

Framework 19.0

**Design & Implementation Conformance
Certification**

Company Name: Saudi Telecom Company

Area Name: Application Operations

Report Version: 1.0

Report Date: 30 November 2019

Table of Contents

List of Figures	1
List of Tables	2
1 Introduction	3
1.1 Executive Summary	3
2 Functionality/Capability Overview	4
2.1 STC-Application Operations- Organization Systems Operations Dept. Business Process Blueprint – Design & Implementation Overview	4
2.2 Resource Trouble Management	7
3 STC – Application Operations - Business Process Framework Process Scope.....	9
4 Business Process Framework Assessment Overview	10
4.1 Mapping Technique Employed.....	10
5 Business Process Framework – Process Mapping Descriptions	12
5.1 Level 2: 1.5.8 – Resource Trouble Management.....	12
5.1.1 Mapping Details & Supporting Evidence	12
6 Framework Conformance Result	14
6.1 Business Process Framework – Scoring Guidelines	14
6.2 Business Process Framework – Conformance Result Summary.....	15
6.3 Business Process Framework – Detailed Conformance Results - Resource Domain	16

List of Figures

Figure 1 – Org Structure.....	6
Figure 2 – Detailed L4 Resource Trouble Management.....	7
Figure 3- Level 2 process coverage for STC Application Operations Assessment.....	9
Figure 4 - Level 3 process coverage for STC Application Operations Assessment.....	11
Figure 5 - TM Forum Business Process Framework: Conformance Scoring Rules.....	14
Figure 6 - Conformance Results (eTOM) Resource Domain	15

List of Tables

Table 6-1 Business Process Framework: Detailed Conformance Results - Resource16

1 Introduction

1.1 Executive Summary

This document provides details of the implementation of the TM Forum Business Process Framework at **Saudi Telecom Company (STC)'s Application Operations**, along with Conformance Assessment, against the following TM Forum Framework 19.0 components:

- Business Process Framework Version 19.0

The assessment included a review of the methodology approach to process modeling against the TM Forum's Business Process Framework Release 19.0 according to the specific processes submitted in scope for the Assessment.

Note that Conformance to the Information Framework (SID) Aggregate Business Entities (ABEs) was not covered in this Assessment.

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

2 Functionality/Capability Overview

2.1 STC-Application Operations- Organization Systems Operations Dept. Business Process Blueprint – Design & Implementation Overview

Applications Operations

Is responsible for leading the operations for all systems in Applications Sector and for providing user focused, cost effective operations and support services for STC, ensuring compliance with policies, procedures and established standards. It is also responsible for leading service management and quality control of operational environment.

Organization Systems Operations department

Is responsible for managing the operations of Organization Enablement business applications, operating systems, and databases in production environment. The Department is also responsible for increasing the efficiency and productivity of these systems by regularly measuring the performance against benchmark levels and leveraging technology for continuous improvement and system upgrades.

Admin & Subsidiary Systems Operation

- Managing Operations activities and processes for Admin & Subsidiary Systems 24/7 in addition to Building Security & Siport Systems
- Providing L1 & L2 operation support based on agreed SLAs
- Monitoring Admin & Subsidiary Systems performance and ensure services stability, integrity and availability.
- Tracking infrastructure capacity and growth.
- Performing System Administration services for all Admin & Subsidiary Systems
- Ensuring security requirements are met and conducting security vulnerability management
- Deploying Admin & Subsidiary Systems RFCs governed by defined SLA and KPIs
- Resolves Admin & Subsidiary Systems Incidents TT and service request governed by defined SLA and KPIs
- Cooperating with Subsidiaries for their related systems in operations
- Conducting regular maintenance and health checks proactively detecting and solving defects and issues
- Conducting quarterly preventive maintenance every 3 months for Building Security & Siport Systems.
- Managing backups and ensuring recovery in case of failure.
- Controlling operational activities within budget and influence the proper and effective use of resources.
- Manages all database issues, troubleshooting and resolution of all complex technical problems to minimize the disruption in business operations.

