

Framework 18.5

Product Conformance Certification Report

Poslovna Inteligencija D.O.O **PI Telco DWH model 4.0**

June 2019

Version 1.0

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1 Introduction

1.1 Executive Summary

This document provides details of Poslovna Inteligencija D.O.O's self-assessment, followed by TM Forum's Conformance Assessment, relative to their PI Telco DWH model 4.0, of business processes and data modelling against the following Framework components:

- Business Process Framework Version 18.5
- Information Framework Version 18.5

The assessment included a review of:

- The methodology approach to process modeling against the TM Forum's Business Process Framework Release 18.5 according to the specific processes submitted in scope for the Assessment.
- Conformance to the Information Framework Release 18.5 Domains/Aggregate Business Entities according to the specific ABEs submitted in scope for the Assessment.

2 Product Functionality/Capability Overview

2.1 Poslovna Inteligencija's PI Telco DWH model 4.0 Overview

Poslovna Inteligencija Telecommunications Data Warehouse Data Model (PI Telco DWH model[®]) is standard industry data warehouse model applicable for both fixed and mobile telecommunications operators, covering traditional Business Intelligence requirements, regulatory requirements including GDPR and IFRS 15, Big Data Analytics and IoT requirements.

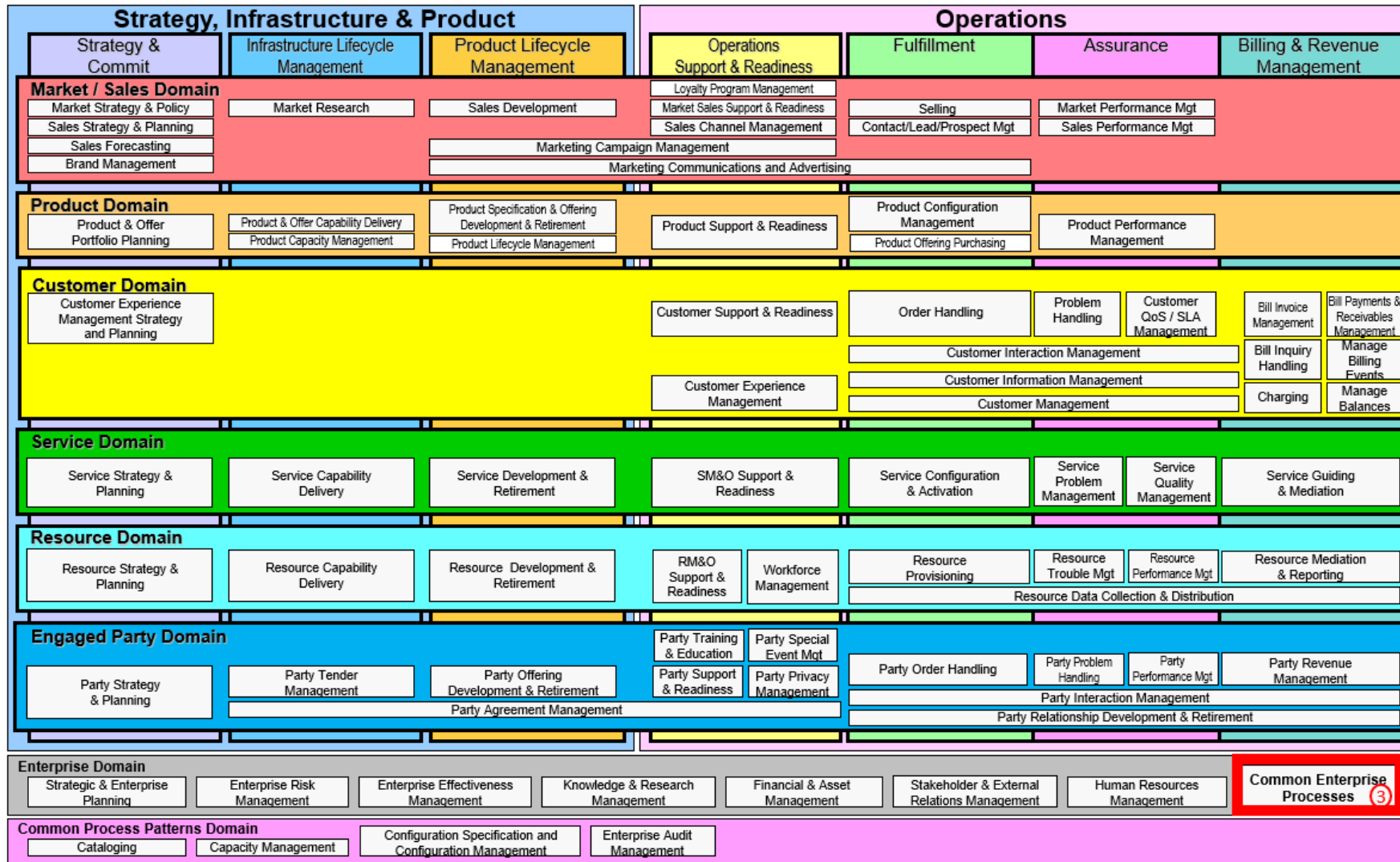
Logic of the model is following TM Forum's Information Framework Shared Information Data Model (SID), as a common reference model that service providers, software providers, and integrators use to describe enterprise management information.

Based on data represented in the model, all standard Telecommunication reporting and analysis Data Marts can be delivered, and ones regularly used are already defined as Subject areas in the model

PI Telco DWH model[®] is based on industry best practices, developed and applied during data warehouse system implementations in telecoms in Europe, Africa and Asia with more than 15 reference implementations. Also, model is open for necessary alterations and modifications required for each telecom customer.

2.2 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.



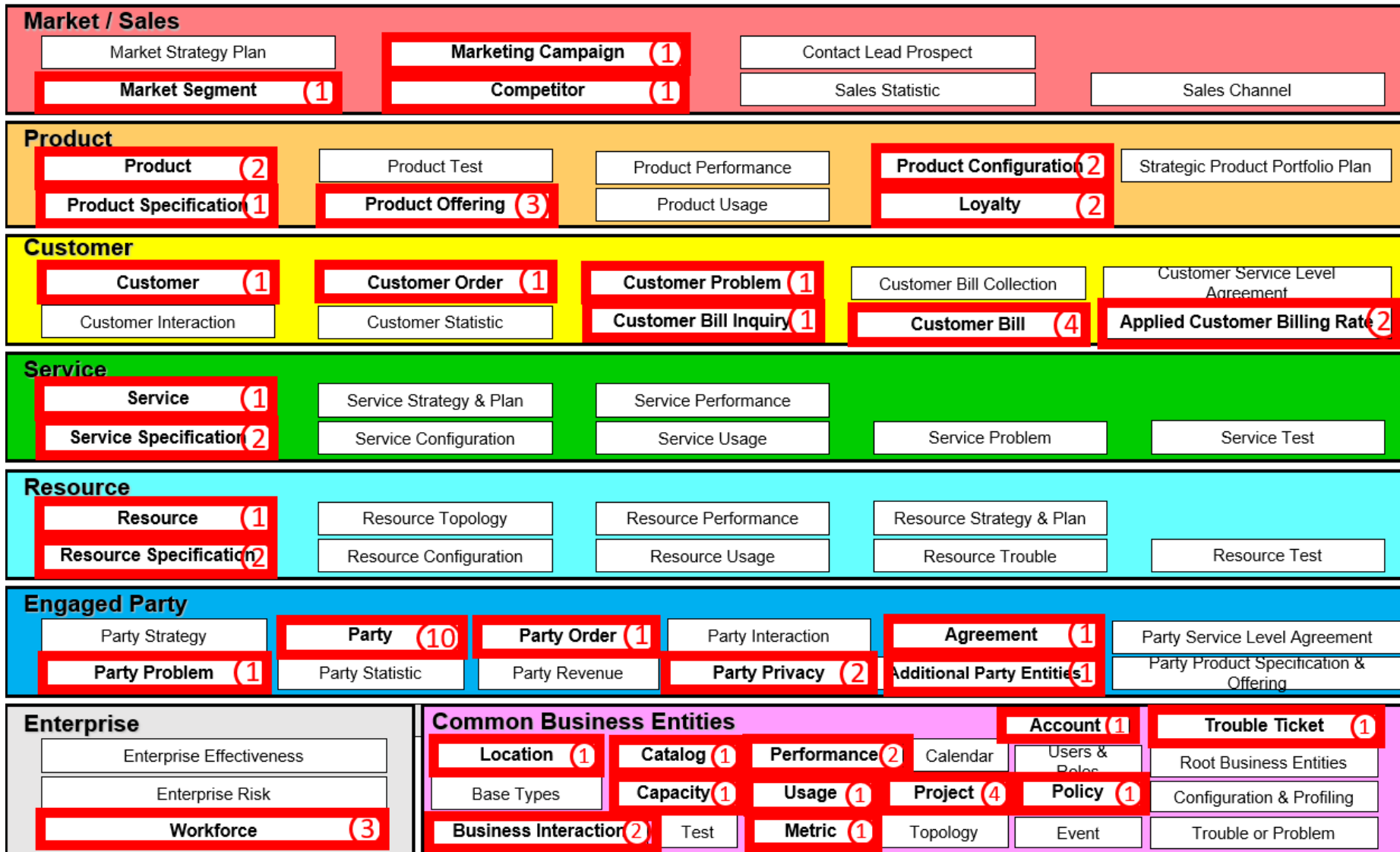
Three Level-3 process elements were submitted for conformance certification:

- Data Analytics
- Data Governance
- Data Management

Figure 1 - Level 2 process coverage for Poslovna Inteligencija- PI Telco DWH model 4.0 Conformance Assessment

2.3 Information Framework Assessment - ABE Scope

The following diagram illustrates the Information Framework ABEs that were presented in scope for the Assessment.



Number of ABEs or sub-ABEs submitted for conformance certification

Figure 2- ABEs coverage for Poslovna Inteligencija– PI Telco DWH model 4.0 Conformance Assessment

2.4 Solution Description

Poslovna Inteligencija Telecommunications Data Warehouse Data Model (PI Telco DWH model[®]) is standard industry data warehouse model applicable for both fixed and mobile telecommunications operators, covering traditional Business Intelligence requirements, regulatory requirements including GDPR and IFRS 15, Big Data Analytics and IoT requirements. Based on data represented in the model, all standard Telecommunication reporting and analysis Data Marts can be delivered, and ones regularly used are already defined as Subject areas in the model. PI Telco DWH model[®] is based on industry best practices, developed and applied during data warehouse system implementations in telecoms in Europe, Africa and Asia. Also, model is open for necessary alterations and modifications required for each telecom customer.

PI Telco DWH model[®] is convergent for fixed, mobile and data service providers. Data from different sources can be mapped and loaded to the same model structures for all types of communication networks.

PI Telco DWH model[®] is based on strong Primary Key – Foreign Key relationships that will assure consistency in the model itself and in content of implemented Data Warehouse System. Physical model implementations can be in every standard RDBMS and also in any ODBC-compliant NoSQL environment.

PI Telco DWH model[®] is developed with CA ERWin and will require ERWin license to view or change. ERWin license is not part of PI Telco DWH model[®] license, but we can provide also ERWin licenses if needed. Model can be exported to any other standard database modeling tool format.

In version **4.0** of the model, model has more than **500** Entities (Tables) grouped in more than **40** Subject areas. Subject areas (in alphabetical order):

1. Business Items and KPI's Subject Area
2. CAPEX Subject area
3. Common Subject area
4. Contact Center Subject area
5. Content Subject Area
6. Customer Subject area
7. Churn Prediction Subject area
8. Dunning Subject area
9. Engaged Party Subject area
10. ETL Process Execution Audit Subject Area
11. Event Subject Area
12. Finance Subject area
13. GDPR Compliance Subject area

14. Human Resources Subject area
15. IFRS 15 Reporting Subject area
16. Interconnection Subject area
17. Internet of Things Subject area
18. Inventory Management Subject area
19. Location Subject area
20. Loyalty Program Subject area
21. Market Segments Subject Area
22. Market Share Subject area
23. Marketing Campaign Subject area
24. Mobile Payments Subject area
25. Number of Subscribers Subject area
26. Order Subject Area
27. Policy Subject Area
28. Procurement Subject area
29. Product Subject area
30. Project Subject area
31. Quality of Service Subject area
32. Rate Plan Subject area
33. Recharge Subject area
34. Resource Subject area
35. Resource Capacity Management Subject area
36. Revenue and Collection Subject area
37. Sales Subject area
38. Service Subject Area
39. Service Provisioning Management Subject area
40. Subscriber Location Subject area
41. Traffic Subject area
42. Traffic Aggregations Subject area

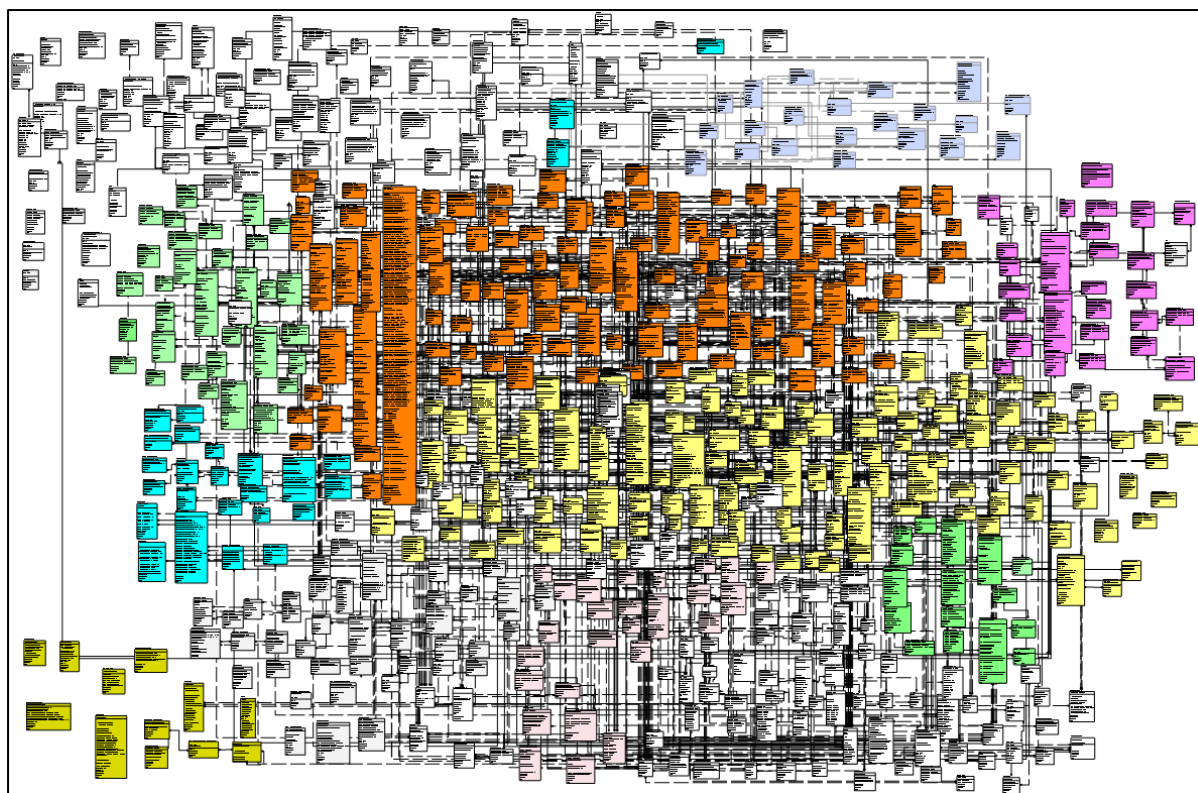


Figure 3- Schema of PI DWH Model main area

Colors used in the model

Color-coding of tables and Subject areas in the model is as follows:

- White – common business and infrastructure tables
- Yellow – CAS tables
- Beige – Usage and recharge tables
- Light Green – Invoice and Payment, Dunning
- Green – Loyalty Program
- Light Blue – Marketing Campaign, Market Share, Churn prediction
- Purple – Contact Center
- Grey – Finance (Capex & Opex)
- Rose - Inventory

Functional Groups

Subject Areas are grouped in five functional groups:

Common Business

- Business Items and KPI's Subject Area

- Common Subject area
- Engaged Party Subject area
- Product Subject area
- Location Subject area
- Event Subject area
- Order Subject Area
- Policy Subject Area
- ETL Process Execution Audit Subject Area

Customer, Account & Subscriber

- Customer Subject area
- Rate Plan Subject area
- Sales Subject area
- Number of Subscribers Subject area
- Loyalty Program Subject area
- Contact Center Subject area
- Churn Prediction Subject area
- Market Segments Subject area
- Marketing Campaign Subject area
- GRPR Compliance Subject area

