

**Gulf Aluminium Rolling Mill B.S.C.**

**ICT Department**

**CEA / MRE System**

***Software Requirement Specifications***

Document Revision History:

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| --- | --- | --- | --- |
| **Version** | **Date** | **Remarks** | **Author** |
| 1.0 | 26 June 2022 | Draft created | Ervin Brosas |
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Document Approval (Sign-off):

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| --- | --- | --- | --- |
| **Approver Name** | **Position** | **Signature** | **Date** |
| Khalid Jalal | Sr. Group ICT Manager |  |  |
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# INTRODUCTION

This chapter is to introduce the project, its purpose, and structure.

## Project Owners

The project owners comprise of the Department Managers and Management Executives.

## Audience

This document is intended for third party suppliers who could provide a software solution based on the defined functional requirements. This is also intended for Finance and Engineering Stakeholders for their perusal on various functionalities that will be implemented in the system, as well as to identify any additional requirements as needed.

## Purpose

The purpose of this document is to identify the system requirements and the proposed solution to the audience. This document will also be used by the ICT software development team as the basis of the design and implementation of the application. Project owners will sign-off on all requirements before moving into the design phase.

After sign-off, any requested changes to the requirements will be documented including the effect on the project costs, scope and timelines and presented to the project owners for approval. These requirements were gathered based on IT understanding of the user requirements.

## Project Overview

The CEA/MRE System is designed to enhance the user experience with respect to creating a request electronically without filling out any paper-based forms. The system has built-in dynamic workflow which automates the approval process as well as sending of email notification to the approver. Users can track the progress or status of their request and can view the approval history. The system also provides functionality to search for requisitions based on filter criteria as well as producing dynamic reports.

The CEA/MRE system addresses the following primary business challenges:

1. Automate the Expenditure Request process
2. Eliminate delays in the manual approval process
3. Reduce human errors and delays of searching for data to fill out manual forms
4. Seamless integration with other systems such as JDE OneWorld, TAS, and GAP.

## System Glossary

|  |  |
| --- | --- |
| Term | Description |
| CEA | Capital Expenditure Addition |
| MRE | Major Revenue Expenditure |
| INC | Item Non-Capitalized |
|  |  |

# PROJECT SCOPE

## Business Problem

The current CEA/MRE System is reaching the end of its lifetime due to outdated technologies used which lead to its cumbersome maintenance. Though the system is still operational, the ever-changing internet browser updates would lead to unresolved compatibility issues which may result to system malfunctions.

## Application Scope

The CEA/MRE system will serve as the source for requesting expenditure, which is submitted to an online approval process. Users will be able to track the request at any time online, which will indicate the current status and the next status. The system automates the approval process based on the workflow setup and will send the email notification to the approver or to the substitute during their absence.

## Integration with other Systems

The CEA/MRE system will receive information from the following systems.

|  |  |
| --- | --- |
| JDE OneWorld | Information such as budget, cost centers, descriptions, employee ID’s etc. |
| GARMCO Active Directory | User security information such account name, user id, etc. |
| GAP (GARMCO Application Portal System) | Employee leave information |

# FUNCTIONAL REQUIREMENTS

## Budget Management

The budget management function would help the user to manage budget related information, which is used as a source in the process of creating an expenditure request.

### Creation of Projects

The finance department, at the beginning of the fiscal year, would upload all the approved CEA / MRE budgets into the system; conforming to the format (MS Excel sheet) defined by ICT department.

The typical information would be; Fiscal Year, Expenditure Type, Cost Centre, Project Number, Expense Category, Description, Detailed Description, Approved Budget Amount, etc.

Currently there are three expenditure types used in the system which include the following.

1. CEA – Capital Expenditure Addition
2. MRE -
3. INC - Item Non-Capitalized

### Budget Amendment Request

The budget amendment feature would facilitate any budget amendments that would need to compliment an expenditure request.

BR: The system would check for the available budget allocation at the time of creating an expenditure request. If expenditure request amount exceeds the budget limit, the system would notify the expenditure request initiator.

WF: The following workflow will take place, when requesting for additional budget for a project.