- Coordinates with other Sectors to ascertain business requirements and management of administrative and managerial systems such as RTTS, JIRA, ATS, HPM, voting applications etc. as time management calendars, project management systems, workflow systems, knowledge management systems etc.
- Performs complex configuration, change management and testing activities to ensure proper functioning of administrative and managerial systems and integration with other systems and applications.

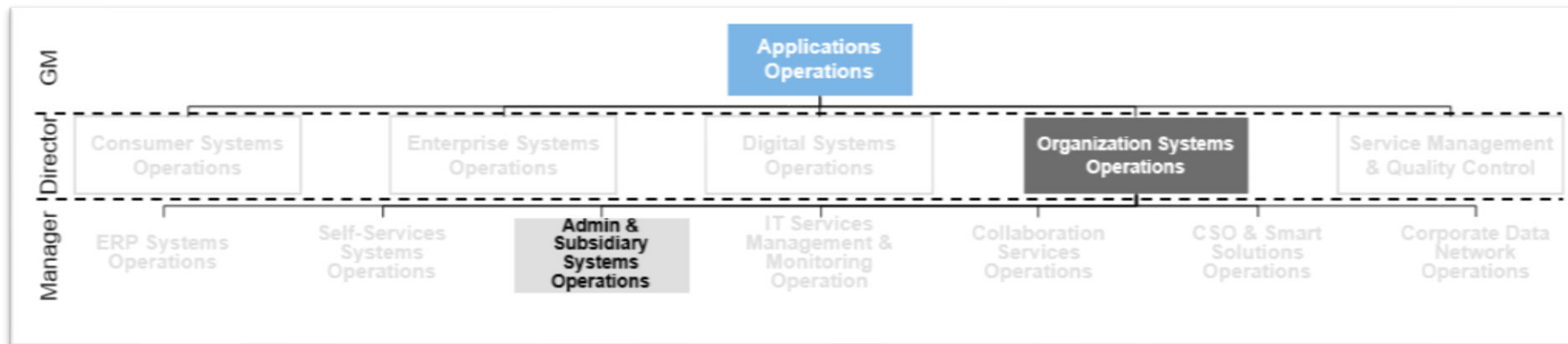


Figure 1 – Org Structure

The Process under assessment focus is to return the service to a normal service level, as quickly as possible with minimum disruption to the business. Keeping a record of resource troubles for reporting, and integrate with other processes to drive continuous improvement. It places great emphasis on the timely recording, classification, diagnosis, escalation and resolution of resource troubles.

2.2 Resource Trouble Management

Resource Trouble Management processes are responsible for the management of troubles associated with specific resources. The objectives of these processes are to efficiently and effectively manage reported resource trouble, isolate the root cause and act to resolve the resource trouble.

