Frameworx 10

Business Process Framework R8.0

Product Conformance Certification Report

Tektronix
IRIS Application Suite
Release 11.3

January 2012

Table of Contents

List of Tables

List of Figures

1 Introduction

1.1 Executive Summary

This document provides details of Tektronix's self-assessment and TM Forum's certification of Tektronix's IRIS Application Suite, Release 11.3 including the methodology approach to product modeling and Product Lifecycle Management (PLM) against the TM Forum's Business Process Framework Release 8.0.

1.2 Tektronix IRIS Application Suite Functionality/Capability

Tektronix Communications Iris Suite framework provides a seamless user experience across a wide range of powerful network management tools. Iris Suite provides single sign-on access to IrisTouchPoint Customer Experience Management (CEM), Performance Intelligence (IPI), Iris Traffic Analyzer (ITA), Iris Session Analyzer (ISA), Protocol Analyzer (PA) and Iris Automated Control Engine (ACE). The Iris Suite graphical user interface consolidates these networks-, service- and customer-focused applications regardless of the underlying data sources. Iris Suite's web services based design will enable easy integration of additional network management tools.

1.3 Mapping Technique Employed

Business Process Framework L3 descriptions are analyzed by looking for implied tasks. (This is similar to how process decomposition can use Semantic Analysis). Each eTOM 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.

The eTOM L3 descriptions 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 3 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).

2 Assessment Scope

2.1 Business Process Framework Level 2 Scope

Figure 2.1 represents Business Process Framework Level 2 processes (blue background) that were presented in scope for the assessment, and the textual callouts represent the framework and component solution of the Tektronix IRIS Application Suite Solution that were assessed and support the corresponding eTOM processes according to the results in Chapter 4.

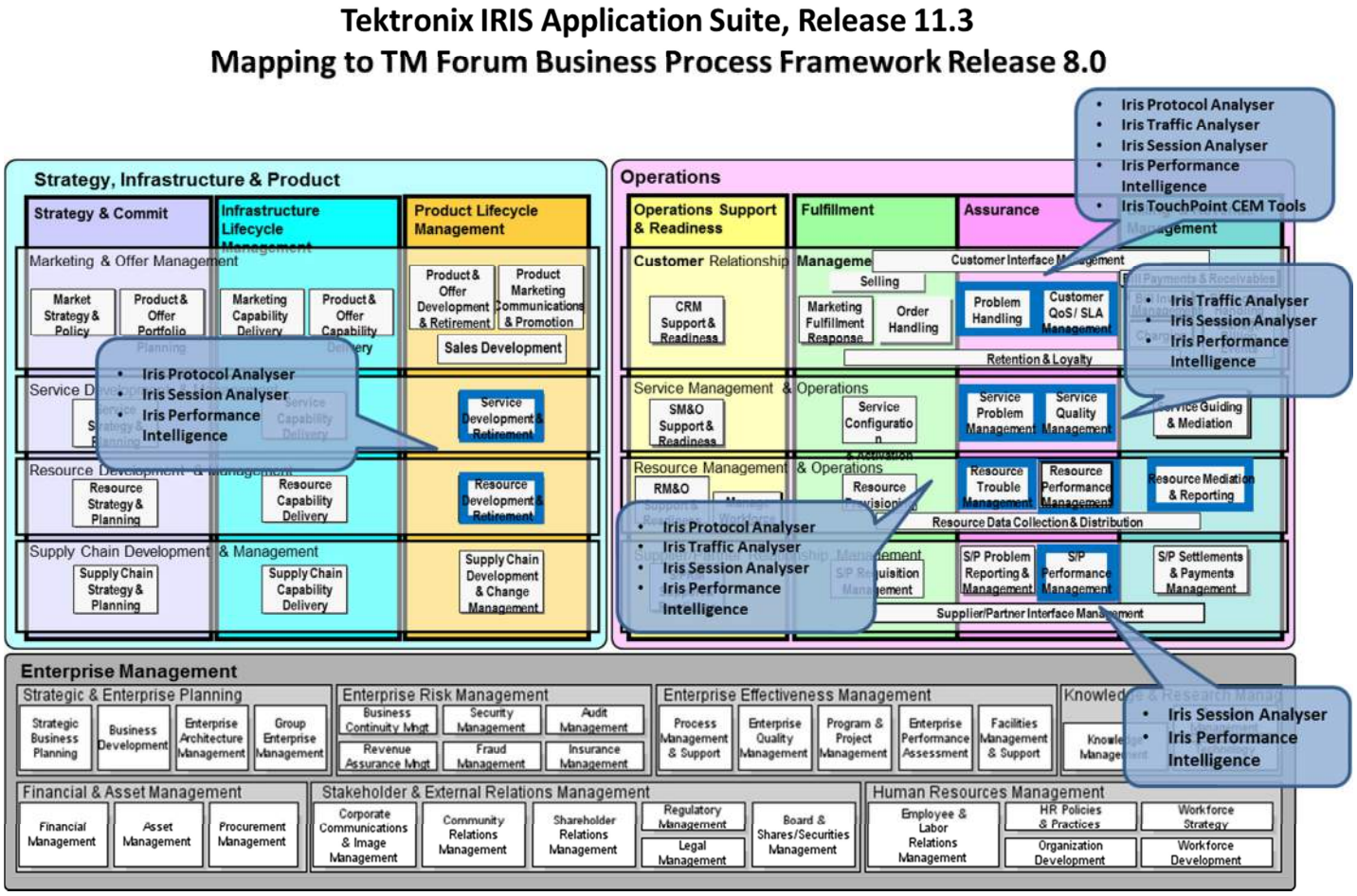

Figure 2.1 Business Process Framework Level 2 Scope

2.2 Product Scope

Figure 2-2

Figure 2.1represents the Tektronix IRIS Application Suite Product. The aspects of the product that were presented in scope are shown with a blue border. The textual callout represent the TM Forum Business Process Framework Level 2 processes that were assessed and that are supported by the Tektronix IRIS Application Suite product according to the Conformance Results in Chapter 4 Process Conformance.

