

**Achievement of Market-Friendly Initiatives and Results Program
(AMIR 2.0 Program)**

Funded By U.S. Agency for International Development

Software Requirements Specification
For
E-GOVERNMENT
TRAINING MANAGEMENT
SYSTEM (TMS)

Final Report

**Deliverable for ICTI Component, Task No. 431.7
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Document Revision History

Version	Revised By	Revision Date	Comments
0.1	Osamah Yacoub, AlliedSoft	Nov 21 2002	Initial draft.
0.11	Osamah Yacoub	Dec 2 2002	Minor modifications for information consistency.
0.2	Osamah Yacoub	Dec 12 2002	Changed according to Dec 3 rd stakeholders' meeting results.
1.0	Osamah Yacoub, Ahmad Arrabi	Dec 31 2002	Finalized requirements, use cases, and component Business Priorities.

1 Introduction

This Software Requirements Specification (SRS) document is intended to capture the complete software requirements for the E-Government Training Management System. This document is intended to capture the scope and requirements of the desired system to be approved by the client and to be used by the software development team as a means to understand what needs to be done, and to serve as a basis for software design, development, and testing.

In addition to system functionality, the SRS also describes the non-functional requirements, design constraints, and other factors necessary to provide a comprehensive view of the requirements for the software.

1.1 Scope

The Jordanian Ministry of Information and Communication Technology (MoICT) is looking for a system to acquire and track training and testing sessions for Government of Jordan (GoJ) employees. Such a system will be Web based and available to managers, administrators, as well as the employees. Different user groups are identified and the system will implement different policies, access rights and securities per group.

The system will support a bidding process for training/testing offers and will have the ability to track employees' training/testing nomination, registration, and results. The system will accept course feedback from the trainees. Relevant reports and views are to be generated also as part of this system.

A successful solution will automate (to an extent) the process of acquiring training and testing. It will provide vision to management about the training that the GoJ employees need to complete. More efficient use of the training should be realized with such a system.

1.2 Definitions, Acronyms, and Abbreviations

The following is an alphabetized glossary of terms, acronyms, and abbreviations required to properly interpret and understand the software requirements and intended use.

Term, Acronym, or Abbreviation	Definition
ARFO	Approved Request for Offer
ARFT	Approved Request for Testing
GoJ	Government of Jordan
MoICT	Ministry of Information and Communication Technology
PMU	Project Management Unit
RFI	Request for Information
RFN	Request for Nominations (training)
RFO	Request for Offer (training)
RFO Response	Request for Offer Response (training)
RFR	Request for Registration (training)

Term, Acronym, or Abbreviation	Definition
RFT	Request for Testing
RFT Response	Request for Testing Response
TC	Training/Testing Coordinator (GoJ Entity)
Testing RFN	Testing Request for Nominations
Testing RFR	Testing Request for Registration
TP	Training/Testing Provider

1.3 References

The following is a list of all references used to produce this SRS.

Reference	Date	Published By	Source
Training Management System Definition Document	Aug 25 2002	CNS	AMIR
Annex D, Scope of Work	Oct 14 2002	AMIR	AMIR

2 Assumptions and Dependencies

This document is based on the following assumptions.

Assumption No.	Title	Description
1	User Connectivity and Skill Level	All users of this system are assumed to have the ability to connect to the TMS Web application (via Internet or Intranet) and to have Web browsing capability.
2	Web Browser	Supported Web Browser will be Microsoft Internet Explorer 5.0 or above.
3	Supported Languages	The user interface and data will be either English or Arabic. Normally, English will be used; Arabic will be used in all interactions involving non-administrative users (trainees). Arabic will be used when appropriate, such as for employee names and mailing addresses.
4	Runtime Environment	The runtime hardware, software, and networking environment will be supplied in fully operational condition by the client. AlliedSoft is not responsible for the purchase, setup, and configuration of the required runtime hardware, software, and networking environment.
5	Screen Resolution	Optimal end user screen resolution will be 800x600.

Assumption No.	Title	Description
6	Reporting Technique	There is no specific reporting technology identified as an e-Government standard. AlliedSoft is free to use any reporting technique that will meet the requirements.
7	Public Events and Program Announcements	These are text (free-form) announcements to be accessible from the system's home page without login.
8	Nomination vs. Registration	Government Entities nominate, PMU approves nominations based on certain criteria. The criteria are not tracked on the system, but the PMU should be able to list the criteria in the RFR.
9	RFI	This is information on the profile of the Training/Testing Provider (TP), such as the services they offer, their location, etc.
10	RFI Response	<ul style="list-style-type: none"> The RFI response can contain only one attachment which can be downloaded onto the user's computer. The attachment can be opened/viewed if the user's computer has the associated program installed.
11	Login ID for Administrative User Groups	For administrative user groups: PMU, TP, and TC, there is no business need to have different login IDs for each user within these groups.
12	Testing Prerequisites	There are no testing prerequisites. Employees can take tests without attending training.
13	Approved RFO/RFT Responses	The PMU may approve more than one TP for an RFO or RFT.
14	Employee Selection Criteria	The business criteria for employee nomination and selection for registration are kept outside the system and are not automatically enforced by the system.
15	GoJ Employee Access	A GoJ employee can use the system after entering his/her National ID Number.
16	Export Data to Excel	<ul style="list-style-type: none"> Microsoft Excel 2000 or above will be supported. Not all reports will be exported; only reports where the data can be further analyzed will be exported.
17	Change Request	The development of the system will proceed based on the client requirements. Any additional requirements and/or changes of existing requirements may result in changes to the development schedule and/or the project price. Change Requests must be submitted formally using the Change Request Form shown in Appendix – Change Request Form .

3 High-Level System Architecture

The system architecture must comply with the overall e-Government software and hardware architecture guidelines. Although this is not yet completed, we are required to use a 3-tier software architecture with XML support for interoperability with future e-Government applications.

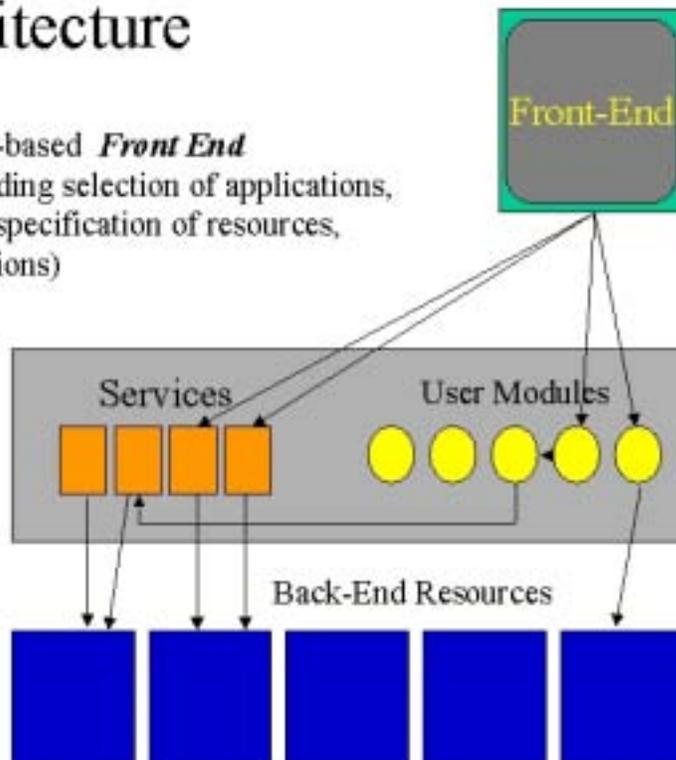
A general view of 3-tier software architecture is shown below.

Three-Tier Architecture

Tier 1 is a high-level, browser-based *Front End* for visual programming (including selection of applications, generation of input data sets, specification of resources, post-processing and visualizations)

Distributed, object-based, scalable, and reusable Web server, Object broker and Resource Manager *Middleware* forms Tier 2

Back-End services comprise Tier 3.



