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Incident Handling Process

Document Index

1 Definitions

CMS – Call Management System

IM – Incident Manager

KPI – Key Performance Indicator

P1 – Priority one

PIR – Post Incident Review

RFE – Request for Enhancement

Resolver Area –Team responsible for resolving incidents/requests

SLA – Service Level Agreement

SD – Service Desk

2 Scope

The purpose of this document is to outline the Incident Management process including Priority 1 handling. It will also identify the roles and responsibilities which are relevant to the Incident Management process.

2.1 Incident Management Definition

For the purpose of this document and the Incident Management process an incident is defined as:

"Any event which is not part of the standard operation of a service and which causes, an interruption to, or a reduction in, the quality of that service."

2.2 Aim of Incident Management

The main purpose of Incident Management is:

"To restore normal service operation as quickly as possible with minimum disruption to the business, thus ensuring that the best achievable levels of availability and service are maintained"

2.3 Scope of Incident Management within Axiell

The incident management process encompasses the lifecycle of an incident from detection (if identified internally) or notification (if raised by a Customer or other 3rd Party) through to service resumption.
The main activities of the Incident Management process are detailed below:

- Detection
- Logging
- Prioritization
- Diagnosis
- Escalation
- Investigation
- Resolution and recovery
- Closure
- Communication
- Measures and reporting

Within Axiell the scope of Incident Management incorporates incidents which fall into the following categories

- Hardware
- Software
- Support (Question(s) from the customer(s) – How do I / what is this?)

2.4 Benefits of Incident Management

There are many benefits which can be achieved by adhering to an Incident Management process

- Improved service resolution times following incidents, therefore a reduction in downtime
- Improved customer satisfaction through increased visibility of the incident management process
- Controlled streamlined process throughout Axiell, enabling a consistent approach to customers and incidents
- Provides a mechanism for the identification of beneficial system enhancements and amendments
- Increased management and control against SLA
- Enables more accurate information to be captured resulting in more effective management information

2.5 Expectations and Requirements

- All incidents and requests will be raised via the Service Desk
- All incidents and requests will be recorded in Axiell's Call Management System
- All resolved incidents and requests will be communicated to the customer
- CMS records should be closed in a timely manner following service resumption and in line with agreed SLA's.
- Axiell's CMS must be updated with all actions and communications as well as non-activity on a regular basis
- Incident priorities should be assessed when each incident is logged to ensure the correct priority has been allocated

<u>Priority one incidents</u>
A failure in the IT system has resulted in the total inability or severe restriction, which results in the customer performing the normal operation of a significant business function.

- P1 incidents will be notified to the Incident Manager to ensure processes are followed and appropriate communication occurs. Within working hours, all priority 1 incidents will be managed by the Incident Manager according to the P1 Process
- There will be regular communication to Senior Management
- There will be engagement of relevant resolver area(s)
- Once a P1 is assigned to a resolver area an ongoing communication strategy will be agreed
- P1's will be worked on through to completion without breaking for the close of business.
- The P1 process should allow the resolver time to fully focus on the task in hand, whilst maximizing the time available needed to restore the service

3 Roles and Responsibilities

In order for the process to remain effective and for the benefits of effective incident management to be realized it is important that all staff involved know and understand their roles in the process.
There are a number of roles involved in the investigation and resolution of an incident:

3.1 Incident Manager

The Incident Manager is responsible for the management and co-ordination of incidents within the business; ensuring that the incident is communicated internally and escalated effectively and that where necessary the relevant resource is available for investigation and diagnosis into any application related issues.
The Incident Manager can be the Service Desk Team Leader, Service Delivery Manager or Service Operations Manager.
The Incident Manager ensures that the investigator is not interrupted during investigations.

3.2 Service Desk

The Service Desk is responsible for logging all incidents and requests reported to them on Axiell Call Management System, carrying out initial triage of the incidents and attempting a resolution. If the SD is unable to resolve the incident then the record will be reassigned to the next level of support for further investigation, diagnosis and resolution. The SD role within incident management includes the communication and escalation, if required.

3.3 Resolver Areas

The resolver areas are those areas that complete the technical investigation into an incident. They are responsible for investigating and diagnosing the incident, restoring the service and ensuring that the CMS is updated with progress.

Resolver Areas within the business may be called upon to perform investigations into a reported incident.

Where the owning Resolver Area requires input or assistance from other areas they should request this support, whilst maintaining overall ownership and ensuring that progress is monitored to meet the target service resumption time.