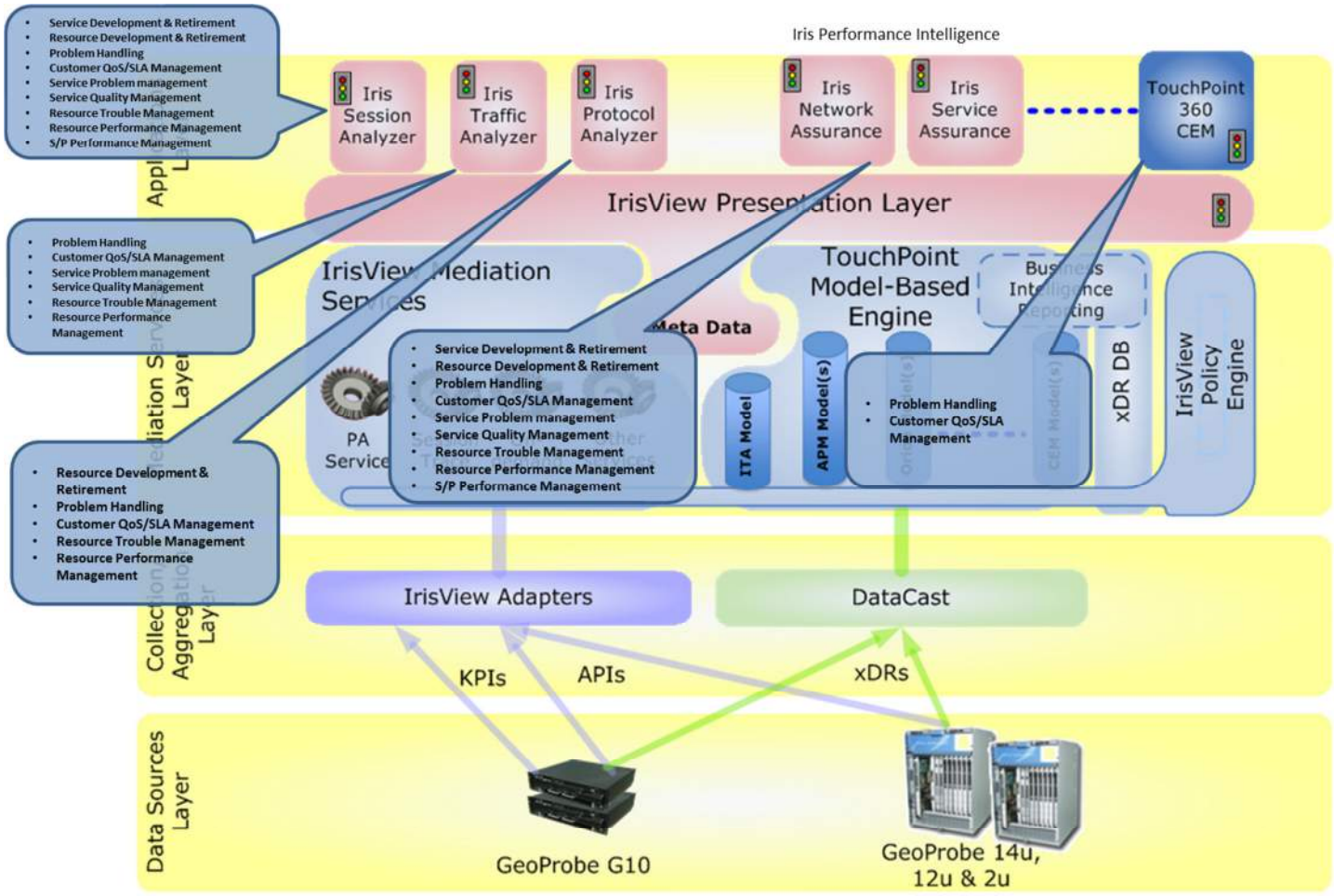

Figure 2.2 Tektronix IRIS Application Suite - Product Scope

3 Self-Assessment – Process Mapping Descriptions

3.1 Customer Relationship Management

3.1.1 1.1.1.6 - Problem Handling

eTOM process element	Tektronix Communications Mapping	
1.1.1.6 Problem Handling	Alignment	Mapping Comment
1.1.1.6.1 - Isolate Customer Problem	Tektronix Communications End User Use Case Document – Iris Application Suite Use Case: Iris-T-001	**Brief description** Identify the root cause of the customer problem. **AM** Please refer to Iris-T-001 **Extended description** The purpose of the Isolate Customer Problem processes is to identify the root cause of the customer problem. The responsibilities of these processes include, but are not limited to: · Verifying whether the customer is using the purchased product offering correctly; and **AM** Please refer to Iris-T-001 Step 1, 2, 2a · Performing diagnostics based on the customer provided information to determine whether the root cause of the customer problem is linked to the underlying services. **AM** Please refer to Iris-T-001 Step 1-7 and 6' The Isolate Customer Problem processes will make the results of the root cause analysis available to other processes. The Isolate Customer Problem processes will update open customer problem report, as required during the assessment, and when the root cause has been identified. **AM** Please refer to Iris-T-001 The Isolate Customer Problem processes will notify the Track & Manage Customer Problem processes when the analysis is complete. **AM** Please refer to Iris-T-001 Step 8, 9, 8' and 9'

3.1.2 1.1.1.7 - Customer QoS/SLA Management

eTOM process element	Tektronix Communications Mapping	
1.1.1.7 - Customer QoS/SLA Management	**Alignment**	**Mapping Comment**
1.1.1.7.1 - Assess Customer QoS/SLA Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-001**	**Brief description** Manage the overall assessment of the customer QoS/SLA performance. **AM** Please refer to Iris-P-001 **Extended description** The purpose of the Assess Customer QoS/SLA Performance processes is to manage the overall assessment of the customer QoS/SLA performance. **AM** Please refer to Iris-P-001 These processes are responsible for ensuring that the QoS received by the customer meets the contractual obligations agreed with the customer. They check that the QoS data that they receive from other processes and entities meets the required QoS thresholds and they alert other processes and entities if this is not the case. **A** Please refer to Iris-P-001 Step 1-3 and 3' These processes are responsible for collecting service and resource performance information analyzed and reported by the Report Service Quality Performance and Report Resource Performance processes, and converting it into a form suitable for determining whether the contractual obligations with the customer are being met. The actual reporting of the results of the assessments is managed in the Report Customer QoS Performance processes. **A** Please refer to Iris-P-001 Step 1-3 and 3' They are responsible for maintaining an overview of the quality of the customer's purchased product offering, and for carrying out QoS performance reviews with the customer, as well as for undertaking any preparatory and/or follow-up steps with other processes/entities in conjunction with such reviews **AM** Please refer to Iris-P-001

1.1.1.7.2- Manage QoS/SLA Violation	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-001**	**Brief description** Ensure that the customer and the relevant internal processes are informed of service quality degradations and violations and that action is undertaken to resolve the degradation or violation **AM** Please refer to Iris-P-001 **Extended description** The purpose of the Manage QoS/SLA Violation processes is to ensure that the customer and the relevant internal processes are informed of service quality degradations and violations and that action is undertaken to resolve the degradation or violation. **AM** Please refer to Iris-P-001 and steps in DW42 They analyze all the information related to a QoS/SLA degradation or violation and take the appropriate actions when a soft threshold is crossed or the agreed QoS is violated.A Please refer to Iris-P-001 and steps in DW42. Detection of violation and execution of pre-defined actions are fully automated by the system. They follow up the actions to ensure that the customer is satisfied with the resolution of the problem. They ensure that the customer is informed of any planned maintenance or other scheduled events likely to impact delivery of the customer's service. **AM** Please refer to Iris-P-001
1.1.1.7.3- Report Customer QoS Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-001**	**Brief description** Report on the customer's QoS/SLA performance **A** Please refer to Iris-P-001 **Extended description** The objective of the Report Customer QoS Performance processes is to monitor the status of customer QoS performance degradation reports, provide notifications of any changes and provide management reports. **A**

		Please refer to Iris-P-001 These processes are responsible for continuously monitoring the status of customer QoS performance degradation reports **A** Please refer to UD_IPI.pdf with specific page references from previous comments and managing notifications to other processes and to other parties, including customers, registered to receive notifications of any status changes. Notification lists are managed and maintained by the Support Customer QoS/SLA Management processes. **A** Please refer to Iris-P-001 These processes record, analyze and assess the customer QoS performance degradation report status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Customer QoS/SLA Management process. **A** Please refer to Iris-P-001 and Page 44-48 of UP_IPI.pdf These specialized summaries could be specific reports required by specific audiences and/or customers. **A** Please refer to Iris-P-001 These processes also report any identified constraints that can affect customer related quality standards to other processes. These constraints may include specific resource failures, capacity shortages due to unexpected demand peaks, etc. **A** Please refer to Iris-P-001

3.2 Service Management & Operations

3.2.1 1.1.2.3 - Service Problem Management

eTOM process element	Tektronix Communications Mapping	
1.1.2.3 Service Problem Management	**Alignment**	**Mapping Comment**
1.1.2.3.2- Diagnose Service Problem	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-T-002**	**Brief description** Identify the root cause of the specific service problem **AM** Please refer to Iris-T-002 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Diagnose Service Problem processes is to identify the root cause of the specific service problem. These processes are invoked by the Track & Manage Service Problem processes. **AM** Please refer to Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. The responsibilities of these processes include, but are not limited to: · Verifying whether the service configuration matches the appropriate product features; **AM** Please refer to Iris-T-002 Step 1-2 Please also refer to UD_IPI.pdf Page 46 for example use case on troubleshooting incorrect APN configuration. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Performing diagnostics against the specific services; **AM** Please refer to Iris-T-002 Steps 3-5 Please also refer to UD_IPI.pdf Page 46 for example use case on MMS service diagnostics. FastPath GUI snapshots are

		available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Running tests against the specific services; **AM** Please refer to Iris-T-002 Step 6. Please also refer to UD_IPI.pdf Page 48 on suggested drill path for different diagnostics can be done using the system. · Starting and stopping audits against specific services; and **AM** Please refer to Iris-T-002 Step 6, 9 This is achieved through setting up specific policies for each service. Once a policy is set for a particular service and activated, the service is monitored. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. · Scheduling routine testing of the specific services. **AM** Please refer to Iris-T-002 Step 9 This is achieved through setting up specific policies for each service. Once a policy is set for a particular service and activated, the service is monitored. Specifically, the scheduling of the service monitoring is based on the schedule of the policy profile. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. The Diagnose Service Problem processes will make the results of the root cause analysis available to other processes. **AM** Please refer to Iris-T-002 Step 8, 9 and 8' Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. The Diagnose Service Problem processes will update the open service trouble report, as required during the assessment, and when the root cause has been identified. **AM**