4 Functional Requirements

4.1 Functional Requirements

The following table summarizes the functional requirements for the TMS.

Req. No.	Title	Description
FR01	Course/Test Maintenance	Add, update, and delete courses or tests
FR02	Course Type Maintenance	Add, update, and delete course types
FR03	Users Maintenance	Add, update, and delete system administrators and GoJ trainees; trainee information should include gender
FR04	Training Center Maintenance	Add, update, and delete training centers
FR05	Testing Center Maintenance	Add, update, and delete testing centers

Req. No.	Title	Description
FR06	Location Maintenance	Add, update, and delete locations
FR07	GoJ Entity Maintenance	Add, update, and delete GoJ entities
FR08	TP Locations	Locations are associated with TPs
FR09	Request for Offer (RFO)	
FR09.1	RFO Maintenance	Add, update, and delete training offer requests. Maximum attendees is specified; no minimum
FR09.2	RFO Notify	RFO notification to centers, optionally via e-mail
FR09.3	RFO Select	TP views and selects RFO
FR09.4	Training Offer Submit	TP submit training offer
FR09.5	RFO Approve/Reject	PMU approves or rejects one or more submitted training offer (ARFO)
FR10	Request for Nominations (RFN)	
FR10.1	RFN Maintenance	Add, update, and delete RFNs, including nominee selection criteria. Maximum nominees is specified; no minimum
FR10.2	RFN Notify	RFN notification to TCs, optionally via e-mail
FR10.3	RFN Select	TC views and selects RFN
FR10.4	Nominee Maintenance	Administer the nominated trainees
FR10.5	Submit Nominations	TC submits training nominations to PMU
FR10.6	Approve/Reject Nominations	PMU approves or rejects nominees for training
FR11	Request for Registration (RFR)	
FR11.1	RFR Maintenance	Add, update, and delete request for registration
FR11.2	RFR Notify	RFR notification to TCs, optionally via e-mail
FR11.3	RFR Select	TC views and selects RFR
FR11.4	Trainee Registration	TC registers approved training nominees with one or more TPs approved for this training
FR11.5	Registration Maintenance	Maintain registered employees
FR11.6	ARFO Go	Allows TP to move ahead with an ARFO
FR11.7	Training Attendance Maintenance	TP administers training attendance
FR11.8	Indicate Training Completion	TP indicates trainee completed training
FR12	Training/Testing Evaluation	
FR12.1	Retrieve Trainee History	View attended courses and tests by GoJ employees
FR12.2	Evaluation	Submit training or testing evaluation data by employee. System should support dynamically generated evaluation form for a training course or a test.
FR13	Request for Testing (RFT)	

Req. No.	Title	Description
FR13.1	RFT Maintenance	Add, update, and delete testing offer requests. Maximum attendees is specified; no minimum
FR13.2	RFT Notify	RFT notification to centers, optionally via e-mail
FR13.3	RFT Select	TP views and selects RFT
FR13.4	Testing Offer Submit	TP submit testing offer
FR13.5	RFT Approve/Reject	PMU approves or rejects one or more submitted testing offer (ARFT)
FR14	Testing Request for Nominations	
FR14.1	Testing RFN Maintenance	Add, update, and delete testing RFNs, including nominee selection criteria. Maximum nominees is specified; no minimum
FR14.2	Testing RFN Notify	Testing RFN notification to TCs, optionally via e-mail
FR14.3	Testing RFN Select	TC views and selects testing RFN
FR14.4	Testing Nominee Maintenance	Administer the employees nominated for testing
FR14.5	Submit Testing Nominations	TC submits testing nominations to PMU
FR14.6	Approve/Reject Testing Nominations	PMU approves or rejects testing nominees
FR15	Testing Request for Registration	
FR15.1	Testing RFR Maintenance	Add, update, and delete request for registration (testing)
FR15.2	Testing RFR Notify	Testing RFR notification to TCs, optionally via e-mail
FR15.3	Testing RFR Select	TC views and selects testing RFR
FR15.4	Registration for Testing	TC registers approved nominees for testing with one or more TPs approved for this testing
FR15.5	Testing Registration Maintenance	Maintain registered employees for testing
FR15.6	ARFT Go	Allows TP to move ahead with an ARFT
FR15.7	Testing Attendance Maintenance	TP administers testing attendance
FR15.8	Indicate Testing Completion	TP indicates employee testing completed
FR16	Allow Training and Related Testing in the Same Center	System should allow trainee to take the related test in the same center where the training occurred.
FR17	Events Maintenance	Maintain and publish public event announcements
FR18	Programs Maintenance	Maintain and publish public program announcements
FR19	Request for Information (RFI)	
FR19.1	RFI Maintenance	List, edit and maintain RFIs
FR19.2	RFI Notify	RFI notification to all centers, optionally via e-mail

Req. No.	Title	Description
FR19.3	RFI Respond	TP responds to RFI. An ID number (commercial registration number) must be entered in order to respond to RFI.
FR19.4	RFI Response Attachment	RFI Response must have the ability to attach a binary file of 2 MB maximum size
FR19.5	RFI Response Maintenance	List and delete RFI responses; download (view) file attachments
FR20	Reports	
FR20.1	Printable	Reports should be printable in a neat and clear format
FR20.2	E-mail	Provide the ability to send reports via e-mail
FR20.3	Export to Excel	Provide the ability to export report data to Microsoft Excel (for further analysis)
FR20.4	RFO report	List of RFOs
FR20.5	RFR report	List of RFRs
FR20.6	RFR nominations report	List of RFR nominations
FR20.7	Approved Training Offers Report	List of approved training offers
FR20.8	Registered Trainees Report	List of registered trainees per course
FR20.9	Course Attendance Report	List of attendance per course
FR20.10	Course Absentees Report	List of absentees per course
FR20.11	Training Evaluation Report	Report about training evaluations
FR20.12	Training History Report	Training history per trainee
FR20.13	Approved Testing Offers Report	List of approved testing offers
FR20.14	Testing RFR Nominations Report	List of registered employees for testing
FR20.15	Testing History Report	Testing history per employee
FR20.16	Pass Rate Reports	Pass rates by entity, location, TP, and gender
FR20.17	Total Cost Report	Total cost of employees in a certain course or test
FR20.18	RFR Cost per Entity Report	Cost per entity for a certain RFR

4.2 Actors

An actor is anything that exchanges data with the system. An actor can be a user, external hardware, or another system. The following are identified actors on the system.

4.2.1 System Administrator

The System Administrator will have full access to the whole application. His/her role is to set up the system to be used by the other user groups, such as maintaining GoJ entities, users, locations, TPs, TCs, PMUs, etc.

4.2.2 PMU Administrator

The PMU Administrator is responsible for managing the entire workflow for training and testing GoJ employees, including maintaining TPs, administering RFOs and RFTs, selecting TPs, registering employees for training and testing, etc.

4.2.3 TP Administrator

The TP Administrator is responsible for maintaining his/her center's information, submitting offers, reporting attendance, and reporting training and/or testing results.

4.2.4 Training Coordinator (TC)

The TC is responsible for tracking his employees training/testing status, and nominating employees for training/testing.

4.2.5 GoJ Employee

The GoJ Employee belongs to a specific government entity. He/she can track his/her own training/testing history, and he/she can submit training course evaluations.

4.3 Use Cases

A use case defines a set of use-case instances, where each instance is a sequence of actions a system performs that yields an observable result of value to a particular actor. Following are the identified use cases.

4.3.1 Login

Initiator: Any Actor

Description: This use case enables actors to login to the Training Management System (TMS) in order to access the application and determine their access rights.

Basic Flow of Events

This use case begins when the actor attempts to logon the TMS web site through entering his/her User ID and Password. The system verifies that the password is valid [E-1] and allows the actor to log to the system.

Exceptional Flow of Events

E-1: An invalid User ID or Password is entered. The user may either re-enter the User ID and/or Password, or terminate the use case.

4.3.2 Course/Test Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain Course or Test information.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The user can create/read/update/delete a specific Course or Test.

