FINANCIAL MANAGEMENT SYSTEMS IMPROVEMENT COUNCIL (FMSIC)

Electronic Timesheet System (ETS)
Functional and Operational Requirements
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FUNCTIONAL AND OPERATIONAL REQUIREMENTS
FOR
ELECTRONIC TIME SHEET
FINANCIAL MANAGEMENT SYSTEMS IMPROVEMENT COUNCIL
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REVISION **0**

The Financial Management Systems Improvement Council (FMSIC) was created by the Department of Energy in recognition of the need for information sharing and prudent standardization of cost collection and financial reporting among its integrated contractors. A vision statement was developed and adopted during the first Council meeting and states: *IMPROVE CONTRACTOR FINANCIAL MANAGEMENT SYSTEM PROCESSES WHICH WILL RESULT IN INCREASED EFFICIENCY AND EFFECTIVENESS THROUGH (a) THE SHARING OF SUCCESSFUL APPROACHES [best business practices] AND BENCHMARKING AMONG CONTRACTORS and (b) THE DEVELOPMENT OF BUSINESS REQUIREMENTS AND COMMON TERMINOLOGY FOR FINANCIAL MANAGEMENT SYSTEMS, and © THE IDENTIFICATION OF SYSTEMS WHICH LEND THEMSELVES TO COMMON PROCESSES AND THE PURSUIT OF STANDARDIZATION WHERE APPROPRIATE.*

Since its inception in June of 1993, the Council has embarked on several initiatives designed to leverage gains from the existing contractor financial management knowledge and experience base. One of these initiatives was the Functional and Operational Requirements (F&OR) effort. The purpose of this effort was to develop and publish a basic set of design requirements for the more commonly used financial management automated information systems. With this requirements document, a contractor could shorten the requirements definition phase of the system development life cycle and could also result in some standardization of system design within the DOE contractor complex.

Contractors are required to review applicable F&ORs prior to the acquisition of or the major modification to a financial management information system. Although these documents are intended to serve as reference material and are advisory in nature, it is the hope of the Council to eliminate redundant system development and unnecessary system procurements among the DOE contractors.

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Outline

Electronic Timesheet System (ETS)

Introduction

This functional and operational requirements model is part of an initiative chartered by the Financial Management Systems Improvement Council (FMSIC).

Purpose

The Electronic Timesheet System (ETS) provides a data collection and transmission system for time (effort, labor, and absence) information.

Background

The implementation of the Chief Financial Officer (CFO) Act and the Secretary's Financial and Project Management Improvements Program has led to a number of important initiatives. One of these major initiatives is to evaluate the potential for improvements to the FMS of the Department's M&O contractors. The initial step in this effort was a survey completed by the M&O contractors on their FMS initiatives. The data collected from this survey proved to be a valuable exercise that produced useful information. It showed that 84% of the M&O contractor community has customized or modified commercial FMS and only 15% were using commercial off-the-shelf software. Our initial findings indicate that sharing M&O FMS or parts of systems has a potential for significant savings to the government. At a CFO meeting held in Clearwater, Florida in October 1992, there was agreement that the establishment of FMS Improvement Council was an appropriate initial first step in a process that could result in improvements to the FMS of M&O contractors and in future significant cost savings to the government.

Requirements

This document identifies general specifications of the ETS.

Concept of Operation

A technical approach for supporting these requirements has not been selected at this time. However, it is recommended that a graphical user interface distributive system be preferred. The actual identification will occur in the appropriate stage of the system development life cycle.

Application Objectives

- Provide for the collection of personnel time data, including productive and non-productive time, absences, and the transmission of the data to appropriate systems.
- Provide for the collection of multiple-tier data via the use of mediums such as request numbers, work orders, or accounts to provide the descriptive information concerning the time collected.

- Provide access to a centralized database for data storage that permits on-line or batch query and on-line or batch report generation.

- Provide for the up or down exchange of ETS data to and from other applications or other platforms. (On-line, Batch, or File.)

- Ensure the system (software, hardware, telecommunications) is configured to be user-friendly in the user's working environment.

- Provide associated documentation including:
  - on-line interactive user manuals with print upon request capability,
  - training materials,
  - system documentation,
  - on-line help.

- Provide access to historical time data in accordance with facility policies and procedures.

- Provide access capability for any authorized persons to enter time.

- Provide internal controls that comply with all Department of Energy (DOE) requirements, Cost Accounting Standards, other applicable laws and regulations, and internal policies and procedures.

- Provide ability to process amended time data.

- Conform to the applicable facility system development standards.

- Provide the data required for applicable systems (e.g., Payroll, Cost Accounting Systems, Human Resources, Ledger, etc.).

- Strive for the elimination of manual processes such as dependency on cards/paper, duplicate data collection, manual signatures, etc.

Functional Requirements

ETS user functions are described under the categories of access control, data entry processing and transmission, and data query and retrieval.

Access Control

Provide the following access control capabilities as required based on facility policy:

- userid/password control into ETS.

