

Process Quality Assurance (PQA)



- Objective
- PQA Plan
- PQA schedule
- Audit Inputs
- Audit Incident log
- Audit NC analysis & reporting
- Process Improvement incidents


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Why PQA?

To objectively evaluate the Process Areas and Work Products.

To provide stakeholders and management with objective insight into compliance.

To track and communicate issues to ensure that they are resolved.

Select Project	QA-22-23_ADTPLN	 Load
BASICS		
Project Type	Product Development	
Project Name	QA-22-23_ADTPLN	
Description	Oversight on the adherence to defined standards, methods, procedures and objectives of the organization to make the product quality exceed expectations. Goal= 10 NC/session (major =5 minor)	
Project Category	"Q" Category	
Link to Project Data	http://10.141.1.9:8080/svn/PQA/	
Project Classification	Continuous Improvement – Pro-active incremental	
Business Unit	Genus Innovation Limited	
Parent Project	None	
Project Manager	Shweta Aggarwal	
Marketing Manager	None	
EXECUTION		
	Scheduled Start	2022-4-1
	Target Finish	2023-3-31
	Scheduled Finish	2023-3-31
	Priority	High
	Add to Roadmap	No
IMPACT		
	Market	-
	Customer	-
	Targeted Prod. Specs	-
	Primary KPI Affected	-
	Intangible Impact	-
	Knowledge Output	-

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PQA resource

[Personal Data Base](#) PQA is additionally responsible for providing process facilitation and assistance to the project team members.



- PQA is independent of the project and not directly supervised by any stakeholder, and maintain a reporting channel to Senior Management.

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PQA activities

PQA tasks/schedule is for conducting Organization Audits, audit report analysis & review with senior management, PQA audit.

TECHNOLOGY DEVELOPMENT PROJECT			PROJECT TIMELINE			BUSINESS UNIT			
QA-22-23_ADTPLN			Apr 01, 2022 - Mar 31, 2023			Genus Innovation Limited			
PROJECT MANAGER			ACTUAL TIMELINES			PROJECT CUSTOMER			
Shweta Aggarwal			Apr 01, 2022 - Oct 20, 2022			-			
Task ID & Description	Planned Start/End	Actual Start/End	Sch. Variance	Planned Efforts	Actual Efforts	Effort Variance	Planned Cost	Actual Cost	Cost Variance
[1101] Start Approved Linked Comments Start Shweta Approved (1%)	Apr 01, 2022 Apr 01, 2022	Apr 01, 2022 Apr 01, 2022	0%	0	0.08	100%	0	0.08	100%
[1103] April SM review with metrics report Approved Linked Comments April SM review Shweta Approved (1%) Team Status (1%)	Apr 28, 2022 Apr 30, 2022	Apr 30, 2022 Apr 30, 2022	-100%	0.64	0.5	-22%	0.64	0.5	-22%
[1104] May SM review with metrics report Approved Linked Comments May SM review Shweta Approved (1%) Team Status (1%)	May 30, 2022 May 31, 2022	May 31, 2022 May 31, 2022	-100%	0.64	0.5	-22%	0.64	0.5	-22%
[1115] PQA audit-Q1 Approved	Jun 24, 2022	Aug 12, 2022							

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Tasks assigned to me

At Einframe home screen, there are pending tasks assigned to me. This reflects combined schedule for me.

13255	Release & Closure audit/Audit defect resolve and close	Oct 29, 2022	Oct 31, 2022	Project Task SP10-SAG302 DC DC Synchronization Audit GNE114	Sobhag Prajapat
13353	Oct SM review with metrics report	Oct 29, 2022	Oct 31, 2022	Project Task QA-22-23 ADTFLN	Me
10917	Training on 3D Modeling & Rendering	Aug 18, 2022	Oct 31, 2022	Trainings	Girja Singh
13179	Audit of Validation Phase	Nov 02, 2022	Nov 03, 2022	Project Task GNE114	Chandrashekhar Sharma
13200	Team Meeting 2 in validation phase	Nov 02, 2022	Nov 03, 2022	Project Task GNE114	Chandrashekhar Sharma
13250	SAP Documentation	Nov 02, 2022	Nov 03, 2022	Project Task SP11-SG027 LAMINATOR BY CHARGER	Sobhag Prajapat
10075	Training on Buck & boost technology by TI	Aug 05, 2022	Nov 03, 2022	Trainings	Girja Singh
10102	Training on LFRAC MOSFET in Inverter Application by NXP	Aug 05, 2022	Nov 03, 2022	Trainings	Girja Singh
13202	Final BOM updating in SAP	Nov 03, 2022	Nov 04, 2022	Project Task GNE114	Chandrashekhar Sharma
13191	Release note and review	Nov 04, 2022	Nov 05, 2022	Project Task GNE114	Chandrashekhar Sharma
10923	Training on CREO-Mechanism	Aug 18, 2022	Nov 10, 2022	Trainings	Girja Singh
13355	Nov SM review with metrics report	Nov 29, 2022	Nov 30, 2022	Project Task QA-22-23 ADTFLN	Me
13350	PQA audit-Q3	Dec 23, 2022	Dec 24, 2022	Project Task QA-22-23 ADTFLN	Me

