



# Frameworx Standard

Saudi Telecom Company
E2E Customer Assurance Process Journey Processes

TM Forum Frameworx 17.0 Certification

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Self-Assessment Process Mapping Report

1.4.6 – Service Problem Management

Version 1.0

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# 1.4.6 Service Problem Management

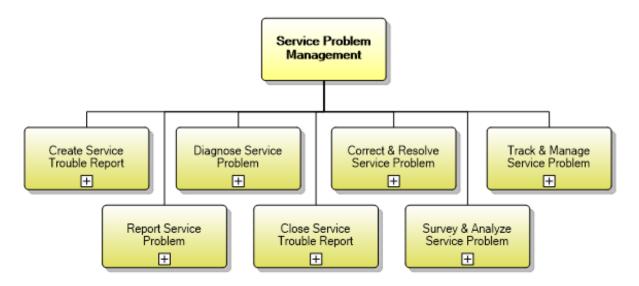


Figure 1: 1.4.6 Service Problem Management decomposition

### **Service Problem Management**

**Process Identifier: 1.4.6** 

### **Brief Description**

Respond immediately to customer-affecting service problems or failures in order to minimize their effects on customers, and to invoke the restoration of the service, or provide an alternate service as soon as possible.

### **Extended Description**

Service Problem Management processes are responsible for the management of problems associated with specific services. The objective of these processes is to respond immediately to reported service problems or failures in order to minimize their effects on customers, and to invoke the restoration of the service, or provide an alternate service as soon as possible.

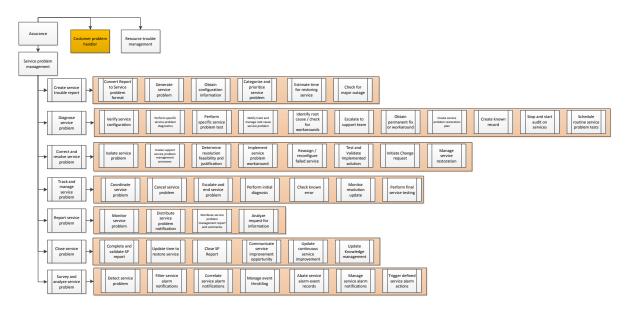
Responsibilities of the Service Problem Management processes include, but are not limited to:

- Detecting, analyzing, managing and reporting on service alarm event notifications;
- Initiating and managing service trouble reports;
- Performing service problem localization analysis;
- Correcting and resolving service problems;
- Reporting progress on service trouble reports to other processes;
- Assigning & tracking service problem testing and recovery activities
- Managing service problem jeopardy conditions

Service Problem Management processes perform analysis, decide on the appropriate actions/responses and carry them out with the intent of restoring normal operation on specific services.



However these activities need to interact with the Problem Handling processes, as the latter have a view on customer impact. Service Problem Management processes are responsible for informing Problem Handling processes of any potential customer problems. Where the original report arose as a result of customer problems, the Service Problem Management processes may be coordinated by Problem Handling processes.



### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

### Interactions

Reserved for future use.

# **Create Service Trouble Report**

**Process Identifier: 1.4.6.1** 

### **Brief Description**

Create a new service trouble report.

### **Extended Description**

The objective of the Create Service Trouble Report process is to create a new service trouble report.

A new service trouble report may be created as a result of service alarm event



notification analysis, and subsequent creation of new service alarm event records, undertaken by the Survey & Analyze Service Problem processes, or at the request of analysis undertaken by other processes in the Customer (in particular a Customer Problem Report can generate one or more Service Trouble Reports), Service or Resource Domains which detect that some form of failure has occurred for which service restoration activity is required to restore normal operation.

If the service trouble report is created as a result of a notification or request from processes other than the Survey & Analyze Service Problem processes, the Create Service Trouble Report processes are responsible for converting the received information into a form suitable for the Service Problem Management processes, and for requested additional information if required.

These processes will make estimates of the time to restore service which will be included in the new service trouble report so that other processes can gain access to this information.

### **Explanatory**

Reserved for future use.

#### **Mandatory**

Reserved for future use.

#### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

# **Diagnose Service Problem**

**Process Identifier: 1.4.6.2** 

### **Brief Description**

Identify the root cause of the specific service problem, including those service problems related to security events.

#### **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.

The responsibilities of these processes include, but are not limited to:

- Verifying whether the service configuration matches the appropriate product features;
- Performing diagnostics against the specific services;
- Running tests against the specific services;
- Starting and stopping audits against specific services
- Scheduling routine testing of the specific services.

The Diagnose Service Problem processes will make the results of the root cause analysis



available to other processes. 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.

When the process is complete the Diagnose Service Problem processes will notify the Track & Manage Service Problem processes.

### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

### **Correct & Resolve Service Problem**

**Process Identifier: 1.4.6.3** 

### **Brief Description**

Restore the service to a normal operational state as efficiently as possible

### **Extended Description**

The objective of the Correct & Resolve Service Problem processes is to restore the service to a normal operational state as efficiently as possible.

Based on the nature of the service failure leading to the associated service alarm event notification, automatic restoration procedures might be triggered. Manual restoration activity is assigned to the Correct & Resolve Service Problem processes from the Track & Manage Service Problem processes.

Depending on the nature of the specific service failure, these processes may possibly reassign services or re-configure service parameters.

For large service failures requiring extensive re-assignment and/or re-configuration activity to restore normal operation, these processes will attempt to implement work-arounds to recover the specific service operation. In these circumstances, recovery of normal operation may require invocation of the Support Service Problem Management processes.

They will also report successful restoration of normal service operation, restoration through temporary work-arounds or an unsuccessful attempt at service restoration to Track & Manage Service Problem through updates to the associated service trouble report.

# **Explanatory**

Reserved for future use.