Revenue & Usage

- Recharge Subject area
- Revenue and Collection Subject area
- Dunning Subject area
- Traffic Subject area
- Traffic Aggregations Subject area
- IFRS 15 Reporting Subject area
- Interconnection Subject area
- Mobile Payments Subject area
- Subscriber Location Subject area
- Market Share Subject area
- Content Subject Area
- Internet of Things Subject area

Finance & HR

- Finance Subject area
- CAPEX Subject area
- Procurement Subject area
- Human Resources Subject area

Infrastructure, Workflow & Inventory

- Service Subject Area
- Inventory Management Subject area
- Project Subject area
- Quality of Service Subject area
- Resource Subject area
- Resource Capacity Management Subject area
- Service Provisioning Management Subject area

Semantic Layer

Semantic data model is actually integrated with logical data model in PI Telco DWH model[®] in several ways:

- Relationships between the various entities are named and they describe type of relationship, i.e. for subtype relationship, relationship type is 'is a', or in practical example subtype relationship between Device and Product table is named 'Device is a Product'
- Naming conventions for entities and attributes are respected throughout the model
- All attributes have a domain. Domains are not only generic (String, Number, Date), but also context-specific and descriptive of attribute role (Name, Address, ID, Telephone Number)

Model customizations

PI Telco DWH model[®] is customizable per customer specific requests. There are several types of customizations:

- Customizing of existing Entities including changing attribute properties (name, type, and description), adding new attributes, adding indexes etc.
- Creating of new Entities if there is a requirement for a new dimension or new aggregation
- Adding new Subject areas with multiple entities that will cover new business areas
- Customizing of physical model - defining partitions, block sizes etc.

Base and Analytical Layers

PI Telco DWH model[®] has base layer tables and aggregated analytical tables. Base Layer contains tables loaded and transformed directly from source systems. Data Marts have additional fact tables for analytical purposes based on aggregated data from Base Layer. Some Data Marts are in separate Subject Areas (Number of Subscribers, Traffic Aggregations, Churn Prediction, Market Share). Some aggregate (snapshot) tables are in the same Subject Area as corresponding Base Layer tables (i.e. Open Items in Revenue & Collection, Prepaid Balance in Recharge, Loyalty Account Points History in Loyalty Program).

Handling of Slowly Changing Dimensions

PI Telco DWH Model[®] is using Type 6 Hybrid SCD and History tables. Having a Type 2 surrogate key for each validity period can cause problems if the dimension is subject to change. Type 6 SCD implementation does not use this, but uses a Surrogate Key for each master data item based on ID(s) + Valid_From. Same dimensional tables are used in model for Base Layer and Data Marts. Queries that require historical variables and statuses use History tables

2.5 Components of Architecture

PI Telco DWH model[®] Architecture

Architectural approach of the PI Telco DWH model is presented in following picture, where PI Telco DWH model is marked yellow:

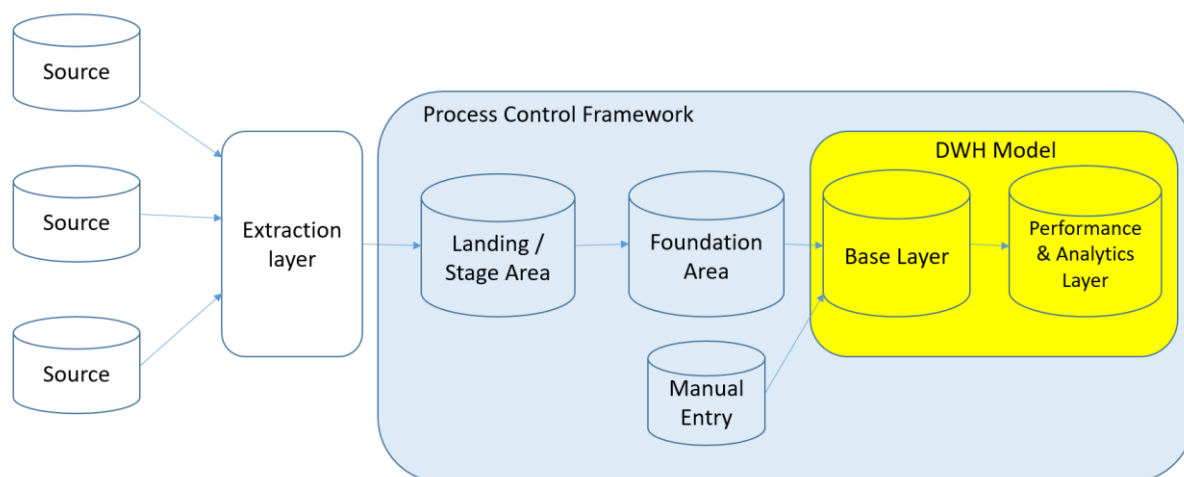


Figure 4- PI DWH Model architectural approach

Explanation of elements of the architecture and process:

- **Source** – Different source systems used to load PI Telco DWH model
- **Extraction Layer** – source data access layer. It may use push, pull or streaming technologies
- **Landing / Stage Area** – temporary area where source data is staged for further processing. It is recommended to keep N last loads in this area. Table structure in this area corresponds to the structure of tables / views from source systems
- **Foundation Area** – historical area where all historical changes are preserved. Table structure in this area corresponds to the structure of tables / views from source systems, but with added SCD2 attributes for master data.
- **Manual Entry** – area where manual entry attributes are maintained for attributes and dimensions that does not exist in source systems such as analytical hierarchies
- **Base Layer** – part of PI Telco DWH Model that contains tables loaded and transformed directly from source systems
- **Performance & Analytics Layer** - additional tables for analytical purposes based on aggregated data from Base Layer (Data Marts). Some Data Marts are in separate Subject Areas and some are in the same Subject Area as corresponding Base Layer tables
- **Process Control Framework (PCF)** - framework designed for running and managing cross-platform data processes. PCF addresses the question of achieving parallelism, performance optimization and dependency management

Important notes:

- PI Telco DWH model include Base Layer and Performance & Analytics Layers
- Landing / Stage Area, Foundation Area and Manual Entry Area are not part of the model and are based on specific customer source systems and requirements. In this way we have only one step in the process where customer-specific business and technical rules are implemented and that is load from Foundation / Manual Entry layer to Base Layer. In that way we are reducing complexity of implemented system

PI Telco DWH model[®] Packaging

PI Telco DWH model[®] is delivered with following documentation:

- PI Telco DWH model[®] in ERWin format that can be exported to other required formats
- Detailed Subject Areas Documentation
- Implementation and Customization Guide Documentation – how to implement model
- Detailed ERWin Model Report Documentation (~500 pages)
- 40 Report and 5 Dashboard Mockups in Excel
- Business Glossary with 400+ definitions
- KPI list with 150+ standard telco KPI definitions
- Source to Target Mapping templates
- Detailed Model content and Methodology Presentation for knowledge transfer (400+ Slides)

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 Framework 18.5 Assessment Scoping Document - Business Process Framework (eTOM)			
Company:		Inteligencija Poslovna D.O.O.	
Product:		PI Telco DWH model ® 4.0	
Assessment Type:		Product	
Framework Version:		18.5	
Number of L3 Processes in Scope:		3	
Level 1	Level 2	Level 3	
1.7 - Enterprise Domain			
1.7.8 - Common Enterprise Processes			
		1.7.8.1 - Data Analytics	X
		1.7.8.4 - Data Governance	X
		1.7.8.5 - Data Management	X