If the activity selected is Create, the *A-1: Create Course/Test* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Course/Test* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Course/Test* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Course/Test* alternative flow is performed.

Alternative Flow of Events

A-1: Create Course/Test

The system displays the Course/Test creation screen. The user enters and saves the Course/Test information [E-1], then the use case can restart or terminate.

A-2: Read Course/Test

The system displays the Course/Test information [E-2], then the use case can restart or terminate.

A-3: Update Course/Test

The system displays the Course/Test screen containing information for the specified Course/Test. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete Course/Test

The user deletes the specified Course/Test [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid Course/Test information is entered. The user may re-enter the invalid Course/Test information, restart the use case, or terminate the use case.

E-2: Course/Test information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Course/Test information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.3 TP Maintenance

Initiator: PMU Administrator or TP Administrator

Description: This use case enables the PMU Administrator or TP Administrator to maintain TP information.

Preconditions

The user successfully logs in as PMU Administrator or TP Administrator.

Basic Flow of Events

The PMU Administrator or TP Administrator can Create/Read/Update/Delete the information for a specific TP.

If the activity selected is Create, the *A-1: Create TP* alternative flow is performed.

If the activity selected is Read, the *A-2: Read TP* alternative flow is performed.

If the activity selected is Update, the *A-3: Update TP* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete TP* alternative flow is performed.

Alternative Flow of Events

A-1: Create TP

The system displays the TP creation screen. The user enters and saves the TP information [E-1], then the use case can restart or terminate.

A-2: Read TP

The system displays the specific TP information [E-2], then the use case can restart or terminate.

A-3: Update TP

The system displays the TP screen containing information for the specific TP. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete TP

The user deletes the specific TP [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid TP information is entered. The user may re-enter the TP information, restart, or terminate the use case.

E-2: TP information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: TP information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.4 Requests Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain the information for all types of requests.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete the information for all types of requests such as: RFO, RFT, RFN or RFI.

If the activity selected is Create, the *A-1: Create Request* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Request* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Request* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Request* alternative flow is performed.

Alternative Flow of Events

A-1: Create Request

The system displays the Request creation screen, depending on the type of request. The user enters and saves the Request information [E-1], then the use case can restart or terminate. Request information includes criteria for nomination if applicable.

A-2: Read Request

The system displays the specific Request information [E-2], then the use case can restart or terminate.

A-3: Update Request

The system displays the Request screen containing information for the specific Request. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete Request

The user deletes the specific Request [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid Requests information is entered. The user may re-enter the Request information, restart, or terminate the use case.

E-2: Requests information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Requests information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.5 Submit Request

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to submit Request information.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Request Maintenance use case has finished successfully for the Request to be submitted.

Basic Flow of Events

The PMU Administrator can submit a particular Request to the appropriate destination based on the type of Request [E-1] [E-2]. The PMU Administrator will specify the deadline for the response.

Exceptional Flow of Events

E-1: Request information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: Request cannot be submitted. The user may either re-submit the Request, restart or terminate the use case.

4.3.6 RFR Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain the information for RFR form.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete the information for RFR form.

If the activity selected is Create, the *A-1: Create RFR Form* alternative flow is performed.

If the activity selected is Read, the *A-2: Read RFR Form* alternative flow is performed.

If the activity selected is Update, the *A-3: Update RFR Form* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete RFR Form* alternative flow is performed.

Alternative Flow of Events

A-1: Create RFR Form

The system displays the RFR creation screen. The user enters and saves the RFR information [E-1], then the use case can restart or terminate.

A-2: Read Request

The system displays the RFR information [E-2], then the use case can restart or terminate.

A-3: Update Request

The system displays the RFR information screen. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete Request

The user deletes the RFR information [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid RFR information is entered. The user may re-enter the RFR information, restart, or terminate the use case.

E-2: RFR information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: RFR information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.7 Submit RFR

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to submit a RFR for training or testing.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The RFR Maintenance use case has finished successfully for the RFR to be submitted.

Basic Flow of Events

The PMU Administrator specifies the RFR to be submitted [E-1] then submits the RFR to the selected TCs [E-2].

Exceptional Flow of Events

E-1: RFR information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: RFR cannot be submitted. The user may either re-submit the RFR, restart or terminate the use case.

4.3.8 RFO/RFT Response Maintenance

Initiator: TP Administrator

Description: This use case enables the TP Administrator to maintain the information for RFO or RFT Response.

Preconditions

1. The user successfully logs in as TP Administrator.
2. Submit Request successfully done.

Basic Flow of Events

The TP Administrator is able to create/read/update/delete the information for a specific RFO/RFT Response.

If the activity selected is Create, the *A-1: Create RFO/RFT Response* alternative flow is performed.

If the activity selected is Read, the *A-2: Read RFO/RFT Response* alternative flow is performed.

If the activity selected is Update, the *A-3: Update RFO/RFT Response* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete RFO/RFT Response* alternative flow is performed.

Alternative Flow of Events

A-1: Create RFO/RFT Response

The system displays the RFO/RFT Response creation screen. The user enters and saves the Response information [E-1], then the use case can restart or terminate.

A-2: Read RFO/RFT Response

The system displays the specific RFO/RFT Response information [E-2], then the use case can restart or terminate.

A-3: Update RFO/RFT Response

The system displays the RFO/RFT Response screen containing information for the specific RFO/RFT Response. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete RFO/RFT Response

The user deletes the specific RFO/RFT Response [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid RFO/RFT Response information is entered. The user may re-enter the Request information, restart, or terminate the use case.

E-2: RFO/RFT Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: RFO/RFT Response information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.9 Submit RFO/RFT Response

Initiator: TP Administrator

Description: This use case enables the TP Administrator to submit a response to a Request.

Preconditions

1. The user successfully logs in as TP Administrator.
2. The RFO/RFT Response Maintenance use case has finished successfully for the RFO/RFT Response to be submitted.

Basic Flow of Events

The TP Administrator specifies the RFO/RFT Response to be submitted [E-1] then submits the response to the PMU Administrator [E-2] [E-3].

Exceptional Flow of Events

E-1: RFO/RFT Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: RFO/RFT Response cannot be submitted. The user may either re-submit the RFO/RFT Response, restart or terminate the use case.

E-3: Response to the request after given deadline. The response is not submitted. The user may restart or terminate the use case.

4.3.10 RFN Response Maintenance

Initiator: TC

Description: This use case enables a TC to maintain the information for RFN or Testing RFN Response.

Preconditions

1. The user successfully logs in as a TC.
2. Submit Request successfully done.

Basic Flow of Events

The TC is able to create/read/update/delete the information for a specific RFN/Testing RFN Response.

If the activity selected is Create, the *A-1: Create RFN Response* alternative flow is performed.

If the activity selected is Read, the *A-2: Read RFN Response* alternative flow is performed.

If the activity selected is Update, the *A-3: Update RFN Response* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete RFN Response* alternative flow is performed.

Alternative Flow of Events

A-1: Create RFN Response

The system displays the RFN Response creation screen. The user enters and saves the Response information [E-1], then the use case can restart or terminate. RFN Response includes specifying the nominated employees.

A-2: Read RFO/RFT Response

The system displays the specific RFN Response information [E-2], then the use case can restart or terminate.

A-3: Update RFO/RFT Response

The system displays the RFN Response screen containing information for the specific RFN Response. The user updates and saves the information [E-1], then the use case can restart or terminate. Updating RFN Response includes the ability to add/update/delete nominated employees.

A-4: Delete RFN Response

The user deletes the specific RFN Response [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid RFN Response information is entered. The user may re-enter the Response information, restart, or terminate the use case.

E-2: RFN Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: RFN Response information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.11 Submit RFN Response

Initiator: TC

Description: This use case enables the TC to submit a response to a RFN or Testing RFN.

Preconditions

1. The user successfully logs in as a TC.
2. The RFN Response Maintenance use case has finished successfully for the RFN Response to be submitted.

