USAID | DELIVER PROJECT

HEALTH COMMODITY MANAGEMENT INFORMATION SYSTEM (HCMIS)

DETAILED CUTOVER PLAN AND SCHEDULE

FOR HUB EDITION

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John Snow, Inc.
1616 Fort Myer Drive, 11th Floor
Arlington, VA 22209 USA
Phone: 703-528-7474
Fax: 703-528-7480
E-mail: askdeliver@jsi.com
Internet: deliver.jsi.com

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1 INTRODUCTION

This Cutover plan refines the Health Commodity Management Information System Hub Edition's (HCMIS HE) compliance plans, strategies and decisions and specifies the high level steps that are required to execute a cutover to a live environment.

1.1 Purpose

The Cutover plan provides the sequence of events a hub/warehouse will take to handle the transition from its current manual operations to compliance with the HCMIS FE. It is done after the requirements are met and tested to ensure that the new system is performing as specified based on the deliverables identified.

Moreover, this document outlines the cutover procedures that will be put in place.

1.2 Approach

The approach used in determining the cutover strategy and plan was to discuss the conversion strategies with senior technical developers in the project, who are responsible for executing the system changes. Numerous meetings occurred until an agreement was reached that the plan mitigated all the risks that could be foreseen.

1.3 Document Organization

This document is organized into seven chapters. A summary of each chapter is listed out below.

Chapter 1: Introduction - describes the purpose, approach, document organization, and intended audience in the risk management document

Chapter 2: Cutover Plan Development - this chapter of the document defines the cutover plan development

Chapter 3: Cutover People – this chapter states the user readiness, training, communication plans, contact list and role and responsibilities in cutover activities

Chapter 4: Cutover Data – outlines the data conversion overview and sequences, dependencies and milestones in cutover plan

Chapter 5: Cutover Process **-** summarizes ways of maintaining the cutover plan, manual procedures, transactions occurring during downtime, contingency plans, execution process, and post Go-Live tracking dashboard for cutover plan

Chapter 6: Cutover Technology - addresses the installation, security, output devices, and legacy shutdown in cutover activity

Chapter 7: Additional Section - define abbreviations and definitions in the document

1.4 Intended Audience

The Prospective audience for the cutover plan includes all constituents (internal – Development Team; external – service providers/vendor, employee at hub/warehouse or end user). It is the responsibility of the project management to inform the hub/warehouse at each site and associated projects of required downtime 30 days for the cutover to take place.

2 CUTOVER PLAN DEVELOPMENT

Once the data to be converted and the conversion method are identified from the Conversion Plan, the next step is to determine and document the timing and sequence of the conversion program. Obviously this will bring different questions. Among the questions to be considered include:

- When can all existing system operations be completed?
- When can the legacy system be shut down to begin the data conversion effort, and when must the new system be operational?
- How long will the data conversion processes, data verification, and reconciliation processes require?
- When should data backups be performed, and how much time is required for database recovery?
- How much data will be converted? As the volume of data is critical in determining the processing
- Time of the conversion program or resources required for manual data entry
- What type of hardware is being used? Determine how the hardware will affect the speed of automated conversion processes and transaction processing for manual efforts
- At what time must the new system be operational?

Estimate the time required for completing all the data conversion processes. Once the time frame has been defined, it is recommended that an additional 24 hours be allocated to the plan as a precaution.

In addition to this, the cutover plan team should also identify alternatives to resolve problems that may occur during the planning or execution phases. For example, during the planning phase, the targeted conversion weekend may not contain enough time to complete all processes. Options may include:

- Identifying another weekend (perhaps a holiday weekend) that will allow more time for cutover processes to be completed without disrupting the hub's business operations
- Determine whether all cutover processes are critical to operations on day one

3 CUTOVER PEOPLE

3.1 User Readiness

From a preliminary survey, users in different sites at hubs/warehouses are ambitious to use the new HCMIS HE system in order to avoid routine paper based activity and enhance their day to day activities. Even if, most employees at the health facilities have a working knowledge on computers, conducting HCMIS HE training is inevitable.

3.2 Training

Once the cutover plan has been completed, the major activities can be transferred to the cutover team who will provide the necessary activities. Trainings will be required before the cutover activity is completed and the hubs begin work with the new system. One week to learn about HCMIS HE including its functionalities should be sufficient.

3.3 Communication Plans

3.3.1 Information Flow

During the cutover process activities two categories of personnel will be involved. The first category that is the cutover process team provides the expertise and support to complete the day-to-day activities involved. These include super or power users, team leaders and team members. The second category approves successfully completed tasks or confirms contingency plans for a Final Readiness Go/No-Go decision.