#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

# Track & Manage Service Problem

**Process Identifier: 1.4.6.4** 

### **Brief Description**

Ensure that testing, repair and restoration activities are assigned, coordinated and tracked efficiently, and that escalation is invoked as required for any open service trouble reports in jeopardy

### **Extended Description**

The purpose of the Track & Manage Service Problem processes is to ensure that testing, repair and restoration activities are assigned, coordinated and tracked efficiently, and that escalation is invoked as required for any open service trouble reports in jeopardy. Responsibilities of these processes include, but are not limited to:

- Initiating first-in testing using automated remote testing capabilities;
- Adding additional information to an open service trouble report based on the first-in testing;
- Scheduling, assigning and coordinating repair and restoration activities;
- Generating the respective resource trouble report creation request(s) to Create Resource Trouble Report based on specific service trouble reports;
- Initiate any final testing to confirm clearance of the service problem;
- Undertake necessary tracking of the execution progress;
- Modifying information in an existing service trouble report based on assignments;
- Modifying the service trouble report status;
- Canceling a service trouble report when the specific problem was related to a false service alarm event
- Monitoring the jeopardy status of open service trouble reports, and escalating service trouble reports as necessary.

Note that some specific resource components may be owned and managed by other parties. In these cases the Track & Manage Service Problem process is responsible for initiating requests, through Party Problem Handling processes for restoration and recovery by the party related to the specific resource components.

These processes will co-ordinate all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence.



The Track & Manage Service Problem processes are responsible for engaging external parties in correction and recovery activities when:

- higher level expertise and/or higher level support is required to resolve the service problem, (which may be automatic in the case of highest priority service problems);
- the specific service has been purchased from an external party (as in an interconnect service).
- the specific service is delivered by an external party.

Where the engagement with an external party is for purchased or delivered services, as the case may be, the tracking and management of the party problem resolution activity is actually performed by the Party Problem Handling processes, with the Track & Manage Service Problem processes relegated to an overall coordination role. The Track & Manage Service Problem processes will also inform the Close Service Problem processes by modifying the service trouble report status to cleared when the service problem has been resolved.

### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

### **Report Service Problem**

**Process Identifier: 1.4.6.5** 

### **Brief Description**

Monitor the status of service trouble reports, provide notifications of any changes and provide management reports. This includes service trouble caused by security events.

#### **Extended Description**

The objective of the Report Service Problem processes is to monitor the status of service trouble reports, provide notifications of any changes and provide management reports. These processes are responsible for continuously monitoring the status of service trouble reports and managing notifications to processes and other parties registered to receive notifications of any status changes, for example, Service Quality Management and Customer QoS/SLA Management processes. Notification lists are managed and maintained by the Support Service Problem Management processes.

These processes record, analyze and assess the service trouble report status changes to



provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Problem Management process. These specialized summaries could be specific reports required by specific audiences.

These processes will make the necessary reports about the problem that occurred, the root cause and the activities carried out for restoration.

### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

### **Close Service Trouble Report**

**Process Identifier: 1.4.6.6** 

### **Brief Description**

Close a service trouble report when the service problem has been resolved

### **Extended Description**

The objective of the Close Service Trouble Report processes is to close a service trouble report when the service problem has been resolved.

These processes monitor the status of all open service trouble reports, and recognize that a service trouble report is ready to be closed when the status is changed to cleared.

#### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

# **Survey & Analyze Service Problem**

**Process Identifier:** 1.4.6.7



#### **Brief Description**

Monitor service alarm event notifications and manage service alarm event records in real-time. Service alarm events include security event alarms.

### **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.

Responsibilities of the Survey & Analyze Service Problem processes include, but are not limited to:

- Detecting and collecting service alarm event notifications;
- Initiating and managing service alarm event records;
- Performing service alarm event notification localization analysis;
- Correlating and filtering service alarm event records;
- Reporting service alarm event record status changes to other processes;
- Managing service alarm event record jeopardy conditions.

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. 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 correlation. 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.

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.

These processes may determine that a service alarm event notification may represent a customer impacting condition. In these circumstances this process is responsible for indicating a potential customer problem to the Problem Handling processes. 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.

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.

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.



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.

### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

# 1.4.6.1 Create Service Trouble Report

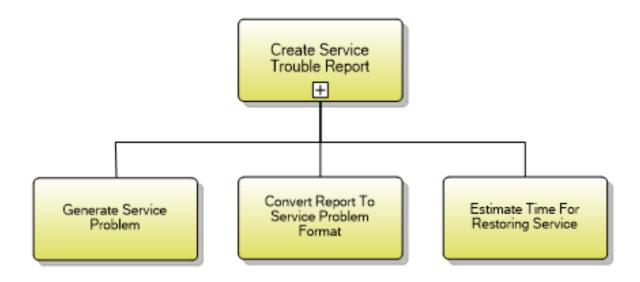


Figure 2: 1.4.6.1 Create Service Trouble Report decomposition

# **Create Service Trouble Report**

**Process Identifier: 1.4.6.1** 

**Brief Description** 

Create a new service trouble report. AM

### Comment for the compliance:

AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")



See Level4s in scope below for details of support

#### **Extended Description**

The objective of the Create Service Trouble Report process is to create a new service trouble report.

A new service trouble report may be created as a result of service alarm event notification analysis, and subsequent creation of new service alarm event records, undertaken by the Survey & Analyze Service Problem processes, or at the request of analysis undertaken by other processes in the Customer (in particular a Customer Problem Report can generate one or more Service Trouble Reports), Service or Resource Domains which detect that some form of failure has occurred for which service restoration activity is required to restore normal operation.

If the service trouble report is created as a result of a notification or request from processes other than the Survey & Analyze Service Problem processes, the Create Service Trouble Report processes are responsible for converting the received information into a form suitable for the Service Problem Management processes, and for requested additional information if required.

These processes will make estimates of the time to restore service which will be included in the new service trouble report so that other processes can gain access to this information.

#### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

### **Generate Service Problem**

**Process Identifier: 1.4.6.1.1** 

### **Brief Description**

This process creates a new Service Trouble report.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element



#### Mandatory

### This process creates a new Service Trouble report. AM

### Comment for the compliance:

Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution"

the customer calls the Call Center to raise a complaint against a service failure identified. The Call Center agent captures all the related customer information and service information in the system based on the type of service provided.