Table 1 - Business Process Framework (eTOM) Assessment Scope

3.3 Scope of Conformance Certification – Chart (eTOM)

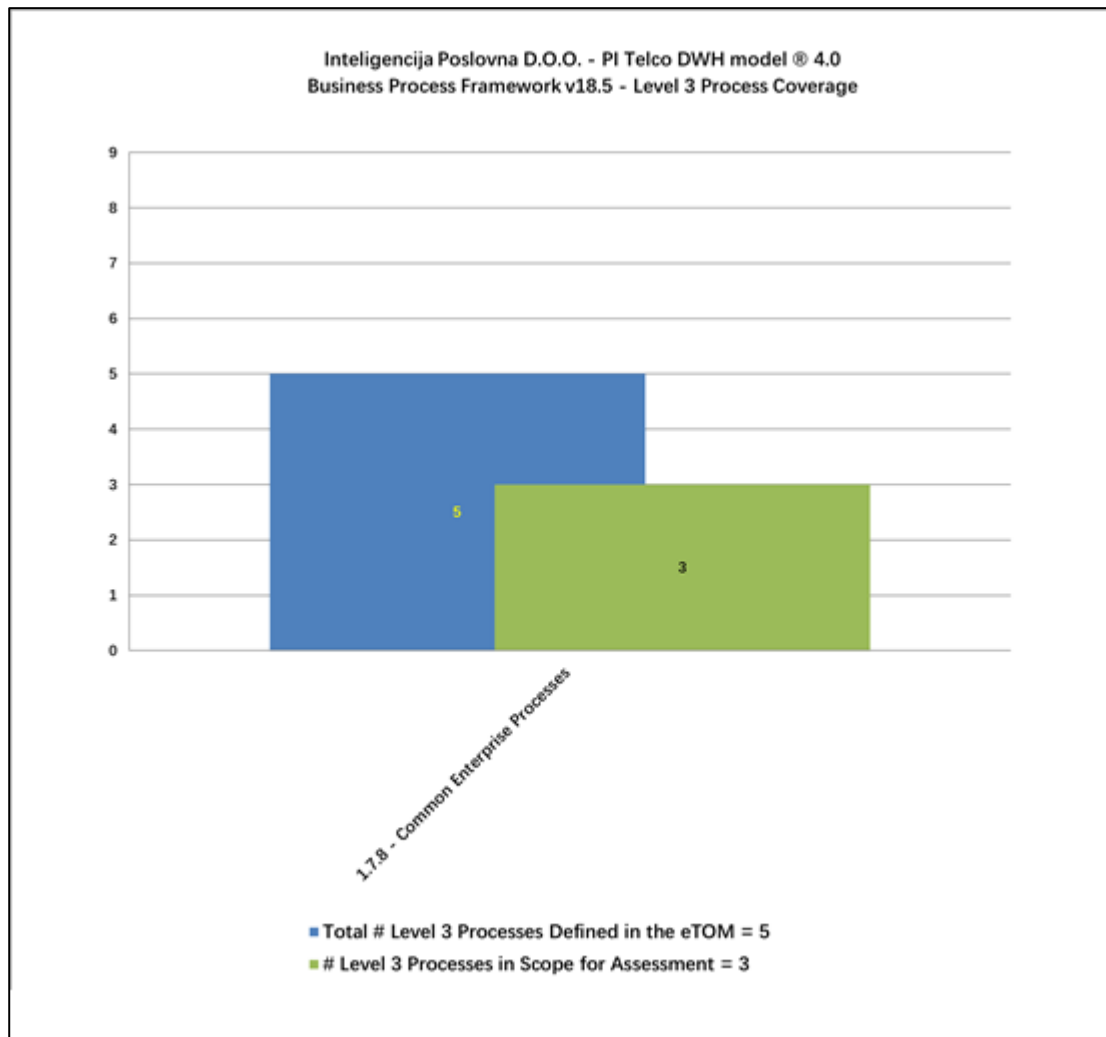


Figure 5- Level 3 process scope for certification

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 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 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 give 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 6- 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 received.

3.5.1 Enterprise Domain

3.5.1.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3 processes in scope for the '1.7 – Enterprise Domain' business processes are available from the following link:

https://tmforum-resources.s3.amazonaws.com/Conformance+Certifications+/Poslovna_Inteligencija_PI_Telco_DWH_model_v4eTOM_R18_5_CEP_1_7_8_V3RF.pdf

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

1.7.8 - Common Enterprise Processes	
	1.7.8.1 - Data Analytics
	1.7.8.4 - Data Governance
	1.7.8.5 - Data Management

3.6 Framework Conformance Result

This Section details the Scores awarded to reflect Conformance for Inteligencija Poslovna - PI Telco DWH model ® 4.0 to the Business Process Framework components of Framework 18.5.

TM Forum Framework 18.5 Assessment Scoping Document - Business Process Framework (eTOM)			
Company:		<i>Inteligencija Poslovna D.O.O.</i>	
Product:		<i>PI Telco DWH model ® 4.0</i>	
Assessment Type:		<i>Product</i>	
Framework Version:		18.5	
Number of L3 Processes in Scope:		3	
Level 1	Level 2	Level 3	Certification Final Scores for Level-3 Process Elements
1.7 - Enterprise Domain			
1.7.8 - Common Enterprise Processes			
		1.7.8.1 - Data Analytics	
		1.7.8.4 - Data Governance	5
		1.7.8.5 - Data Management	5

Figure 7- TM Forum Business Process Framework: Conformance Scores

3.6.1 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 Inteligencija Poslovna - PI Telco DWH model 4.0 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)

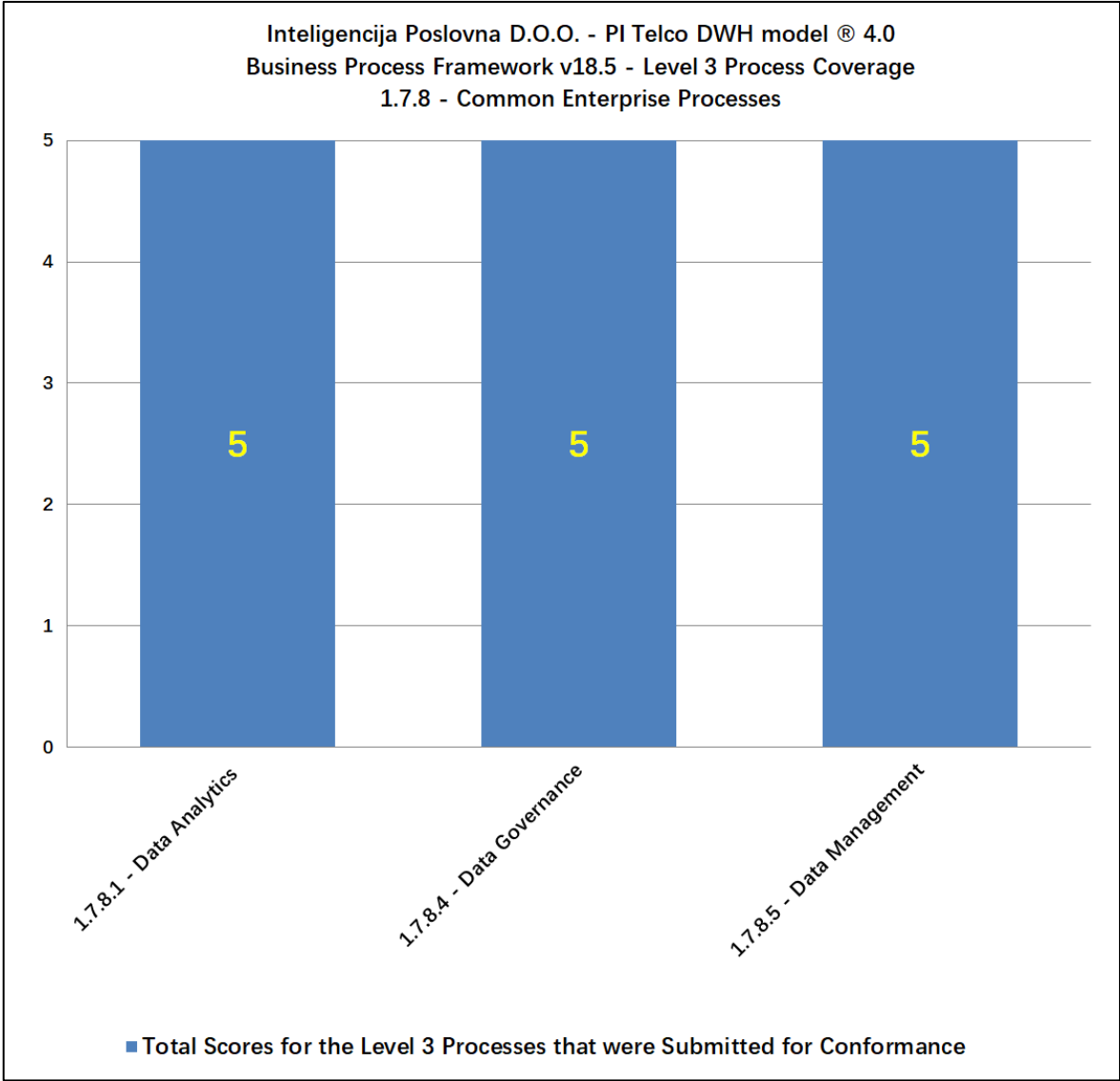


Figure 8- Conformance Scores – eTOM - 1.7.8 – Common Enterprise Processes

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.

For a view of the ABEs that were submitted in scope for conformance certification, please refer to Figure 2- ABEs coverage for Poslovna Inteligencija– PI Telco DWH model 4.0 Conformance Assessment on page 9.

