Business Process Framework (eTOM) 20.5 Solution Conformance Certification Report

Invia
Bill360 Solution

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1 Introduction

1.1 Executive Summary

This document provides details of Invia's self-assessment and TM Forum's Conformance Assessment of **Invia Bill360 Solution**, against the following ODA components:

- Business Process Framework Version 20.5

The assessment included a review of the methodology approach to process modeling against the TM Forum's Business Process Framework (eTOM) Release 20.5 according to the specific processes submitted in scope for the Assessment.

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1.2 About Invia

Invia is an Australian based software and technology solutions provider with an exclusive focus on the Telecommunications industry. Invia's leadership team has decades of international experience in the IT&T industry.

Invia's flagship product is Invia EnterpriseOne which delivers an entire ecosystem capable of supporting all OSS and BSS operations for a fully operational telco provider or MVNO.

Invia EnterpriseOne is comprised of the following modules:

- Invia Bill360 – complete Telco billing and bill-on-behalf solution
- Invia Fleet360 –mobility lifecycle management and usage & spend management
- Invia Asset360 – Asset Management for every stage of the device lifecycle

2 Product Functionality/Capability Overview

2.1 Bill360 Solution – Overview

Invia's Bill360 solution is a modern, scalable cloud-native Telco billing application, developed in Australia from the ground up in collaboration with partner CSPs with whom Invia has worked closely for over a decade.

Invia Bill360 is a cloud-based comprehensive billing, customer and partner management portal. Bill360 supports highly configurable offers, constructs and bundles of various telco products and services. It can also function as a telco-managed, single-bill marketplace allowing the telco's customers to access a managed catalog of first-party and third-party products and services, with highly configurable payment terms including one-off, periodic, subscription-based, milestone-based and delivery-based payments.

Invia's innovative approach to core data model design supports rapid integration with existing systems while also allowing simpler data migration of legacy transactional and reference data.

As a comprehensive billing and bill-on-behalf platform, Invia Bill360 provides the following capabilities:

2.1.1 Customer Billing
- ✓ Account and Service level billing.
- ✓ Flexible bill cycle Monthly, Quarterly, Annual or One-off.
- ✓ Support for complex billing incorporating discounts and multipliers.
- ✓ Auditable history of all customer billing.

2.1.2 Order Management
- ✓ Quote to Cash lifecycle in a single platform.
- ✓ Configurable workflow for order acceptance, fulfilment and approval.
- ✓ Full order and transaction history.
- ✓ Bulk processing of orders.

2.1.3 Partner Management
- ✓ 360 degree view of partner relationship.
- ✓ Multi-tenant and secure partner self-serve portal.
- ✓ Express setup – partner services can be setup and ready to order in less than 24 hours.
- ✓ Partner alerts and notifications.
- ✓ Auditable history of all partner transactions.

- ✓ Support for multiple products and services with each partner.
- ✓ Configure bundles combining products, services and subscriptions from multiple vendors, and present as a single offering with custom pricing.
- ✓ Machine learning based partner transaction validation.

2.1.4 Payments

- ✓ Generate and send payment summary file to Accounts Payable.
- ✓ Auditable history of all partner payments.

2.1.5 Revenue Share/Margin Management

- ✓ Manage revenue share and margins on third-party products/service using flexible pricing models.
- ✓ Support for fixed and percentage share by product and services.
- ✓ Capability to set default values by partner.
- ✓ Product Manager console to manage pricing and margin for all products, services and bundles.

2.2 Bill360 Solution – Benefits

Bill360 offers core capability already available in many systems such as managing customer invoices, vendor payments, offering management and ordering. However, Bill360 brings additional features that provides a purpose-built capability to address many of the challenges in an ever-evolving landscape:

- A comprehensive billing solution that provides capability and innovation across all three key market verticals in Enterprise, Consumer and Wholesale.
- Innovative 3rd party and ICT product enablement with additional options to bundle and enrich with professional services or ongoing managed services.
- Unique scalable product prefab frameworks for easier billing deployments and ongoing management of new market offerings.
- Ability to work in unison with existing telco IT systems and infrastructure with the aim to compliment rather than replace.