The Resolver Area must ensure that the customer is kept updated with ongoing investigations by providing regular updates to the SD who will pass these onto the customer(s).

There are three different levels for the Resolver Areas:
First line – Service Desk: manage the initial stages in the life of an incident from logging to diagnosis, and resolve the incident if possible; escalate to second line support where necessary.

Second line – support group/s focused on incident diagnosis and resolution.

Third line – deeper level of technical expertise provided by technical teams, such as Network Support etc.

4 Incident Management Process

See Appendix 1 for process flow.

All customer-detected incidents and requests should be reported to Axiell via the Service Desk. Contact with the SD can be via email, telephone, fax and web interface.

- The SD is responsible for recording the details for all incidents and requests and contacting the customer if more detail is required. Incidents and requests are recorded in the Axiell Call Management System tool. The SD will also attempt to find out how to replicate the issue.
- SD staff will try to diagnose and resolve the incident if they have the appropriate skill and time. If they cannot resolve the incident then they are responsible for assigning the calls for further diagnosis and investigation.
- The SD will retain ownership of incidents and requests to ensure that assignees provide timely updates for all incidents.
- The SD is also responsible for communication with the customer, providing updates throughout the lifecycle of the incident, if necessary, and communicating the details upon resolution of each incident.

When an incident or request is reported, structured questions are asked based on the reported issue in order to establish as much information as possible and enable the correct priority to be given. It may be that the customer answers a number of the questions when providing the SD with the description of their query; we will always require basis information such as;

1. Which product is affected?
2. Where is the error/problem occurring?
3. What is the frequency of the error/problem?
4. Is this in the Live system? If not, which system is affected?
5. When was the system last working correctly?
6. Have any internal investigations taken place? If so, what have these been?

Other questions will need to be asked depending on the nature of the incident/request for instance see Arena support process.

If an error message is reported as part of incident, the details of this message is required. Also the steps involved to obtain the error message must be known and given when the incident is raised.

Once it is believed that a resolution to an incident has been completed then the customer will be sent an email detailing the resolution along with any recommendations to prevent recurrence, if necessary. The email will conclude with the line – “Please confirm that you are satisfied with the resolution, if we do not hear from you within 3 days then this incident/request will be closed and a new incident/request will need to be raised”

If an out of office response is received when sending a resolution email, the incident/request will be put “on hold” until the contact is back in the office.

During the lifecycle of the incident/request the case will be monitored to ensure that it is progressing in a timely manner such that an effective resolution will be made within the targeted SLA, where it looks like the case will not be resolved in time then an escalation will be made to the Incident Manager and/or the Resolver Team Manager.

5 Incident Priorities

A consistent set of priorities are defined as part of the process, with each incident being allocated an appropriate priority. This enables a consistent measure of impact and urgency.

5.1 Impact

Definition –

Impact is a measure of the effect of an incident on business processes; it is often based on how service levels will be affected.
Impact is used to determine the Priority in combination with Urgency, see section 5.2.

When determining the business impact of an incident, the following must be considered:

- Axiell and Customer reputation,
- Financial impact, for example lost revenue or penalties,
- Regulatory and legislative obligations.

From this assessment, an impact rating can be allocated:

<u>High</u>

- Complete loss of an entire service/product to all users of that service or critical business process,
- No alternative process is immediately available, to be reverted to as a workaround, without invoking full business continuity.

<u>Medium</u>

- Degradation of a service/product, where users are able to function, but at a reduced level than is acceptable for a prolonged period of time.

<u>Low</u>

- Minor issue
- Minimal Customer impact
- Single user, single application, single search issues

5.2 Urgency

Definition –

Urgency is a measure for how long it will be until an incident has a significant impact on the business. For example, a high impact incident may have a low urgency if the impact will not affect the business until the end of the financial year.
Urgency is used to determine the Priority in combination with Impact, see section 5.1.

The urgency of an incident is an assessment of how quickly the incident needs to be resolved.

- All or multiple customers
- Single Application

5.3 Priority Allocation Matrix

Priority is a category used to identify the relevant importance of an incident.
Priority is based on impact and urgency, and is used to identify required times for actions to be taken.

Impact		
High	Medium	Low
1	2	N/A
2	2	2
N/A	3	3

Where there is any confusion over the priority that should be allocated, clarification can be sought from the Service Desk Team Leader or the Incident Manager.