4.2 Information Framework Conformance Result

This Section details the Scores awarded to reflect Conformance of the Inteligencija Poslovna - PI Telco DWH model ® 4.0 to the Information Framework components of Framework 18.5.

4.2.1 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.

This section provides further details about the **Adoption** scoring method.

4.2.2 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.

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

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 2 - TM Forum Information Framework Adoption Conformance - Scoring Rules Table 2 below.

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

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>						

Additional Notes on Information Framework Conformance Adoption 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. Adoption Scoring is based 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.

4.2.3 Information Framework – Conformance Result Summary

The following sections provide the summary results of the Information Framework Adoption scores granted to the ABEs presented in scope for the Inteligencija Poslovna - PI Telco DWH model 4.0 Framework Assessment.

Each ABE was measured using the Information Framework (SID) conformance scoring guidelines as described in section 4.2.2 above.

4.3 Information Framework – Detailed Conformance Results

TM Forum Framework 18.5 - Assessment Scoping Document - Information Framework (SID)			
Company:		<i>Inteligencija Poslovna D.O.O.</i>	
Product:		<i>PI Telco DWH model ® 4.0</i>	
Assessment Type:		<i>Product</i>	
Framework Version:		<i>18.5</i>	
ABEs in Scope:		<i>63</i>	
Level 1 ABEs	Level 2 ABEs	Level 3 ABEs	Conformance Certification Final Scores Achieved for ABEs
Market/Sales Domain			
Competitor ABE			10
Market Segment ABE			10
Marketing Campaign ABE			10
Product Domain			
Loyalty ABE	Loyalty Program ABE		10
Loyalty ABE	Loyalty Program Specification ABE		10
Product ABE			10
Product ABE	Product Price ABE		10
Product Configuration ABE			10
Product Configuration ABE	Product Action ABE		10
Product Offering ABE			10
Product Offering ABE	Product Catalog ABE		10
Product Offering ABE	Product Offering Price ABE		10
Product Specification ABE			10
Customer Domain			
Applied Customer Billing Rate ABE			10
Applied Customer Billing Rate ABE	Applied Customer Billing Rate Spec ABE		10
Customer ABE			10
Customer Bill ABE			10
Customer Bill ABE	Customer Billing Statistic ABE		10
Customer Bill Collection ABE	Dunning ABE		10
Customer Bill Inquiry ABE			10
Customer Order ABE			10
Customer Problem ABE			10
Service Domain			
Service ABE			9.9
Service Specification ABE			10
Service Specification ABE	Service Catalog ABE		10
Resource Domain			
Resource ABE			9.8
Resource Specification ABE			10
Resource Specification ABE	Resource Catalog ABE		10
Engaged Party Domain			
Additional Party Entities ABE			10
Agreement ABE			10
Party ABE			9.8
Party ABE/Contact Medium ABE			10
Party ABE	Currency ABE		10
Party ABE	Identification ABE		10
Party ABE	Party Community ABE		9.7
Party ABE	Party Demographic ABE		9.7
Party ABE	Party Organization ABE		10
Party ABE	Party Profile ABE		10
Party ABE	Party Role Group ABE		10
Party ABE	Skill ABE		10
Party Order ABE			10
Party Privacy ABE	Party Privacy Profile ABE		10
Party Privacy ABE	Party Privacy Profile Type ABE		10
Party Problem ABE			9.9
Enterprise Domain			
Workforce ABE	WorkSpecification ABE		10
Workforce ABE	Workforce Schedule ABE		9.0
Workforce ABE	Workforce Resource ABE		9.1
Common Business Entities Domain			
Account ABE			10
Business Interaction ABE			10
Business Interaction ABE	Disputed Amount ABE		10
Capacity ABE			10
Catalog ABE			10
Location ABE			10
Metric ABE			10
Performance ABE			10
Performance ABE	Performance Specification ABE		10
Policy ABE			10
Project ABE			10
Project ABE	Activity ABE		9.9
Project ABE	Work Breakdown Structure ABE		10
Project ABE	Work Order ABE		10
Trouble Ticket ABE			10
Usage ABE			10