Service trouble reports also created by the STC Network operations either when a network performance issue has been pro-actively identified by STC by monitoring the network analyzer results or when multiple customer problem reports (customer complaints) have been recorded for the similar service failure issue. These service problem reports/tickets are used to track and manage these service problems and these are created in the RTTS system as ticket.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Convert Report to Service Problem Format**

**Process Identifier: 1.4.6.1.2** 

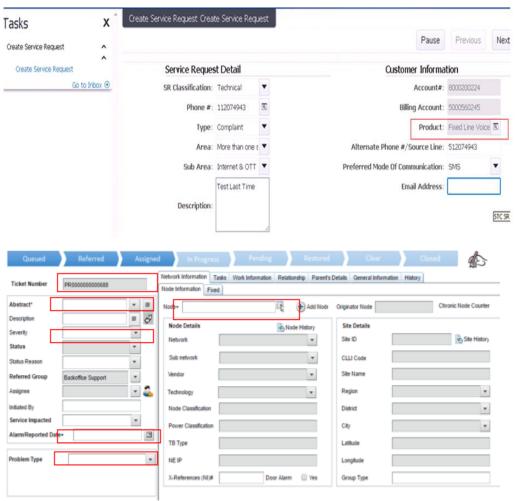
#### **Brief Description**

AM

If the service trouble report is created as a result of a notification or request from processes other than the Survey & Analyze Service Problem processes, this process is responsible for converting the received information into a form suitable for the Service Problem Management processes, and for requested additional information if required.

When the customer faces an issue with the services, he/she calls the call center to raise a trouble ticket. The Customer Call Center captures all the relevant customer information and service information and enters in the CRM system depending upon the type of service offered to the customer. The information converted by the system to service problem format helps the service problem management processes to resolve the issue successfully.





### **Extended Description**

Not used for this process element

### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

# **Interactions**

Reserved for future use.

# **Estimate Time for Restoring Service**

**Process Identifier: 1.4.6.1.3** 



### **Brief Description**

This process estimates the time to restore service which is included in the new Service Trouble report so that other processes can gain access to this information.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

This process estimates the time to restore service which is included in the new Service Trouble report so that other processes can gain access to this information. AM

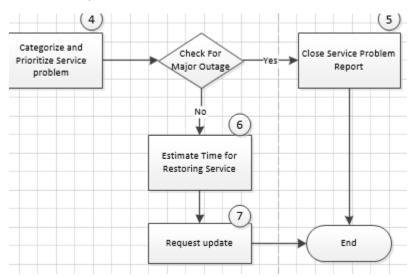
STC Tier 1,1.5 prepare restoration plan to fix customer service problem. The customer trouble ticket is passed on to Tier 2, which tries to resolve the issue through remote resolution by calling the customer. If the Tier 2 team is unable to resolve the issue through this approach, the ticket is passed on to the Field Operations team, which then sends a technician to fix the issue at customer location. The trouble ticket systems supported to calculate estimated time for service restoration

### **Optional**

Not used for this process element

### **Interactions**

Not used for this process element



# 1.4.6.2 Diagnose Service Problem



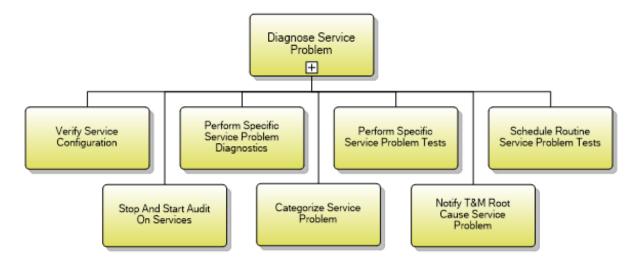


Figure 3: 1.4.6.2 Diagnose Service Problem decomposition

### **Diagnose Service Problem**

**Process Identifier: 1.4.6.2** 

### **Brief Description**

Identify the root cause of the specific service problem, including those service problems related to security events.

### **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.

The responsibilities of these processes include, but are not limited to:

- Verifying whether the service configuration matches the appropriate product features;
- Performing diagnostics against the specific services;
- Running tests against the specific services;
- Starting and stopping audits against specific services
- Scheduling routine testing of the specific services.

The Diagnose Service Problem processes will make the results of the root cause analysis available to other processes. 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.

When the process is complete the Diagnose Service Problem processes will notify the Track & Manage Service Problem processes. AM

#### *Comment for the compliance:*

AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")

See Level4s in scope below for details of support



#### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

### **Verify Service Configuration**

**Process Identifier: 1.4.6.2.1** 

### **Brief Description**

This process verifies whether the service configuration matches the appropriate product features.

### **Extended Description**

Not used for this process element

#### **Explanatory**

Not used for this process element

### Mandatory`

This process verifies whether the service configuration matches the appropriate product features. AM

The Call Center Tier1 and Tier1.5 captures all the information from the customer and raises a ticket on behalf of the customer, in case they couldn't resolve the customer issue then Tier 2 starts to verify the service used by the customer as well as the product configuration for the customer. This information will be used in determining the function within operations team to whom this ticket will be forwarded for resolution. After this verification, the team starts to perform specific tests to identify the root cause of the problem.

The service problem management processes are internally triggered, the team use Diagnostics systems to check service parameters and verify if they match the service/product features

### **Optional**

Not used for this process element

#### Interactions

Not used for this process element



### **Perform Specific Service Problem Diagnostics**

**Process Identifier: 1.4.6.2.2** 

### **Brief Description**

This process performs diagnostics against the specific services.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

### This process performs diagnostics against the specific services. AM

At tier 1 team conducts an initial verbal diagnostic with the customer to attempt to address the problem and perform basic troubleshooting steps. If not solved Tier 1.5 will perform detailed problem diagnostics on call. and the basic service configuration is verified, if this failed ,Tier 2 will receive ticket to perform preliminary tests to confirm if the basic functionalities of the product are working fine. This will further help to identify the particulars of the services/functionalities not functioning properly.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Perform Specific Service Problem Tests**

**Process Identifier: 1.4.6.2.3** 

#### **Brief Description**

This process runs tests against the specific services.

#### **Extended Description**

Not used for this process element

#### **Explanatory**

Not used for this process element

#### Mandatory

### This process runs tests against the specific services. AM

Once the specific functionalities/services affected are identified, Tier 2 performs specific tests pertaining to those functionalities/services to identify the exact problem impacting the functioning.



### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Schedule Routine Service Problem Tests**

**Process Identifier: 1.4.6.2.4** 

### **Brief Description**

This process schedules routine testing of the specific services.

