Logo

Description automatically generated with medium confidence

Logo

Description automatically generatedLogo

Description automatically generated with medium confidence CWFM Auto Bill Generation

Functional Requirements Specification

# Document Revisions

|  |  |  |
| --- | --- | --- |
| Date | Version Number | Document Changes |
| 23/08/2021 | 1.0 | Initial Draft |
| 25/08/2021 | 1.1 | Changes made in document and flow of system |
| 28/08/2021 | 1.2 | Changes made in TO-BE flow diagram |

# Table of Contents

[1 Document Revisions 2](#_Toc80873893)

[2 Table of Contents 2](#_Toc80873894)

[3 Introduction 3](#_Toc80873895)

[3.1 Project Summary 3](#_Toc80873896)

[3.2 Project Scope 3](#_Toc80873897)

[4 Business Process Overview 4](#_Toc80873898)

[4.1 Current Business Process (As-Is) 4](#_Toc80873899)

[4.2 Proposed Solution (To-Be) 4](#_Toc80873900)

[5 Appendices 10](#_Toc80873901)

[5.1 List of Acronyms 10](#_Toc80873902)

[5.2 Assumptions 10](#_Toc80873903)

[5.3 Out of Scope 10](#_Toc80873904)

[6 Sign-Off 11](#_Toc80873905)

# Introduction

## Project Summary

### Objectives

CWFM – Billing Automation solution is being designed to automate the Invoice Generation and Billing process between UTCL and the Third Party Contractors. The solution will be designed to interact with the existing KRONOS, SAP and UKSC systems. Few of the functionalities for the new system to be developed are mentioned below:

* Deliver an Admin module for managing all Administrative Tasks through Assigned User(s).
* Maintain Approval Workflow of Bill.
* Maintain Dispute Management between Departments and Contractor.
* Integration with KRONOS, SAP and UKSC for fetching Invoice details, Service Entry posting, MIRO posting and Final Bill Amount disbursal.
* Maintain Reports based on Contractors, Units and Cluster Levels.

### Background

The Invoice Generation and Bill Processing is currently being done manually. Currently Invoice generation is being done manually through the concerned department using the details through the KRONOS and SAP system. Service Entry and MIRO postings are being done in SAP manually. After the Manual approvals take place, it is followed by the posting of the Bill to UKSC Mailroom.

## Project Scope

The development of Integrated Automated solution for CWFM – Billing process. Following modules have been decided upon to cater to the Objectives:

### In-Scope Functionality

* Admin Module
* Automated Invoice Generation
* Contractor Dispute Management
* Contractor Digital Signature provision
* Bill Approval Workflow
* Auto Service Entry Posting and MIRO posting
* Final Bill posting to UKSC
* Reports and Dashboard Generation

# Business Process Overview

This section describes the Current Business Process(i.e.AS-IS) and the Proposed Business Process (i.e. TO-BE).

## Current Business Process (As-Is)

1. Purchase Requisition being created by User department.
2. Work Order is created and flows to KRONOS.
3. Section Head generates Labor Requisition in KRONOS.
4. DH approves the LR and scheduler schedules the resource(Workman) against the LR.
5. Attendance capturing and Bill verification on Monthly basis.
6. Contractor submits Invoice to the respective departments.
7. Invoice receiving Department approves the bill and creates Service Entry.
8. Mailroom format is being followed to submit hard copy of Invoice and approvals.
9. The Mailroom Employee scans the hard copy of the bill and creates a Case into Case manager.
10. The Account executive at UKSC verifies the bill (amount, Advance, Credit/Debit settlement) and forwards it to the UKSC Supervisor.
11. The UKSC Account Executive does a 3-way match and submits to UKSC Supervisor for approval.
12. The UKSC Supervisor verifies and approves the bill.
13. Steps 10, 11 and 12 takes 3-4 business days.
14. The Payment releases according to the due date according to the PO terms.
15. Payment has to be processed by 6th day of every of month for the previous month invoice.