Basic Flow of Events

The TC specifies the RFN Response to be submitted [E-1] then submits the response to the PMU Administrator [E-2] [E-3].

Exceptional Flow of Events

E-1: RFN Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: RFN Response cannot be submitted. The user may either re-submit the RFN Response, restart or terminate the use case.

E-3: Response to the request after given deadline. The response is not submitted. The user may restart or terminate the use case.

4.3.12 RFR Response Maintenance

Initiator: TC

Description: This use case enables a TC to maintain the information for RFR or Testing RFR Response.

Preconditions

1. The user successfully logs in as a TC.
2. Submit RFR Request successfully done.

Basic Flow of Events

The TC is able to create/read/update/delete the information for a specific RFR/Testing RFR Response.

If the activity selected is Create, the *A-1: Create RFR Response* alternative flow is performed.

If the activity selected is Read, the *A-2: Read RFR Response* alternative flow is performed.

If the activity selected is Update, the *A-3: Update RFR Response* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete RFR Response* alternative flow is performed.

Alternative Flow of Events

A-1: Create RFR Response

The system displays the RFR Response creation screen. The user enters and saves the Response information [E-1], then the use case can restart or terminate. RFR Response includes specifying the TP selected for providing the course or test.

A-2: Read RFR Response

The system displays the specific RFR Response information [E-2], then the use case can restart or terminate.

A-3: Update RFR Response

The system displays the RFR Response screen containing information for the specific RFR Response. The user updates and saves the information [E-1], then the use case can restart or terminate.

A-4: Delete RFR Response

The user deletes the specific RFR Response [E-3], then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid RFR Response information is entered. The user may re-enter the Response information, restart, or terminate the use case.

E-2: RFR Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: RFR Response information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.13 Submit RFR Response

Initiator: TC

Description: This use case enables the TC to submit a response to a RFR or Testing RFR.

Preconditions

1. The user successfully logs in as a TC.
2. The RFR Response Maintenance use case has finished successfully for the RFR Response to be submitted.

Basic Flow of Events

The TC specifies the RFR Response to be submitted [E-1] then submits the response to the TP [E-2] [E-3].

Exceptional Flow of Events

E-1: RFR Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: RFR Response cannot be submitted. The user may either re-submit the RFR, restart or terminate the use case.

E-3: Response to the request after given deadline. The response is not submitted. The user may restart or terminate the use case.

4.3.14 RFI Response Maintenance

Initiator: TP Administrator

Description: This use case enables a TP Administrator to maintain the information for RFI Response.

Preconditions

1. The user successfully logs in as a TP Administrator.
2. Submit Request successfully done.

Basic Flow of Events

The TP Administrator is able to create/read/update/delete the information for a specific RFI Response. The user has the option to attach one or more binary files to the RFI Response.

If the activity selected is Create, the *A-1: Create RFI Response* alternative flow is performed.

If the activity selected is Read, the *A-2: Read RFI Response* alternative flow is performed.

If the activity selected is Update, the *A-3: Update RFI Response* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete RFI Response* alternative flow is performed.

Alternative Flow of Events

A-1: Create RFI Response

The system displays the RFI Response creation screen. The user enters and saves the Response information [E-1], then the use case can restart or terminate. The user may attach one or more binary files to the RFI Response [E-4].

A-2: Read RFI Response

The system displays the specific RFI Response information [E-2], then the use case can restart or terminate. The user is able to view any attachments associated with the RFI Response [E-5].

A-3: Update RFI Response

The system displays the RFI Response screen containing information for the specific RFI Response. The user updates and saves the information [E-1], then the use case can restart or terminate. The user is able to add/update/delete any attachment associated with this RFI Response.

A-4: Delete RFI Response

The user can delete the specific RFI Response [E-3] along with any attachments, then the use case can restart or terminate.

Exceptional Flow of Events

E-1: Invalid RFI Response information is entered. The user may re-enter the Response information, restart, or terminate the use case.

E-2: RFI Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: RFI Response information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

E-4: Total attachments' size exceeds 2 MB. The user is informed that this option cannot be executed. The user may attach another file, restart or terminate the use case.

E-5: No viewer available. The user is informed that this option cannot be executed. The user may view another file, restart or terminate the use case.

4.3.15 Submit RFI Response

Initiator: TP Administrator

Description: This use case enables the TP Administrator to submit a RFI Response.

Preconditions

1. The user successfully logs in as a TP Administrator.
2. The RFI Response Maintenance use case has finished successfully for the RFI Response to be submitted.

Basic Flow of Events

The TP Administrator specifies the RFI Response to be submitted [E-1] then submits the response to the PMU Administrator [E-2] [E-3].

Exceptional Flow of Events

E-1: RFI Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: RFI Response cannot be submitted. The user may either re-submit the RFI, restart or terminate the use case.

E-3: Response to the request after given deadline. The response is not submitted. The user may restart or terminate the use case.

4.3.16 Review RFI Response

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to review a specific RFI Response.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Submit RFI Response use case has finished successfully for the RFI Response to be reviewed.

Basic Flow of Events

The PMU Administrator is able to read/delete a selected RFI Response.

If the activity selected is Read, the *A-1: Read RFI Response* alternative flow is performed.

If the activity selected is Delete, the *A-2: Delete RFI Response* alternative flow is performed.

Alternative Flow of Events

A-1: Read RFI Response

The system displays the specific RFI Response information [E-1], then the use case can restart or terminate. The user is able to view any attachments associated with the RFI Response [E-2].

A-2: Delete RFI Response

The user can delete the specific RFI Response [E-3] along with any attachments, then the use case can restart or terminate.

Exceptional Flow of Events

E-1: RFI Response information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: No viewer available. The user is informed that this option cannot be executed. The user may view another file, restart or terminate the use case.

E-3: RFI Response information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.17 Request Notification

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to notify TP Administrators and TCs of their pending requests through the system and optionally through e-mail.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Submit Request use case has finished successfully for the Request to notify about.

Basic Flow of Events

This use case enables the PMU Administrator to notify the related TP Administrators and/or TCs about a Request (RFO, RFT, RFR, Testing RFR, RFI, or RFN) through the system [E-1].

If the user chooses to also notify via e-mail, the *A-1: Notify through E-Mail* alternative flow is performed.

Alternative Flow of Events

A-1: Notify through E-mail. An E-mail message is sent to the related TP Administrators and/or TC [E-2].

Exceptional Flow of Events

E-1: Notification cannot be submitted. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: E-mail cannot be sent. The user is informed and the e-mail notification is not sent. The use case terminates.

4.3.18 Response Approval

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to approve one or more Responses for a specific RFO/RFT Request.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Submit RFO/RFT Response use case has finished successfully for the Response to approve.

Basic Flow of Events

The PMU Administrator can approve one or more of the RFO/RFT Responses for a specific RFO/RFT Request [E-1]. An approved RFO Response is called ARFO (Approved RFO) and an approved RFT Response is called ARFT (Approved RFT).

If there are no responses within the Request deadline, the *A-1: Extend Request Deadline* alternative flow may be performed.

Alternative Flow of Events

A-1: Extend Request Deadline. The PMU Administrator has the option to extend the response deadline for the specific RFO/RFT Request and send a notification to the related TPs [E-2].

Exceptional Flow of Events

E-1: RFO/RFT Response cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: Request Deadline cannot be extended. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

4.3.19 Nominations Approval

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to approve/reject nomination(s) of trainees/employees for a Training/Testing course.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Submit RFN Response use case has finished successfully for the nominations to approve.

Basic Flow of Events

The PMU Administrator can approve or reject nominations of trainees/employees for a course or a test.

If the activity selected is Approve, the *A-1: Approve Nomination* alternative flow is performed.

If the activity selected is Reject, the *A-2: Reject Nomination* alternative flow is performed.

Alternative Flow of Events

A-1: Approve Nomination

The nominee from the RFN Response is tagged as approved [E-1] to be included in the RFR which will be sent to the relevant TC for registration.