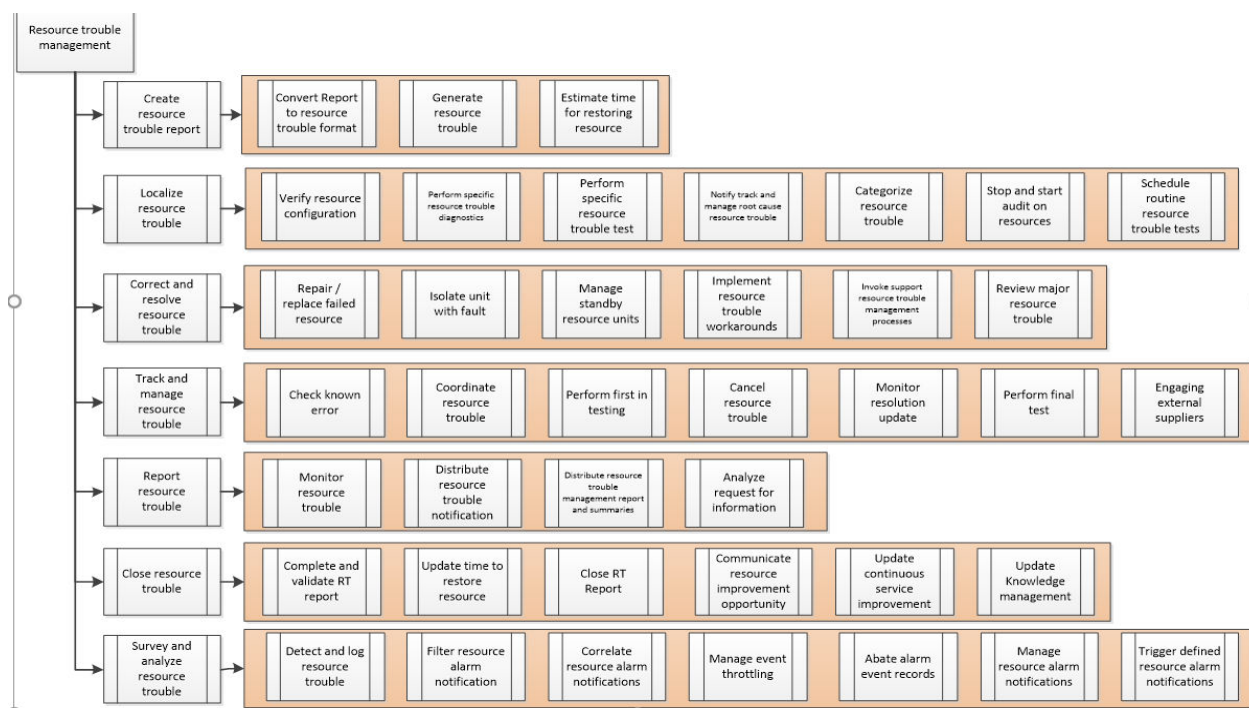


Figure 2 – Detailed L4 Resource Trouble Management

To ensure consistency and promote standardization the following principles, techniques, standards and best practices are observed for process design, implementation and improvement:

Design and Implementation principles

1. Effectiveness

- Reduce non-value adding activities
- First time right
- Reduce Cycle time
- Reduce number of hand-offs
- Reduce Human Intervention

2. Unification

- Unified shape for the Assurance processes inside operations

- Reduction of process variants
- Standardization of processes (in line with GB 921U)

3. Efficiency

- Improve the process to fix the top issues affecting the operation efficiency
- Compliance to business process frameworks
- Common Governance structure for review conformance and maturity of process design.

4. Utilization

- Remove roles duplicates and overlaps
- Clear boundaries & job description
- Reusable components

5. Customer Experience

- Customer Insightfulness of processes
- Improve Customer Touch points to have Customer interface processes centralized, avoid duplicates

6. Systems & Digitization

- Convert Conceptual process model to Executable process model digitized Processes.

Design and Implementation Policies

- Use STC Methodology & Templates
- Proper Document Management
- Alignment with best practices & Standards
- Continuous Improvement through Audits & Corrective Action
- Well define process KPIs
- KPIs monitoring & Reporting
- Employee Quality Awareness
- Third Party Governance
- Well define mechanism for Customer Satisfaction (internal / External)
- Maximize the Workflow Automation
- Management Reporting & Dash Board
- Data Archiving mechanism in place

3 STC – Application Operations - Business Process Framework Process Scope

The following figure represents the scope of the assessment based on the Business Process Framework (eTOM) v.19.0. The Level-2 processes highlighted in red, and all their Level-3 constituents were submitted for conformance certification.