2.3 Bill360 Solution – Modules

The key modules of Bill360 and their supported functionality are listed below:

Customer
- Master Record Management
- Contact
- Address
- Accounts
  - Addresses
  - Invoice Management
  - Payments
  - Agreed Debt
- Bill Reporting

Product Offerings
- Master Record Management
- Product Prefabs
- Product Bundles
- 3rd Party Products

Ordering
- Customer Orders
  - Order Items
- Order Workflow Management
- Order Notification Management
- Order Document Management

Vendor/Partner Management
- Master Record Management
- Payment Event Records
- Recipient Created Tax Invoice (RCTI) Management

Mediation & Usage
- Mediated Network Usage Events
- Mediated 3rd Party Events

2.4 Bill360 Solution - Supported Installation Models

Supported models include Private Cloud (customer's cloud infrastructure), SaaS hosted on Invia's secure cloud, and on-premise. A hybrid model is also supported where core data (including sensitive data such as PII) is hosted on premise or in a Private Cloud, with the GUI functionality supported via SaaS or Invia cloud.

2.5 Solution Scope

The scope and integration points of the Bill360 platform are depicted in the diagram below, using example third party partners.
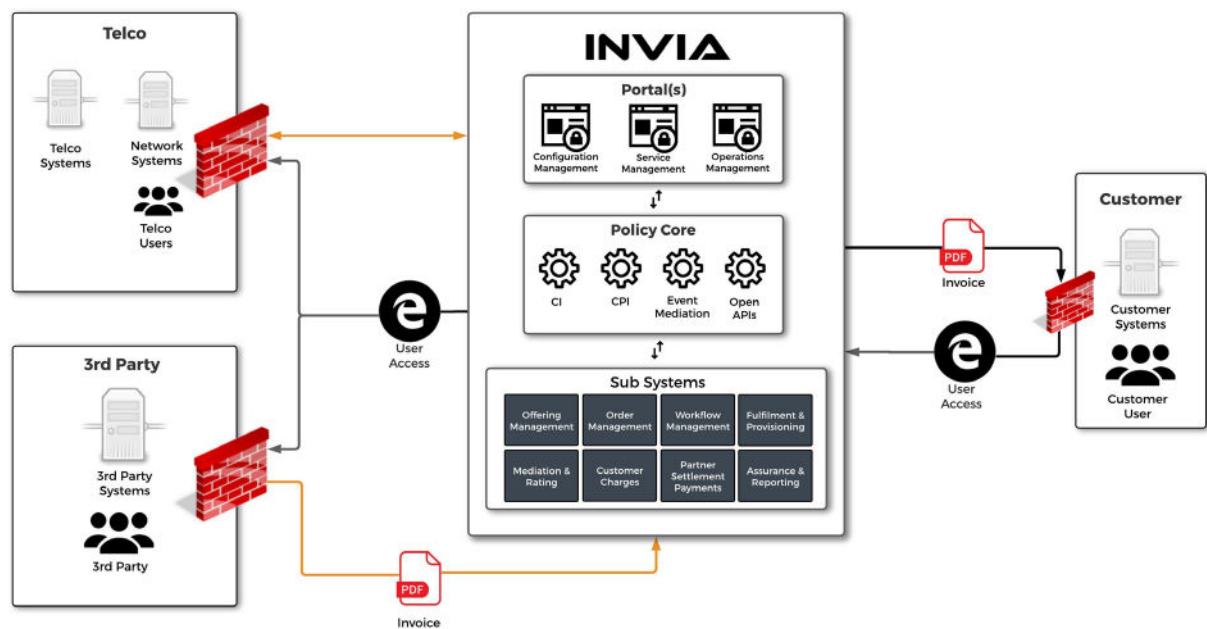
2.6 Business Process Framework Level 2 Process Scope

The following figure represents the eTOM Business Process Framework Level 2 processes that were presented in scope for conformance certification for the Invia Bill360 Solution.

