



Framework 14.0 Product Conformance Certification Report

IST

(International Software Techniques S.A.)

Service and Product Management System (SPMS)

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1 Introduction

1.1 Executive Summary

This document provides details of IST's self-assessment and TM Forum's Conformance Assessment of the **IST SPMS** product, against the following Framework 14.0 component:

- Information Framework Version 14.0

The assessment included a review of:

- Conformance to the Information Framework Release 14.0 Domains/Aggregate Business Entities according to the specific ABEs submitted in scope for the Assessment.



2 Product Functionality/Capability Overview

2.1 IST SPMS – Product Overview

SPMS core functionality is to centralize all processes related with the introduction, management and alteration of Offers, Products, services, bundles, discounts, and promotions for Telecom Operators. The SPMS solution functions as a central hub, through which a Telecom Operator organizes, monitors and controls one of the most important aspects of its business.

SPMS offers significant advantage to a company, but also gives other enterprise systems great value by enabling the sharing of product information throughout the organization. From product initialization through delivery to final customers, it can integrate with business operations, trigger innovation, and support new product strategies.

Functions as a central hub for all CSP departments seeking up-to-date product information:-Product Management, Product Development, Cost Control, Shops, Customer Care, Audit, Regulatory.

Feeds business systems with management-approved charging specifications as created/modified by Product Managers. Postpaid & Prepaid Billing, Revenue Assurance, IVR, DWH, ERP, Intranet/internet/extranet.

Core System Characteristics

Product Management Tools

- Supports complex user defined product structures and charging strategies.
- End users are able to modify any aspect of product information through parameterization forms.
- Large number of pre-defined templates and configuration for Telecom market.
- Fully customizable: Supports user defined structures and characteristics.
- Tools for massively updating charging information across products.
- Embedded version control.
- Embedded Document Management functionality for all Product Lifecycle related documents.

Reporting

- Advanced reporting mechanisms.
- Comparative tools for market and competition analysis.
- Full history of Product modifications.

Security

- Advanced security & auditing features.
- Domain, User/Role, Category, Department, Product and Attribute-level security.



System Architecture

- User-friendly, Ajax enabled web-based, thin-client environment.
- Integration with heterogeneous systems.
- Workflow support.



3 Business Process Framework Assessment Overview

Not applicable to this Assessment/Certification

4 Business Process Framework – Process Mapping Descriptions

Not applicable to this Assessment/Certification



5 Information Framework Assessment Overview

5.1 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 organisation undergoing the assessment must map their information model to the core entities and dependent entities and the required & optional attributes for each entity, as defined in the SID model, according to what is supported for the product/solution under assessment.

5.2 Information Framework Assessment - ABE Scope

The diagram in Figure 5-1 illustrates the Information Framework Level 1 ABEs (as highlighted in blue) that were presented in scope for the Assessment.