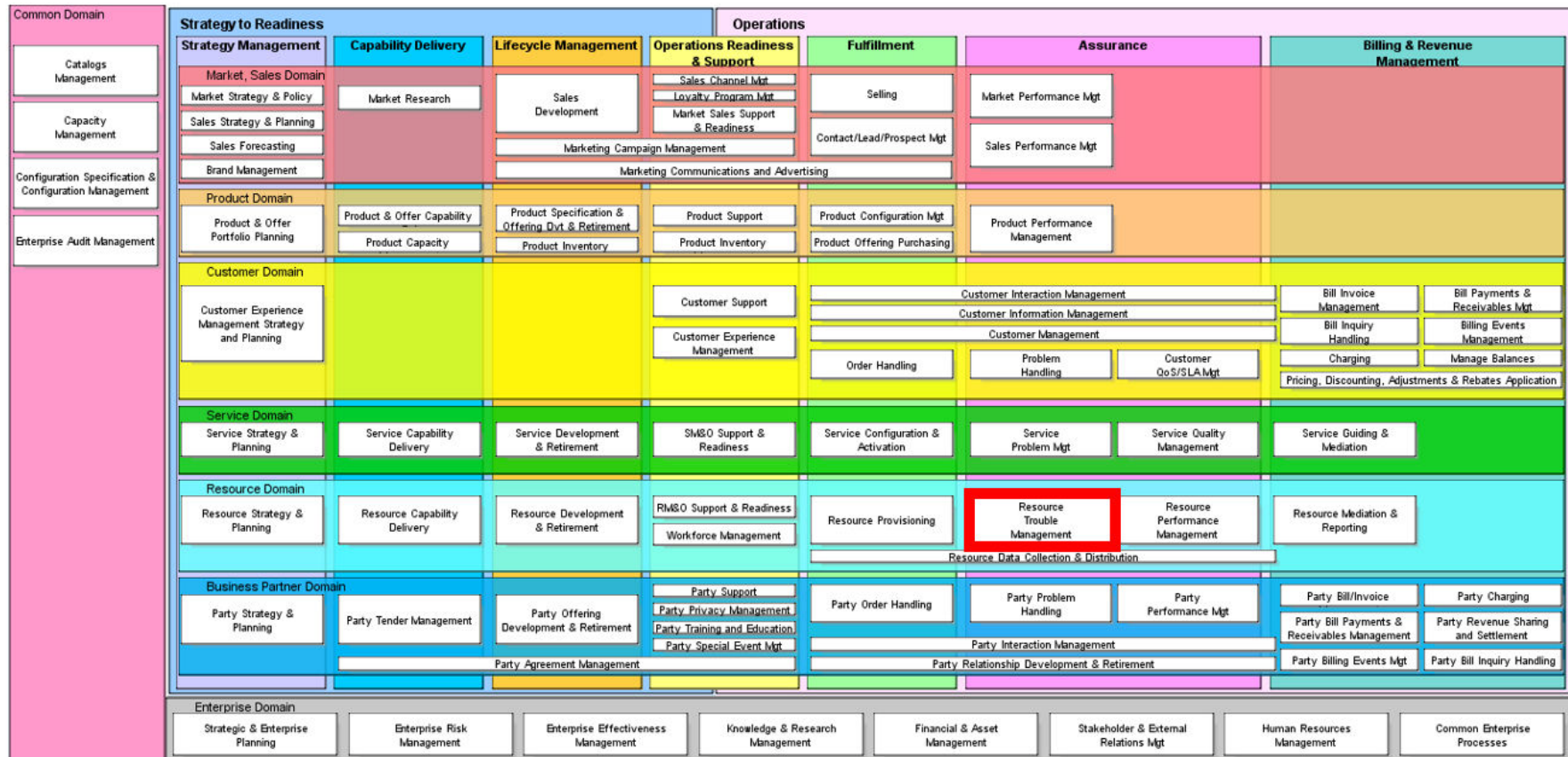


Figure 3- Level 2 process coverage for STC Application Operations Assessment

4 Business Process Framework Assessment Overview

4.1 Mapping Technique Employed

Business Process Framework Level 4 descriptions are analyzed by looking for implied tasks. (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.

Note that when a Level 3 process has not been decomposed to Level 4 processes, the implied tasks for the given Level 3 process are analyzed.

The Business Process Framework Level 4 descriptions (or Level 3 if appropriate) are analyzed by looking for implied tasks. 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.