Figure 1 - Level 2 process coverage for Invia Bill360 v21.3 Conformance Assessment

3 Business Process Framework Assessment Overview

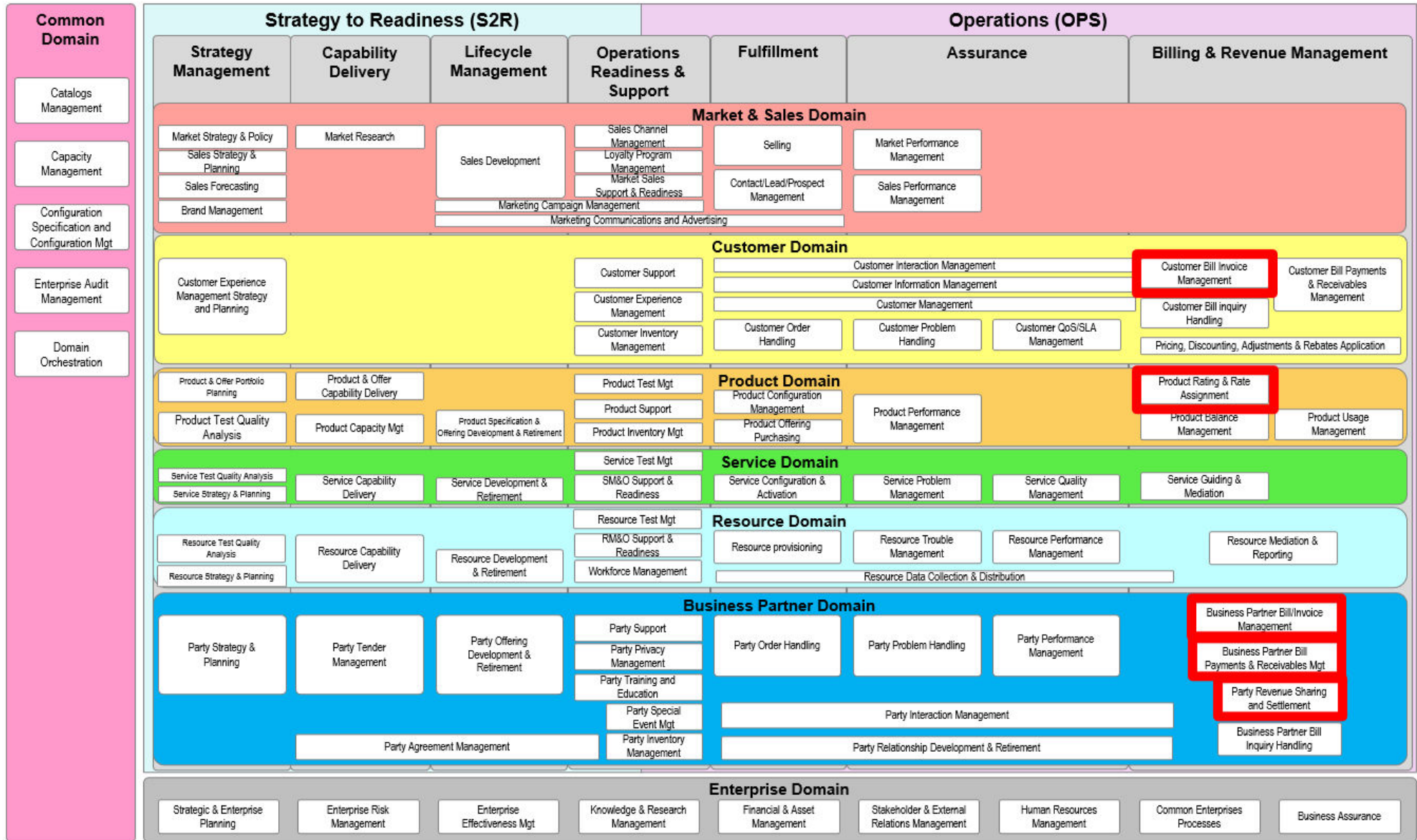### 3.1 Mapping Technique Employed

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)