		Please refer to Iris-T-002 Step 8, 9 and 8' Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. The notification can be manual or automated through an action associated with the policy. When the process is complete the Diagnose Service Problem processes will notify the Track & Manage Service Problem processes. **AM** Please refer to Iris-T-002 Step 10, and 10'

1.1.2.3.7- Survey & Analyze Service Problem	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-003**	**Brief description** Monitor service alarm event notifications and manage service alarm event records in real-time **A** Please refer to Iris-P-003 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Survey & Analyze Service Problem processes is to monitor service alarm event notifications and manage service alarm event records in real-time. **AM** Please refer to Iris-P-003 and UD_IPI.pdf with specific pages referred below. Responsibilities of the Survey & Analyze Service Problem processes include, but are not limited to: · Detecting and collecting service alarm event notifications; **AM** Please refer to Iris-P-003 Step 1 Please also refer to FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation. · Initiating and managing service alarm event records; **AM** Please refer to Iris-P-003 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. Once alarm is generated, alarm records are displayed on Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf. · Performing service alarm event notification localization analysis; **AM** Please refer to Iris-P-003 Step 5 Please also refer to Page 30 of UD_IPI.pdf for the work flow. · Correlating and filtering service alarm event records; **AM** Please refer to Iris-P-003 Step 5 Please refer to Alarm Dashboard as shown on Page 37 of

		UD_Iris_GetStarted.pdf. · Reporting service alarm event record status changes to other processes; **AM** Please refer to Iris-P-003 Step 3 All status changes can be seen on Alarm Dashboard and Fastpath Dashboard within the system. The system can export all alarm records with changes through SNMP to other processes/entities. Please refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf. · Managing service alarm event record jeopardy conditions. **AM** Please refer to Iris-P-003 Please also refer to FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation. Service alarm event notification analysis encompasses the identification of the service alarm event in terms of reporting entity and nature of the service alarm event. **AM** Please refer to Iris-P-003. Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the details on reporting entities and alarm event details. It will then analyze the service alarm events based on a number of criteria and then suppress redundant, transient or implied service alarm events by means of filtering and **A**correlation. Please refer to Iris-P-003. Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. It includes the notification of new service alarm event records, or status changes of previously reported service alarm event records, as well as abatement messages when service alarm event records have been cleared. **AM** Please refer to Iris-P-003

		Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for status changes as well as abatement/clearing of alarms. The analysis will correlate service alarm event notifications to planned outage notifications to remove false service alarm event notifications arising as a result of the planned outage activity. **AM** Please refer to Iris-P-003 Step 2 This is achieved through scheduling of alarm profiles to take into account of service windows. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. These processes may determine that a service alarm event notification may represent a customer impacting condition. **AM** Please refer to Iris-P-003. Service alarms can be classified by user configuration. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. In these circumstances this process is responsible for indicating a potential customer problem to the Problem Handling processes. **A** Please refer to Iris-P-003. The notification can be through actions configured as part of the alarm policy profile. These actions can be emails, SNMP alarm traps, or other automated scripts. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. As a part of this indication this process is responsible for identifying the impacted deployed product instances associated with the service instances presenting alarm event notifications and passing this information to the Problem Handling processes. **AM** Please refer to Iris-P-003 Step 2 Alarm record information that contains the product instances can be passed to other processes through the mechanism stated above. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up

		actions for the policy profile. Service alarm event record correlation and filtering encompasses the correlation of redundant, transient or implied service alarm event notifications with a specific "root cause" service alarm event notification and associated service alarm event record. **AM** Please refer to Iris-P-003, Step 5 Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. The Survey & Analyze Service Problem processes might trigger a well-defined action based on specific service alarm event notification information as well as the non-arrival of service alarm event notification information after a specific time interval has elapsed. **AM** Please refer to Iris-P-003 Step 3 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. These processes are also responsible for monitoring and triggering the appropriate action when a service alarm event record is not cleared within a pre-defined period of time. **AM** Please refer to Iris-P-003 Step 3 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile.

3.2.2 1.1.2.4 - Service Quality Management

eTOM process element	Tektronix Communications Mapping	
1.1.2.4 – Service Quality Management	**Alignment**	**Mapping Comment**
1.1.2.4.1 – Monitor Service Quality	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-002**	**Brief description** Monitor received service quality information and undertake first-in detection. **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Monitor Service Quality processes is to monitor received service quality information and undertake first-in detection. **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. The responsibilities of the processes include, but are not limited to: · Undertake the role of first in detection and collection by monitoring and logging the received specific service performance quality data. **A** Please refer to Iris-P-002 Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Comparing the received specific service performance quality data to performance quality standards set for each specific service (available from the Service Inventory); **A** Please refer to Iris-P-002 Services are modeled in the system as a set of performance indicators. Each service can have one to many KPIs. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Assessing and recording received specific service performance quality data which is within tolerance limits for performance quality standards, and for which

		continuous monitoring and measuring of performance is required; **A** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows for the policy profile that defines tolerance limits for KPIs. Tektronix system performs 24X7 monitoring. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Recording the results of the continuous monitoring for reporting through the Report Service Quality Performance processes; **A** Please refer to Iris-P-002 Tektronix system performs 24X7 monitoring. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. Page 33 of UD_IPI.pdf document indicates the historical measurement data are stored in database for reporting. The next few pages provide examples of the reports from the historical measurement database queries. · Detect performance quality threshold violations which represent specific service failures due to abnormal performance; **A** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows for the policy profile that defines tolerance limits for KPIs. All policy violation will result in alarms. · Pass information about specific service failures due to performance quality threshold violations to Service Problem Management to manage any necessary restoration activity as determined by that process; **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for common service problems. FastPath GUI snapshots are available on Page 29-31 of UD_IPI.pdf for further explanation of the use case.

		· Pass information about potential specific customer SLA/QoS performance degradations arising from specific service quality performance degradations (using knowledge about service to purchased product offering linkages) to Problem Handling to manage any necessary restoration activity as determined by that process; **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for common service problems. FastPath GUI snapshots are available on Page 29-31 of UD_IPI.pdf for further explanation of the use case · Detect performance degradation for specific services which provide early warning of potential issues; **A** Please refer to Iris-P-002 Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Forward service performance degradation notifications to other Service Quality Management processes, which manage activities to restore normal specific service performance quality; and **A** Please refer to Iris-P-002 The system can export all alarm records with changes through SNMP to other processes/entities. It can also send out email notifications as defined by the policy actions. Please see Page 39 of UD_IPI.pdf for functional descriptions. · Log specific service performance quality degradation and violation details within the repository in the Manage Service Inventory processes to ensure historical records are available to support the needs of other processes. **A** Please refer to Iris-P-002. All violation details are store in the alarm records together with related KPIs. All data are stored in the system database for historical reporting. Page 33 of UD_IPI.pdf document indicates the historical measurement data are stored in database for reporting. The next few pages provide examples of the reports

		from the historical measurement database queries. The processes also perform automated service testing using simulated calls simulating standard user behavior, **AM** Please refer to UD_Iris_ACE.pdf Page 11 on creating active test policies to kick off simulated calls. and collect data related to service usage which may supply information to other processes (i.e. marketing, service cost, etc) and identify abnormal usage by the service users (i.e. bad passwords, terminal configurations, etc). **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case.

1.1.2.4.2- Analyze Service Quality	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-002, Iris-P-003, and Iris-T-002**	**Brief description** Analyze and evaluate the service quality performance of specific services **AM** Please refer to Iris-P-002, Iris-P-003, Iris-T-002, and UD_IPI.pdf with detailed page references below. **Extended description** The purpose of the Analyze Service Quality processes is to analyze the information received from the Monitor Service Quality process to evaluate the service quality performance of specific services. **AM** Please refer to Iris-P-002, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on analyzing service quality. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. Using the data from Monitor Service Quality, these processes will correlate events in order to filter repetitive alarms and failure events that do not affect the quality delivered, **AM** Please refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. and they will calculate key service quality indicators, (such as Mean Time Between Failures and other chronic problems). **AM** Please refer to Iris-P-002, Iris-P-003, and Iris-T-002 Please also refer to Page 43 of UD_IPI.pdf for KPIs and KQIs. The responsibilities of the processes include, but are not limited to: · Undertaking analysis as required on specific service performance information received from the Monitor Service Quality processes; **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on analyzing service quality. FastPath GUI

		snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Initiating, modifying and cancelling continuous performance data collection schedules for specific services required to analyze specific service performance. **AM** This is achieved through setting up specific policies for each service. Once a policy is set for a particular service and activated, the service is monitored. Specifically, the scheduling of the service monitoring is based on the schedule of the policy profile. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. These schedules are established through requests sent to the Enable Service Quality Management processes. **AM** Please refer to Iris-P-002 Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. · Determining the root causes of specific service performance degradations and violations; **AM** Please refer to Iris-P-002, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Recording the results of the analysis and intermediate updates in the Service Inventory for historical analysis and for use as required by other processes; and **A** Please refer to Iris-P-003 All data are stored in the system database for historical reporting. Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports · Undertaking specific detailed analysis (if the original requested came from Customer QoS/SLA Management processes) to discover the root cause of customer QoS performance degradations that may be

		arising due to interactions between service instances, without any specific service instance having an unacceptable performance in its own right. **AM** Please refer to Iris-P-002, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case.