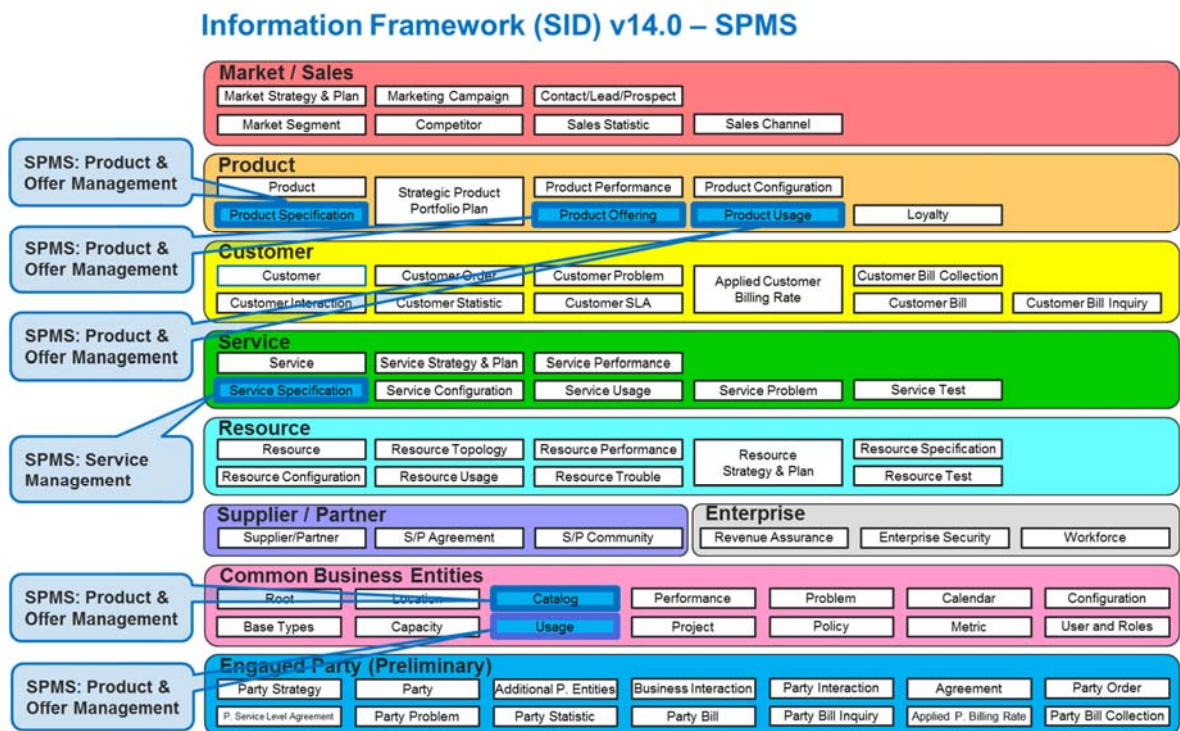


Figure 5-1 Level 1 ABEs in scope for I Assessment



5.3 Product Scope

The diagram in Figure 5-2 represents the mapping of IST SPMS to the Information Framework ABEs in scope for the assessment.

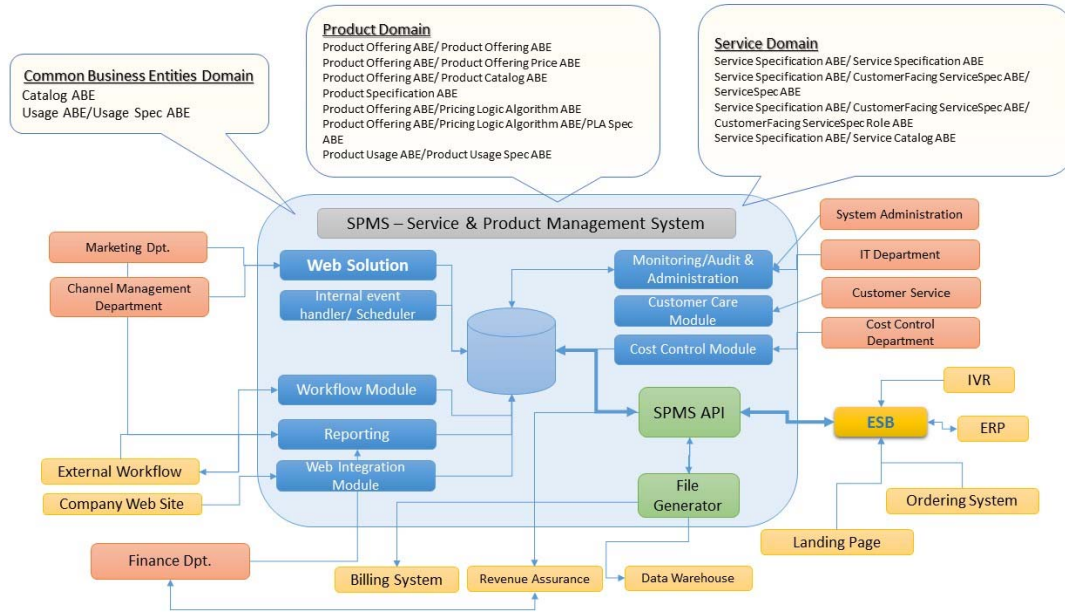


Figure 5-2 IST SPMS Footprint: Product Scope for SID Assessment



6 Framework Conformance Result

This section details the Scores awarded to reflect Conformance of IST SPMS 4.0 to the Information Framework components of Framework 14.0.