A-2: Reject Nomination

The nominee from the RFN Response is tagged as rejected [E-1] to be excluded from the RFR which will be sent to the relevant TC for registration.

Exceptional Flow of Events

E-1: RFN Response cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

4.3.20 ARFO/ARFT “Go” Signal

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to inform the relevant TP(s) associated with a RFR or Testing RFR to start the training course or test.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The Submit RFR Response use case has finished successfully for the related ARFO/ARFT.

Basic Flow of Events

The PMU Administrator informs the approved TP(s) to start the training course/test [E-1].

Exceptional Flow of Events

E-1: RFR Response cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

4.3.21 Course/Test Results Maintenance

Initiator: TP Administrator

Description: This use case enables the TP Administrator to maintain Trainee/Employee course or test results, including attendance and grades.

Preconditions

The user successfully logs in as TP Administrator.

Basic Flow of Events

The TP Administrator can maintain [E-1] Trainee/Employee results for a particular training course or test taken at the TP, including attendance/absence and grades (pass/fail).

Exceptional Flow of Events

E-1: Employee record cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

4.3.22 Submit Course/Test Results

Initiator: TP Administrator

Description: This use case enables the TP Administrator to submit course or test results.

Preconditions

1. The user successfully logs in as a TP Administrator.
2. The Course/Test Results Maintenance use case has finished successfully for the results to be submitted.

Basic Flow of Events

The TP Administrator specifies the course/test to be submitted [E-1] then submits the results to the TC and PMU Administrator [E-2].

Exceptional Flow of Events

E-1: Results information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: Results cannot be submitted. The user may re-submit the results, restart or terminate the use case.

4.3.23 Evaluation Form Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain the Evaluation Form for a particular course/test.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete the training course evaluation form for a particular course/test.

The evaluation form is built by creating questions and specifying the Feedback Type for each question:

1. Rating from 1-5
2. Yes/No
3. Free-form text

If the activity selected is Create, the *A-1: Create Evaluation Form* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Evaluation Form* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Evaluation Form* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Evaluation Form* alternative flow is performed.

Alternative Flow of Events

A-1: Create Evaluation Form

The system displays the Evaluation Form creation screen. Then the user can enter questions and specify the Feedback Type for each question [E-1].

A-2: Read Evaluation Form

The system displays the course/test Evaluation Form [E-2].

A-3: Update Evaluation Form

The system displays the Evaluation Form update screen. Then the user can update questions and/or Feedback Types [E-1].

A-4: Delete Evaluation Form

The user is able to delete Evaluation Forms [E-3].

Exceptional Flow of Events

E-1: Invalid evaluation information is entered. The user may re-enter the Evaluation Form information, restart, or terminate the use case.

E-2: Evaluation Form information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Evaluation Form cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.24 Course/Test Evaluation

Initiator: GoJ Employee

Description: This use case enables a GoJ Employee to evaluate a specific attended training course or test.

Preconditions

1. The user successfully logs in as a GoJ Employee.
2. The Evaluation Form Maintenance use case has finished successfully for the related course/test.

Basic Flow of Events

The GoJ Employee is able to evaluate an attended course or test by filling the evaluation form. The user is allowed to fill only one evaluation for the selected course, and he/she cannot delete an evaluation once submitted.

If the activity selected is Create, the A-1: *Create Evaluation* alternative flow is performed.

If the activity selected is Read, the A-2: *Read Evaluation* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Evaluation* alternative flow is performed.

Alternative Flow of Events

A-1: Create Evaluation

The system displays the associated Evaluation Form [E-2] [E-3] and the user enters and saves the evaluation [E-1].

A-2: Read Evaluation

The system displays the evaluation form for the selected course/test [E-4].

A-3: Update Evaluation

The system displays the selected course/test evaluation update screen. Then the user can update the evaluation information [E-1] [E-5].

Exceptional Flow of Events

E-1: Invalid evaluation information is entered. The user may re-enter the evaluation information, restart, or terminate the use case.

E-2: Evaluation Form information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Evaluation information already entered. The user is allowed to update the evaluation if not already submitted. The user may restart or terminate the use case.

E-4: Evaluation information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-5: Evaluation information already submitted. The user is allowed to read but not update evaluation information. The user may restart or terminate the use case.

4.3.25 Lookup Data Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain the Lookup Data.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete Lookup Data entries, such as Locations, Feedback Types, etc.

If the activity selected is Create, the *A-1: Create Lookup Data* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Lookup Data* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Lookup Data* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Lookup Data* alternative flow is performed.

Alternative Flow of Events

A-1: Create Lookup Data

The system displays the Lookup Data creation screen for the selected lookup data then the user enters and saves the information [E-1].

A-2: Read Lookup Data

The system displays the selected Lookup Data [E-2].

A-3: Update Lookup Data

The system displays the Lookup Data update screen for the selected lookup data. The user updates and saves the information [E-1].

A-4: Delete Lookup Data

The user deletes the selected lookup data entry [E-3].

Exceptional Flow of Events

E-1: Invalid Lookup Data is entered. The user may re-enter the lookup data, restart, or terminate the use case.

E-2: Lookup Data cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Lookup Data cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.26 GoJ Entity Maintenance

Initiator: PMU Administrator or TC

Description: This use enables the PMU Administrator to maintain GoJ Entity information.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete GoJ Entity information.

If the activity selected is Create, the *A-1: Create GoJ Entity* alternative flow is performed.

If the activity selected is Read, the *A-2: Read GoJ Entity* alternative flow is performed.

If the activity selected is Update, the *A-3: Update GoJ Entity* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete GoJ Entity* alternative flow is performed.

Alternative Flow of Events

A-1: Create GoJ Entity

The system displays the GoJ Entity creation screen. The user enters and saves the information [E-1].

A-2: Read GoJ Entity

The system displays the selected GoJ Entity information [E-2].

A-3: Update GoJ Entity

The system displays the GoJ Entity update screen for the selected GoJ Entity. The user updates and saves the information [E-1].

A-4: Delete GoJ Entity

The user can delete the selected GoJ Entity [E-3].

Exceptional Flow of Events

E-1: Invalid GoJ Entity information is entered. The user may re-enter the information, restart, or terminate the use case.

E-2: GoJ Entity information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: GoJ Entity information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.27 Administrator Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain TP Administrators and TCs.

Preconditions

1. The user successfully logs in as PMU Administrator.
2. The TP Maintenance use case or the GoJ Entity Maintenance use case has finished successfully for the TP or GoJ Entity to which the administrator belongs.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete TP Administrator or TC information.

If the activity selected is Create, the *A-1: Create Administrator* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Administrator* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Administrator* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Administrator* alternative flow is performed.

Alternative Flow of Events

A-1: Create Administrator

The system displays the Administrator creation screen. The user enters and saves the information for a TP Administrator or TC and specifies which TP or GoJ Entity the Administrator represents [E-1].

A-2: Read Administrator

The system displays information for a selected Administrator [E-2].

A-3: Update Administrator

The system displays the Administrator update screen. The user updates and saves the information [E-1].

A-4: Delete Administrator

The user can delete a selected Administrator [E-3].

Exceptional Flow of Events

E-1: Invalid GoJ Employee information is entered. The user may re-enter the information, restart, or terminate the use case.

E-2: GoJ Employee information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: GoJ Employee information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.28 GoJ Employee Maintenance

Initiator: TC

Description: This use case enables the TC to maintain GoJ Employee information.

Preconditions

1. The user successfully logs in as a TC.
2. The GoJ Entity Maintenance use case has finished successfully for the Entity to which the Employee belongs.

Basic Flow of Events

The TC is able to create/read/update/delete GoJ Employee information.

If the activity selected is Create, the *A-1: Create GoJ Employee* alternative flow is performed.

If the activity selected is Read, the *A-2: Read GoJ Employee* alternative flow is performed.

If the activity selected is Update, the *A-3: Update GoJ Employee* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete GoJ Employee* alternative flow is performed.

Alternative Flow of Events

A-1: Create GoJ Employee

The system displays the GoJ Employee creation screen. The user enters and saves the information for a particular employee within the GoJ Entity he/she represents [E-1].