### Challenges in AS-IS Process

1. In the year end (in March), if there is a bill which is of previous financial year but the billing cycle occurs in the next financial year. So, need to take care of MIRO posting in the same financial year. Need to take this up in special consideration for this outcome as this can vary from plant to plant according to policies.
2. If Invoice value is above 10 Lakhs, the bill will go to Financial HOD for approval of that Unit. These cases are prominent in the packaging Units.
3. Currently, there is no fixed TAT (Turn around time) for payment.

## Proposed Solution (To-Be)

### Invoice Generation and Bill Processing Flow

Import WO Details and Bill verification data from KRONOS

1. Integration will be done with KRONOS for WO and Bill verification data to identify the type of WO and generate Invoice accordingly.
2. System will have Manual excel upload option for Plants where CWFM module is not available/extended.
3. PPE Calculation. (Yearly)
4. PF Calculation Invoice. (Monthly)
5. ESI Calculation Invoice. (Monthly)
6. Bonus Calculation Invoice. (Done yearly)
7. Reimbursement of Insurance (to be considered in Phase 2).

Validations:

1. Invoice generation to be standardized 19th to 20th to avoid dispute in bills.

Invoice Generation

1. Billing cycle against the Plant will be maintained in the system.
2. The system will automatically generate the Draft Invoices according to the Billing cycle for a particular WO.
3. Invoice due date by default will be 7th day of every month. It will be configurable in the billing cycle Master.
4. Draft Invoice will be generated according to the below formula:

**Invoice Amount = Wage Rate(/hr) \*Work hours of workmen+ Margin + taxes (CGST, IGST, SGST)**

1. The Bill will be generated according to the proposed format:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PAN: AJQXXXX1R  GSTIN:23AJQXXXXX1R2ZE | | **XYZ ABC Electricals**  155, SRGGGGG COLONEY, NAYAGOAN, TEHSIL: JAWAD, DISTT: NEEMUCH, MADHYAPRADESH – 458468  TEL: +919425922757, +9198XXXXXXXX, EMAIL: [SINGHSUNDER75@YAHOO.COM](mailto:SINGHSUNDER75@YAHOO.COM) | | | | | | | | | State /Code: MP / 23  Vendor Code:8XX602 |
| **TAX INVOICE** | | | | | | | | | | | |
| Invoice No: | **20-21/10/001** | | Invoice Date: | **01/10/2020** | Due Date | **01/10/2020** | | Order No | **3010514703** | Order Valid Till | **30/09/2020** |
| SES No: |  | | Taxable Under RCM | **No** | Reverse Charge: | | **No** | Billing Period | **01/09/20 – 30/09/20** | GL Code | **0000707050** |
| Department: | **Instrumentation** | | Section: | IRM | Section Desc: | | | Service ID | MEXXXX9684 | | |
| Service Description: | KHALASI 1 W/O SAFETY TOOL | | | | | | | Job Description: | **SUPPLY MANPOWER FOR L1 COALMILL WAGON TI** | | |
| **Bill to Party** | | | | | | | | **Ship to Party** | | | |
| UltraTech Cement Limited  Unit – Aditya Cement Works  Sewa Kesarpura, District: Chittorgarh – 312612  Rajasthan  GSTIN: 08AAXXXXXXS42L1ZA  PAN: AXXXXXXX442L | | | | | | | | UltraTech Cement Limited  Unit – Aditya Cement Works  Sewa Kesarpura, District: Chittorgarh – 312612  Rajasthan  GSTIN: 08AAXXXX42L1ZA  PAN: AAAXXX42L | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sr# | Workman Name | Category | Trade | Skill | Rate | Regular (Days) | OT (Hours) | Wage (₹) | OT (₹) | Margin (₹) | Total (₹) |
| 1 | APCW29SS5910 - SURESH C | BSR | KHALASHI | Skilled | 559.22 | 21 | 10.5 | 11743.62 | 1467.95 | 939.49 | 14151.06 |
| 2 | APCW294XXX5913 - HUSSEN VALI BAAIKAATI | BSR | KHALASHI | Skilled | 559.22 | 20 | 3 | 11184.40 | 419.42 | 894.80 | 12498.62 |
| 3 | APCWXXX006114 - HABEEBU RAHMAN KUTTASSERI. | BSR | KHALASHI | Skilled | 559.22 | 20 | 0 | 11184.40 | 0 | 894.80 | 12070.20 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Totals** | | | | | | | | **34112.42** | **1887.37** | **2729.09** | **38719.88** |
| **Taxable Value** | | | | | | | | | | | **38719.88** |
| **SGST @9%** | | | | | | | | | | | **3484.79** |
| **CGST @9%** | | | | | | | | | | | **3484.79** |
| **IGST@0%** | | | | | | | | | | | **0** |
| **Amount Payable** | | | | | | | | | | | **₹45689.50** |
| **Amount Payable In Words: ₹ Fourty Five Thousand Six Hundred eighty-nine and fifty paise.** | | | | | | | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Payment Instructions | For Shree Durga Electricals | Department Head / FH (Conditional) | Accounts / UKSC |
|  | Digital Sign  Shree Durga | Approval Stamp | Approval Stamp |