1.1.2.4.4- Report Service Quality Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-002**	**Brief description** Monitor the status of service performance degradation reports, provide notifications of any changes and provide management reports **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Report Service Quality Performance processes is to monitor the status of service performance degradation reports, provide notifications of any changes and provide management reports. **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports These processes are responsible for continuously monitoring the status of service performance degradation reports **A** Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be scheduled to run continuously and monitor the status of service performance and managing notifications to other processes in the SM&O and other process layers, and to other parties registered to receive notifications of any status changes. **AM** Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be emailed by the system automatically to interested parties Notification lists are managed and maintained by the Enable Service Quality Management processes. **AM** Please refer to Iris-P-002 Email notification list is configurable by the user per report. Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be emailed by the system automatically to interested parties These processes record, analyze and assess the service performance degradation report status changes to

		provide management reports **AM** Please refer to UD_IPI.pdf Page 52 for management reports. and any specialized summaries of the efficiency and effectiveness of the overall Service Quality Management process. **AM** Please refer to UD_IPI.pdf Page 52 for management reports for example measurements and report templates. These specialized summaries could be specific reports required by specific audiences. **AM** Please refer to Iris-P-002 All reports are configurable by system user. These processes also report any identified constraints that can affect service quality standards to other processes. **AM** Please refer to UD_IPI.pdf Page 52 for management reports for example measurements and report templates. These constraints may include specific resource failures, capacity shortages due to unexpected demand peaks, etc. **AM** Please refer to Iris-P-002. Please refer to UD_IPI.pdf Page 52 for management reports for example measurements and report templates.

3.3 Resource Management & Operations

3.3.1 1.1.3.3 - Resource Trouble Management

eTOM process element	Tektronix Communications Mapping	
1.1.3.3 Resource Trouble Management	**Alignment**	**Mapping Comment**
1.1.3.3.1- Survey & Analyze Resource Trouble	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-003**	**Brief description** Monitor Resource alarm event notifications and manage resource alarm event records in real-time. **AM** Please refer to Iris-P-003 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Survey & Analyze Resource Trouble processes is to monitor resource alarm event notifications and manage resource alarm event records in real-time. **AM** Please refer to Iris-P-003 All resource alarms can be channeled into FastPath dashboard. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. Responsibilities of the Survey & Analyze Resource Trouble processes include, but are not limited to: · Detecting and collecting resource alarm event notifications; **AM** Please refer to Iris-P-003 This is achieved through setting up specific policies for resources. Once a policy is set for a particular resource and activated, the resource is monitored. Specifically, the scheduling of the resource monitoring is based on the schedule of the policy profile. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. · Initiating and managing resource alarm event records;

		AM Please refer to Iris-P-003 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. Once alarm is generated, alarm records are displayed on Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf. · Performing resource alarm event notification localization analysis; **AM** Please refer to Iris-P-003 Please also refer to UD_IPI.pdf Page 44-48 for use case descriptions on identifying root causes for some common problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Correlating and filtering resource alarm event records; **AM** Please refer to Iris-P-003 Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. · Reporting resource alarm event record status changes to other processes; and **AM** Please refer to Iris-P-003 All status changes can be seen on Alarm Dashboard and Fastpath Dashboard within the system. The system can export all alarm records with changes through SNMP to other processes/entities. . · Managing resource alarm event record jeopardy conditions. **AM** Please refer to Iris-P-003 Please also refer to FastPath GUI snapshots are available on Page 29-31 of UD_IPI.pdf for further explanation.

		Resource alarm event notification analysis encompasses the identification of the resource alarm event in terms of reporting entity and nature of the resource alarm event. **AM** It will then analyze the resource alarm events based on a number of criteria and then suppress redundant, transient or implied resource alarm events by means of filtering and correlation. **AM** Please refer to Iris-P-003. Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. It includes the notification of new resource alarm event records, or status changes of previously reported resource alarm event records, as well as abatement messages when resource alarm event records have been cleared. **AM** Please refer to Iris-P-003 Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the details on reporting entities and alarm event details. The analysis will correlate resource alarm event notifications to planned outage notifications to remove false resource alarm event notifications arising as a result of the planned outage activity. **AM** Please refer to Iris-P-003 This is achieved through scheduling of alarm profiles to take into account of service windows. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. These processes may determine that a resource alarm event notification may represent a service impacting condition. **AM** Please refer to Iris-P-003. Resource alarms can be classified by user configuration. Please refer to UD_IPI.pdf Page 40-42 for screen captures and

		workflows on setting up actions for the policy profile. In these circumstances this process is responsible for indicating a potential service problem to the Service Problem Management processes. **AM** Please refer to Iris-P-003. The notification can be through actions configured as part of the alarm policy profile. These actions can be emails, SNMP alarm traps, or other automated scripts. As a part of this indication this process is responsible for identifying the impacted service instances associated with the resource instances presenting alarm event notifications and passing this information to the Service Problem Management processes. **AM** Please refer to Iris-P-003 Alarm record information that contains the product instances can be passed to other processes through the mechanism stated above. Resource alarm event record correlation and filtering encompasses the correlation of redundant, transient or implied resource alarm event notifications with a specific “root cause” resource alarm event notification and associated resource alarm event record. **AM** Please refer to Iris-P-003 Please also refer to Alarm Dashboard as shown on Page 37 of UD_Iris_GetStarted.pdf for the filtering and correlation of alarms. The filtering is done with the GUI panel on the right side of the snapshot. All alarms can be filtered down to the profile configured, severity, application affected, and the state of the alarms. The alarm record table to the left is displayed in columns. All columns including the network element (resource) related to the alarm. All columns can be sorted so that relevant alarms can be correlated into the same view. The Survey & Analyze Resource Trouble processes might trigger a well-defined action based on specific resource alarm event notification information as well as the non-

		arrival of resource alarm event notification information after a specific time interval has elapsed. **AM** Please refer Iris-P-003 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. These processes are also responsible for monitoring and triggering the appropriate action when a resource alarm event record is not cleared within a pre-defined period of time. **AM** Please refer to Iris-P-003 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile.

1.1.3.3.2- Localize Resource Trouble	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-T-001/002**	**Brief description** Identify the root cause of the specific resource trouble **AM** Please refer to Iris-T-001/002 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Localize Resource Trouble processes is to identify the root cause of the specific resource trouble. These processes are invoked by the Track & Manage Resource Trouble processes. **AM** Please refer to Iris-T-001/002 Please also refer to UD_IPI.pdf Page 44-45 for use case descriptions on identifying root causes for some common resource problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. The responsibilities of these processes include, but are not limited to: · Verifying whether the resource configuration matches the appropriate service features; **AM** Please refer to Page 29 of UD_IPI.pdf section “Service Support”. · Performing diagnostics against the specific resources;· **AM** Please refer to Iris-T-001 Step 1-7 and 6’ Please also refer to UD_IPI.pdf Page 47 for example use case on incorrect DNS Configuration. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Running tests against the specific resources; **AM** Please refer to Iris-T-002 Step 6 Please also refer to UD_IPI.pdf Page 48 on suggested drill path for different diagnostics can be done using the system. Please also refer to Page 22 of UD_IPI.pdf on screenshots for proactive network (resource) analysis.

