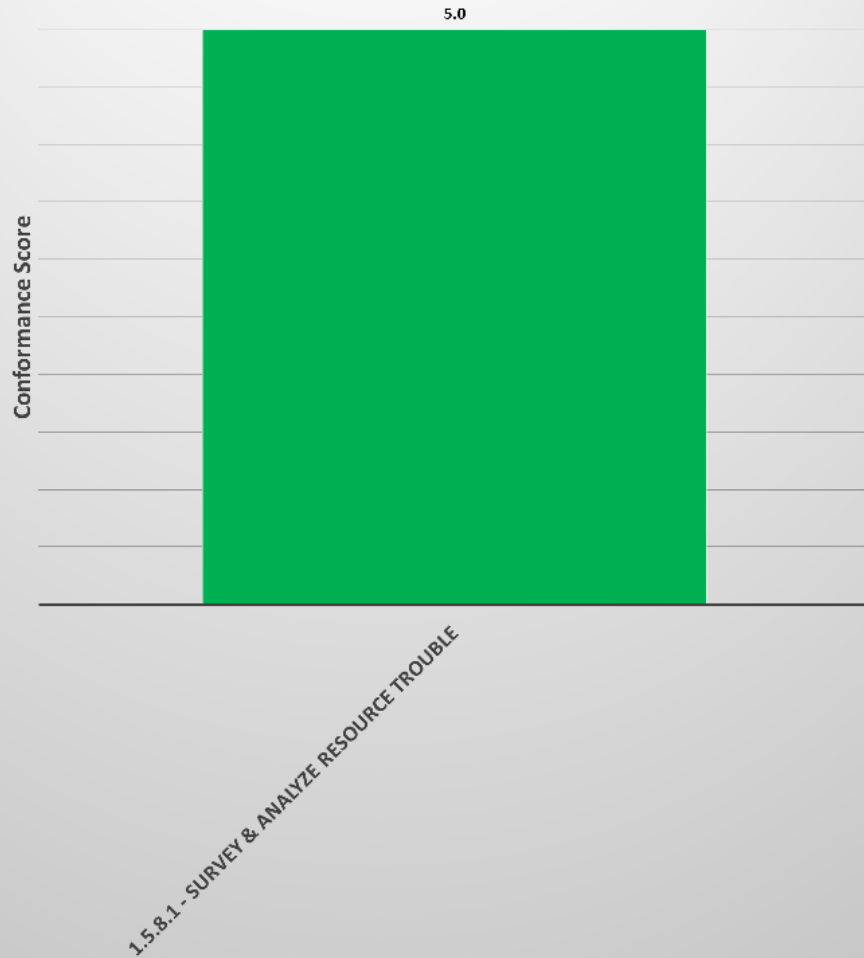


Figure 12- - eTOM Conformance Scores Summary Graph – Resource Trouble Management

4 Information Framework Assessment Overview

4.1 Mapping Technique Employed

The certification scope defines the list of Information Framework (SID) ABEs (Aggregate Business Entities) for which mapping support is reviewed during the assessment. For each of the ABEs defined in scope for the assessment, the organization undergoing the assessment must map their information model to the core entities and dependent entities and the required and optional attributes for each entity, as defined in the SID model, according to what is supported for the product/solution under assessment.

4.2 Scope of Conformance Certification (SID)

JIO B2C System - ODA-C-JAM-JCE - Resource Domain = 2 ABEs	
<i>L2 ABEs</i>	
Resource Domain	
Alarm ABE	