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 provided against the text in the “Mandatory” field for the process. In the event of the Mandatory field not being used, the process mappings are in that case provided against the Level 4 Brief/Extended descriptions.*

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 4 process descriptions (Brief & Extended).*

The following diagram identifies the number of Level 3 processes that were submitted for assessment, for each Level 2 process that was submitted in scope for the Assessment.

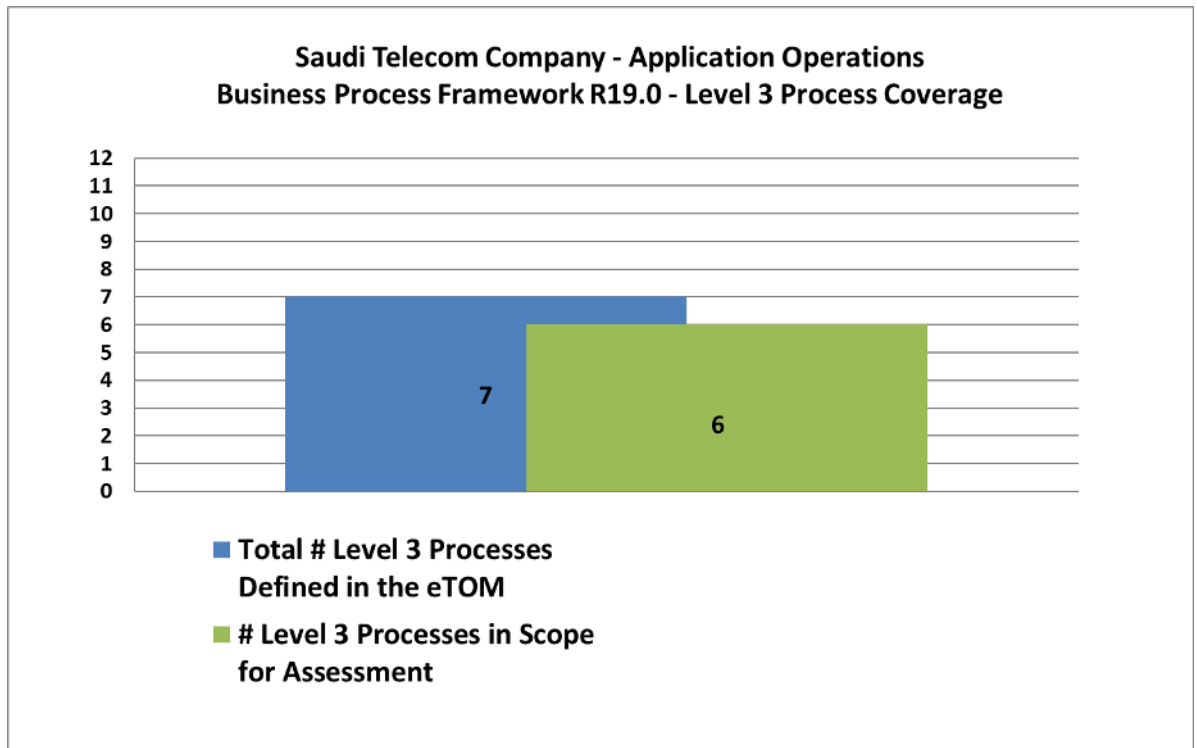


Figure 4 - Level 3 process coverage for STC Application Operations Assessment

5 Business Process Framework – Process Mapping Descriptions

This Section provides a summary of the design and implementation mappings that STC Application Operations GD provided in the form of self-assessment.