Note that this assessment covered only the Information Framework component of Framework 14.0

6.1 Business Process Framework – Scoring Rules

Not applicable for this Assessment/Certification

6.2 Business Process Framework – Conformance Result Summary

Not applicable for this Assessment/Certification

6.3 Business Process Framework – Detailed Conformance Results

Not applicable for this Assessment/Certification



6.4 Information Framework – Scoring Rules

As of Framework 14.0 Conformance Assessments, TM Forum award two categories of conformance scoring to the Information Framework assessment as follows:

- **Information Framework Maturity** Conformance Levels
- **Information Framework Adoption** Conformance Scores

This section describes the basis of scoring for each of these categories.



6.4.1 Information Framework Maturity Conformance Scoring Methodology

The Information Framework Maturity Conformance scores are granted based on the detailed scoring guidelines outlined in Table 6-1.

Maturity conformance is based on a progressive scoring system - i.e. a lowest level ABE must conform completely to the conformance criteria at one score level before proceeding to the next level.

For example, to achieve a score of 3 there must be equivalence to all the required attributes of the ABE's core entity.

A decimal scoring system is utilized to show the per cent achievement towards the next level.

With the Information Framework Maturity Conformance scoring, no further contribution to the score is made for equivalence to the ABE's remaining dependent entities and other SID components. For example, no further contribution to the score is made even if there is equivalence to 8 of the ABE's 10 dependent entities.

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 is applied. See 6.4.2 Information Framework Adoption Conformance Scoring Methodology for details of this Conformance category.



Table 6-1 TM Forum Information Framework Maturity Conformance - Scoring Rules

Information Framework R14.0: Maturity Conformance Scoring Guidelines	
Maturity Conformance Level	Progressive Scoring Qualifiers
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 and ABEs.
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 absence in the ABE would make the ABE incomplete.
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.



Additional Notes on Maturity Level scoring:

- 1. 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).*
- 2. Maturity Level versus Adoption Score: Using the progressive scoring schema for Maturity Level, 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). For the Maturity Level, because not all required attributes of the Core Entity are supported, the Maturity Level score does not progress to the next level, regardless of conformance to other components of the ABE.*
- 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.*



6.4.2 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 is introduced to complement the Maturity Levels that have been used since the launch of the Framework Conformance Programme.

Information Framework Adoption scores are granted based on the detailed scoring guidelines outlined in Table 6-2.

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 & 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 6-2.



Table 6-2 TM Forum Information Framework Adoption Conformance - Scoring Rules

Information Framework R14.0: 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 [See note 2]				
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=1-3]	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]



Additional Notes on Adoption scoring:

- 1. The score values for each SID component are added together to get the overall Adoption Conformance score.*
- 2. 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.*
- 3. Adoption Score versus Maturity Level: Using the scoring category to recognize 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).*



6.5 Information Framework – Conformance Result Summary

The following sections provide the summary results of the Information Framework Maturity Levels & Information Framework Adoption scores granted to the ABEs presented in scope for the IST SPMS Framework Assessment.

Each ABE was measured using the Information Framework (SID) conformance scoring guidelines as described in sections 6.4.1 & 6.4.2.