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Audit task in Project's tasks

Project's audit task is planned in project tasks itself, and assigned to me as per mutual agreement in kick off meeting.

Select Project:

GNE114

Load

TECHNOLOGY DEVELOPMENT PROJECT

GNE114

PROJECT TIMELINE

Sep 13, 2022 - Nov 05, 2022

BUSINESS UNIT

Genus Innovation Limited

PROJECT MANAGER

Chandrashekhar Sharma

ACTUAL TIMELINES

Sep 19, 2022 - Oct 28, 2022

PROJECT CUSTOMER

-

Task ID & Description	Planned Start/End	Actual Start/End	Sch. Variance	Planned Efforts	Actual Efforts	Effort Va
<div>[1626] Audit of RD Phase</div> <div>Approved</div> <div>Latest Comments:</div> <div>Audit done.</div> <div>Chandrashekhar Sharma [129]</div> <div>Shweta Aggarwal [99]</div>	<div>Sep 23, 2022</div> <div>Sep 24, 2022</div>	<div>Sep 24, 2022</div> <div>Sep 24, 2022</div>	-100%	1.6	1.34	
[1531] Toll Gate 0						

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Audit Inputs

Audit Checklists

Projects' Work Products

Organizational and Project Standards, and Process Definitions

Name

E -Mails and MOM

Hardware Design

Planning

RD Phase

Testing

GNE114_AUDITT

Audit Checklist for Design and Implementation Phase End

Project

GNE114

Audit

Shweta Aggarwal

Audit

Chandrashekhar Sharma

Date

22.10.2022

S. No	Checkpoint	Functional Non-Conformance/ Non-Functional Non-Conformance/ Observation	Log ID
1	Has the Design documents been prepared as per the defined and current Design template?	Conformance	
2	Have the Design documents been reviewed?	Conformance	
3	Has all interfaces identified?	Conformance	
4	Has all Interfaces been reviewed?	Conformance	
5	Has the RTT been updated?	Conformance	
6	Has the RTT been reviewed?	Conformance	
7	Are all the essential interfaces designed in the design phase clearly traceable and marked as such in the functional	Conformance	
8	Has DAR been applied appropriately for critical design decisions? (if DAR applied)	Conformance	
9	Is the problem statement for DAR clear and concise?	Conformance	
10	Is the decision arrived at using DAR clearly stated and use sound judgment?	Conformance	
11	Have the findings of the reviews conducted logged in Incident Management?	Conformance	
12	Has the Design been approved by the project manager?	Major Non-Conformance	270
13	Have the respective modules been allocated to individual	Conformance	
Revision History	Initiation & RD-RM	Planning	Design-Implementation
		Integration	Validation and closure

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Audit Incident log

PQA classify findings as Non-Functional/Functional/Observations based on Audit guidelines & definitions provided in procedure.

INCIDENT MANAGEMENT									
HOME / REPORTS / INCIDENT MANAGEMENT									
Search Incidents									
Enter search criteria and click 'Search' below									
Search Again									
256	Oct 18, 2022	HOWDSN- sequence/numbering of modules is mismatched, 3.10 is coming after 4.0	HOWDSN document, module numbering	HOWDSN	Oct 18, 2022	Oct 08, 2022	-	Closed	Project Related GNE114 GNE114 2.0208 ABV
257	Oct 18, 2022	No evidence is seen for RTT review.	RTT review log/timesheet not available.	RTT review	Oct 18, 2022	Oct 08, 2022	-	Closed	Project Related GNE114 GNE114 2.0208 ABV
258	Oct 18, 2022	no evidence of test case review is seen.	no evidence of test case review is seen.	test case review	Oct 18, 2022	Oct 08, 2022	-	Closed	Project Related GNE114 GNE114 2.0208 ABV
259	Oct 18, 2022	updated MOM is not available on SVN server.	latest MOM not on SVN	MINI/MET	Oct 18, 2022	Oct 08, 2022	-	Closed	Project Related GNE114 GNE114 2.0208 ABV

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Audit incident closure



PQA discuss the timelines to close the NCs with the Auditee, After resolving the NC's by Stakeholder, I check resolution and re-open if not suitable action. I ensure that all audit findings are resolved.