		· Starting and stopping audits against specific resources; and **AM** Please refer to Iris-T-002 Step 6, 9 This is achieved through setting up specific policies for each resource. Once a policy is set for a particular resource and activated, the service is monitored. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. · Scheduling routine testing of the specific resources. **AM** Please refer to Iris-T-002 Step 9 This is achieved through setting up specific policies for each resource and select scheduling option to be periodical. Once a policy is set for a particular resource and activated, the service is monitored. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. The Localize Resource Trouble processes will make the results of the root cause analysis available to other processes. **AM** Please also refer to UD_IPI.pdf Page 44-45 for use case descriptions on identifying root causes for some common problems. Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. The notification can be manual or automated through an action associated with the policy. The Localize Resource Trouble processes will update the open resource trouble report, as required during the assessment, and when the root cause has been identified. **AM** Please refer to Iris-T-002 Step 8, 9 and 8' Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile. The updating of the report can be manual or automated through an action associated with the policy. When the process is complete the Localize Resource Trouble processes will notify the Track & Manage Resource Trouble processes. **AM**

		Please refer to Iris-T-002 Step 10, and 10' The system can export all alarm records with changes through SNMP to other processes/entities. It can also send out email notifications as defined by the policy actions.

3.3.2 1.1.3.4 - Resource Performance Management

eTOM process element	Tektronix Communications Mapping	
1.1.3.4 – Resource Performance Management	**Alignment**	**Mapping Comment**
1.1.3.4.1 – Monitoring Resource Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-004**	**Brief description** Monitor received resource performance information and undertake first-in detection. **AM** Please refer to Iris-P-004 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Monitor Resource Performance processes is to monitor received resource performance information and undertake first-in detection. **AM** Please refer to Iris-P-004 and UD_IPI.pdf with detailed page references below. The responsibilities of the processes include, but are not limited to: · Undertaking the role of first in detection by monitoring the received specific resource performance data; **AM** · Comparing the received specific resource performance data to performance standards set for each specific resource (available from the Resource Inventory); **AM** Please refer to Iris-P-004 Resource performance data are modeled in the system as a set of performance indicators. Each resource can have one to many KPIs. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Assessing and recording received specific resource performance data which is within tolerance limits for performance standards, and for which continuous monitoring and measuring of specific resource performance is required; **A**

		Please refer to Iris-P-004 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows for the policy profile that defines tolerance limits for KPIs. Tektronix system performs 24X7 monitoring. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Recording the results of the continuous monitoring for reporting through the Report Resource Performance processes; **A** Please refer to Iris-P-004 Tektronix system performs 24X7 monitoring. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Detecting performance threshold violations which represent specific resource failures due to abnormal performance; **A** Please refer to Iris-P-004 Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows for the policy profile that defines tolerance limits for KPIs. All policy violation will result in alarms. · Passing information about resource failures due to performance threshold violations to Resource Trouble Management to manage any necessary restoration activity as determined by that process; **AM** Please refer to Iris-P-004 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for common resource problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Passing information about potential specific service performance degradations arising from specific resource degradations to Service Quality Management to manage any necessary restoration activity as determined by that process; **AM**

		Please refer to Iris-P-004 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case · Detecting performance degradation for specific resources which provide early warning of potential issues; **A** Please refer to Iris-P-004 Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. · Forwarding resource performance degradation notifications to other Resource Performance Management processes, which manage activities to restore normal specific resource performance; and **AM** Please refer to Iris-P-004 The system can export all alarm records with changes through SNMP to other processes/entities. It can also send out email notifications as defined by the policy actions. · Logging specific resource performance degradation and violation details within the repository in the Manage Resource Inventory processes to ensure historical records are available to support the needs of other processes. **AM** Please refer to Iris-P-004 All violation details are store in the alarm records together with related KPIs. All data are stored in the system database for historical reporting. Please also refer to Page 32 of UD_IPI.pdf for historical reporting overview.

1.1.3.4.2- Analyze Resource Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-003, Iris-P-004, and Iris-T-002**	**Brief description** Analyze and evaluate the performance of specific resources **AM** Please refer to Iris-P-004, Iris-P-003, Iris-T-002, and UD_IPI.pdf with detailed page references below **Extended description** The objective of the Analyze Resource Performance processes is to analyze the information received from the Monitor Resource Performance process to evaluate the performance of a specific resource. **AM** Please refer to Iris-P-004, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on analyzing resource performance. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. The responsibilities of the processes include, but are not limited to: · Undertaking analysis as required on specific resource performance information received from the Monitor Resource Performance processes **; AM** Please refer to Iris-P-004 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on analyzing resource performance. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Initiating, modifying and cancelling continuous performance data collection schedules for specific resources required to analyze specific resource performance. **AM** This is achieved through setting up specific policies for each resource. Once a policy is set for a particular resource and activated, the resource is monitored. Specifically, the scheduling of the resource monitoring is based on the schedule of the policy profile. Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. These schedules are established through requests sent to the Enable Resource Data Collection & Distribution

		processes; **AM** Please refer to Iris-P-004 Please refer to UD_IPI.pdf Page 40-42 for screen captures and workflows. · Determining the root causes of specific resource performance degradations and violations; **AM** Please refer to Iris-P-004, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common resource problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. · Recording the results of the analysis and intermediate updates in the Resource Inventory for historical analysis and for use as required by other processes; and **A** Please refer to Iris-P-003 All data are stored in the system database for historical reporting. Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports · Undertaking specific detailed analysis (if the original requested came from Service Quality Management processes) to discover the root cause of service performance degradations that may be arising due to interactions between resource instances, without any specific resource instance having an unacceptable performance in its own right. **AM** Please refer to Iris-P-004, Iris-P-003, and Iris-T-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common resource problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case.

1.1.3.4.4- Report Resource Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-004**	**Brief description** Monitor the status of resource performance degradation reports, provide notifications of any changes and provide management reports **AM** Please refer to Iris-P-004 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Report Resource Performance processes is to monitor the status of resource performance degradation reports, provide notifications of any changes and provide management reports. **AM** These processes are responsible for continuously monitoring the status of resource performance degradation reports **AM** Please refer to Iris-P-004 Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be scheduled to run continuously and monitor the status of resource performance Please also refer to the newly uploaded Report_Config_Snapshots.pptx for detailed configs on periodical report configuration and email notification. and managing notifications to other processes in the RM&O and other layers, and to other parties registered to receive notifications of any status changes. **AM** Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be emailed by the system automatically to interested parties Notification lists are managed and maintained by the Enable Resource Performance Management processes. **AM** Please refer to Iris-P-004 Email notification list is configurable.

		Please also refer to the newly uploaded Report_Config_Snapshots.pptx for detailed configs on periodical report configuration and email notification. These processes record, analyze and assess the resource performance degradation report status changes to provide management reports **AM** Please refer to UD_IPI.pdf Page 52 for management reports. Please also refer to the newly uploaded Report_Config_Snapshots.pptx for detailed configs on periodical report configuration and email notification. and any specialized summaries of the efficiency and effectiveness of the overall Resource Performance Management process. **AM** Please refer to UD_IPI.pdf Page 52 for management reports for example measurements and report templates. Please also refer to the newly uploaded Report_Config_Snapshots.pptx for detailed configs on periodical report configuration and email notification. These specialized summaries could be specific reports required by specific audiences. **AM** Please refer to Iris-P-004 All reports are configurable by system user. Please also refer to the newly uploaded Report_Config_Snapshots.pptx for detailed configs on periodical report configuration and email notification.

3.3.3 1.1.3.6 - Resource Mediation & Reporting

eTOM process element	Tektronix Communications Mapping	
1.1.3.6 – Resource Mediation & Reporting	**Alignment**	**Mapping Comment**
1.1.3.6.1 – Mediate Resource Usage Records	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-004**	**Brief description** Validate, normalize, convert and correlate usage records collected from the network. **A** Please refer to Iris-P-004 and Mediation-DataCast_EN.pdf for details **Extended description** The purpose of the Mediate Usage Records processes is to validate, normalize, convert and correlate usage records collected from various pieces of equipment in the network. **A** Please refer to Iris-P-004 and Mediation-DataCast_EN.pdf Page 2-3 for details
1.1.3.6.2- Report Resource Usage Records	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-004**	**Brief description** Generate reports on resource usage records based on requests from other processes. **AM** Please refer to Iris-P-004 and UD_IPI.pdf for details **Extended description** The purpose of the Report Resource Usage Records is to generate reports on usage records based on requests from other processes. **AM** Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports. These processes produce reports that may identify abnormalities, which may be caused by fraudulent activity or related to customer complaints or network problems. **AM** Please refer to UD_IPI.pdf Page 52 for management reports based data records collected by DataCast Mediation Platform. These reports can be emailed by the system automatically to interested parties.

