

ISO 9001:2008 Quality Management System Case Study – Summary report

1 Executive summary

A serious problem with frequent failures of a telecommunications hub during heavy rains caused loss of revenue for the company of millions of Rands. The quality management system through the non-conformance and corrective action system solved the problem after a proper root cause analysis and appropriate corrective action was done.

2 Introduction

2.1 The Company

The company provides telecommunications services to the South African industry. The majority of their clients are corporate clients.

2.2 Problem statement

The company had frequent power failures at one branch which caused the telecommunications hub to go out of service due to power failures during heavy rains. The root cause of the problem was that electrical distribution boards got wet and failed during heavy rains because the rainwater from the roof above fell onto the distribution boards. The result was that calls that would normally go through this telecommunications hub, because it is the shortest route, would go through other hubs resulting in loss of revenue to the Company to the amount of <R 90m per incident.

2.3 Prior to implementation of the QMS

Previous corrective actions, prior to the implementation of the quality management system included investigation into the root cause of the problem. The building maintenance reported that the roof was fully maintained, including the gutters, and the electrical maintenance reported that the distribution boards were 100% compliant. Standby generators were installed but offered no resolution because the distribution boards were wet.

3 Conclusion

3.1 Analysis

The company decided to obtain ISO 9001:2008 certification. A consultant was appointed to provide support with the development and implementation of a quality management system that was ISO 9001:2008 compliant for certification. One of the attributes of the newly developed QMS was a documented Non-conformance and Corrective Action system. The failure of the Telecommunications hub was registered as an incident and became one of the first NCR's that was registered.

3.2 NCR & CAR Process

A root cause analysis was conducted in accordance with the relevant non-conformance procedure. The root cause analysis revealed that during heavy rains the current gutter that was installed did not have the capacity to handle the volume of rainwater that came down the roof resulting in the rainwater overflowing the gutter and flowing onto the electrical distribution boards two stories below, causing power failures for several days because the distribution boards were wet. After determining the root cause of the failure appropriate corrective action was determined. The appropriate Corrective Action derived from the root cause analysis, was to replace the current gutter with a gutter that could handle the volume of rainwater during heavy rains and to install a

rainwater protection cover above the electrical distribution boards to prevent any rainwater from reaching the electrical distribution boards. The total cost of the corrective action was R19 500.

3.3 End Results

After the corrective action was implemented the situation was monitored for a period of 3 months and the electrical distribution boards never caused the telecommunications hub to fail again during heavy rains.