TM Forum Business Process Framework (eTOM) - Assessment Scope		
Member	INVIA	Level 3 Process Elements included in the certification scope
Solution	Bill360 v.21.3	
Assessment Type	Solution	
Framework Version	20.5	
Number of L3 Processes in Scope:	2	
Level 2	**Level 3**	
1.2 - Product Domain		
1.2.17 - Product Rating & Rate Assignment		L2
	1.2.17.1 - Perform Rating	L3
1.3 - Customer Domain		
1.3.9 - Customer Bill Invoice Management		L2
	1.3.9.4 - Apply Pricing, Discounting, Adjustments & Rebates to Customer Account	L3
1.6 - Business Partner Domain		
1.6.15 - BP Bill/Invoice Management		L2
	1.6.15.3 - Party Bill/Invoice Lifecycle Management	L3
1.6.16 - BP Bill Payments & Receivables Management		L2
	1.6.16.2 - Party Account Balance Management	L3
1.6.18 - Party Revenue Sharing and Settlement		L2
	1.6.18.2 - Party Revenue Sharing Agreement Management	L3

Table 1 - Business Process Frameworx (eTOM) Assessment Scope

3.3 Scope of Conformance Certification – Chart (eTOM)

INVIA - Bill360 v.21.3
Business Process Framework v20.5 - Level 3 Process Coverage

Legend:
- ■ Total # Level 3 Processes Defined in the eTOM = 19
- ■ # Level 3 Processes in Scope for Assessment = 5

Categories (x-axis):
- .2.17 - Product Rating & Rate Assignment — Blue: 5, Green: 1
- 1.3.9 - Customer Bill Invoice Management — Blue: 3, Green: 1
- 1.6.15 - BP Bill/Invoice Management — Blue: 4, Green: 1
- 1.6.16 - BP Bill Payments & Receivables Management — Blue: 2, Green: 1
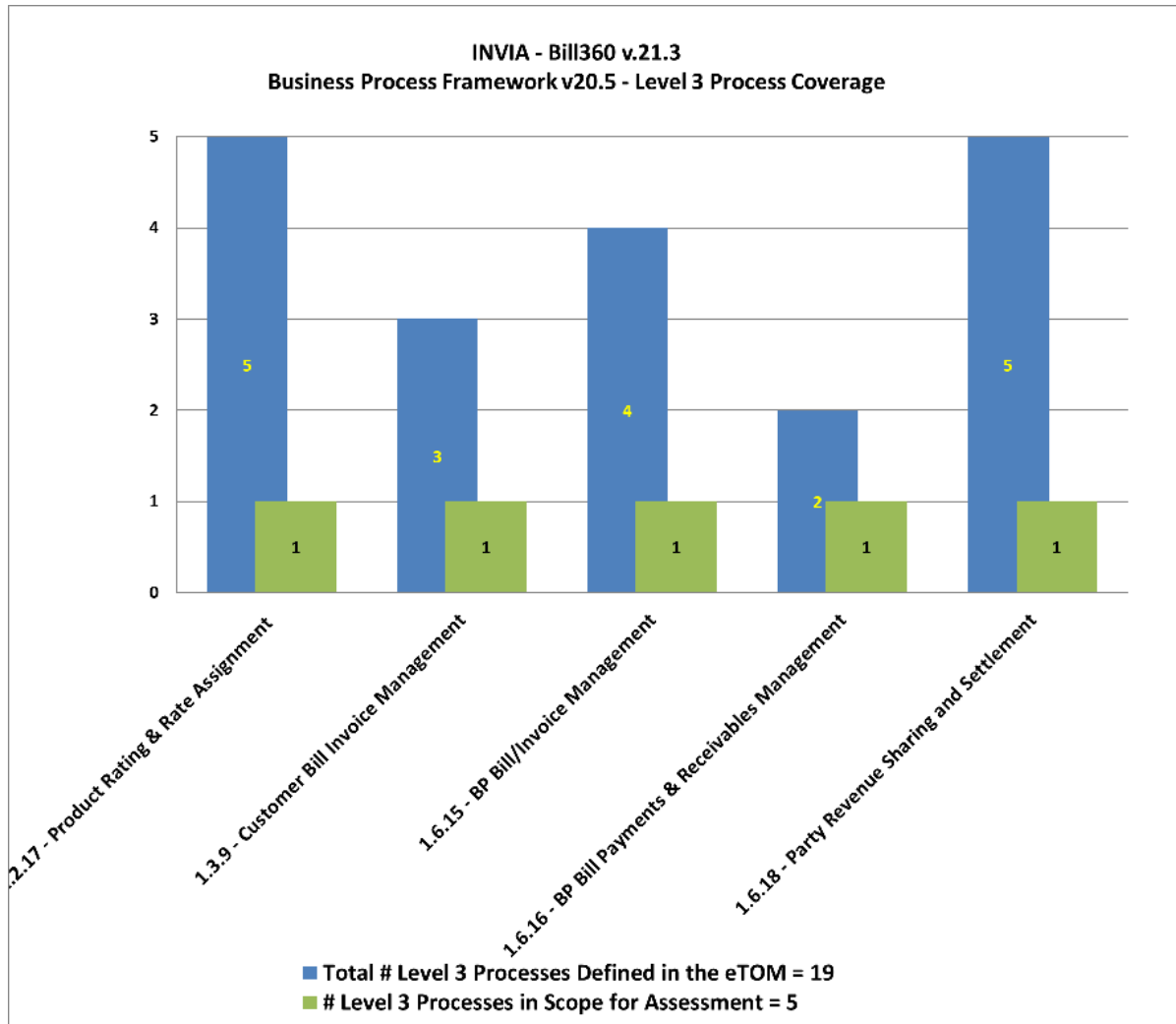- 1.6.18 - Party Revenue Sharing and Settlement — Blue: 5, Green: 1