3.4 Supplier/Partner Relationship Management

3.4.1 1.1.4.4 - Supplier/Partner Performance Management

eTOM process element	Tektronix Communications Mapping	
1.1.4.4 S/P Performance Management	Alignment	Mapping Comment
1.1.4.4.1- Monitor & Control S/P Service Performance	Tektronix Communications End User Use Case Document – Iris Application Suite Use Case: Iris-P-002	**Brief description** Collect and analyze performance of services delivered by suppliers and partners. **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. **Extended description** Monitor & Control S/P Service Performance processes control the performance measurement activities, **AM** Please refer to Iris-P-002 From monitoring perspective, S/P service performance is modeled the same as other services in CSPs network. Services are modeled in the system as a set of performance indicators. Each service can have one to many KPIs. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. collect performance data on a specified S/P service, **AM** Please refer to Iris-P-002 Tektronix system performs 24X7 monitoring/collection. Please also refer to Page 16 of data modeling for collection. analyze this against the relevant SLA for the supplier/partner **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case.

		and report performance data and any S/P SLA violations to other processes. **AM** Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports These processes also carry out impact analysis on any S/P SLA violations and initiate corrective actions. **AM** Please refer to UD_IPI.pdf Page 48 on suggested drill path for different diagnostics can be done using the system. Please also refer to UD_IPI.pdf Page 40-42 for screen captures and workflows on setting up actions for the policy profile.

1.1.4.4.3- Report S/P Performance	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-002**	**Brief description** Monitor the status of S/P performance degradation reports, provide notifications of any changes and provide management reports **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. **Extended description** The objective of the Report S/P Performance processes is to monitor the status of S/P performance degradation reports, provide notifications of any changes and provide management reports. **AM** Please refer to Iris-P-002 From monitoring perspective, S/P service performance is modeled the same as other services in CSPs network. Services are modeled in the system as a set of performance indicators. Each service can have one to many KPIs. Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports These processes are responsible for continuously monitoring the status of S/P performance degradation reports and managing notifications to processes and other parties registered to receive notifications of any status changes. Notification lists are managed and maintained by the Support S/P Performance Management processes. **A** Please refer to Iris-P-002 Please refer to UD_IPI.pdf Page 52 for management reports. These reports can be scheduled to run continuously and monitor the status of service performance. These reports can be emailed by the system automatically to interested parties These processes record, analyze and assess the S/P performance degradation report status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall S/P Performance Management process. These specialized summaries could be specific reports required by specific audiences. **A**

		Please refer to Iris-P-002 Please also refer to UD_IPI.pdf Page 52 for management reports and Page 93 for query reports

3.5 Service Development & Management

3.5.1 1.1.2.3 – Service Development & Retirement

eTOM process element	Tektronix Communications Mapping	
1.2.2.3 Service Development and Retirement	Alignment	Mapping Comment
1.2.2.3.2- Assess Performance of Existing Services	Tektronix Communications End User Use Case Document – Iris Application Suite Use Case: Iris-P-002	**Brief description** Analyze the performance of existing services to identify inadequacies and required improvements. **AM** Please refer to Iris-P-002 and UD_IPI.pdf with detailed page references below. **Extended description** The Assess Performance of Existing Services processes analyze the performance of existing services to identify inadequacies and required improvements. **AM** Services are modeled in the system as a set of performance indicators. Each service can have one to many KPIs. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. Please also refer to UD_IPI.pdf Page 44 for use case descriptions on identifying root causes for some common service problems. FastPath GUI snapshots are available on Page 29 of UD_IPI.pdf for further explanation of the use case. These processes use information from customers and from operational activities to identify required improvements. **AM** Please refer to Iris-P-002 Tektronix system performs 24X7 monitoring/collection. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. Please also refer to Page 44-48 on use cases that the application can be used to improve service planning and speed service problem resolution.

3.6 Resource Development & Management

3.6.1 Resource Development & Retirement

eTOM process element	Tektronix Communications Mapping	
1.2.3.3 Resource Development and Retirement	**Alignment**	**Mapping Comment**
1.2.3.3.2- Assess Performance of Existing Resources	**Tektronix Communications End User Use Case Document – Iris Application Suite** **Use Case: Iris-P-004**	**Brief description** Analyze the performance of existing resources to identify inadequacies and required improvements**. AM** Please refer to Iris-P-004 and UD_IPI.pdf with detailed page references below. **Extended description** The Assess Performance of Existing Resources processes analyze the performance of existing resources to identify inadequacies and required improvements. Resource performance is modeled in the system as a set of performance indicators. Each resource can have one to many KPIs. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows. These processes use information from customers and from operational activities to identify required improvements. **AM** Please refer to Iris-P-004 Tektronix system performs 24X7 monitoring/collection. Please also refer to Page 22 of UD_IPI.pdf for screenshots and workflows.

4 Process Conformance

4.1 Business Process Framework – Process Conformance Summary

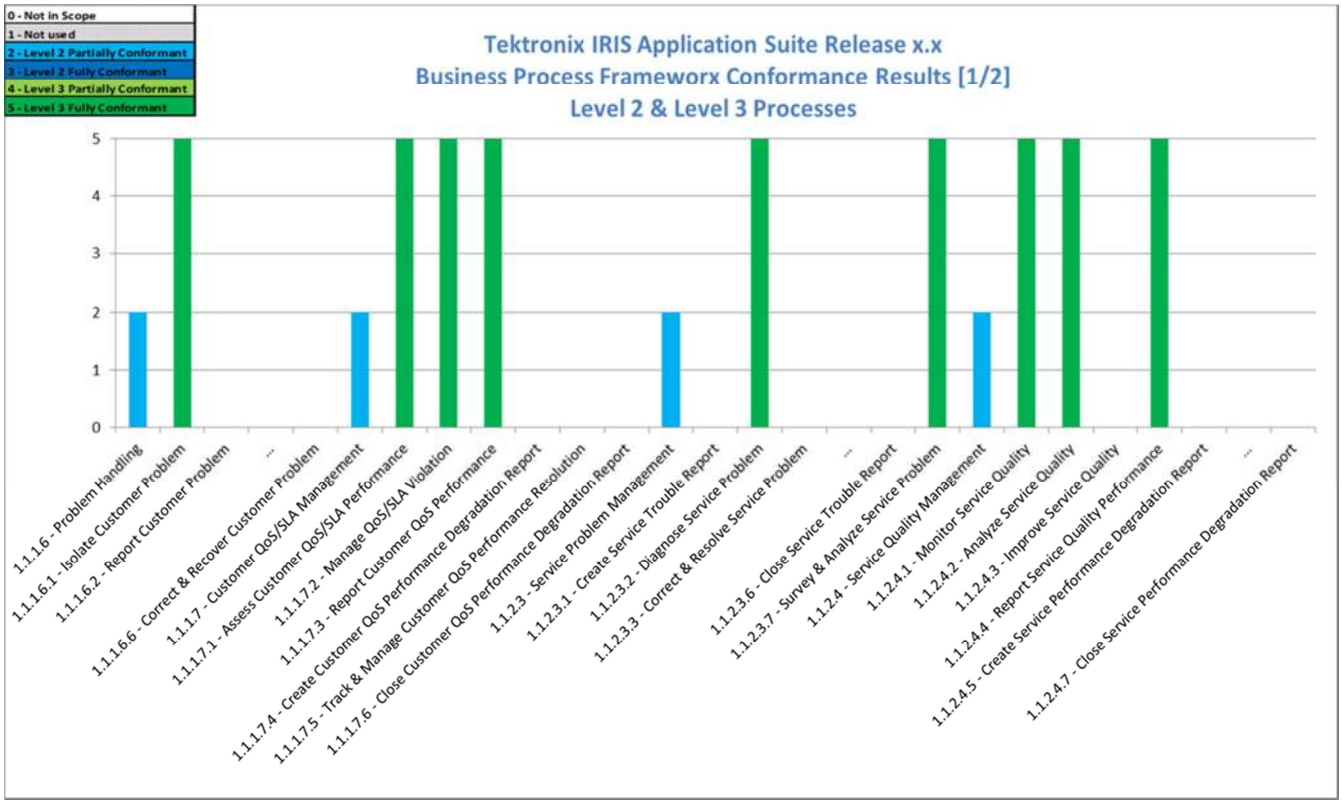

Figure 4.1 Tektronix IRIS Application Suite – Conformance Result Summary [1/2]