A-2: Read GoJ Employee

The system displays information for a selected GoJ Employee [E-2].

A-3: Update GoJ Employee

The system displays the GoJ Employee update screen. The user updates and saves the information [E-1].

A-4: Delete GoJ Employee

The user can delete a selected GoJ Employee [E-3].

Exceptional Flow of Events

E-1: Invalid GoJ Employee information is entered. The user may re-enter the information, restart, or terminate the use case.

E-2: GoJ Employee information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: GoJ Employee information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.29 Public Events/Programs Maintenance

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to maintain public events and program announcements.

Preconditions

The user successfully logs in as PMU Administrator.

Basic Flow of Events

The PMU Administrator is able to create/read/update/delete public events and program announcements.

If the activity selected is Create, the *A-1: Create Announcement* alternative flow is performed.

If the activity selected is Read, the *A-2: Read Announcement* alternative flow is performed.

If the activity selected is Update, the *A-3: Update Announcement* alternative flow is performed.

If the activity selected is Delete, the *A-4: Delete Announcement* alternative flow is performed.

Alternative Flow of Events

A-1: Create Announcement

The system displays the Announcement creation screen. The user enters and saves the information for a particular announcement [E-1].

A-2: Read Announcement

The system displays information for a selected announcement [E-2].

A-3: Update Announcement

The system displays the Announcement update screen. The user updates and saves the information [E-1].

A-4: Delete Announcement

The user can delete a selected announcement [E-3].

Exceptional Flow of Events

E-1: Invalid Announcement information is entered. The user may re-enter the information, restart, or terminate the use case.

E-2: Announcement information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-3: Announcement information cannot be removed. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.30 Publish Announcements

Initiator: PMU Administrator

Description: This use case enables the PMU Administrator to publish public events and program announcements onto the TMS home page.

Preconditions

1. The user successfully logs in as PMU Administrator.

2. The Public Events/Programs Maintenance use case has finished successfully for the announcement to be published.

Basic Flow of Events

The PMU Administrator is able to select one or more public events and program announcements [E-1], and then the selected announcements will appear on the TMS home page [E-2].

Exceptional Flow of Events

E-1: Announcement information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

E-2: Announcement information cannot be published. The user is informed that this option cannot be executed at this time. The user may restart or terminate the use case.

4.3.31 Produce Reports

Initiator: Any Actor

Description: This use case enables an actor to request and produce reports, depending on the type of Actor.

Preconditions

The user successfully logs in.

Basic Flow of Events

The user is able to select and display reports [E-1] based on the type of user.

If the user selects to print the report, the *A-1: Print Report* alternative flow is performed.

If the user selects to e-mail the report, the *A-2: E-Mail Report* alternative flow is performed.

If the user selects to export the report, the *A-3: Export Report* alternative flow is performed.

Alternative Flow of Events

A-1: Print Report

After the report is displayed, the user can print the report to a printer defined at the client machine [E-2].

A-2: E-Mail Report

After the report is displayed, the user can e-mail the report to an e-mail recipient [E-3].

A-3: Export Report

After the report is displayed, the user can export the report data to a Comma Separated Variable (CSV) file on the client machine [E-4], that can be opened with Microsoft Excel for further data analysis.

Exceptional Flow of Events

E-1: Report information cannot be accessed. The user is informed that this option is not available at this time. The user may restart or terminate the use case.

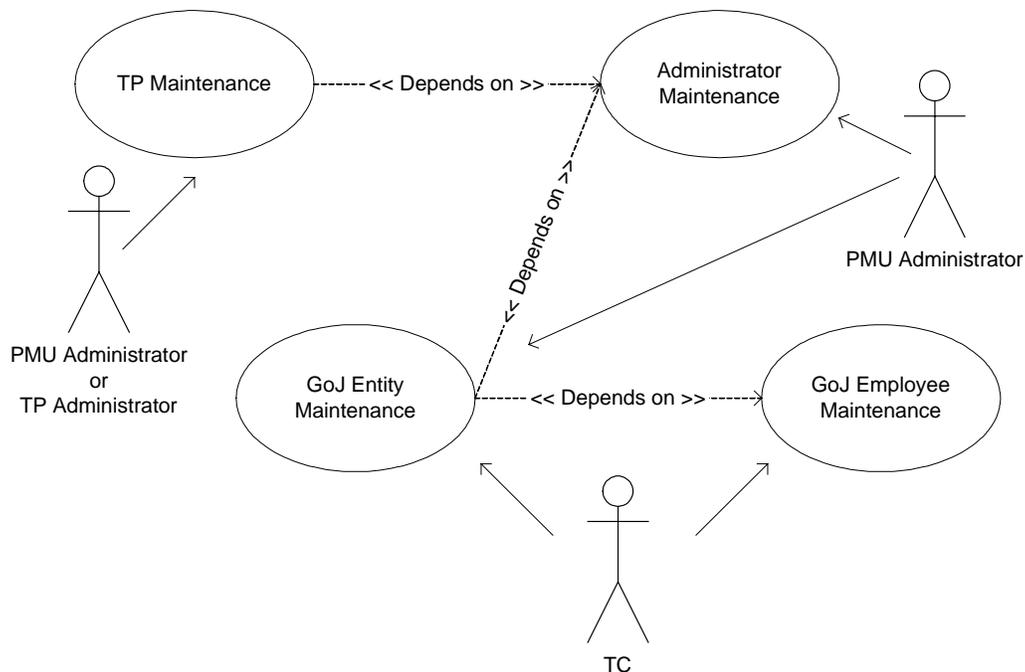
E-2: Report cannot be printed. The user is informed that this option cannot be executed. The user may restart or terminate the use case.

E-3: Report cannot be e-mailed. The user is informed that this option cannot be executed. The user may restart or terminate the use case.

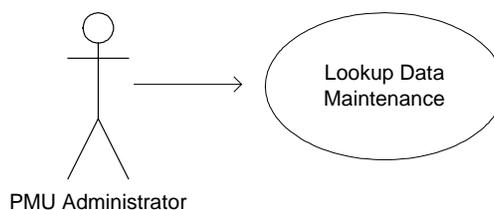
E-3: Report cannot be exported. The user is informed that this option cannot be executed. The user may restart or terminate the use case.

4.4 Use Case Diagrams

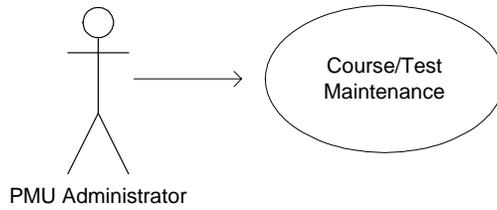
4.4.1 Entities/Users Information Maintenance