Table 3 - Information Framework: Detailed Conformance Result

4.4 Information Framework - Adoption Conformance Result Summary

4.4.1 Market/Sales Domain

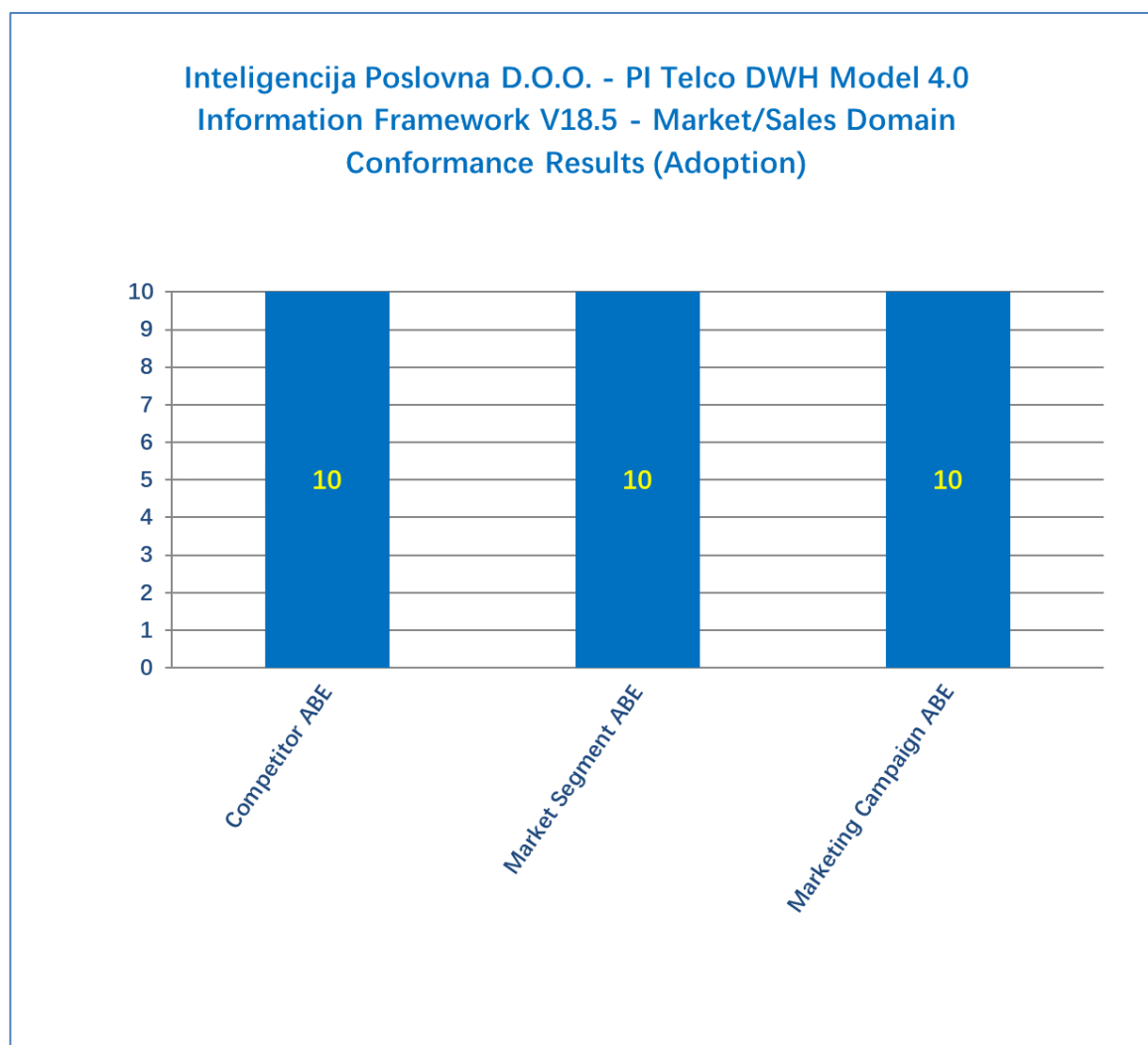


Figure 9- Conformance Scores SID – Market/Sales Domain

4.4.2 Customer Domain

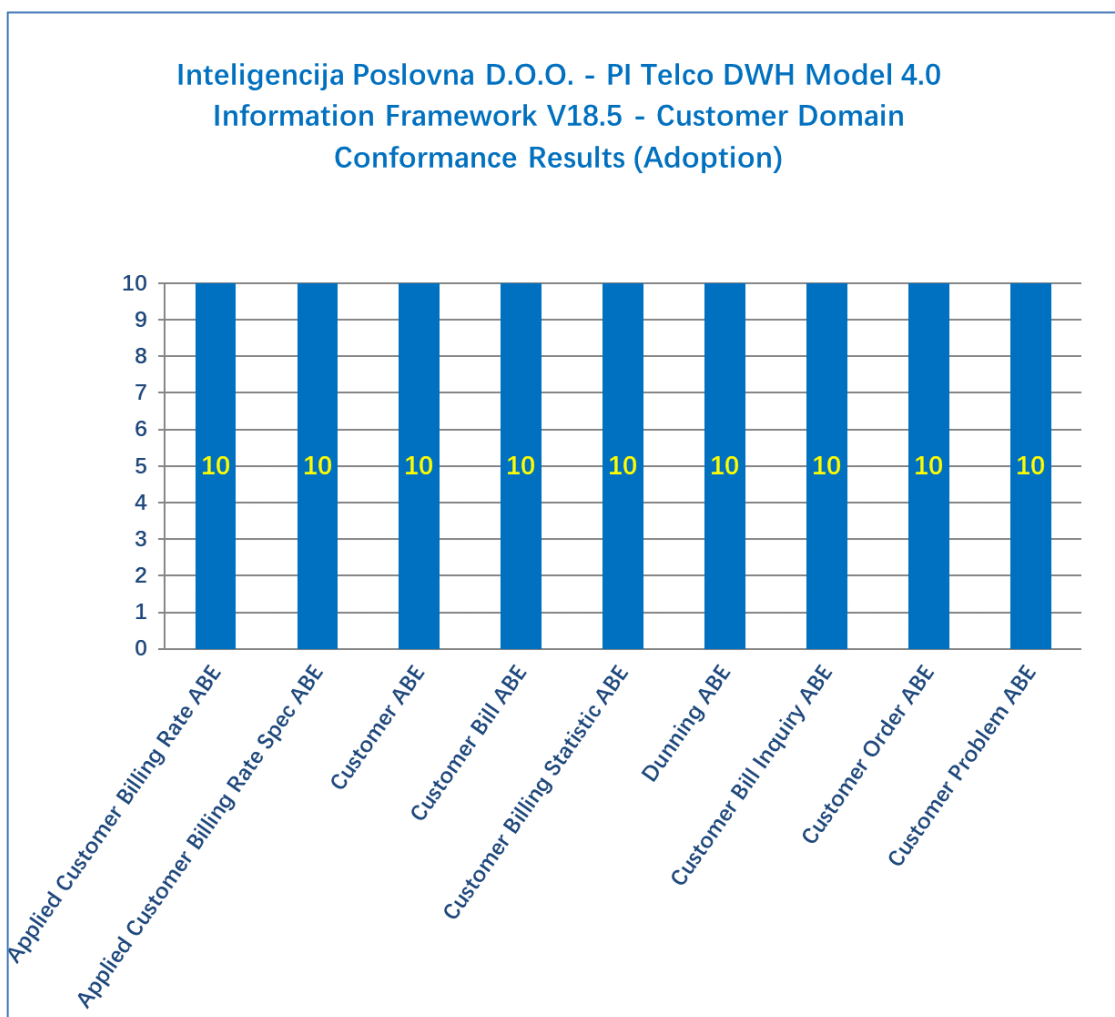


Figure 10- Conformance Scores SID – Customer Domain