3.3.2 Communicating the Plan

The team leader of the cutover process must orchestrate the flow of information facilitated by a cutover checklist. The checklist provides a measure of how the cutover process is progressing, given the critical nature of timing in this phase. The checklist details such things as:

- Tasks to be completed
- Department owners of tasks (for example, the person responsible for final signoff of the successfully completed task)

- Dependencies
- Timing

3.4 Contact List

The cutover process is time-critical; and those involved in this effort must remain in contact. To this end, a schedule of personnel on first-level support for various processes is developed and no task should be the sole responsibility of one team member. This "dual knowledge base" ensures sharing of information in the organization and provides a contingency plan if resources are unexpectedly unavailable.

For questions related to HCMIS HE cutover plan and processes, contact one of the following personnel.

Table 1: Cutover team personnel contact list

HCMIS FE Contact	Position	Contact information	Email Address
Ketesla Hailemeskel	HCMIS Analyst	251923409695	leketsu@gmail.com
Tamrat Jima	HCMIS Analyst	251911413388	tamirat.j@gmail.com
Henok Getachew	HCMIS Developer	251911305468	henygetachew@gmail.com

3.5 Roles and Responsibilities

Error! Reference source not found. outlines the roles and responsibilities assigned to the cutover team members for the sake of having a significant influence on the project.

Table 2: Personnel role and responsibility

Group	Responsibility
Project manager	• Provides oversight of Cutover activities to ensure successful program performance and compliance with program procedure • Ensures adequate resources are available for Cutover process • Resolves open issues by making the final decision

	• Ensures that persons in management or supervisory roles support the objective of this Cutover plan • Ensures Cutover team receive adequate training to perform their activity
Cutover team	• Collect Cutover process status and report to project manager • Involves in Cutover process activities • Work with developers to ensure that Cutover process be as expected • Assists the end users
Developer	• Work in collaboration with Cutover team • Responsible for executing the system change

4 CUTOVER DATA

4.1 Data Conversion Overview

In the process of transforming the manual system into the newly developed HCMIS HE system, data conversion is vitally required. **Error! Reference source not found.** identifies the data to be converted, rough timing and the number of data required to be converted.

Table 3: List of data conversion

	Already complete in master client	Cutover to be completed during weekend 1	To be Completed During Week 1of System Live
List of Items		X	
Bin card		X	
Stock card		X	
Price list			X
Employees	X		

4.2 Sequences, Dependencies and Milestones

The implementation process is expected to run on weekday of the cutover period. Once the processes have been initiated, technical personnel will monitor the progress, and assess the success of the conversion by carrying out scripted data checks. It is anticipated that this process will take most of the weekdays with activities and processes going on throughout the day.

The key milestones related to the HCMIS HE system are as follows:

Table 4: HCMIS HE key milestones

No	Milestone Description	Completion Date
1	HCMIS FE development and internal testing complete	DATEMISSING
2	Cutover plan (final)	DATEMISSING
3	Data conversion completed	DATEMISSING
4	Readiness review checkpoint	DATEMISSING
5	Transition preparation complete	DATEMISSING
6	Cutover	DATEMISSING

5 CUTOVER PROCESSES

The movement to the new format will commence on DATEMISSING when the hub address list gathering is completed.

5.1 Maintaining the Cutover Plan

This plan is a living document and as such will be updated on a regular basis as we progress through the various stages of the project. Cutover team will communicate any risk to the milestones as identified above to project manager and all impacted stakeholders on an ongoing basis.

5.2 Manual Procedures

HCMIS HE will not have any manual processes that will affect the facilities once the cutover has occurred.

5.3 Transactions Occurring During Downtime

No transaction will be put on hold for this elevation.

5.4 Contingency Plans

This section will describe the structure of the contingency and its plan for the cutover activities.

5.4.1 Purpose of Contingency Plan

The purpose of this contingency plan is to address project implementation risks that may result in one of the following scenarios:

- Decision to delay the system go-live
- Decision to proceed with limited functionality or restricted scope
- Decision to back out the system after, or in the process of going live, based on a catastrophic event

5.4.2 Structure of the Contingency Plan

The contingency plan consists of the following components:

- Description of risk – potential occurrences that could arise during the implementation phase of the project
- Consequence - the impact to the business should the risk become reality
- Probability – rating (1 = least likely to 5 = most likely) that the risk event will occur.
- Degree of impact – rating (1 = least impact to 5 = most impact) of the severity of impact to the business
- Severity – the risk's degree of severity, based on the probability and impact of occurrence. Risks ratings of 9 and above must have mitigating actions identified, and will be closely tracked and assessed throughout the cutover preparation and execution timeframe
- Mitigation actions – what can and should be done to avoid the risk
- Possible response – what can be done should the risk event occur
- Owner – responsibility for addressing the risk through mitigation and/ or response, the decision maker should the risk event occur.