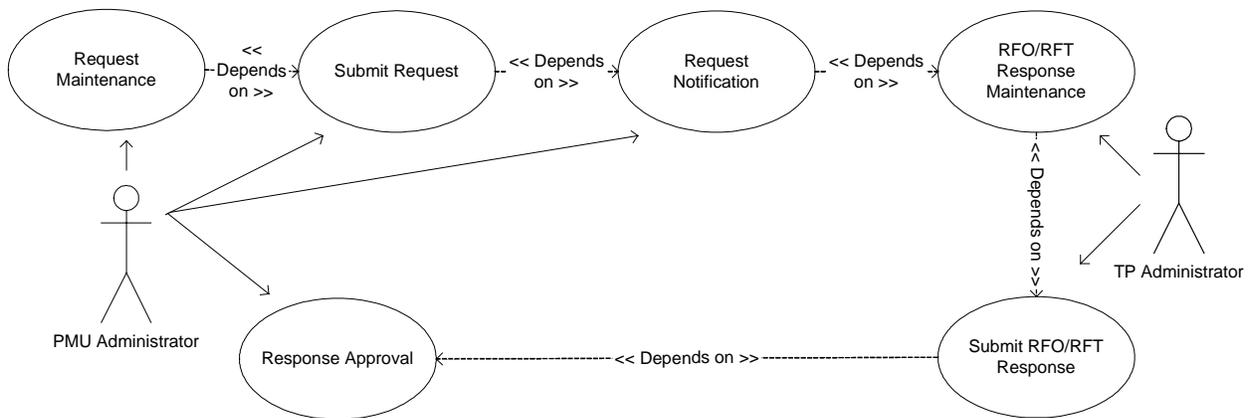
4.4.2 Lookup Data Maintenance



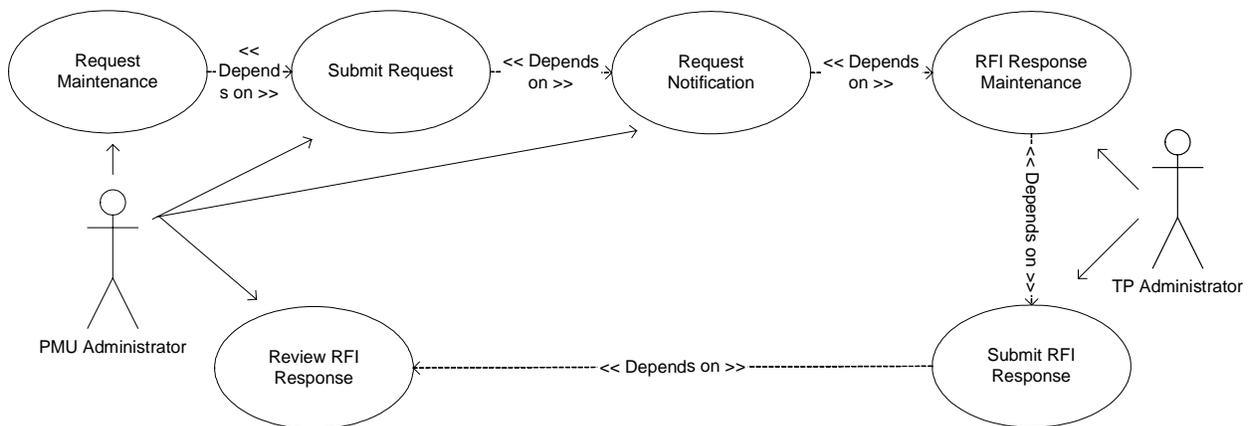
4.4.3 Course/Test Maintenance



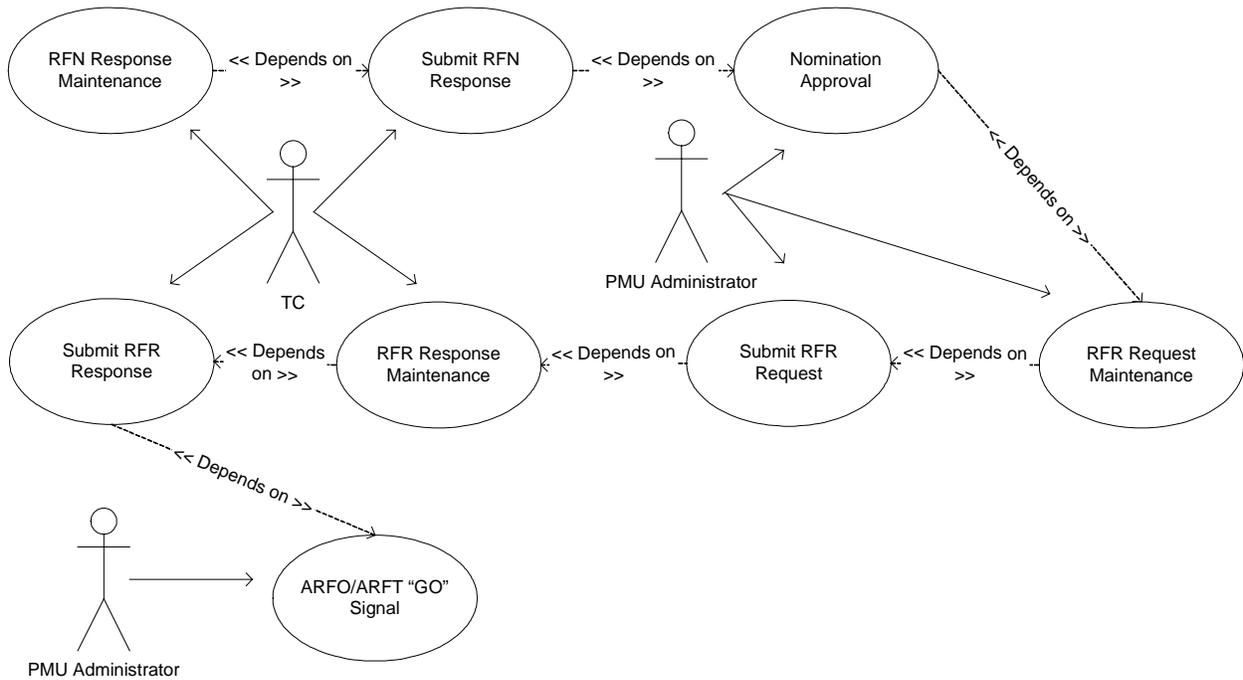
4.4.4 RFO/RFT



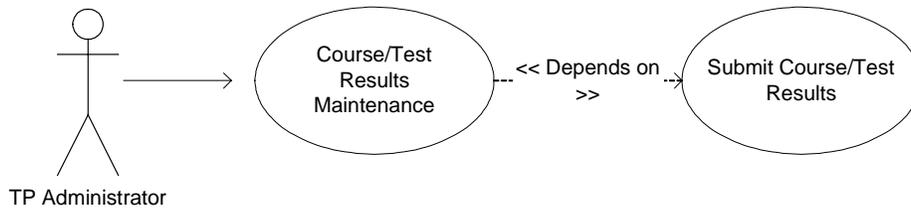
4.4.5 RFI



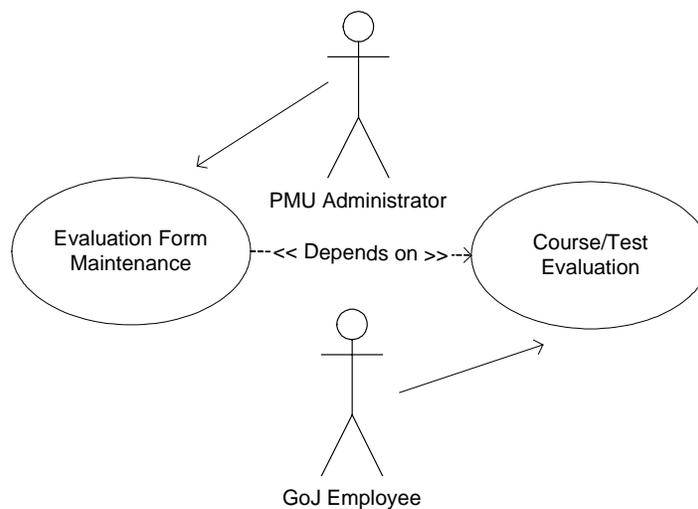
4.4.6 Nomination and Registration



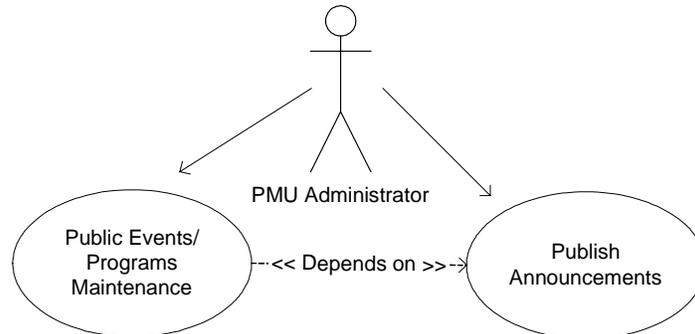
4.4.7 Course/Test Results



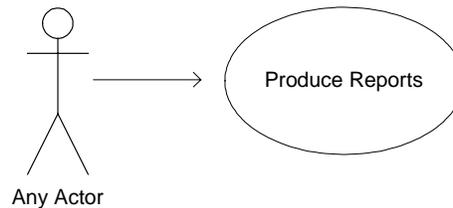
4.4.8 Course/Test Evaluation



4.4.9 Public Events/Programs



4.4.10 Reports



5 Non Functional Requirements

5.1 System Requirements

Req. No.	Title	Description
SYS01	Web Based	This application will be Web based.
SYS02	Languages	The user interface and data will be either English or Arabic. Normally, English will be used; Arabic will be used in all interactions involving non-administrative users (trainees). Arabic will be used when appropriate, such as for employee names and mailing addresses.
SYS03	Architecture	The application must be designed with a 3-tier software architecture with XML support for interoperability with future e-Government applications.