Figure 2- Level 3 process scope for certification

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 3- 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   Mapping Details & Supporting Evidence

The documented mapping information for all Level 3 processes in scope for the 3 domains: Product, Customer and Business Partner is available from the following link:

https://www.tmforum.org/wp-content/uploads/2021/07/Invia-Pty-Ltd-Conformance-Mappings-V3RF.pdf

Mappings and supporting evidence were presented for the following **L3** processes:

Product Domain
1.2.17 - Product Rating & Rate Assignment
Customer Domain
1.3.9 - Customer Bill Invoice Management
Business Partner
1.6.15 - BP Bill/Invoice Management
1.6.16 - BP Bill Payments & Receivables Management
1.6.18 - Party Revenue Sharing and Settlement

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		Level 3 Process Elements Scores achieved
Member	INVIA	
Solution	Bill360 v.21.3	
Assessment Type	Solution	
Framework Version	20.5	
Number of L3 Processes in Scope:	0	
Level 2	**Level 3**	
1.2 - Product Domain		
1.2.17 - Product Rating & Rate Assignment		5
	1.2.17.1 - Perform Rating	
1.3 - Customer Domain		
1.3.9 - Customer Bill Invoice Management		5
	1.3.9.4 - Apply Pricing, Discounting, Adjustments & Rebates to Customer Account	
1.6 - Business Partner Domain		
1.6.15 - BP Bill/Invoice Management		5
	1.6.15.3 - Party Bill/Invoice Lifecycle Management	
1.6.16 - BP Bill Payments & Receivables Management		5
	1.6.16.2 - Party Account Balance Management	
1.6.18 - Party Revenue Sharing and Settlement		5
	1.6.18.2 - Party Revenue Sharing Agreement Management	

