****

Software Engineering Process Group (SEPG) & Information Security Management System (ISMS) Plan

**Version History**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ver.** | **Date** | **Description of Change** | **Authored / Revised By** | **Reviewed By** | **Approved By** |
| 1.0 | 23rd April, 2008 | Initial Draft | Abhishek Rautela | SEPG | Mr. Sudhir Saxena |
| 2.0 | 20th April, 2010 | Update section 3.0 Organization Metric objective | Abhishek Rautela | SEPG | Mr. Sudhir Saxena |
| 2.1 | 24th Sep, 2012 | Update section 4.0 for threshold values for metrics | Rahul Raj | SEPG | GM Dua |
| 2.2 | 10th Dec, 2012 | Update section 5.3 Process definition plan | Rahul Raj | SEPG | Ajay Kumar Zalpuri |
| 3.0 | 31st Oct 2013 | Update section 1 and 5 for ISMS purpose | Rahul Raj | SEPG  | Ajay Kumar Zalpuri |
| 3.1 | 31st July 2014 | Update section Appendix B for SEPG team members.  | Rahul Raj | Dhananjay | Ajay Kumar Zalpuri |
| 3.2 | 29th July 2015 | Update section 5.4 and Appendix B for SEPG team members.  | Rahul Raj | Dhananjay | Ajay Kumar Zalpuri |
| 3.3  | 12th Dec 2015 | Update section 4 and 5.4, 5.7 and appendix B as per CMMI5 Requirements | Rahul Raj | Dhananjay | Ajay Kumar Zalpuri |

**Table of Contents**

[1 Purpose 4](#_Toc381103533)

[2 Scope 4](#_Toc381103534)

[3 Quality Objectives 4](#_Toc381103535)

[3.1 Organizational Measurement Objectives 4](#_Toc381103536)

[4 Threshold Values for Metrics 4](#_Toc381103537)

[5 SEPG Activities 5](#_Toc381103538)

[5.1 Internal Audit Plan 5](#_Toc381103539)

[5.2 RTP Review Schedule 6](#_Toc381103540)

[5.3 Process Definition & Documentation 6](#_Toc381103541)

[5.4 Process Training 6](#_Toc381103542)

[5.5 BCP/Fire Drill Schedule 6](#_Toc381103543)

[5.6 Process Improvements 7](#_Toc381103544)

[5.7 Management Review Meetings 7](#_Toc381103545)

[5.8 Process Asset Library Details 7](#_Toc381103546)

[6 Appendix – A (Org Structure) 8](#_Toc381103547)

[Appendix – B (List of SEPG members) 9](#_Toc381103548)

# Purpose

To plan the activities for achieving the Quality Objectives stated in the Quality Manual and ISMS Manual. The specific activities are the following:

* Schedule for Quality Assurance Activities
* Internal Audit Plan ( Process, product, configuration & ISMS)
* VAPT schedule
* RTP review schedule
* BCP/Fire drill schedule
* Coordinate external audit
* Process Development and Improvement Activities
* Process Training
* Schedule for MRM, SEPG, Security Council Review Meeting
* Measurement Objectives

# Scope

This plan applies to all Organization personnel.

# Quality Objectives

Quality Objectives as stated in the Quality Manual are as follows:

**Key Objective 1:** Provide high quality services to our clients.

**Key Objective 2:** Continuous focus on employee satisfaction and competency development so as to reduce and stabilize employee attrition.

**Key Objective 3:** Continual improvement of services to our internal & external customers.

**Key Objective 4:** To secure its information assets and of its customers, NST shall deploy procedures to maintain confidentiality, integrity and availability of all information assets.

**Key Objective 5:** To have year on year revenue increase while maintaining profitability

## Organizational Measurement Objectives

* Provide insight into actual schedule, effort and costs compared to plan
* Evaluate the effectiveness of defect detection throughout the product lifecycle
* Assess the volume of change requests
* Evaluate effectiveness of change management process
* Evaluate compliance to QMS and ISMS
* Improve effectiveness of internal audit
* Ensure faster identification and implementation of Process Improvement suggestions.

# Threshold Values for Metrics

| **Business objective** | **Metric** | **Threshold Value** | **Remarks** |
| --- | --- | --- | --- |
| To provide high quality services to our clients. | Customer Satisfaction Index | Greater than or equal to 80% | Applicable for DEV Projects |
| Defect Removal Effectiveness | Greater than or equal to 80% | Applicable for DEV Projects |
| DD (QC Defect Density) | Less than .20/fp | Target will change after PPM is baselined. This is Threshold Value. Target for DD will be presented in project PMP with Std. Dev. after whatif, that will be done on Phase wise baseline PPM (regression Equation) |
| Delivered Defect Density | Less than .20/fp | Target will change after PPM is baselined. This is Threshold Value. Target for DDD will be presented in project PMP with Std. Dev. after whatif, that will be done on Phase wise baseline PPM (regression Equation) |
|  | Schedule Variance | Plus Minus 15% | Applicable for DEV Projects |
| Effort Variance | Plus Minus 10% | Target will change after PPM is baselined. This is Threshold Value. Target for EV will be presented in project PMP with Std. Dev. after whatif, that will be done on Phase wise baseline PPM (regression Equation) |
|  | QC Effectiveness | To Maximize Review Effectiveness >.4 | Target will change after PPM is baselined. This is Threshold Value. Target for QC Effectiveness will be presented in project PMP after whatif, that will be done on Phase wise baseline PPM (regression Equation) |
|  | CycleTime | To minimize CT | Target will change after PPM is baselined. This is Threshold Value. Target for DDD will be presented in project PMP after whatif, that will be done on Phase wise baseline PPM (regression Equation) |
| Continuous focus on employee satisfaction and competency development so as to reduce and stabilize employee attrition  | Average Training Person Hours | 3 man days in a year | Applicable for NST |
| Overall attrition rate | <15% in year | Applicable for NST |
| Employee satisfaction survey score | greater than 72% | Applicable for NST |
| Continual improvement of services to our internal & external customers | Key process performance improvement | at least 5% per annum  | Applicable for NST |
| To secure its information assets and of its customers | Number of security incidents of high severity | Less than 5% of total security incidents | Applicable for NST |
| To have year on year revenue increase while maintaining profitability | Revenue growth | To be >=20% with respect to the previous financial year | Applicable for NST |
| Profit before Tax | to be >=5% with respect to the previous financial year | Applicable for NST |