Identifying areas of risks will create an opportunity to understand the consequences, develop mitigation plans, identify responses and create sense of ownership with the possibility of taking appropriate actions if an issue arises during implementation.

5.5 Cutover Log

Chronological documentation of the cutover process is important for retracing steps and events should problems develop during execution of the cutover plan. At a minimum, the log will record the person identifying the action, a description of the action, and the time.

5.6 Execution Process

As far as the plan is concerned, the elements required for HCMIS HE compliance will go live on DATEMISSING.

During the planning phase, a list of individuals and activities that need to be informed about the no-going efforts are identified. This notification list, in the form of a matrix, is placed to identify the conditions requiring notification and order of notification. The matrix identifies the type of events with the individuals receiving "immediate" and "secondary" notification as well as the order of notification.

It is important that an individual be empowered to coordinate all procedures and activities. This individual acts as a focal point to monitor the status of ongoing efforts and to ensure that the Cutover Plan is being followed, especially those for procedures affecting communications with other parties. The Cutover Manager is also the immediate point-of-contact for unanticipated events that require activating contingency procedures or modifying the dictated procedures in the Cutover Plan.

5.7 Post Go-Live Tracking Dashboard

The Cutover Team will be maintaining a Cutover Log as outlined in the previous section and a Post Cutover Issues Log to track any issues that may result during the cutover period or Post Cutover operational activities to ensure that should any issues arise they are recorded, tracked, communicated and resolved in a timely manner.

6 CUTOVER TECHNOLOGY

6.1 Installation

The step by step installations are provided considering Windows XP as the operating system. The installation steps are:

1. Insert either the CD-ROM or the removable media (such as Flash Disk) containing the HCMIS HE setup
2. From the root folder double click the setup.exe
3. Next, the setup will check for the installation prerequisites. If .NET framework 4.0 is not installed, it will automatically start to install the .NET Framework 4.0 setup
4. Just follow the simple installation wizard until the installation is completed
5. Next it will detect the presence of the SQL Server Express edition installation. If the installation is not present, it will prompt the user to install it. Follow the instruction wizard until all dependencies are properly installed. And, finally, it will install the software
6. Once the installation is successfully completed, double click the HCMIS Icon from the desktop or from the program's menu list. Then, enter the username and password on the login window and start using the system

6.1.1 Hardware

To put the HCMIS FE work, at minimum, it requires a standalone desktop computer with 2.4 GHz Pentium IV Processor, 512 MB RAM, and 20GB Hard Disk.

6.1.2 Software

In addition to the hardware requirements, the HCMIS FE demands the following software.

- **Operating System**: Windows XP Service Pack 3
- **Database**: SQL Server 2005 Express Edition
- **Framework**: .Net Framework 4.0

6.2 Security

HCMIS HE shall require user ID and password to grant access to system users and to let them create, modify and delete information. Moreover, the HCMIS shall require system administrators their ID and password so as to allow them to undertake necessary system administrator tasks. The HCMIS shall also be developed and maintained in compliance with internationally established guidelines and standards for protecting computer systems, networks and information.

6.3 Output Devices

For various reports including Stock Status, Expired Product, Near Expiry Product, Balance, RRF, Summary, Stock Expiry Status and Cost Summary, the hubs are required to setup printers. High quality black and white as well as color printers are required to produce hard copies of the aforementioned reports that will be presented to decision makers and other concerned bodies.

6.4 Legacy Shutdown

This section is not applicable since a facility is making changes to its new system; not building a replacement.

7 Additional section

7.1 Definitions and Abbreviations

- Contingency Plan - Is a pre-prepared plan that is put into action when significant problems do occur and they are unable to be resolved within a reasonable time period.
- HCMIS HE – Health Commodity Management Information System Hub Edition
- Mitigation Actions – Reducing the probability impact of the risk
- RRF – Report and Resupply Voucher
- Severity – Refers to specific program or system behavior as a result of defects

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John Snow, Inc.
1616 Fort Myer Drive, 11th Floor
Arlington, VA22209USA
Phone: 703-528-7474
Fax: 703-528-7480
Email: deliver_project@jsi.com
Internet: deliver.jsi.com