- update and maintenance support of userid/password information.
- application access privileges based upon types of users.
- control of specified functions limited to the ETS System Manager only. The ETS System Manager has access to all ETS functionality.

Data Entry Processing and Transmission

- Provide functionality to include accounting for all time data with necessary approvals.
- Provide delegations of authority for time approval if not covered in another system.
- Provide for future time period reporting.
- Provide appropriate point of entry validation checks against the Personnel Master, Chart of Accounts, etc., on all input to maintain data integrity. The system may provide for:
  - Absence eligibility check.
  - Authorized signature verification for absence approvals.
  - Account/Work Order Master for Standard distributions.
- Provide the capability to handle personnel assigned to multiple cost centers during a given collection period (daily, weekly, monthly) for the purposes of entering time, evaluating participation, and report generation. The system must be able to process personnel assigned to work orders instead of accounts.
- Provide the capability to allow users to select a subset of data within a division and/or cost center for the purposes of entering, reviewing, or reporting time data.
- Provide for time input to be made by an individual, designated alternate, or an appointee for a defined grouping of individuals.
- Provide the ability for time approval of personnel time by an approver, or designated alternate, with a minimum number of keystrokes.

- Provide ability to input effort data of chargers and non-chargers as well as productive and non-productive time (all absences).

- Provide ability to input time on a daily, weekly, or monthly basis.

- Provide ability to copy time data upon request from a previous period ending date and modify as necessary for the current period.

- Provide ability to make prior period adjustments which include additions, subtractions, and error corrections with proper authorizations.

- Provide the capability for supplemental processing/approval by designated personnel.

- Provide the capability to allow input data to be transmitted to user friendly menus and screens located in Payroll Services offices where original input data will be reviewed and used to initiate further data input that will be transmitted to Payroll for pay purposes and report generation. The system may provide for:
  - automation of as many manually judged rules as possible,
  - calculation of time in and time out based on rules,
  - edit capability by Payroll for exceptions,
  - personnel convenience time calculations,
  - non-hours based payments.

- Provide for all time data submissions, including prior period adjustments, additions, subtractions, and error corrections, to the Payroll System and Cost Accounting System in compliance with the approved cut off dates/times and submission schedules. System managers, departmental administrators, etc., are responsible for acknowledging and verifying the transmission.

- Provide for on-line data storage in accordance with facility policies and procedures.

Data Query and Retrieval

- Provide users with the capability to produce reports utilizing any of the record attributes for sorting, subtotals, and totals. Selected

reports will be designated for batch generation to paper, on-line viewing, and/or downloading to personal computer-based systems.

- Provide the capability for time reports to be printed on user defined printers.
- Provide pre-defined summary reports to Managers, Finance, and Payroll personnel to meet basic needs.
- Provide a mechanism to show status of time input so that missing time sheets, time sheets with approval, and time sheets without approval can be determined and remedied.

Security Requirements

ETS processes unclassified information. Sensitivity could vary from facility to facility. In accordance with facility policies and procedures, the following features will be supported:

- Control of access to ETS functions and data by type of user.
- Restriction of most functions to the ETS System Manager.
- Additional security measures within ETS as needed.
- Access to the software and process must be protected with appropriate security controls.

Operational Requirements

- Provide functionality so personnel can change their time until it is processed.
- Provide functionality so data can only be updated by the appropriate individual.
- Provide functionality so that once time is approved and processed, it cannot be modified or changed.
- Provide functionality so that duplicate updates will not be allowed.

- Provide computing capacity for processing time records for 100% of personnel base.
- Provide easy simultaneous access to the system for routine updating of time records.
- Provide system capacity to handle peak reporting times.
- Provide data storage, on-line/archived, as required to meet each sites retention schedule.
- Provide for achievement of a reasonable response time.
- Provide full recovery capability (e.g., mirrored disk or a transaction log) in the event of a system failure.
- Provide an electronic signature process, user ID and password, or the appropriate local standard.
- Provide system design that takes into consideration good software/database design practices that will minimize effort associated with future software enhancements.
- Provide, maintain, and have readily available for audit purposes an electronic log, audit trail of control tables, system access, data input, data modification, approvals, and transmissions.

Development Requirements

ETS will be developed in accordance with the accepted systems development methodology.

Telecommunications Requirements

Telecommunications requirements include:

- Transmission of both text and windows graphical data to local and remote users.

- Supporting the local and remote user hardware and software configurations.

- Achievement of a reasonable response time.
- Protecting ETS data from unauthorized access.

- Providing system capacity to handle peak reporting times.

Definitions

Absence	The state of being away or not being present. Any missed work.
Effort	Time charges reflecting hours charged as a result of hands-on-work (what a person is working on). Effort is used as a basis for cost redistribution.
Labor	Payroll costs associated with an employee; the amount an employee is paid.
Non-Productive Time	Time not associated with the performance of a final cost objective, or program task.
Personnel	Individuals whose performance and costs are monitored; may include employees, subcontractors, etc.
Productive Time	Time associated with the performance of a final cost objective, or program task.