1. Bill will be generated according to WO number and Jobwise/line item (There can be multiple jobs in one WO)

Validations:

1. Delta days of billing days of month like 21-31 (Bill cycle 19-20) provisioning to be done – Clarification need (SAP FICO Team, Commercial head – CFD)

Dispute Management

System will have a provision for Contractors to raise a dispute on the Generated Invoice.

1. On the review screen, the Contractor will have an option to raise dispute on the Invoice.
2. A form/option will be provided for the current invoice and with all supporting data from the Invoice.
3. Contractor only needs to enter issue against the dispute, rest other meta-data system will automatically capture.
4. Based on the department, the dispute will be sent to respective department of Invoice for dispute resolution.
5. Receiving department of this dispute will take corrective action to regularize data mismatch (if any) and revert to the Contractor.
6. Contractor will receive an Email alert about the resolution of the dispute. HR/ER will be in copy of Email.
7. HR/ER Department will be overall responsible for any dispute and ensure closure.
8. Once dispute has been resolved, there will be changes made to the Draft invoice according to the raised dispute.

Validations:

1. Once dispute is raised, the Invoice will be forwarded to Departments post dispute resolution.
2. Financial end to be taken care, yearly end dispute report to be sent to Commercial and UKSC.
3. Dispute resolution to be cleared in two days.

Approval Process for Bill within UTCL

1. Approval Matrix(position-wise) will be maintained for the different type of WO /Invoice.
2. Invoice will be sent according to the approval matrix.
3. Invoice will be sent to DH for Approval following approval matrix. DH will be given the option to hold the amount (absolute and %) with reason of the Contractor in case of any discrepancies.
4. If Invoice value is >=------- and <=-----, it will be sent to FH for Approval. FH will have the option of overriding the amount held by the DH.
5. If Invoice value is >=------- and <=-----, it will be sent to UH for Approval.
6. Based on the workflow completion status, Auto SE and MIRO posting and Case creation as mentioned in the below flow.
7. Default SLA is of 3 days (1 day at each level) for approval of Invoice.
8. SLA can be configured at any point of time using the Admin module.

Validations:

1. Post all the Approvals, the Invoice will be sent to the Contractor again for Digital Signature.

Digital Signature

1. Digital Signature screen will be given on the system for signing the Invoice.
2. On the screen, the Contractor will be given an option to enter their Invoice number.
3. Contractor will have to plug-in a USB from their system to digitally sign the invoice.
4. Default SLA is of 1 day for Digitally signing the Invoice.

Validations:

1. Invoice Number entered by Contractor on the screen, will be unique for that Contractor.

Service Entry and MIRO Posting – SAP

Service Entry

1. SAP MM Team will provide RFC to Auto post SE.
2. System will receive a response of SE Number after the posting. It is assumed that SE will not follow any release strategy as necessary approvals are already being taken care of at Invoice level.
3. System will follow MIRO process after SE.

MIRO Posting

1. SAP FICO Team will provide RFC to Auto post MIRO.
2. System will receive a response of Unique Transaction number after the posting.
3. Unique MIRO Document number will be used for UKSC Integration.

Validations:

UKSC Bill Posting

1. After the MIRO Posting, the UKSC team will create a Z-Table with all input and status fields.
2. SAP FICO team will provide a RFC to populate the Z-Table and read the data from that table.
3. Input fields will be populated by the Billing system.
4. Billing system will read status from the same Z-Table for the responses (including Case ID) and regular

statuses written by UKSC Team.