Figure 4- - eTOM Conformance Scores Summary – Bill360 v21.3

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 Invia – Bill360 v21.3 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)
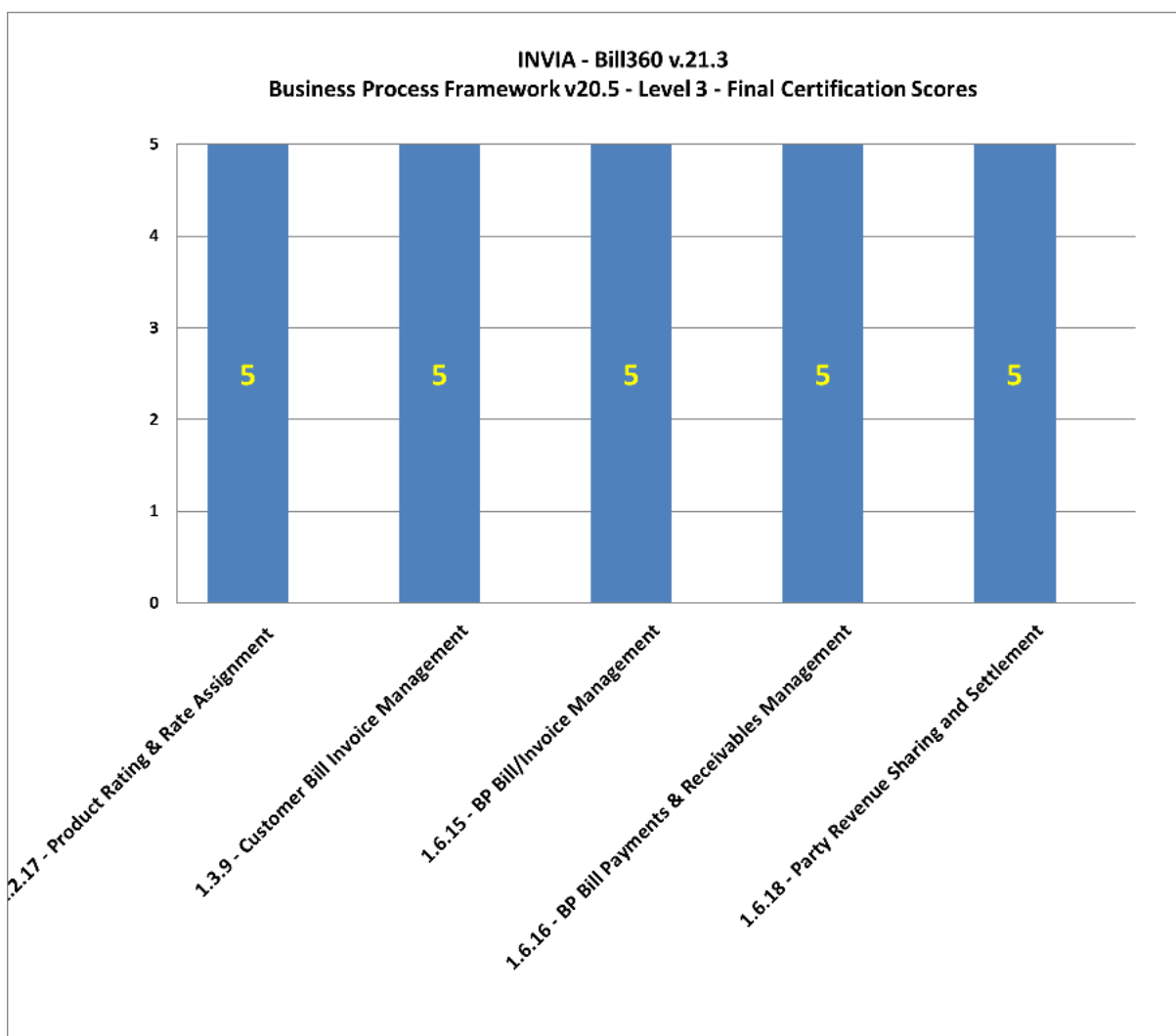

Figure 5- eTOM Conformance Scores - Invia – Bill360 v21.3