4.4.3 Product Domain

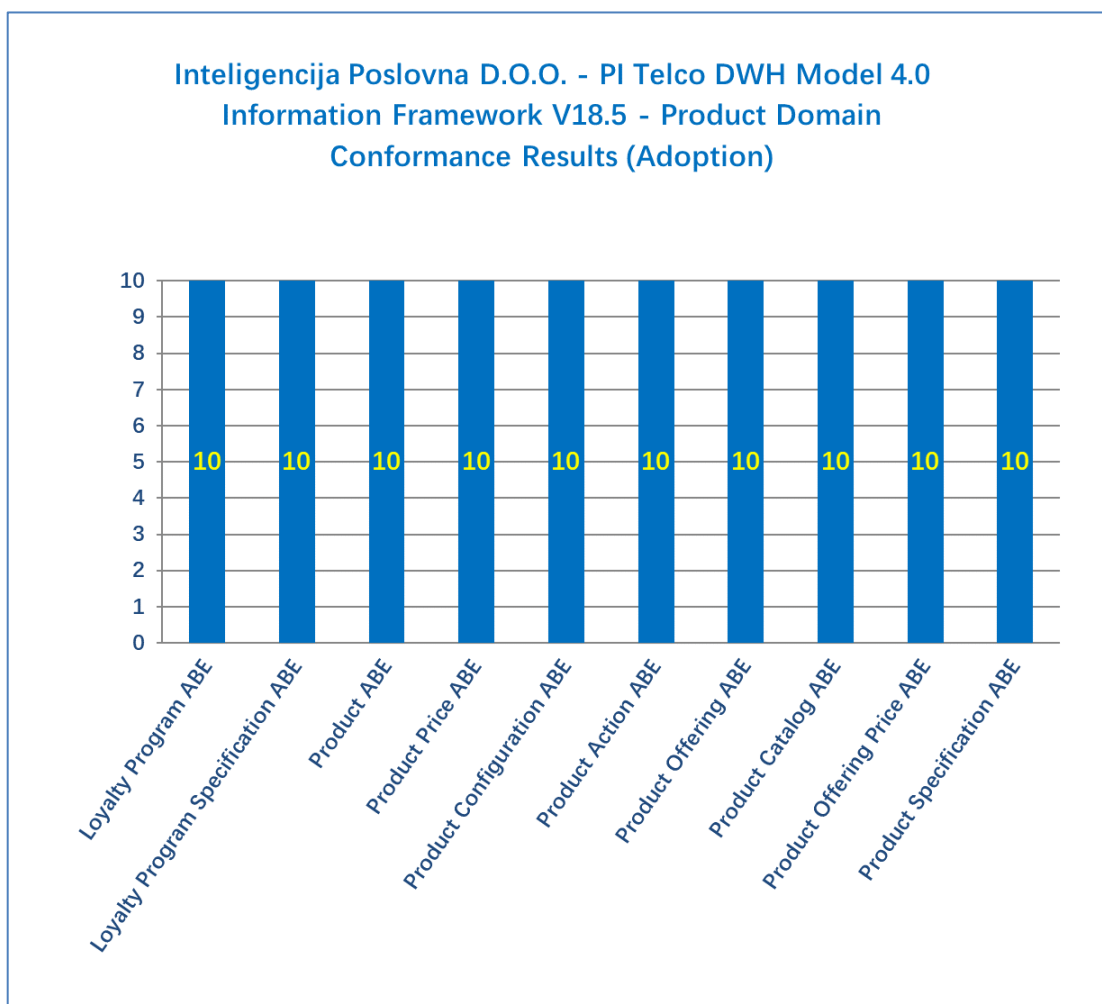


Figure 11- Conformance Scores SID – Product Domain

4.4.4 Service Domain

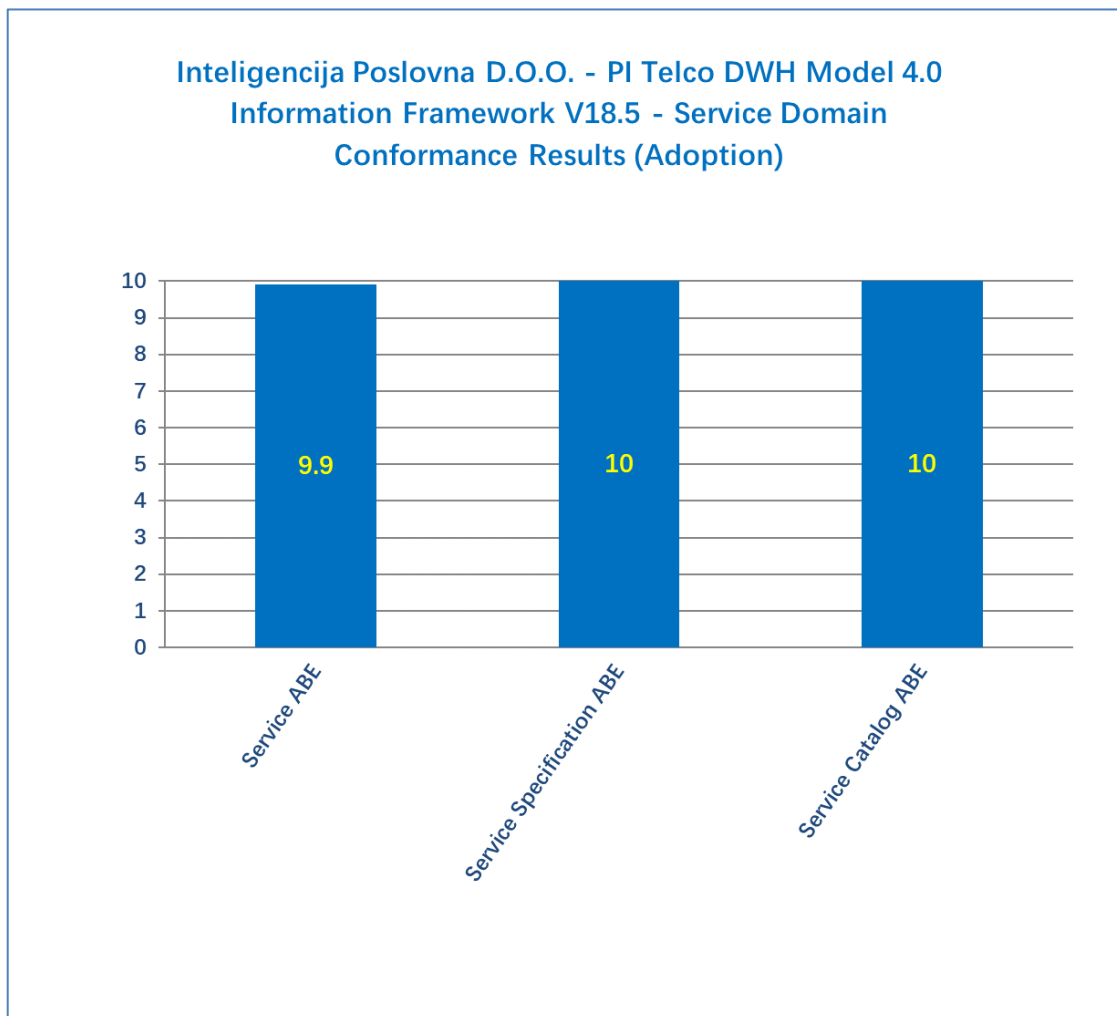


Figure 12- Conformance Scores SID – Service Domain

4.4.5 Resource Domain

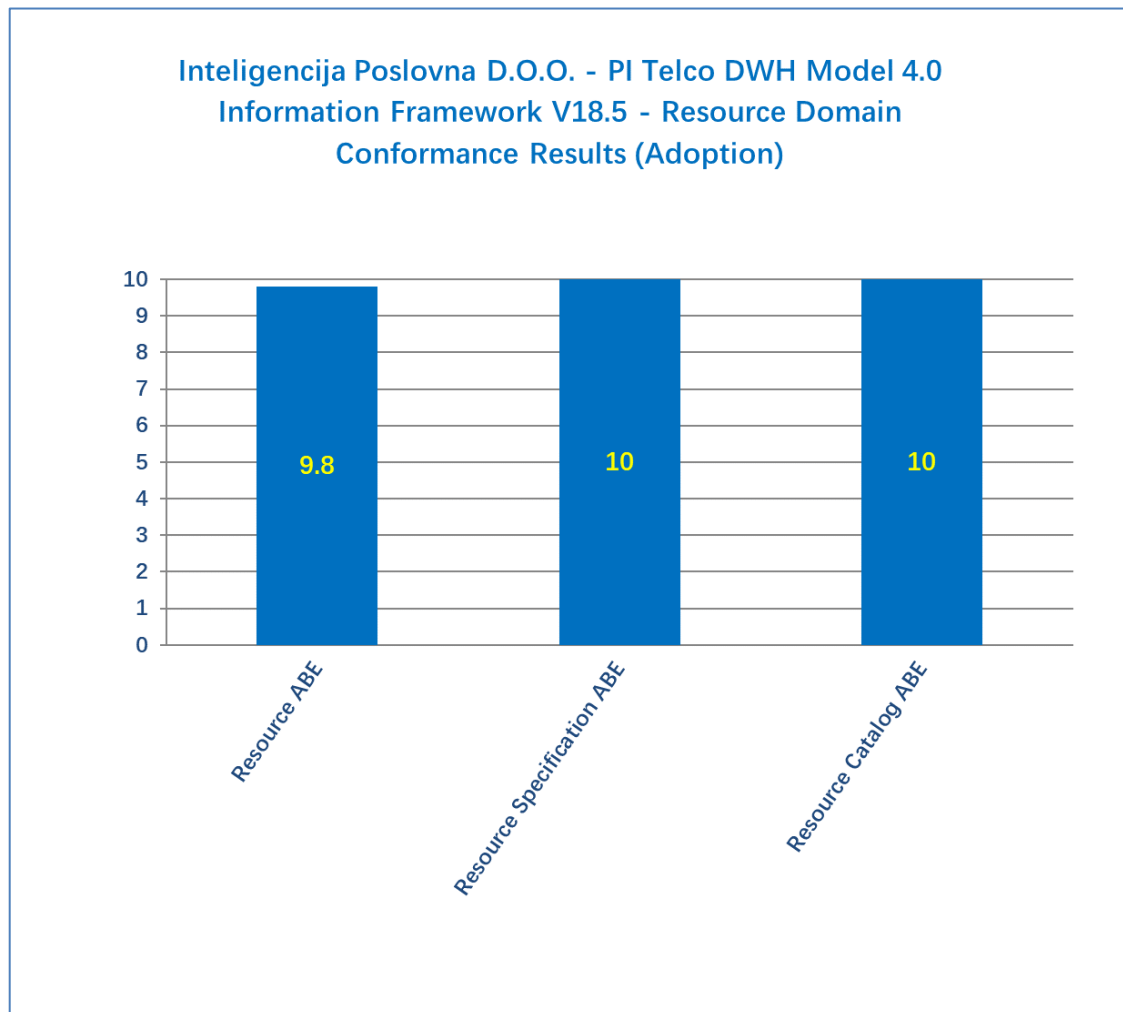


Figure 13- Conformance Scores SID – Resource Domain

4.4.6 Engaged Party Domain