6.5.1 Information Framework Maturity - Conformance Result Summary

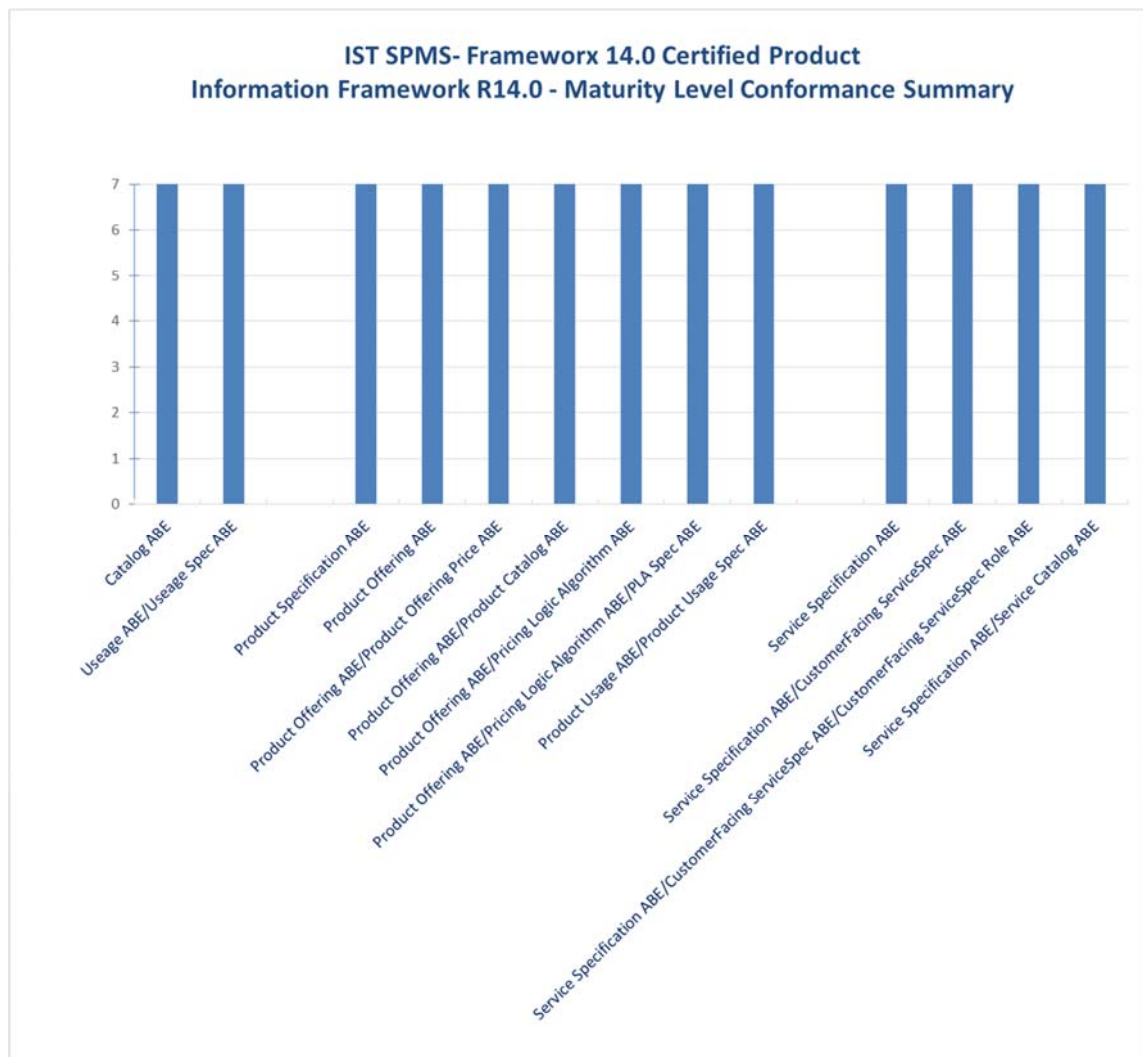


Figure 6-1 Information Framework Maturity Levels - CBE, Product & Service Domains