Figure 13 - SID - v23.5 – JIO B2C System for JAM-JCE SID Certification Scope

4.3 Information Framework Conformance Result

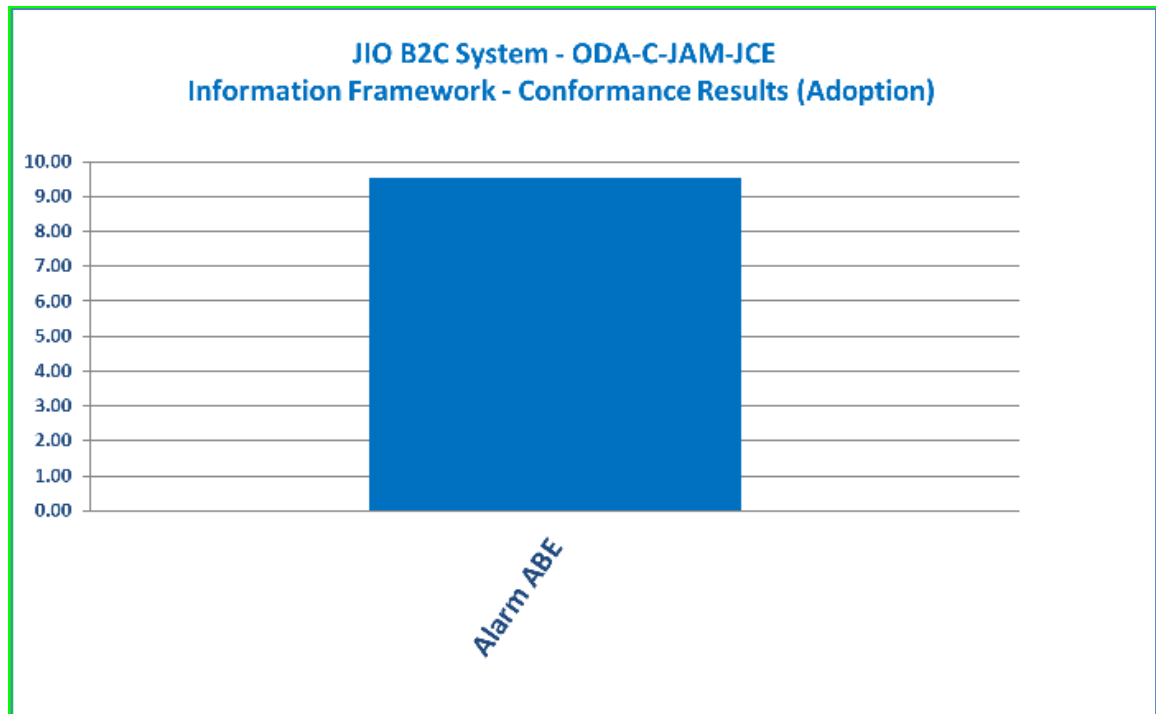


Figure 14 - SID - v23.5 – JIO B2C System for JAM-JCE SID Certification Scores

4.3.1 Information Framework – Scoring Rules

Between 2013 (Framework 14.0) and the end of 2017, TM Forum applied a combined scoring method based on two different categories of conformance scoring:

1. Information Framework Maturity
2. Information Framework Adoption

Starting on the 1st of January 2018, only one method has been retained instead of these two scoring methods (Maturity + Adoption). The use of two different methods made interpretation and understanding difficult and ambiguous for many of our members, on the ground of such experience, the TM Forum decided to keep only the “Adoption” scoring method and discard the “Maturity” scoring method.

Adoption scoring ensures a good balance between qualitative and quantitative criteria on SID conformance criteria. The adoption scoring method consists of a range of scores from 1 to 10 which makes it intuitive and fair, it is also based on weighted criteria e.g. core element, dependent, required, optional, etc.

4.3.2 Information Framework Adoption Conformance Scoring Methodology

As of Framework 14.0 based Conformance Assessments, to recognize the overall adoption of the Information Framework SID Information model, the Information Framework Adoption Scoring system was introduced to complement the Maturity Levels that have been used since the launch of the Framework Conformance Program.

Adoption conformance is based on an accumulative scoring system - i.e. scores are awarded for each element of an ABE to give an overall total Adoption score for the ABE – with elements in this context defined by core & dependent entities and required and optional attributes for both category of entity.

The scores for each element are calibrated according to relative weightings, according to the significance of each element e.g. core entity having higher weighting than dependent entities and required attributes having higher weighting than optional attributes. The relative weightings for each ABE ‘element’ are indicated in Table 1 - TM Forum Information Framework Adoption Conformance - Scoring Rules Table 1 below.

Information Framework - Adoption Conformance Scoring Guidelines						
SID Component		Weighted Scoring Calculation				
Lowest Level ABE		Equivalent – 1 score point				
Core Entity		Equivalent – 2 score points				
Core Entity Required Attribute		% equivalent * 2 [Must support min 50% of Required Attributes]				
Dependent Entity		% equivalent * 1.5				
Dependent Entities – Required Attributes		% equivalent * 1.5				
Core Entity – Optional Attributes		% equivalent * 1.2				
Dependent Entity – Optional Attributes		% equivalent * 0.8				
Adoption Conformance Score Graduation						
Non Conformance [Score = 1 to 3]	Very Low Conformance [3.0 < Score <= 4.0]	Low Conformance [4.0 < Score <= 5.0]	Medium Conformance [5.0 < Score <= 6.0]	High Conformance [6.0 < Score <= 8.0]	Very High Conformance [8.0 < Score < 10.0]	Full Conformance [Score = 10.0]
<p>NOTES:</p> <p>1. The score values for each SID component are added together to get the overall Adoption Conformance score.</p> <p>2. If 50% of of the required attributes of Core entities are not supported, scores for following components are not applied as Adoption Conformance requires conformance to 50% of the required attributes of Core entities.</p> <p>3. Adoption Score versus Maturity Level: Using the scoring category to recognise SID adoption, an assessed ABE for which there is equivalence to 2/3 required core attributes and 8/10 dependent entities would be awarded Maturity Level Score = 2.5 (Very Low Conformance) & Adoption Conformance score = 5.2 (Medium Conformance).</p>						

Figure 15 - TM Forum Information Framework Adoption Conformance - Scoring Rules

4.3.3 Additional Notes on Information Framework Conformance Adoption scoring:

1. For each level, according to what is required, a value is calculated SEsed on the percentage of entities/attributes supported - as appropriate. This will result in a decimal figure (rounded to one decimal place).
2. Adoption Scoring is SEsed on the progressive scoring schema from the former “Maturity” scoring; however it provides additional flexibility in-so-far as it allows to score all attributes and entities in an assessed ABE. In the former “Maturity” scoring, when not all required attributes of the Core Entity were supported, the Maturity Level score would not progress to the next level, regardless of conformance to other “subordinate” components of the ABE (e.g. dependent entities, optional attributes). “Adoption” scoring fixes this constraint as it provides a weighting mechanism to score all elements supported, regardless of the absence of the core entity or/and required attributes.
3. 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.
4. 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.
5. The score values for each SID component are added together to get the overall Adoption Conformance score.
6. If 50% of the required attributes of Core entities are not supported, scores for following categories are not applied as Adoption Conformance requires conformance to 50% of the required attributes of Core entities.