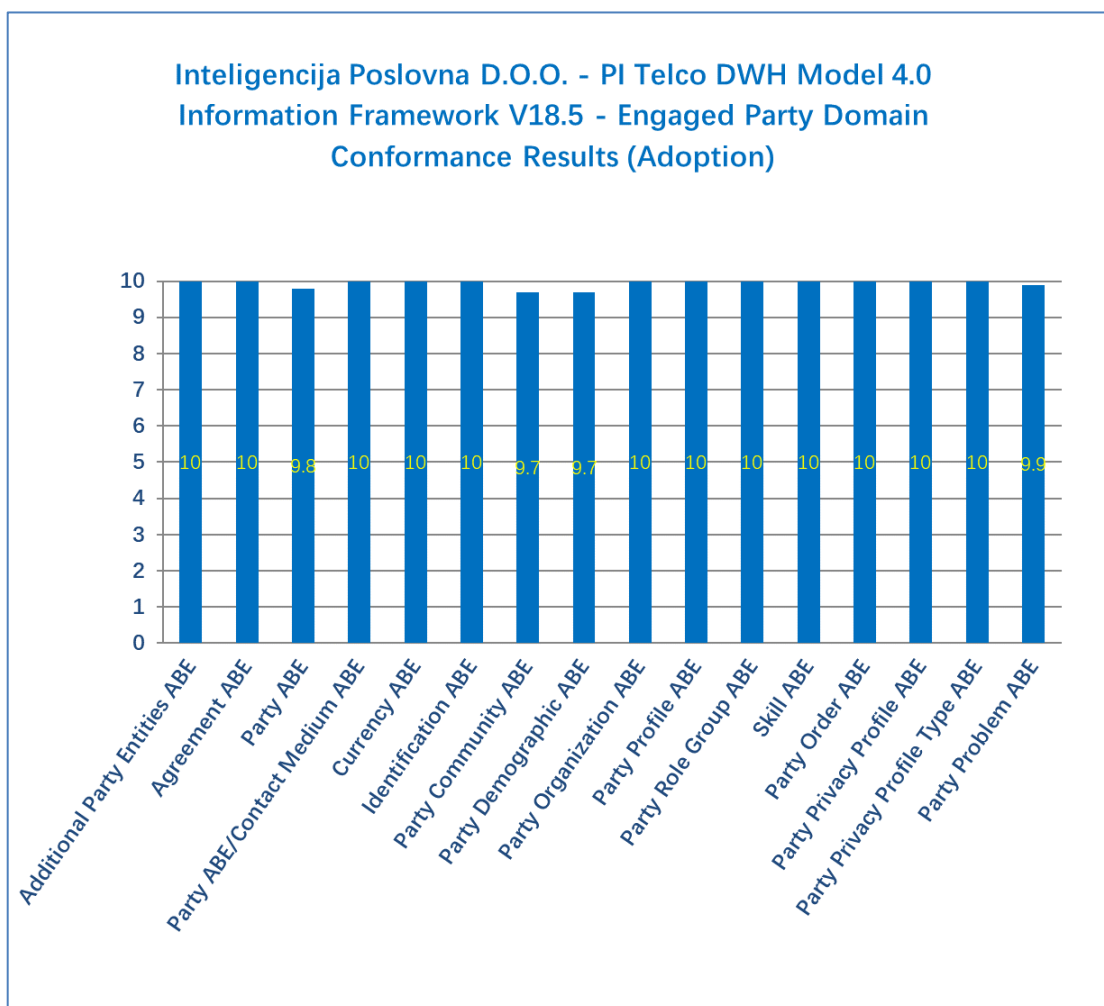


Figure 14- Conformance Scores SID – Engaged Party Domain

4.4.7 Enterprise Domain

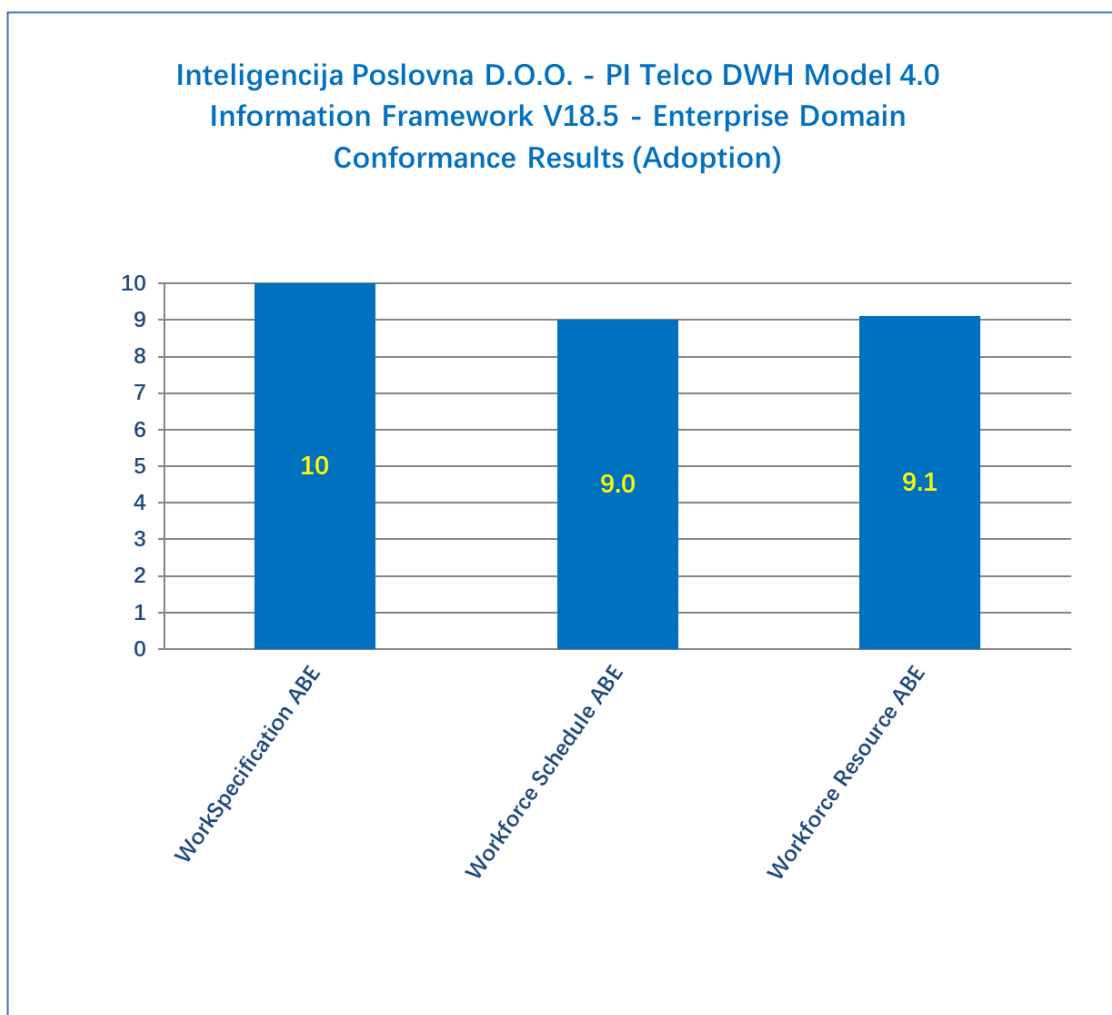


Figure 15- Conformance Scores SID – Enterprise Domain

4.4.8 Common Business Entities Domain

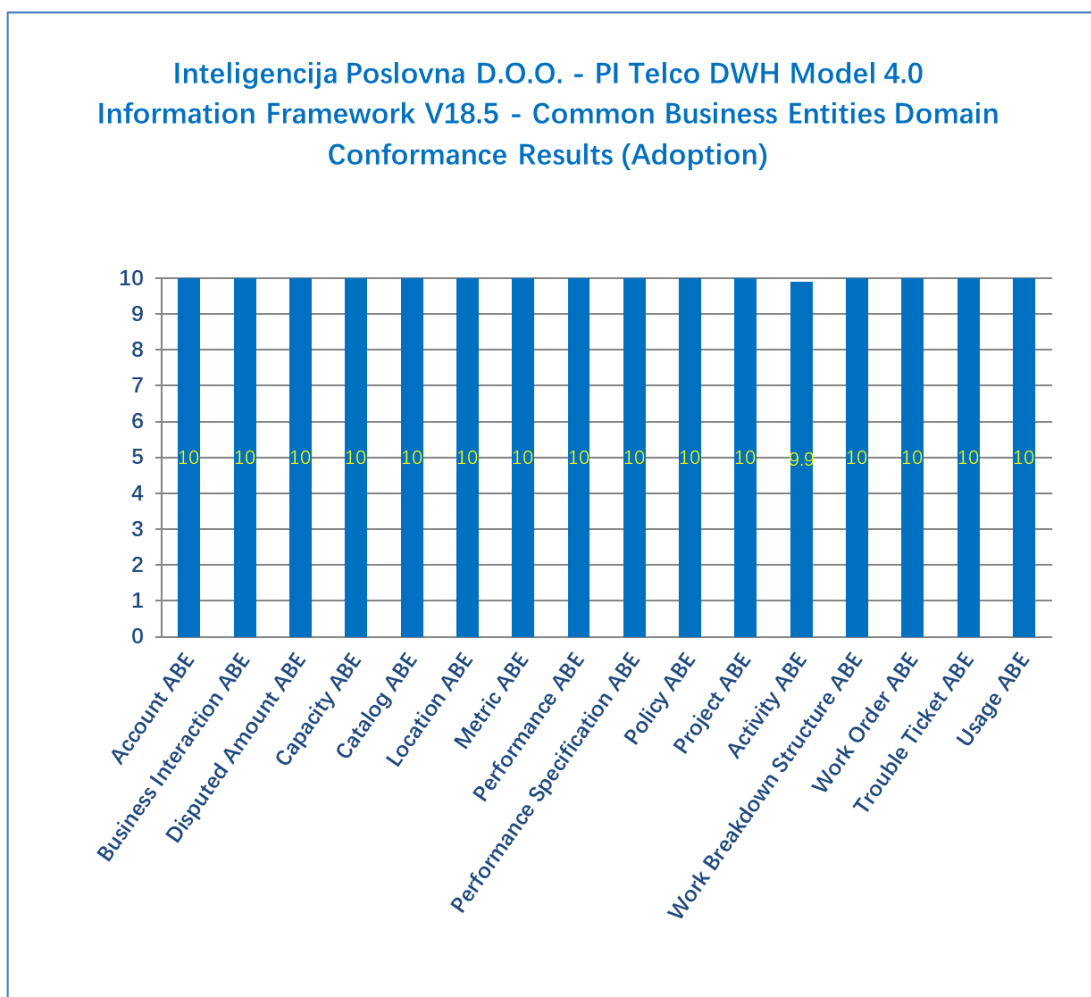


Figure 16- Conformance Scores SID – Common Business Entities Domain