### **Extended Description**

Not used for this process element

#### **Explanatory**

Not used for this process element

### Mandatory

This process schedules routine testing of the specific services. AM

Schedule any routine testing of the services. OSP and ISP network related routine testing for the services is carried out by the Operations team.

#### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

# **Stop and Start Audit on Services**

**Process Identifier: 1.4.6.2.5** 

### **Brief Description**

This process starts and stops audits against specific services.

### **Extended Description**

Not used for this process element

#### **Explanatory**

Not used for this process element

### Mandatory

This process starts and stops audits against specific services. AM



This process is completely owned and performed by Operations team as part of the preventive maintenance process

#### **Optional**

Not used for this process element

#### Interactions

Not used for this process element

### **Notify T&M Root Cause Service Problem**

**Process Identifier: 1.4.6.2.6** 

### **Brief Description**

This process makes the results of the root cause analysis available to other processes. It updates the open Service Trouble report, as required during the assessment, and when the root cause has been identified. This process notifies the Track & Manage Service Problem processes.

### **Extended Description**

Not used for this process element

### **Explanatory**

This process makes the results of the root cause analysis available to other processes.

#### Mandatory

It updates the open Service Trouble report, as required during the assessment, and when the root cause has been identified. This process notifies the Track & Manage Service Problem processes. AM

The root cause analysis is performed by Tier 2 Team after the ticket is passed on to them by CRM system. Once, the root cause of a service problem has been identified and if the root cause involves any resource related trouble, the Tier 2 team invokes the operations processes to fix the resource related failure/trouble.

The Tier 2 team creates a work order in WFMS for the field work, assigns technician and follows Workforce Management processes to resolve the problem. And upon resolution by operations, Workforce management system is updated.

### **Optional**

Not used for this process element

#### Interactions

Not used for this process element



# **Categorize Service Problem**

**Process Identifier: 1.4.6.2.7** 

### **Brief Description**

This process is responsible for categorizing the service problem according to the type of the problem, impact, and standardized criteria at SM&O level. Moreover, this activity will be carried out with appropriate diligence, in order to provide inputs to the "Track & Manage Service Problem" process.

### **Extended Description**

This process is responsible for categorizing the service problem according to the type of the problem, impact, and standardized criteria at SM&O level. Moreover, this activity will be carried out with appropriate diligence, in order to provide inputs to the "Track & Manage Service Problem" process. AM

Categorization of the trouble ticket is done by the Call Center.

The Tier 2 team categorizes the problem into specific buckets under different services such as data, mobile and fixed or by technology like Cupper or Fiber.

#### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

### Interactions

Reserved for future use.

### 1.4.6.3 Correct & Resolve Service Problem



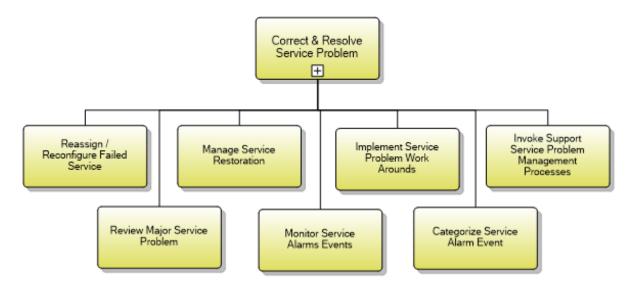


Figure 4: 1.4.6.3 Correct & Resolve Service Problem decomposition

#### **Correct & Resolve Service Problem**

**Process Identifier: 1.4.6.3** 

### **Brief Description**

Restore the service to a normal operational state as efficiently as possible

#### **Extended Description**

The objective of the Correct & Resolve Service Problem processes is to restore the service to a normal operational state as efficiently as possible.

Based on the nature of the service failure leading to the associated service alarm event notification, automatic restoration procedures might be triggered. Manual restoration activity is assigned to the Correct & Resolve Service Problem processes from the Track & Manage Service Problem processes.

Depending on the nature of the specific service failure, these processes may possibly reassign services or re-configure service parameters.

For large service failures requiring extensive re-assignment and/or re-configuration activity to restore normal operation, these processes will attempt to implement work-arounds to recover the specific service operation. In these circumstances, recovery of normal operation may require invocation of the Support Service Problem Management processes.

They will also report successful restoration of normal service operation, restoration through temporary work-arounds or an unsuccessful attempt at service restoration to Track & Manage Service Problem through updates to the associated service trouble report. AM

#### Comment for the compliance:

AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")



### See Level4s in scope below for details of support

#### **Explanatory**

Reserved for future use.

#### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

# Reassign / Reconfigure Failed Service

**Process Identifier:** 1.4.6.3.1

### **Brief Description**

Depending on the nature of the specific service failure, these processes may possibly reassign services or re-configure service and/or security parameters. It also reports successful restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

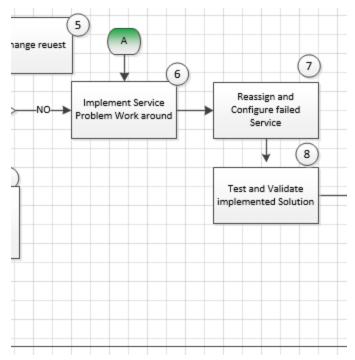
#### Mandatory

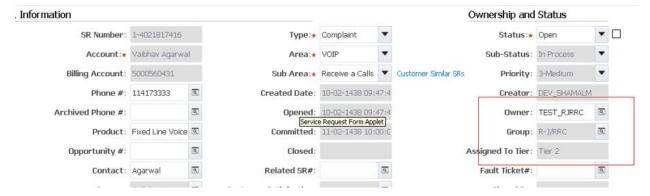
Depending on the nature of the specific service failure, these processes may possibly reassign services or re-configure service parameters. AM

The Tier 2 team attempts to resolve the service problem, and if they are not able to resolve the same depending upon the nature of the service failure, they reassign the ticket to operations team based on the type of the problem.

Operations Team updates the successful restoration of normal operation, which in turn act as a trigger to update CRM system.