Axiell are measured against the handling of the customer priority.

NB: Priorities are incorporated in the customer's contracts

5.4 Service Resumption Targets

Hardware and Software

Since the Key Performance Indicator's within Service Level Agreement's can vary from customer to customer, the details are not documented here.
Priorities are based on the customers contracted SLA's. Up-to-date information can be viewed in the Service Desk Knowledge System (please contact the SD if access is required)

KPI targets are typically measured as the time taken for a response and the total time taken from initial logging of incident to resolution. Response being the start of the initial diagnosis carried out remotely (by SD), or in some cases the commencement of site visit; resolution is the application of a fix or workaround to allow the service to operate within normal parameters.

6 Process for P1 incidents

See Appendix 2 for process flow.

When a P1 incident is identified the Service Desk will assign to a Support Engineer via a telephone call advising them what is affected for which customer and any diagnosis details which can be provided. This call is made within 15 minutes.
A template email is used to send a communication to all interested parties within Axiell. The template ensures that relevant information of the incident is included.

The support engineer will provide updates to the Service Desk; the first update should be no more than 20 minutes after the assignment of the call.
These regular updates will ensure that the SD can keep the incident record up to date with accurate information. This in turns enables the SD to provide updates to the customer and be the point of contact for any other interested parties with the business
The SD must ensure that (regular) updates are received from the Resolver Area(s). The subsequent timescale for communication is agreed after the initial assessment. If updates are not received then the SD must contact the Incident Manager for escalation.

6.1 Email alert to the customer

This notification is to alert customers that there is a major incident in progress and that Axiell are aware of this and investigating.
The Incident Manager is responsible for writing clear and concise emails to customer(s) and providing updates and resolution.

The notification is carried out as soon as possible.

- First email to be sent to the customer(s) following a P1 being raised.

Incident is currently being investigated. *Further update to follow as soon as possible.*	
Date & time of reported incident:	Reference no.:
Server(s)/Product(s) affected:	
Description of incident:	

- Second email to be sent to the customer(s) following an update from the Resolver Area investigating the incident advising that service has been restored.

Incident has been resolved. *See below for resolution details.*	
Date & time of reported incident:	Reference no.:
Server(s)/Product(s) affected:	
Description of incident:	
Resolution of incident:	

6.2 Out of Hours P1 incidents

The Service Desk is available to accept calls 08:00 – 20:00 Mon-Fri. Saturday 08:00 – 18:00. Times outside this are defined as Out of Hours.

24x7 response to a P1 is available upon request; these are detailed within the customer's contracts.
Arena hosted is supported via a 3rd party resource centre; this is documented in the Arena SLA.

6.3 Post Incident Reviews and Incident Reports

Post Incident Reviews can be held for P1s to help identify the root cause, and to document any improvements that could eliminate or alleviate the impact of a similar issue.

PIR's can be requested following any incident if there is valid justification for this to be held.

Requests for a PIR should be made by email to the ServiceDesk@Axiell.co.uk (the Service Desk will forward the request onto the Incident Manager) including justification for the PIR (this is to maintain the integrity of the PIR process) and the required attendees.
Requests can come from the business or the customer; it may be that the Incident Manager can handle the questions without having to arrange a meeting.

Incident reports are produced following every P1 incident published to the customer and internally within 5 days of service resumption.

See below copy of the template used for the incident report.

Date & time of reported incident	Date & time of reported service resumption	Reference no.	Server(s)/Products(s) affected
Description of the incident:			
How was service restored:			
Root cause of the incident:			
Action:			
Timeline:			

6.4 Escalation Flow

Escalations can occur through two paths, one driven by the customer and an automated process within Axiell driven against progress targets towards resolution.

In the first case, if the customer is not satisfied with the progress being made towards resolution of an incident they may wish to escalate or complain about the incident, in which case the separate Escalation Process should be followed.

In the second case throughout the lifecycle of an incident, the progress towards resolution is being monitored at all times, and certain triggers will cause escalations to the Incident Management Team or the Resolution Team Manager.