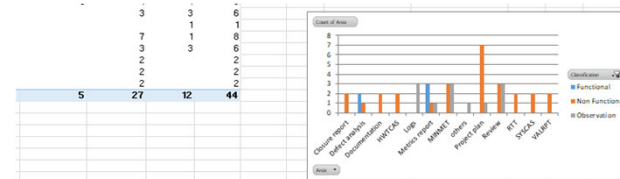
INCIDENT DETAILS			
Incident Type	Project Related	Date of Identification	Sep 06, 2022
Project	SPR-002285 DC-OC Converter 12V-10A & 5V-1A	Resolution Expected By	Sep 06, 2022
Stage	Audit	Assigned To	Sobhag Prapagar
Classification	Observation	Raised By	Shivra Aggarwal
Description	No review evidence could seen for RTT review after adding design, integration, system IDs		
Reproduction Steps	RTT review log, timesheet not seen		
Configuration Information	RTT review		
RESOLUTION DETAILS		CONFIGURATION & IMPACT	
Date of Resolution	Sep 06, 2022	Found In	2022-09-06 - During audit at validation phase
Report Type	BUG	Fixed In	2022-09-06 - During audit at validation phase
Product IPI Affected	Reliability	Effort Spent	0 hrs.
Task Category	Testing	Material Cost	0
Defect Source	Modified Implementation	Schedule Impact	0
Resolution Type	Fixed	Learnings	2022-09-06 -
Resolution Steps	2022-09-06 - RTT is now update with relevant id and no observation found in all relevant documents		
ACTIVITY LOG			
Description	User	Date & Time	
Incident resolved	Sobhag Prapagar	Sep 06, 2022 17:21 (UTC)	
Incident created	Shivra Aggarwal	Sep 06, 2022 09:44 (UTC)	

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Audit NC analysis & report



End of the month, I generate "Audit Report" using "Audit Reporting Tool" (TOOL_ADTRPT) and send this report to PEG Head for identifying Process Improvement Opportunities. Discuss audit report and PQA activities monthly with [senior management](#).



Problem	Elaboration	Impacts	Suggestions
	Corrective actions, process & product defect density are not mentioned in final metrics report while calculated separately in draft report at local computer.	locally data management may impact loss of data and other teammates can not take ref data for other projects also	Keep daily habit of SVN commit, a minor software can be installed in all computers to remind everyone at 5.25 to do this job.
Metrics report	metrics report- corrective actions are not filled phase wise, inappropriate.	-	
	no formal defect analysis is seen	help in prevention of re-occurrence of the defects and by reaching at root cause of the defects may help in prevention of new type of potential defects	Defect analysis to be done for testing defects (every stage), review defects at least. (Incident ID - 237, Process improvement)
Defect analysis			

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Project's process defect density



4. Project's Process Defect Density

The process defect density found 0.22, whereas measurement goal was 0.20±0.03. So it is equal to limit. The total efforts expended on this project is 157 persons hrs. This means that in every 4.48 person hrs one major non conformance came in this project. That is equal to expected.

4.1. Corrective Actions

As this defect density documented during closure so corrective actions not applicable for this particular project, but may help to future projects. But in this project I monitored the process defect density, and try to not leave any blunder in process point of view, as previous project learnings also use full. During updation of RTT ensure that each and every needs track by something in design, implementation, testing, no any system test case id missing to link with needs. Now as organization goal decided for process defect density as 0.20±0.02, so in next project will plan accordingly.

4.2. Root Cause Analysis

Most of NCs main cause observed is negligence during planning upgradation, time sheet missing, negligence during RTT upgradation, so some of silly mistakes done, which actually effects more.

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Process Improvement incidents



- If any best practices and process improvement opportunities are identified, I submit them to the PEG using "Process Improvement Incidents".

55	Jul 25, 2022	Audit repetition in a phase	before and after Metrics report audit is time consuming for team, pls change to once after metrics report preparation only.	PRCD_PRJPLN
56	Jul 25, 2022	Audit checklist to be sync with GLEF	Category of NC is to be sync with term functional/non-functional	CHKL_AUDITT

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