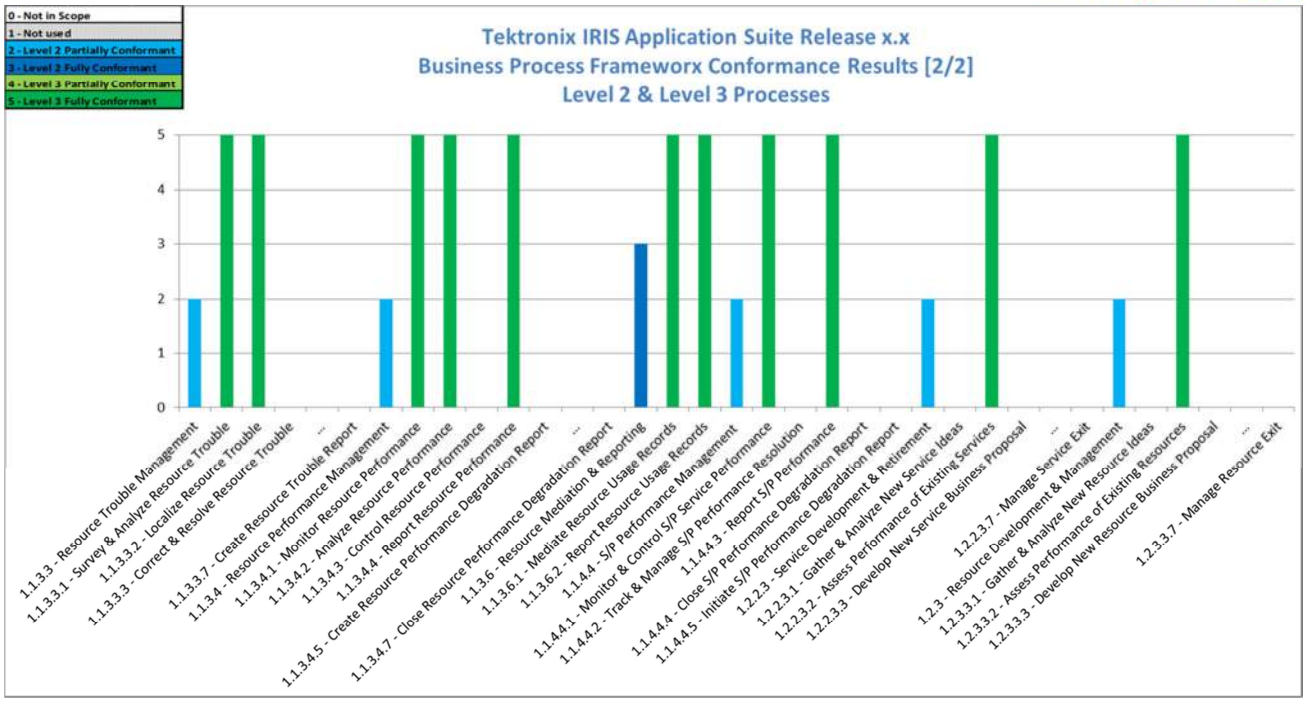

Figure 4.2 Tektronix IRIS Application Suite – Conformance Result Summary [2/2]

4.2 Business Process Framework – Process Conformance Detailed

Table 4.1 Tektronix IRIS Application Suite – Detailed Conformance Result

eTOM process element	Conformance Score	Comment
Within Level 1: **1.1.1 – Customer Relationship Management**	***N/A*** ***(Level 1 Processes are not assessed)***	**The following Level 2 process elements were submitted in scope for this Level 1 process:** **1.1.1.6 Problem Handling** **1.1.1.7 - Customer QoS/SLA Management**
Within Level 2: **1.1.1.6 Problem Handling**	**Scope Partially Conformant** **(2)**	**Partially Conformant** **The following Level 3 process was assessed for conformance:** **1.1.1.6.1 - Isolate Customer Problem** **This process represents 1 out of 6 level 3 processes defined within the 1.1.1.6 Problem Handling L2 process; therefore not all contained Level 3 process elements are in scope for this assessment.** **Note that the support provided can involve manual action facilitated by the automated support.**
1.1.1.6.1 - Isolate Customer Problem	**Scope Fully Conformant** **(5)**	**Conformant** **This process is executed by a network operations technician to identify the root cause of a service problem encountered by a subscriber using Tektronix Iris Application Suite The Iris Session Analyzer (ISA) is the main application to troubleshoot user problems.** **This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).**
Within Level 2: **1.1.1.7 - Customer QoS/SLA**	**Scope Partially Conformant**	**Partially Conformant** **The following Level 3 processes were assessed for conformance:**

eTOM process element	Conformance Score	Comment
Management	(2)	1.1.1.7.1 - Assess Customer QoS/SLA Performance 1.1.1.7.2- Manage QoS/SLA Violation 1.1.1.7.3- Report Customer QoS Performance These processes represent 3 out of a total of 6 level 3 processes defined within the 1.1.1.7 - Customer QoS/SLA Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.1.1.7.1 - Assess Customer QoS/SLA Performance	Scope Fully Conformant (5)	Conformant The System monitors and detects any policy violations based on the performance level defined for subscriber groups; it can then generate alarms with descriptions of the details on the policy violations. The System also generates periodical reports to a configurable list of users on the problems and their resolutions. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.1.7.2- Manage QoS/SLA Violation	Scope Fully Conformant (5)	Conformant Policy Templates enable the creation of new policy templates for QoS/SLA categories and assign them severity and service, as well as the creation of KPI-based rules. Tektronix Iris Performance Intelligence (IPI) alarms are managed through the Iris View Policy Management application, which uses policies to provide critical information on the performance of provisioned network elements. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).

eTOM process element	Conformance Score	Comment
1.1.1.7.3- Report Customer QoS Performance	Scope Fully Conformant (5)	Conformant Tektronix Iris Application Suite monitors subscriber groups proactively; the system can generate automated reports on the problems that subscriber groups encounter and monitors and verifies the resolution of these problems. Iris includes a set of XML-based predefined historical analysis reports. The IPI Management Report is a link between a set of data stored in the Oracle database and four report templates. It provides a set of KPIs and Dimensions needed to analyze Performance and other QoS related parameters. This process is supported through fully automated capabilities. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 1: 1.1.2 – Service Management & Operations	N/A (Level 1 Processes are not assessed)	The following Level 2 process elements were submitted in scope for this Level 1 process: 1.1.2.3 Service Problem Management 1.1.2.4 – Service Quality Management
Within Level 2: 1.1.2.3 Service Problem Management	Scope Partially Conformant (2)	Partially Conformant The following Level 3 processes were assessed for conformance: 1.1.2.3.2- Diagnose Service Problem 1.1.2.3.7- Survey & Analyze Service Problem These two processes represent 2 out of 7 level 3 processes defined within the 1.1.2.3 – Service Problem Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.1.2.3.2 - Diagnose Service Problem	Scope Fully Conformant	Conformant A Service Dashboard provides a service analysis page focusing on specific

eTOM process element	Conformance Score	Comment
	(5)	network region/node groups and sessions; problem codes are isolated from detailed records, then automated tests are triggered along the specific network route and the root cause is then identified; an internal change request is then initiated for rectification. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.2.3.7- Survey & Analyze Service Problem	Scope Fully Conformant (5)	Conformant This is achieved through setting up specific policies for services. Once a policy is set for a particular service and activated, the service is monitored. When an alarm is generated, the corresponding alarm record is generated and displayed on the Iris application (FastPath) dashboard. Note that the support provided involves manual action facilitated by the automated support. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 2: 1.1.2.4 – Service Quality Management	Scope Partially Conformant (2)	Partially Conformant The following Level 3 processes were assessed for conformance: 1.1.2.4.1 – Monitor Service Quality 1.1.2.4.2 - Analyze Service Quality 1.1.2.4.4 - Report Service Quality Performance These three processes represent 3 out of 7 level 3 processes defined within the 1.1.2.4 – Service Quality Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.1.2.4.1 – Monitor Service Quality	Scope Fully Conformant	Conformant Services are modeled in the system as a set of performance indicators;