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

5.1 Level 2: 1.5.8 – Resource Trouble Management

5.1.1 Mapping Details & Supporting Evidence

The documented mapping information for all Level 3 processes in scope for the “1.5.8 – Resource Trouble Management” business processes is available from the following link:

https://www.tmforum.org/wp-content/uploads/2019/12/STC_App_Ops_Conformance_Map.pdf

Mappings and supporting evidence were presented for the following **L3/L4** processes:

1.5.8 RESOURCE TROUBLE MANAGEMENT

1.5.8.1 Survey & Analyze Resource Trouble *(out of scope)*

1.5.8.2 Localize Resource Trouble

- 1.5.8.2.1 - Verify Resource Configuration
- 1.5.8.2.2 - Perform Specific Resource Trouble Diagnostics
- 1.5.8.2.3 - Perform Specific Resource Trouble Tests
- 1.5.8.2.4 - Stop And Start Audit On Resources
- 1.5.8.2.5 - Schedule Routine Resource Trouble Tests
- 1.5.8.2.6 - Notify T&M Root Cause Resource Trouble
- 1.5.8.2.7 - Categorize Resource Trouble

1.5.8.3 Correct & Resolve Resource Trouble

- 1.5.8.3.1 - Repair / Replace Failed Resource
- 1.5.8.3.2 - Isolate Unit with Fault
- 1.5.8.3.3 - Manage Standby Resource Units
- 1.5.8.3.4 - Implement Resource Trouble Work Arounds
- 1.5.8.3.5 - Invoke Support Resource Trouble Management Processes
- 1.5.8.3.6 - Review Major Resource Trouble
- 1.5.8.3.7 - Probe Root Cause Of Failure
- 1.5.8.3.8 - Self Heal Resource Trouble

1.5.8.4 Track & Manage Resource Trouble

- 1.5.8.4.1 - Coordinate Resource Trouble
- 1.5.8.4.2 - Perform First in Testing

- 1.5.8.4.3 - Cancel Resource Trouble
- 1.5.8.4.4 - Escalate/End Resource Trouble
- 1.5.8.4.5 - Perform Final Test
- 1.5.8.4.6 - Engaging External Suppliers
- 1.5.8.4.7 - Prioritize Resource Trouble

1.5.8.5 Report Resource Trouble

- 1.5.8.5.1 - Monitor Resource Trouble
- 1.5.8.5.2 - Distribute Notifications
- 1.5.8.5.3 - Distribute Management Reports & Summaries

1.5.8.6 Close Resource Trouble Report

1.5.8.7 Create Resource Trouble Report

- 1.5.8.7.1 - Generate Resource Trouble
- 1.5.8.7.2 - Convert Report To Resource Trouble Format
- 1.5.8.7.3 - Estimate Time For Restoring Resource

6 Framework Conformance Result

This Section details the Scores awarded to reflect Conformance of the STC Application Operations design & implementation to the Business Process Framework components of Framework 19.0.

6.1 Business Process Framework – Scoring Guidelines

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

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

6.2 Business Process Framework – Conformance Result Summary

The graph in this Section provides an overview of the conformance levels granted to the Level 3 Processes presented in scope for STC Application Operations conformance assessment.

Each Level 3 process was measured using a Business Process Framework (eTOM) conformance score according to the level of Conformance – Full Conformance or Partial Conformance as described in Section 6.1 Business Process Framework – Scoring