### **Optional**

Not used for this process element

#### **Interactions**

It also reports successful restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

# **Manage Service Restoration**

**Process Identifier: 1.4.6.3.2** 

### **Brief Description**

Based on the nature of the service failure leading to the associated service alarm event notification, this restoration process might be triggered. It reports successful



restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

Based on the nature of the service failure leading to the associated service alarm event notification, this restoration process might be triggered. AM

Multiple customer complaints for the similar problem leads to the service alarm notification, and the operations team attempt to resolve the same.

The network analyzer monitors the network, and if some service alarms are raised that also triggers the service restoration activity.

In case of major service problem or service problem that requires onsite intervention from Operations, it is their responsibility to resolve the service problem and restore the service onsite.

### **Optional**

Not used for this process element

#### **Interactions**

It reports successful restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Implement Service Problem Work Arounds**

**Process Identifier: 1.4.6.3.3** 

### **Brief Description**

For large service failures requiring extensive re-assignment and/or re-configuration activity to restore normal operation, this process will attempt to implement workarounds to recover the specific service operation. It also reports restoration through temporary workarounds or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Extended Description**

Not used for this process element

### **Explanatory**

Used for large service failures requiring extensive re-assignment and/or re-configuration activity to restore normal operation,



#### Mandatory

For large service failures requiring extensive re-assignment and/or re-configuration activity to restore normal operation, this process will attempt to implement workarounds to recover the specific service operation. It also reports restoration through temporary workarounds or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report. AM

Service problem workarounds are provided in case major failure of services which require Operations intervention.

The Operations team assesses the need for reassigning and reconfiguring the service configuration. The team also plans for temporary workarounds to restore the service for key customers.

#### **Optional**

Not used for this process element

#### **Interactions**

Reports restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Invoke Support Service Problem Management Processes**

**Process Identifier: 1.4.6.3.4** 

#### **Brief Description**

This process recovers normal operation by invocation of the Support Service Problem Management processes. It also reports successful restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

### **Extended Description**

Not used for this process element

### **Explanatory**

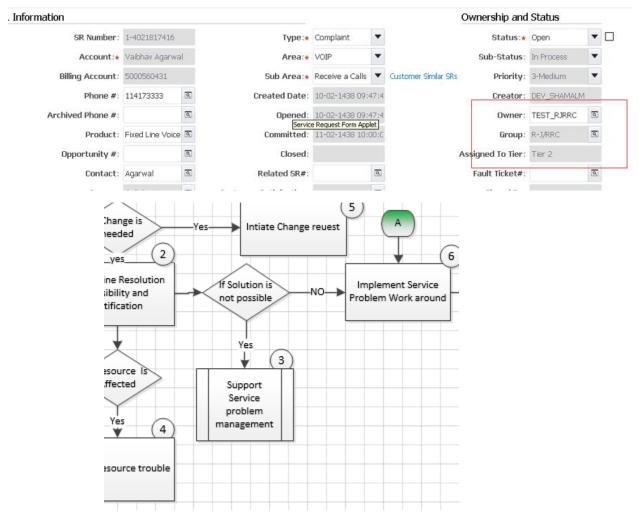
Not used for this process element

#### **Mandatory**

This process recovers normal operation by invocation of the Support Service Problem Management processes. It also reports successful restoration of normal operation or an unsuccessful attempt at restoration to Track & Manage Service Problem through updates to the associated Service Trouble report. AM

Assist Service Problem Management processes by proactively undertaking statistically driven preventative and scheduled service infrastructure maintenance activities and monitoring, managing and reporting on the capability of the Service Problem Management processes.





#### **Optional**

Not used for this process element

#### Interactions

Reports successful restoration to Track & Manage Service Problem through updates to the associated Service Trouble report.

# **Review Major Service Problem**

**Process Identifier: 1.4.6.3.5** 

### **Brief Description**

To review the resolution of service problems that have been categorized as major impact, in order to prevent recurrence and learn lessons for the future.

#### **Extended Description**

To review the resolution of service problems that have been categorized as major impact, in order to prevent recurrence and learn lessons for the future. AM



The problem management team is responsible for the review of major service problems and identification of potential lessons, from the same, for the future

The categorization of the impacts can help in better scheduling of preventive maintenance around the year, and ensure that the same service problems are not reoccurring

### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### **Interactions**

Reserved for future use.

# 1.4.6.4 Track & Manage Service Problem

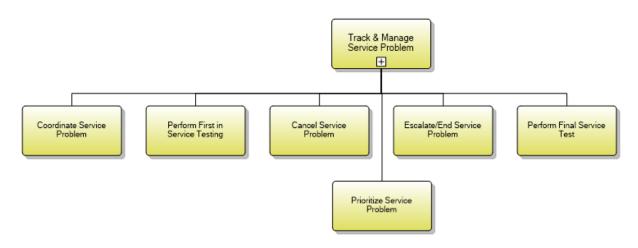


Figure 5: 1.4.6.4 Track & Manage Service Problem decomposition

### Track & Manage Service Problem

**Process Identifier: 1.4.6.4** 

### **Brief Description**

Ensure that testing, repair and restoration activities are assigned, coordinated and tracked efficiently, and that escalation is invoked as required for any open service trouble reports in jeopardy



### **Extended Description**

The purpose of the Track & Manage Service Problem processes is to ensure that testing, repair and restoration activities are assigned, coordinated and tracked efficiently, and that escalation is invoked as required for any open service trouble reports in jeopardy. Responsibilities of these processes include, but are not limited to:

- Initiating first-in testing using automated remote testing capabilities;
- Adding additional information to an open service trouble report based on the first-in testing;
- Scheduling, assigning and coordinating repair and restoration activities;
- Generating the respective resource trouble report creation request(s) to Create
   Resource Trouble Report based on specific service trouble reports;
- Initiate any final testing to confirm clearance of the service problem;
- Undertake necessary tracking of the execution progress;
- Modifying information in an existing service trouble report based on assignments;
- Modifying the service trouble report status;
- Canceling a service trouble report when the specific problem was related to a false service alarm event
- Monitoring the jeopardy status of open service trouble reports, and escalating service trouble reports as necessary.

Note that some specific resource components may be owned and managed by other parties. In these cases the Track & Manage Service Problem process is responsible for initiating requests, through Party Problem Handling processes for restoration and recovery by the party related to the specific resource components.