1. On receipt of case number against the invoice, Contractor will be intimated via Email keeping ER/HR and Department in copy.

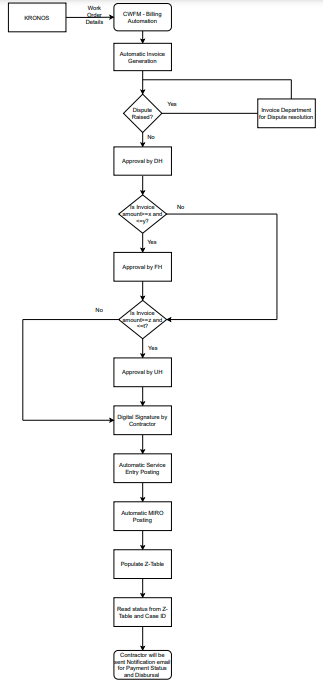


Figure: TO-BE Flow

Queries:

1. CASE ID to be provided in Header text of MIRO after auto posting – FICO Lead clarfication required.

### Billing generation System Flow

Authentication and Authorization

1. System will be maintaining 2 types of Users: Internal Users and Third-Party Contractors
2. Login Credentials for Internal Users will be the same as given by their IT team.
3. Login Credentials for Third Party Contractors will be maintained/managed by the system.
4. When an Internal User will Login, the system will authorize the Login in the Active Directory.
5. When a Third Party Contractor will Login, the system will authorize the Login from the system’s database.
6. Only the Authorized User can reset the Password of all the Users.
7. When a New User is registered in the system, a welcome Email will be sent to the registered User.

### Masters

1. The following High Level Masters will be maintained and will be controlled by Authorized User role:
2. Functions – This master will contain all the Functions present in the Unit.
3. Departments – This master will contain all the Departments in the Unit.
4. Sections – This master will contain all the Sections in the Unit.
5. Business Units – This master will contain all the Business Units present in the Unit.
6. Clusters – This master will contain a list of all the Clusters
7. Business Vertical – This master will contain all the Business Verticals
8. Roles – This master will contain all the Roles for the system.
9. Users – This master will contain all application Users repositories.
10. SLA – This master will contain all the SLAs that will be maintained for the system.
11. WO – Work Order details.

### Reports

The High Level reports are mentioned below:

1. Bill Verification Report
2. Cluster/Unit Wise Bill Status Report
3. Dashboard for Overall Bill Status/Tracking
4. SLA Breach Report (including Dispute management)
5. Audit Report

Report formats to be provided by the Functional Users.

10-12 tentative reports have been considered for development.

# Appendices

## List of Acronyms

|  |  |
| --- | --- |
| **Acronym** | **Full Form** |
| CWFM | Contract Workforce Management |
| UTCL | Ultratech Cement Limited |
| LR | Labor Requisition |
| RFC | Remote Function Call |
| SE | Service Entry |
| SLA | Service Level Agreement |
| UH | Unit Head |
| FH | Financial Head |
| DH | Department Head |
| WO | Work Order |
| BU | Business Unit |

## Assumptions

1. The bill/invoice format will be standard across Ultratech.
2. Contractors must procure Type 2/3 Digital Signature key.
3. SAP FICO & MM Team to ensure the Manual posting of SE and MIRO is blocked for Contractor Billing.
4. System is being designed for overall SLA for payments and approvals by 10th of every month.

## Out of Scope

* UKSC Case Manager related developments
* SAP side Integration development
* SAP side RFC/Program development

# Sign-Off

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Signature** | **Date** |
| Kailash Chandra Maheshwari | SAP FICO – Module Lead |  |  |
| Sanjeev MK | SAP MM – Module Lead |  |  |
| Pankaj Jain | UKSC SPOC |  |  |
| George Allu | SPOC HO/HR - KRONOS |  |  |
| Raj Khetan | SPOC - Vikram |  |  |
| Ramana Bhogi | SPOC - APCW |  |  |
| Jitendra Tanwar | SPOC - Hirmi |  |  |
| Dhananjayan | SPOC - Reddypalyam |  |  |
| Anand Pathak | SPOC - Awarpur |  |  |