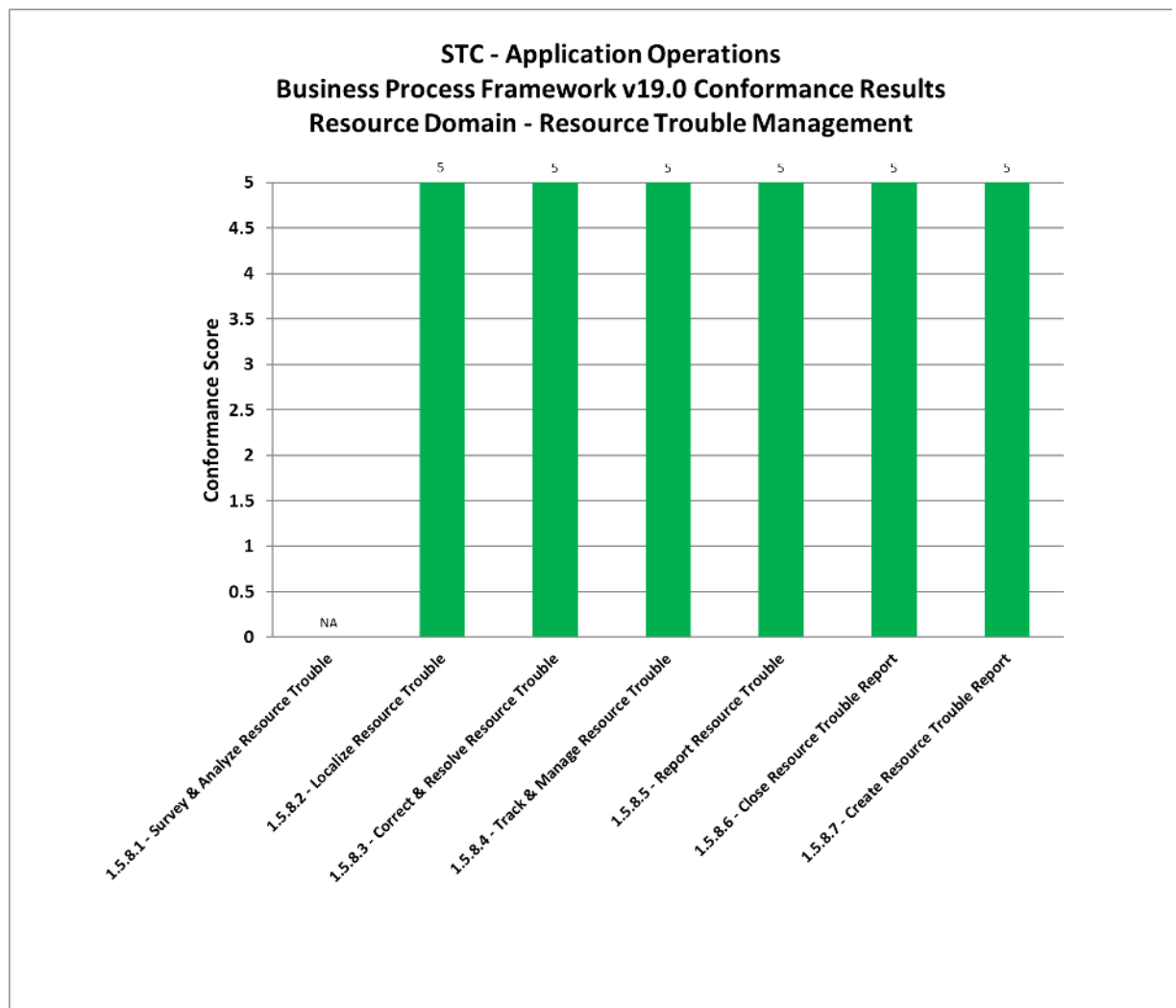


Figure 6 - Conformance Results (eTOM) Resource Domain

6.3 Business Process Framework – Detailed Conformance Results - Resource Domain

TM Forum Framework 19.0 Assessment Scoring Document - Business Process Framework (eTOM)			
Member:		<i>Saudi Telecom Company (STC)</i>	
Product or Area:		<i>Application Operations</i>	
Assessment Type:		<i>Design-Implementation Assessment</i>	
Number of L3 Processes in Scope:		6	
<i>Level 2</i>	<i>Level 3</i>		
1.5 - Resource Domain			
1.5.8 - Resource Trouble Management		L2	
	1.5.8.1 - Survey & Analyze Resource Trouble	NA	Not in Scope
	1.5.8.2 - Localize Resource Trouble	L3	5
	1.5.8.3 - Correct & Resolve Resource Trouble	L3	5
	1.5.8.4 - Track & Manage Resource Trouble	L3	5
	1.5.8.5 - Report Resource Trouble	L3	5
	1.5.8.6 - Close Resource Trouble Report	L3	5
	1.5.8.7 - Create Resource Trouble Report	L3	5

Table 6-1 Business Process Framework: Detailed Conformance Results - Resource