These processes will co-ordinate all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence.

The Track & Manage Service Problem processes are responsible for engaging external parties in correction and recovery activities when:

- higher level expertise and/or higher level support is required to resolve the service problem, (which may be automatic in the case of highest priority service problems);
- the specific service has been purchased from an external party (as in an interconnect service).
- the specific service is delivered by an external party.

Where the engagement with an external party is for purchased or delivered services, as the case may be, the tracking and management of the party problem resolution activity is actually performed by the Party Problem Handling processes, with the Track & Manage Service Problem processes relegated to an overall coordination role. The Track & Manage Service Problem processes will also inform the Close Service Problem processes by modifying the service trouble report status to cleared when the service problem has been resolved. AM

Comment for the compliance:



AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")

See Level4s in scope below for details of support

#### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

#### **Coordinate Service Problem**

**Process Identifier:** 1.4.6.4.1

### **Brief Description**

This process coordinates all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence. It schedules, assigns and coordinates repair and restoration activities, undertakes necessary tracking of the execution progress, modifies information in an existing Service Trouble report based on assignments, and modifies the Service Trouble report status.

#### **Extended Description**

Not used for this process element

#### **Explanatory**

This process coordinates all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence. It schedules, assigns and coordinates repair and restoration activities, undertakes necessary tracking of the execution progress, modifies information in an existing Service Trouble report based on assignments, and modifies the Service Trouble report status.

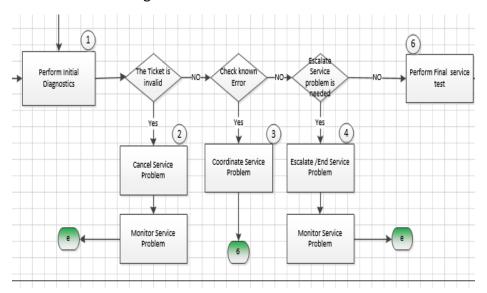
#### Mandatory

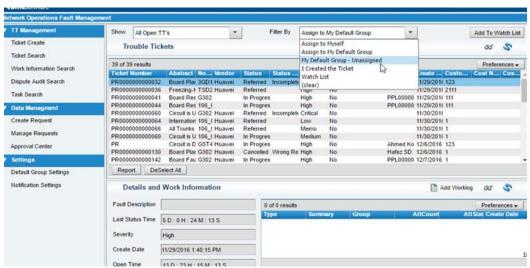
This process coordinates all the actions necessary in order to guarantee that all tasks are finished at the appropriate time and in the appropriate sequence. It schedules, assigns and coordinates repair and restoration activities, undertakes necessary tracking of the execution progress, modifies information in an existing Service Trouble report based on assignments, and modifies the Service Trouble report status. AM

the coordination of service trouble ticket is a key responsibility of Tier2 team. Depending upon the type of service failure, the team allocates trouble ticket to



relevant departments. The team also tracks and manages the customer trouble ticket till the time it gets resolved.





#### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

# **Perform First In-Service Testing**

**Process Identifier: 1.4.6.4.2** 



### **Brief Description**

This process initiates first-in testing using automated remote testing capabilities, and adds additional information to an open Service Trouble report based on the first-in testing.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

This process initiates first-in testing using automated remote testing capabilities, and adds additional information to an open Service Trouble report based on the first-in testing. AM

After the Tier 1 and Tier 1.5 team has attempted first level of resolution with the agreed upon diagnostic techniques and is not able to resolve the service problem, then the automated remote configuration checking is done in Tier 2

The customer trouble ticket is passed on to Tier2 team, which tries to resolve the issue through remote resolution by first in testing. The Tier 2 agent will follow a pre-defined checklist that differs by service. If the Tier 2 agent is unable to rectify the problem in a reasonable amount of time, they will pass the problem ticket on to the relevant department and location within Operations.

Not used for this process element

#### **Interactions**

Not used for this process element

#### **Cancel Service Problem**

**Process Identifier: 1.4.6.4.3** 

# **Brief Description**

This process cancels a Service Trouble report when the specific trouble was related to a false alarm event.

#### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

#### Mandatory

This process cancels a Service Trouble report when the specific trouble was related to a false alarm event. AM



The process is performed by the Tier 2 team. They cancel any ticket which is raised falsely and is called **refer back** process.

In case the customer ticket raised for service problem was invalid, the Tier 1 agent will not directly cancel the ticket. Instead, the agent calls the customer to verify his problem and check if service problem is from customer's side. If the customer ticket information needs to be updated, the same will be done on the system or if the customer is no longer facing the issue, the ticket will be closed.

Also, the same happened in case of false alarm events.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Escalate/End Service Problem**

**Process Identifier: 1.4.6.4.4** 

#### **Brief Description**

This process provides the escalations between support levels and actors when a service problem cannot be solved by the current assigned group. Therefore, the escalation can be carried out between supports levels at SM&O level, or, it can be escalated to other actors, such as, resource provider or other external parties. It is essential the ability to rapidly escalate service problems according to clear and agreed rules.

### **Extended Description**

Not used for this process element

#### Explanatory

Not used for this process element

#### Mandatory

This process monitors the jeopardy status of open Service Trouble reports, and escalates Service Trouble reports as necessary. AM

The process is performed by Tier2 team. If service problem requires any escalation to resource providers or supplier/ partner. also, this procedure enables the customer to request the involvement of appropriate higher management levels within STC if the service outage is not solved within acceptable time. STC management is responsible for taking corrective actions and measures to restore the customer's service as soon as possible. Customer Care Center is the first level of support that will issue a trouble ticket and



escalate the incident internally within STC to the relevant departments. They also provide the customer with continuous updates on progress of repair or resolution of service outages. And will own the customer's incident until its resolution.

#### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Perform Final Service Test**

**Process Identifier: 1.4.6.4.5** 

### **Brief Description**

This process initiates any final testing to confirm clearance of the Service Problem.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

#### Mandatory

This process initiates any final testing to confirm clearance of the Service Problem. AM

The Tier 2 team initiates final testing by accessing the applicable systems and validating the service as per the pre-defined testing plan.

#### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

#### **Prioritize Service Problem**

**Process Identifier: 1.4.6.4.6** 

### **Brief Description**

This process is responsible for assigning the prioritization to service problem in order to establish an order for managing it. The prioritization is assigned (usually automatically) according to criteria, such as, categorization, services affected and SLAs.

### **Extended Description**

This process is responsible for assigning the prioritization to service problem in order to



establish an order for managing it. The prioritization is assigned (usually automatically) according to criteria, such as, categorization, services affected and SLAs. AM

The prioritization of a customer service trouble ticket is done based on the criticality of the ticket and the importance of the customer, approval is received for prioritizing the ticket from Tier 1 governance team.

Once the approval is received, the ticket priority is set in the system and the resolution is taken up on priority. The customer problem is prioritized based on the SLA signed, if any. The customer problems are also prioritized based on any escalations, if any.

### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

#### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

# 1.4.6.5 Report Service Problem

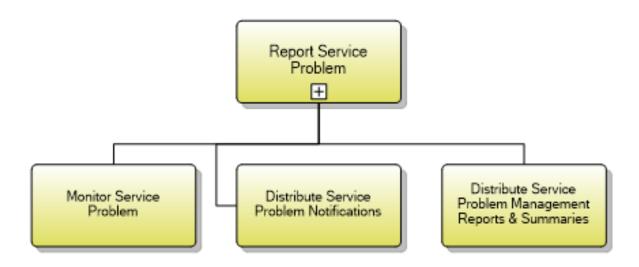


Figure 6: 1.4.6.5 Report Service Problem decomposition

### **Report Service Problem**



**Process Identifier: 1.4.6.5** 

### **Brief Description**

Monitor the status of service trouble reports, provide notifications of any changes and provide management reports. This includes service trouble caused by security events.

### **Extended Description**

The objective of the Report Service Problem processes is to monitor the status of service trouble reports, provide notifications of any changes and provide management reports. These processes are responsible for continuously monitoring the status of service trouble reports and managing notifications to processes and other parties registered to receive notifications of any status changes, for example, Service Quality Management and Customer QoS/SLA Management processes.

Notification lists are managed and maintained by the Support Service Problem Management processes.

These processes record, analyze and assess the service trouble report status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Problem Management process. These specialized summaries could be specific reports required by specific audiences.

These processes will make the necessary reports about the problem that occurred, the root cause and the activities carried out for restoration. AM

### Comment for the compliance:

AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")

See Level4s in scope below for details of support

#### **Explanatory**

Reserved for future use.

#### **Mandatory**

Reserved for future use.

### **Optional**

Reserved for future use.

### **Interactions**

Reserved for future use.

### **Monitor Service Problem**

**Process Identifier:** 1.4.6.5.1

### **Brief Description**

This process is responsible for continuously monitoring the status of Service Trouble reports and managing notifications to processes and other parties registered to receive notifications of any status changes, for example, Resource Performance Management



and Service Quality Management. Notification lists are managed and maintained by the Support Service Problem Management processes.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

This process is responsible for continuously monitoring the status of Service Trouble reports and managing notifications to processes and other parties registered to receive notifications of any status changes, for example, Resource Performance Management and Service Quality Management. AM

Service Problem Reports are primarily monitored by the Tier2 team, which owns the identifying and resolution of service problems. The system used to monitor the changes to the service problem tickets is the Ticketing system, where the status of the report/ticket is continuously updated from the time of problem identification and creation to closure. The service problem reports involve Operations in cases requiring field work to fix service problems.

Currently, there is an integration between Ticketing, CRM and Workforce Management systems which helps the tagging of customer problems to opened service problems. This translates to automatic notification from Tier 2 team or operations team upon resolution of service problems to Customer Problem Management processes to update statuses of customer problems.

#### **Optional**

Not used for this process element

#### Interactions

Notification lists are managed and maintained by the Support Service Problem Management processes.

### **Distribute Service Problem Notifications**

**Process Identifier: 1.4.6.5.2** 

### **Brief Description**

This process makes the necessary reports about the Service Problem that occurred, the root cause and the activities carried out for restoration.

#### **Extended Description**

Not used for this process element



#### **Explanatory**

Not used for this process element

### Mandatory

This process makes the necessary reports about the Service Problem that occurred, the root cause and the activities carried out for restoration. AM

Currently, there is a process of making and distributing reports pertaining to customer problem notifications managed by the governance team

The monitoring of status of service trouble reports is managed by both Tier 2 and operations team. All the necessary reports about service problems are maintained and are available on request.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

# Distribute Service Problem Management Reports & Summaries

**Process Identifier: 1.4.6.5.3** 

### **Brief Description**

This process records, analyzes and assesses the Service Performance Degradation Report status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Quality Management process. These specialized summaries could be specific reports required by specific audiences.

### **Extended Description**

Not used for this process element

### **Explanatory**

These specialized summaries could be specific reports required by specific audiences.

### Mandatory

This process records, analyzes and assesses the Service Performance Degradation Report status changes to provide management reports and any specialized summaries of the efficiency and effectiveness of the overall Service Quality Management process.

### **AM**

Currently, there is a documented reporting mechanism to distribute Customer Problem Management Reports & Summaries. and, customer problem reports are recorded and updated on the relevant system and Dashboards.



#### Filters selection



### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

# 1.4.6.6 Close Service Trouble Report

**Process Identifier: 1.4.6.6** 

### **Brief Description**

Close a service trouble report when the service problem has been resolved

### **Extended Description**

The objective of the Close Service Trouble Report processes is to close a service trouble report when the service problem has been resolved.

These processes monitor the status of all open service trouble reports, and recognize that a service trouble report is ready to be closed when the status is changed to cleared. AM

The closure of the customer ticket is done by the department which resolves the problem; the department can be Tier 2 or Operations. Once the ticket is closed in



the system, the Call Center agent will receive an update on the system through which the ticket was initially raised. The agent then follows up with the customer to verify the customer problem, whether the trouble has been resolved satisfactorily and records the interaction with the customer as a feedback on the ticket resolution.

The system tracks the ticket through the workflow and records the entire average handling time for the ticket right from opening of the ticket to closing the ticket post resolution. Calls capturing ticket closure are recorded for quality purposes. On successfully closing a problem ticket a Call Agent will record his own name and phone number against the ticket. Service Assurance Committee evaluates the reports and looks for improvement opportunities. The team coordinates with the point of contacts from operations and Technology Support to identify and communicate the service improvement opportunity.

### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

### **Interactions**

Reserved for future use.



# 1.4.6.7 Survey & Analyze Service Problem

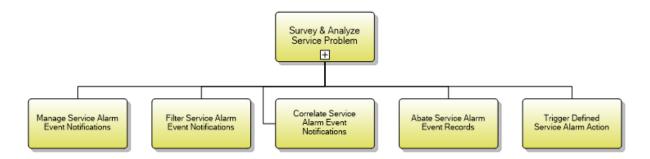


Figure 7: 1.4.6.7 Survey & Analyze Service Problem decomposition

# **Survey & Analyze Service Problem**

**Process Identifier: 1.4.6.7** 

### **Brief Description**

Monitor service alarm event notifications and manage service alarm event records in real-time. Service alarm events include security event alarms.

### **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.

Responsibilities of the Survey & Analyze Service Problem processes include, but are not limited to:

- Detecting and collecting service alarm event notifications;
- Initiating and managing service alarm event records;
- Performing service alarm event notification localization analysis;
- Correlating and filtering service alarm event records;
- Reporting service alarm event record status changes to other processes;
- Managing service alarm event record jeopardy conditions.

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. 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 correlation. 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.

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.



These processes may determine that a service alarm event notification may represent a customer impacting condition. In these circumstances this process is responsible for indicating a potential customer problem to the Problem Handling processes. 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.

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.

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.

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

### Comment for the compliance:

AM (Please refer to the document ASS-FUL ETE Design V1 r1 and BR-CC.TT.01 "Trouble Ticket to Solution")

See Level4s in scope below for details of support

#### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

### **Interactions**

Reserved for future use.

# **Manage Service Alarm Event Notifications**

**Process Identifier: 1.4.6.7.1** 

### **Brief Description**

This process may determine that a service alarm event notification may represent a customer impacting condition. In these circumstances this process is responsible for indicating a potential customer problem to the Problem Handling processes. 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.

### **Extended Description**

Not used for this process element

### **Explanatory**

This process may determine that a service alarm event notification may represent a customer impacting condition. In these circumstances this process is responsible for indicating a potential customer problem to the Problem Handling processes.

#### Mandatory

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

The network team performs Survey & Analyze Service Problem to monitor service alarm event notifications and manage service alarm event records in real-time through Surveillance tools

All the tickets which are passed on to the corporate network team is recorded in network ticketing system, tracked and managed in the same system.

Once the resolution is done, network team informs Tier 2 team and status is updated in CRM system.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Filter Service Alarm Event Notifications**

**Process Identifier:** 1.4.6.7.2

### **Brief Description**

This process 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.

### **Extended Description**

Not used for this process element

### **Explanatory**

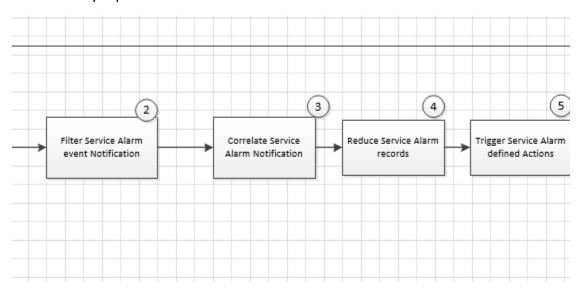
Not used for this process element



#### Mandatory

This process 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

STC Network team filters service alarm event notifications to analyze the root cause for any repeated service failures



#### **Optional**

Not used for this process element

#### Interactions

Not used for this process element

### **Correlate Service Alarm Event Notifications**

**Process Identifier:** 1.4.6.7.3

### **Brief Description**

This process 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. This process correlates service alarm event notifications to planned outage notifications to remove false service alarm event notifications arising as a result of the planned outage activity.

### **Extended Description**

Not used for this process element

### **Explanatory**

This process 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.



#### Mandatory

This process correlates 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

This process is carried out by STC Network. The Network team correlates service alarm event notifications to planned outages, to eliminate any false service alarm notifications.

#### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

### **Abate Service Alarm Event Records**

**Process Identifier: 1.4.6.7.4** 

### **Brief Description**

This process 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.

### **Extended Description**

Not used for this process element

### **Explanatory**

Not used for this process element

### Mandatory

This process 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

STC Network manages any notification of new service alarm event records or status changes of previously reported service alarm event records. And may happens during Maintenance down time MDT activities.

### **Optional**

Not used for this process element

#### **Interactions**

Not used for this process element

# **Trigger Defined Service Alarm Action**



**Process Identifier: 1.4.6.7.5** 

### **Brief Description**

This process triggers 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. This process is 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.

### **Extended Description**

Not used for this process element

#### **Explanatory**

Not used for this process element

### Mandatory

This process triggers 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. This process is 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

STC Network team carries out an action plan based on specific service alarm event notification information. The team also monitors any appropriate action if a service alarm event record is not cleared

### **Optional**

Not used for this process element

### **Interactions**

Not used for this process element

### **Monitor Service Alarms Events**

**Process Identifier: 1.4.6.7.6** 

### **Brief Description**

This process is responsible for collecting and monitoring events and alarms provided by services though systems and monitoring tools.

### **Extended Description**

This process is responsible for collecting and monitoring events and alarms provided by services though systems and monitoring tools. AM

STC operations team is accountable to monitor the service alarm events. If required, they provide this information to Tier 1,1.5, 2 for any further analysis of service alarm events

Also Tier 1,1.5, 2 has their own tools to monitor service quality and alarms.



### **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

#### Interactions

Reserved for future use.

# **Categorize Service Alarm Event**

**Process Identifier:** 1.4.6.7.7

### **Brief Description**

This process is responsible for categorizing the service alarm events in order to support the management, filtering and correlation of events at SM&O level.

# **Extended Description**

This process is responsible for categorizing the service alarm events in order to support the management, filtering and correlation of events at SM&O level. AM

The operations team categorizes the service alarm events to support service management and operations processes.

# **Explanatory**

Reserved for future use.

### Mandatory

Reserved for future use.

### **Optional**

Reserved for future use.

### **Interactions**

Reserved for future use.