# SEPG Activities

## Internal Audit Plan

In order to ensure that approved processes are being implemented, internal process audits will be conducted by the QA Group in coordination with Project Managers. The schedule for internal process audits will be developed by the QA Group using the Project Plans as the input. A separate audit schedule will be maintained on regular basis.

| **Sr. No.** | **Type of Audit** | **Frequency for Projects** | **Frequency for Support Functions** |
| --- | --- | --- | --- |
| 1. | Process Audit | Every 4 months | Every 6 months |
| 2. | Configuration Audit | Every 4 months | Every 6 months |
| 3. | Product Audit | Every 4**\*** months | Every 6 months |
| 4. | ISMS Audit | Every 4 months |  |
| 5. | VAPT Schedule |  | 1 year |

Configuration Audit will be carried out with process audit.

\* – Projects of less than 4 months duration will be audited once prior to User Acceptance Testing or as per PMP defined.

## RTP Review Schedule

RTP will be reviewed in SEPG meeting based on its Asset CIA value.

## Process Definition & Documentation

Organization Process Framework and a set of processes are identified as outlined in master list of QMS documents and for Information security processes, Master list of ISMS documents including ISMS Manual is in place.

Identify process are developed, reviewed and maintained in Process Asset Library.

Any changes shall be considered under change control as defined Configuration Management process. Such changes will be reviewed during the Management Review meeting.

## Process Training

Training will be imparted to the practitioners on all the processes by the respective process champions. The details of the training shall be as given below:

| S. No. | Process Name | Training given by | Planned Training Date | Participant(s) |
| --- | --- | --- | --- | --- |
| 1. | Overview of CMMI, ISO 9001, ISO 27001 | QA Lead | As and when required | All NST Employees |
| 2. | QMS Process Training | QA Lead | As and when required | All NST Employees |
| 3 | ISMS Training | Process Owner | As and when required | All NST Employees  |
| 4 | ISMS Transition Training  | Consultant  | 25th March 2015 | QA Lead, PM, DL, MD, IT, HR, Sales, Testing Team |
| 5 | Six Sigma Training | Consultant | As and when required | PM,TL,QA |
|  |  |  |  |  |

All the training related artifacts shall be maintained as per the training process.

## BCP/Fire Drill Schedule

BCP testing will be done once in a year as per the BIA value.

Fire Drill will be conducted by the Logix Techno Park once in a year

## Process Improvements

SEPG shall maintain PIL (Process Improvement log) for the suggested & recommended improvements.

PIL will be reviewed in Management review meeting on regular basis.

SEPG Team will provide PPM equation to Project Mangeger

## Management Review Meetings

The head of SEPG shall hold Management Review Meetings once in two months.

All the information system security related issues will also be discussed in SEPG meeting as SEPG will also work as a ISSC (Information System Security Committee).

The meetings shall be called after giving prior notice to SEPG members and the agenda shall be given in advance. The agenda shall contain the following items:

1. Review of the previous meeting minutes.
2. Review of Security incidents
3. Review of Process Improvement log.
4. Review of Resources
5. Analysis of (Process, product, configuration & ISMS) Audit findings.
6. Analysis of Metrics at organization level.
7. Status of corrective & preventive actions.
8. Vulnerabilities or threats not adequately addressed in previous risk assessment.
9. Any changes that could affect the ISMS.
10. Any other relevant item
11. Review of the Target with standard deviation
12. Review of PPM equation after baseline
13. Review of Increased or decreased effort for managing X factor
14. Review Cycle Wise Organization and Project performance based on PPM model
15. Review Annova of Defect
16. Review Process capability
17. Review on Cost Benefit Analysis

## Process Asset Library Details

All the QMS related processes are maintained & located on the TFS server as process asset library:

Please ref to <PAL-Process Asset Library-Content Master.xlsx >

SEPG shall assign a MR for handling the QMS. MR will be designated CM for QMS.

The access control list will be available in PAL (Process Asset Library)

# Appendix – A (Org Structure)

**Managing Director**

IT support Team Lead

Dev Team Lead

Dev Test Lead

Problem and Knowledge Manager

Configuration and Build Manager

Application Support Lead

Service Manager

Project Manager

Infrastructure and IT Procurement

IT Operations Head/Delivery Manager

MR

Human Resource and Administration

Finance

Quality Lead

# Appendix – B (List of SEPG members)

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Name** | **Designation** |
|  | Ajay Kumar Zalpuri | Managing Director |
|  | Dhananjay Kumar | Solution Delivery Head |
|  | Saket Madan | IT Head |
|  | Vishal Kumar  | Project Manager  |
|  | Sudhir Mangla  | Project Manager |
|  | Rahul Raj | Assistant Manager QA |
|  | Nutan Kumari | Trainee QA |