eTOM process element	Conformance Score	Comment
	(5)	each service can be associated to one or more KPIs. The Tektronix system performs 24X7 monitoring of such KPIs. Policy profiles define tolerance limits for KPIs. Any policy violation will result in alarms. This process is supported mostly through fully automated capabilities with some limited partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.2.4.2 - Analyze Service Quality	Scope Fully Conformant (5)	Conformant The system will detect any policy violations based on the performance level defined for the services, an alarm is then generated with descriptions of the details on the policy violations and an alarm action is triggered, a service trouble ticket is generated. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.2.4.4 - Report Service Quality Performance	Scope Fully Conformant (5)	Conformant The System generates periodical reports to be distributed to a configurable list of users on the problems and their resolutions. These reports can be scheduled to run continuously to monitor the status of service performance. For each report, email notification lists are configurable by the user. Reports can be emailed by the system automatically to interested parties. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 1: 1.1.3 – Resource Management & Operations	N/A (Level 1 Processes are not	The following Level 2 process elements were submitted in scope for this Level 1 process: 1.1.3.3 - Resource Trouble Management 1.1.3.4 – Resource Performance Management

eTOM process element	Conformance Score	Comment
	assessed)	1.1.3.6 – Resource Mediation & Reporting
Within Level 2: 1.1.3.3 Resource Trouble Management	Scope Partially Conformant (2)	Partially Conformant The following Level 3 processes were assessed for conformance: 1.1.3.3.1- Survey & Analyze Resource Trouble 1.1.3.3.2- Localize Resource Trouble These processes represent 2 out of 7 level 3 processes defined within the 1.1.3.3 - Resource Trouble Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.1.3.3.1- Survey & Analyze Resource Trouble	Scope Fully Conformant (5)	Conformant This is achieved through setting up specific policies for resources. Once a policy is set for a particular resource and activated, the resource is monitored. When an alarm is generated, the corresponding alarm record is generated and displayed on the Iris application (FastPath) dashboard. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.3.3.2- Localize Resource Trouble	Scope Fully Conformant (5)	Conformant A Service Dashboard provides a service analysis page focusing on specific network region/node groups and sessions; problem codes are isolated from detailed records, then automated tests are triggered along the specific network route and the root cause is then identified; an internal change request is then initiated for rectification. Note that the support provided involves manual action facilitated by the automated support. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).

eTOM process element	Conformance Score	Comment
Within Level 2: **1.1.3.4 Resource Performance Management**	**Scope Partially Conformant** **(2)**	**Partially Conformant** **The following Level 3 processes were assessed for conformance:** **1.1.3.4.1 – Monitoring Resource Performance** **1.1.3.4.2- Analyze Resource Performance** **1.1.3.4.4- Report Resource Performance** **These processes represent 3 out of 7 level 3 processes defined within the 1.1.3.4 - Resource Performance Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment.** **Note that the support provided can involve manual action facilitated by the automated support.**
1.1.3.4.1 – Monitoring Resource Performance	**Scope Fully Conformant** **(5)**	**Conformant** **When the system detects any performance policy violation based on the performance level defined for any of the resources, it generates alarms with descriptions of the details on the policy violations. Based on the alarm action definition of the system, a resource trouble ticket is generated.** **This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).**
1.1.3.4.2- Analyze Resource Performance	**Scope Fully Conformant** **(5)**	**Conformant** **This is primarily achieved through two steps:** **1) Monitoring and analyzing network traffic KPIs in dashboards and analysis reports and looking for various trends in network traffic increases over weeks and even months.** **2) Configuring policies on specific network traffic KPIs of interest, setting maximum thresholds and different severity levels.** **This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business**

eTOM process element	Conformance Score	Comment
		Process Framework (eTOM).
1.1.3.4.4- Report Resource Performance	Scope Fully Conformant (5)	Conformant Alignment with this process is achieved through the Iris Performance Intelligence (IPI) module, which provides both Management Reports and Query Reports. Iris includes a set of XML-based predefined historical analysis reports. The IPI Management Report is a link between a set of data stored in the Oracle database and four report templates. It provides a set of KPIs and Dimensions needed to analyze a wide variety of resource performance related aspects. This process is supported through automated capabilities with some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 2: 1.1.3.6 – Resource Mediation & Reporting	Scope Fully Conformant (3)	Fully Conformant The following Level 3 processes were assessed for conformance: 1.1.3.6.1 – Mediate Resource Usage Records 1.1.3.6.2- Report Resource Usage Records These processes represent the complete set of level 3 processes defined within the 1.1.3.6 - Resource Mediation & Reporting L2 process; therefore all contained Level 3 process elements are in scope for this assessment and no deviations were found against the underlying functional requirements as described in the corresponding eTOM process. Note that the support provided can involve manual action facilitated by the automated support.
1.1.3.6.1 – Mediate Resource Usage Records	Scope Fully Conformant (5)	Conformant This process is supported with fully automated capabilities through the Tektronix' DataCast Mediation Platform. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).

eTOM process element	Conformance Score	Comment
1.1.3.6.2- Report Resource Usage Records	Scope Fully Conformant (5)	Conformant This process is supported through the Tektronix' DataCast Mediation Platform with automated capabilities but including some partial manual support as well. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 1: 1.1.4 – Supplier/Partner Relationship Management	N/A (Level 1 Processes are not assessed)	The following Level 2 process elements were submitted in scope for this Level 1 process: 1.1.4.4 – S/P Performance Management
Within Level 2: 1.1.4.4 – S/P Performance Management	Scope Partially Conformant (2)	Partially Conformant The following Level 3 process were assessed for conformance: 1.1.4.4.1- Monitor & Control S/P Service Performance 1.1.4.4.3- Report S/P Performance These two processes represent 2 out of 5 level 3 processes defined within the 1.1.4.4 - S/P Performance Management L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.1.4.4.1- Monitor & Control S/P Service Performance	Scope Fully Conformant (5)	Conformant From a monitoring perspective, S/P service performance is modeled by Tektronix Communications Iris Application Suite in the same way as other services in the CSPs network. Services are modeled as a set of performance indicators. Each service can have one or more KPIs. SLAs are correlated with the monitored QoS; alarms fall in the QoS categories of Retainability, Accessibility or Performance. KPIs categories, and services are model-driven. This process is supported through partially automated capabilities.

eTOM process element	Conformance Score	Comment
		Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
1.1.4.4.3- Report S/P Performance	Scope Fully Conformant (5)	Conformant Tektronix Communications Iris Application Suite monitors continuously the status of S/P performance degradation reports, providing notifications of any changes and management reports These reports can be scheduled to run continuously to monitor the status of service performance. These reports can be emailed by the system automatically to interested parties Note that the support provided can involve manual action facilitated by the automated support. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 1: 1.2.2 – Service Development & Management	N/A (Level 1 Processes are not assessed)	The following Level 2 process elements were submitted in scope for this Level 1 process: 1.2.2.3 – Service Development & Retirement
Within Level 2: 1.2.2.3 - Service Development & Retirement	Scope Partially Conformant (2)	Partially Conformant The following Level 3 process were assessed for conformance: 1.2.2.3.2- Assess Performance of Existing Services This process represents 1 of 7 level 3 processes defined within the 1.2.2.3 - Service Development & Retirement L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.2.2.3.2- Assess Performance of Existing Services	Scope Fully Conformant (5)	Conformant Tektronix system performs 24X7 monitoring/collection of service performance; Services are modeled in the system as a set of

eTOM process element	Conformance Score	Comment
		performance indicators. This process is supported through partially automated capabilities. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).
Within Level 1: 1.2.3 – Resource Development & Management	N/A (Level 1 Processes are not assessed)	The following Level 2 process elements were submitted in scope for this Level 1 process: 1.2.3.3 Resource Development and Retirement
Within Level 2: 1.2.3.3 - Resource Development and Retirement	Scope Partially Conformant (2)	Partially Conformant The following Level 3 process were assessed for conformance: 1.2.3.3.2- Assess Performance of Existing Resources This process represents 1 of 7 level 3 processes defined within the 1.2.3.3 - Resource Development & Retirement L2 process; therefore not all contained Level 3 process elements are in scope for this assessment. Note that the support provided can involve manual action facilitated by the automated support.
1.2.3.3.2- Assess Performance of Existing Resources	Scope Fully Conformant (5)	Conformant Tektronix system performs 24X7 monitoring/collection of resource performance. Resource performance is modeled in the system as a set of performance indicators. Each resource can have one or more KPIs. Note that the support provided can involve manual action facilitated by the automated support. Supporting evidence provided for this level 3 process fully satisfies conformance criteria for the Business Process Framework (eTOM).