These will include, but not be exclusive of,

- Insufficient activity on the incident
- Activity on the incident but incident is in danger of breaching SLA
- Incident has breached the SLA target

6.5 Incident/Request Closure

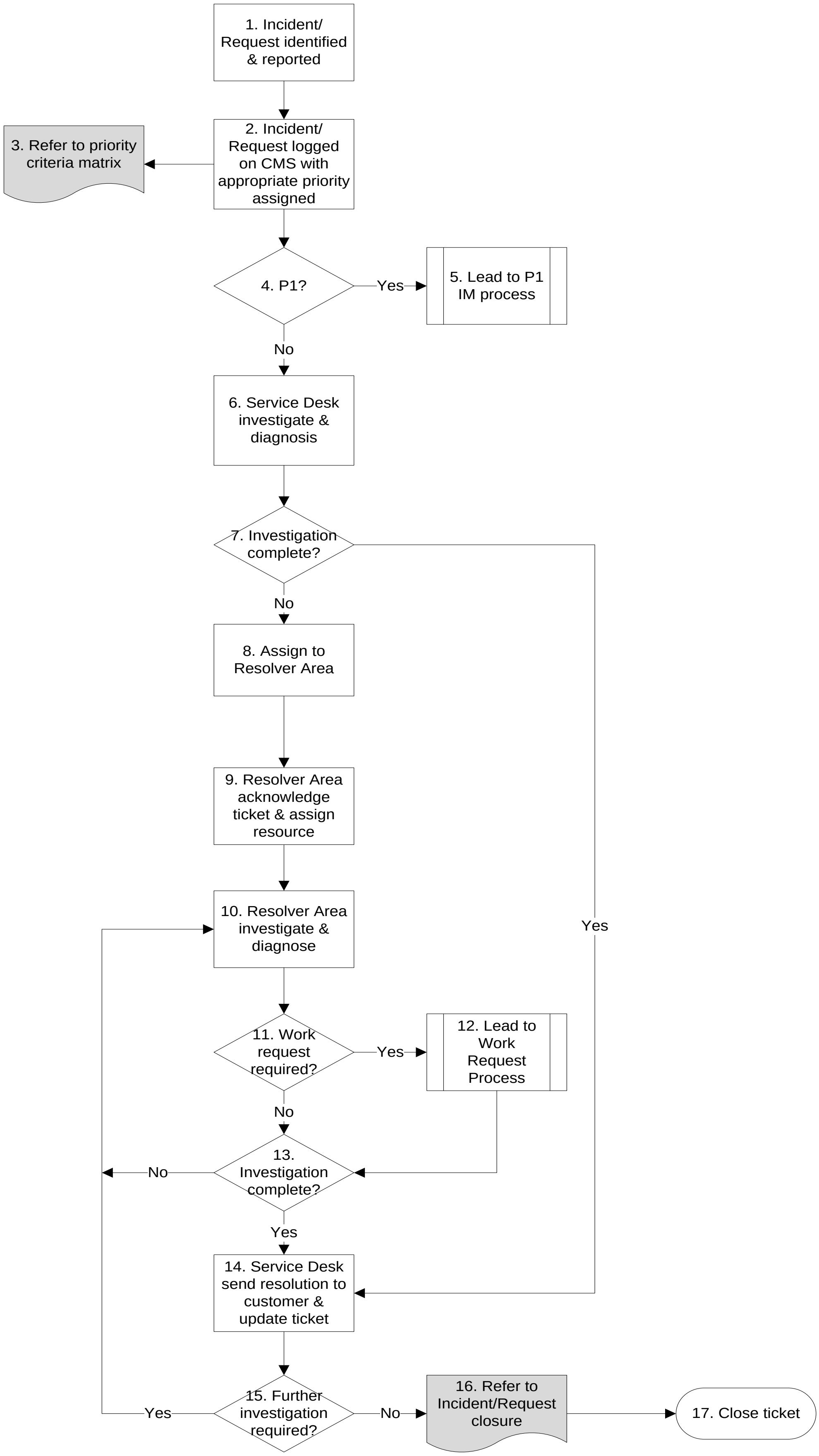
If at any time during the lifecycle of an Incident/Request the Service Desk have failed to get a response from the customer on two separate occasions then a third email will be sent to say: “We have tried to contact you on two previous occasions (list) and have elicited no response therefore if you do not respond to this email in the next 24 hours then the incident will be closed and a new Incident/Request will need to be raised for this issue”.

An out of office reply constitutes a response, in which case the call can be put on hold until the date of return of the customer.

The three communications can be no shorter than one third of the SLA time apart

An incident can be resolved at the point at which is becomes a Request for Enhancement, Bug or Change.
These will then be handled under the RFE, Bug or Change processes.

7 Appendix 1 – Incident and Request process flow



8 Appendix 2 – Process for P1 Incidents