6.5.2 Information Framework Adoption - Conformance Result Summary

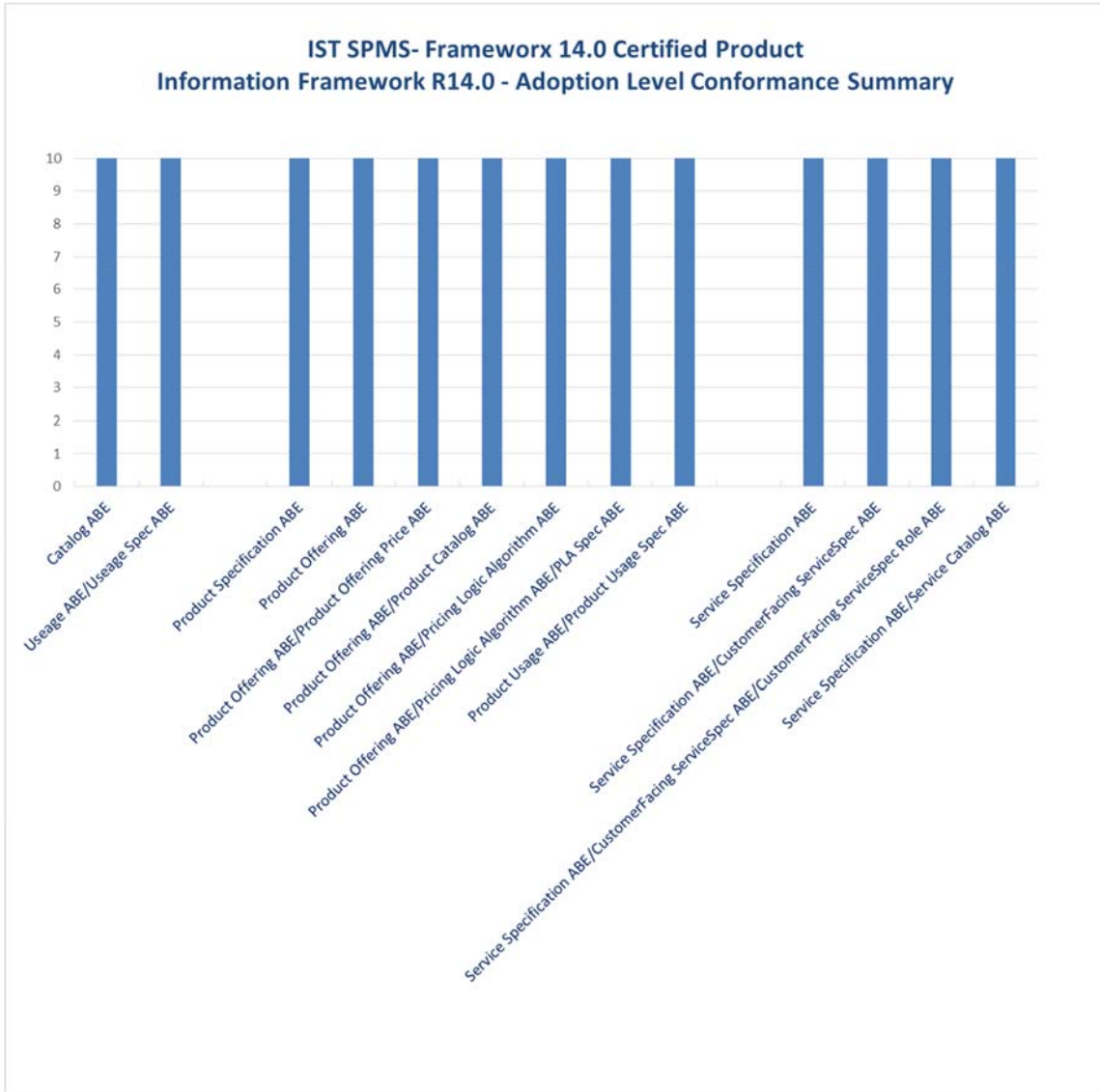


Figure 6-2 Information Framework Adoption – CBE, Product & Service Domains



6.6 Information Framework – Detailed Conformance Result

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

Table 6-3 Information Framework: Detailed Conformance Results

TM Forum Framework 14.0 Information Framework (SID) - Conformance Scores IST SPMS				
<i>Domain/ABE</i>	<i>Maturity Conformance Level (1-7)</i>	<i>Assessment Comments</i>	<i>Adoption Conformance Score (1-10)</i>	<i>Assessment Comments</i>
CBE Domain				
<u>Catalog ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
<u>Usage ABE/Usage Spec ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Product Domain				
<u>Product Specification ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.



<u>Product Offering ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
<u>Product Offering ABE/Product Offering Price ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
<u>Product Offering ABE/Product Catalog ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
<u>Product Offering ABE/Pricing Logic Algorithm ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
<u>Product Offering ABE/Pricing Logic Algorithm ABE/PLA Spec ABE</u>	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all



		attributes of dependent entities supported.		attributes of dependent entities supported.
Product Usage ABE/Product Usage Spec ABE	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Service Domain				
Service Specification ABE	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Service Specification ABE/CustomerFacing ServiceSpec ABE	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.
Service Specification ABE/CustomerFacing ServiceSpec ABE/CustomerFacing ServiceSpec Role ABE	7	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.	10	Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.



<p>Service Specification ABE/Service Catalog ABE</p>	<p>7</p>	<p>Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.</p>	<p>10</p>	<p>Full Conformance Core entity, required attributes, dependent entities, required attributes of dependent entities, all attributes of the core entity, all attributes of dependent entities supported.</p>
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