1. The initiator would inform the manager through the system, regarding the budget insufficient issue.
2. The manager would then create a budget amendment request for additional funds with justification information and send it to the budget approval group.
3. Once the amendment request is approved, the finance department will update the additional amount through the workflow. The system will maintain the original budget amount as it is, while the additional amount will reflect separately. This will notify the initiator and the department manager concerned.
4. The initiator would then submit the expenditure request again through the normal procedure for the department manager approval.

If the budget amendment were not approved, the finance department would update the budget amendment request as not approved. Then the initiator either can cancel or edit the expenditure request information.

## Expenditure Request Management

This function would provide a set of features to manage expenditure requests. The completion of an expenditure request would be transferred to JDE OneWorld.

### Creating an Expenditure Request

The initiator will create an expenditure request by entering the relevant information based on the project details.

The initiator would select an Item Type such as computers, mechanical, electrical when creating an expenditure request. Expenditure requests are mapped to an approval group. Once all information is added, the initiator would save the request to review. Once it is reviewed, initiator would submit it for approval.

Additionally, application will facilitate the attachment of relevant external documents to the request. External documents can be attached only by the initiator or the department managers.

The application would check for the available budget for the requested project. If the available budget is not sufficient for the request, the system will notify the initiator who created the expenditure request and the department manager.

WF: The following workflow will take place when requesting for an expenditure request.

1. The initiator would submit it for approval from the department manager.
2. The department manager approves the expenditure request and submits it for the relevant users in the workflow for approval. (departmental)
3. Once the departmental approvals are made, the application would send the request to CFO for approval.
4. CFO would approve and submit to CEO.
5. After CEO approval, the request can be printed to get the final approval from the MD.

The CEO and MD would sign physically while all other approvals are digital signatories.

At each other approval level, the application would check the leave system to validate the availability of approvers. If an approver were absent, then the application would forward the expenditure request to the next in peer (acting person) for approval.

### Integration of Inventory and Purchase Requisition

Once the request is approved, engineering department will assign the relevant Fixed Asset numbers (for CEA) or the Stock Item number (for Spare), based on the expense type. One CEA request can have one or multiple Fixed Asset numbers. Similarly, one Spares request can have one or multiple Inventory Item Numbers.

MIS will review the possibility of providing a facility to create purchase requisitions through the new application by automatically passing relevant information to JDE OneWorld, which will improve user efficiency and data integrity.

### Tracking of Expenditure Request

The application would provide facilities to track expenditure requests in various statuses such as creation, pending for approval, final approval, budget approved, budget not approved, etc.

### Maintenance of Completed CEA

The finance department would have features to close completed Project and CEA requests.

### Validations

* The Request form would be able to be printed only if the approval process is completed.

### Non-functional

* All entries, user actions will be logged for audit purposes.

## Approval Group Management

The system would provide features to create approval groups and map them with the Expenditure Types. Each approval groups will have fixed signatories. The CEO, CFO and Department Manager will be fixed for all departments.

Users can add any number of signatories for digital approval in addition to the mandatory list, hence the approval group is dynamic.

# Supporting Services

Following are the main services used by the system.

## Workflow Service

Workflow Service will be used to automate the approval process. Along with the workflow, an email notification would be sent to the relevant people to inform them that they have a pending itinerary on their plate that is awaiting approval. Approvers will have a facility to enter their comments prior to approval or rejection.



## Logging Service

Logging is used to maintain the system operational information in a text file for monitoring purposes. The Logging data will be available for System administrators and the administrator can set the level of information that needs to be logged.

Logging for the system is provided both by the Logging Service for the application and by the Web Server, which hosts the Web User Interface for the System. The Web Server typically logs information about user sessions, requests and responses. Standard Web Reporting services such as Web Trends can be used to generate important operational information for the Web Server logs.

The Logging Service provides logging for the application in addition to the logging provided by the Web Server. The application logs provided by the logging service are provide more detailed information about the request processing of the application, especially any errors that are encountered.

### Log Levels

The logging level can be set to one of following:

* Debug – Will log messages defined as information, debug and errors. Debug messages will include detailed information about the processing of a user request. Because of the quantity of information logged at this level, it may have a noticeable impact on performance.
* Information – Will log information and errors of the system. Informational messages will include important events such as a user logging in to the system. This will be the default level for logging.
* Error – Will only log errors defined on the system.