5.2 Security Requirements

The following user security levels are required.

Req. No.	Title	Description
SEC01	PMU	MoICT Project Management Unit users: full control over the system; ability to update the system control data (lookup data); ability to generate all reports.
SEC02	TP Administrators	Training/testing center administrators: of less power than the PMU; maintain his/her center related information; ability to update training attendance/absence and results, and testing results; ability to submit training/testing offers.
SEC03	Training Coordinators	Government of Jordan entity administrators: of less power than the PMU; ability to administer their own employees; ability to nominate their employees for training/testing.
SEC04	GoJ Employees	Ability to view their own training/testing history and provide training evaluations.

5.3 Documentation Requirements

The following documentation is required.

Req. No.	Title	Description
DOC01	Prototype	A prototype that demonstrates the system's structure, look-and-feel, and main functions for the purpose of receiving feedback. This will be delivered as part of the Design phase.
DOC02	Software Design Specification Document	A document specifying the software design, including recommended hardware specifications and hardware/software security design.
DOC03	User Manual	Document describing how to use the system.

Appendix – TMS Components

The following table summarizes the TMS components as they exist today. It is intended to facilitate functionality prioritization.

Note: 3 = High, 2 = Medium, 1 = Low, TBD = to be determined.

Title	Description	Technical Complexity	Business Priority¹
Lookup Data Maintenance	Create/update/delete lookup data, such as feedback types, course types, locations, etc.	1	3
Course/Test Maintenance	Create/update/delete of course and test information.	1	3
GoJ Entity Maintenance	Create/update/delete GoJ Entity information.	2	3
GoJ Employee Maintenance	Create/update/delete GoJ Employee information.	2	3
TP Maintenance	Create/update/delete TP information.	1	3
RFI	TP profile requested by PMU and submitted by TP.		3
RFI Maintenance	Create/update/delete RFI.	1	3
RFI Notification	RFI notification to all centers through the system.	1	3
RFI Response	TP responds to RFI; PMU maintains responses.	1	3
RFI Response Attachments	Attach, download, and maintain RFI response attachments.	2	3
Events and Programs	Announcement of events and programs by the PMU directed for the GoJ entities.	1	3
RFO	Request for Offer (training)		
RFO Maintenance	Create/update/delete RFO information.	2	3
RFO Notification	PMU notifies TPs of RFO through the system.	1	3
RFO Response	TPs response to RFOs.	2	3
RFO Response Approvals	PMU approves one or more RFOs (ARFO)	1	3
RFN	Request for Nominations (training)		
RFN Maintenance	Create/update/delete RFN information.	1	3
RFN Notification	PMU notifies TCs of RFN through the system.	1	3
RFN Nominations	TC nominates employees for training.	1	3

¹ As specified by MoICT.

Title	Description	Technical Complexity	Business Priority¹
Approve Nominations	PMU approves/rejects nominations.	1	3
RFR	Request for Registration (training)		
RFR Maintenance	Create/update/delete RFR information.	2	3
RFR Notification	PMU notifies TCs of RFR through the system.	1	3
Trainee Nomination	TC nominates and administers list of nominees for an RFR.	1	3
Trainee Registration	PMU registers training nominees for a course at a specific TP.	1	3
Training Tracking			
ARFO Go	PMU approves the start of a training course.	1	3
Training Attendance Maintenance	TP tracks training attendance and results.	2	2
Training Completion	TP indicates training course completion.	1	2
Training/Testing Evaluation			
Evaluation Form Maintenance	Create/update/delete training evaluation form.	3	3
Training Evaluation	Trainee evaluates a specific training course.	2	3
RFT	Request for Testing		
RFT Maintenance	Create/update/delete RFT information.	2	3
RFT Notification	PMU notifies TPs of RFT through the system.	1	3
RFT Response	TPs response to RFTs.	2	3
RFT Response Approvals	PMU approves one or more RFTs (ARFT)	1	3
Testing RFN	Request for Nominations (testing)		
RFN Maintenance	Create/update/delete testing RFN information.	1	3
RFN Notification	PMU notifies TCs of testing RFN through the system.	1	3
RFN Nominations	TC nominates employees for testing.	1	3
Approve Nominations	PMU approves/rejects testing nominations.	1	3
Testing RFR			
Testing RFR Maintenance	Create/update/delete Testing RFR information.	2	3
Testing RFR Notification	PMU notifies TCs of Testing RFR through the system.	1	3
Testing Nomination	TC nominates and administers list of nominees for a Testing RFR.	1	3

Title	Description	Technical Complexity	Business Priority¹
Testing Registration	PMU registers testing nominees for a test at a specific TP.	1	3
Testing Tracking			
ARFT Go	PMU approves the start of a test.	1	2
Testing Attendance Maintenance	TP tracks testing attendance and results.	2	3
Testing Completion	TP indicates testing completion.	1	3
Reporting			
E-mail Report	Send report via e-mail.	1	3
Export to Excel	Export report data to Excel for further analysis.	2	3
RFO/RFT Report	List of RFOs/RFTs (possible filters: TP).	1	3
ARFO/ARFT Report	List of ARFOs/ARFTs (possible filters: TP).	1	3
RFR Report	List of training/testing RFRs (possible filters: ARFO, ARFT, TP).	2	3
Nominations Report	List of training/testing nominations (possible filters: RFR).	1	3
Registration Report	List of employees registered for training/testing (possible filters: RFR, TP, GoJ Entity, course, test).	2	3
Attendance Report	List of employees who attended a training course or a test (possible filters: TP, GoJ Entity, course, test).	2	2
Absentees Report	List of employees who were registered but absent from a training course or a test (possible filters: TP, GoJ Entity, course, test).	2	2
Training Evaluations Report	List of evaluations for a training course (possible filters: TP, GoJ Entity, course, various evaluation criteria).	3	3
Training/Testing History Report	Training/testing history for GoJ employees (possible filters: GoJ Employee, GoJ Entity).	2	3
Pass Rate Reports	Pass rates by entity, location, TP, and gender.	2	3
Total Cost Report	Total cost of a course or test (possible filters: GoJ Entity, course, test).	2	3
E-Mail Notifications			
RFI	PMU notifies TPs of RFI through e-mail.	2	3
RFO	PMU notifies TPs of RFO through e-mail.	2	3
RFN	PMU notifies TCs of RFN through e-mail.	2	3

Title	Description	Technical Complexity	Business Priority¹
RFR	PMU notifies TCs of RFR through e-mail.	2	3
RFT	PMU notifies TPs of RFT through e-mail.	2	3
Testing RFN	PMU notifies TCs of Testing RFN through e-mail.	2	3
Testing RFR	PMU notifies TCs of Testing RFR through e-mail.	2	3
Public Events/Programs	Maintain and publish public events and programs announcements.	1	2

Appendix – Change Request Form

Note: Filling this Ticket serves as a formal notification to AlliedSoft of your problem or/and change request.

<i>Submit Date:</i>	<dd/mm/yyyy>
<i>Submitted By:</i>	
<i>Type:</i>	<Problem or Change Request>
<i>Priority:</i>	
<i>Description:</i>	

For AlliedSoft use only

<i>Project Name:</i>					
<i>Ticket Number:</i>					
<i>Problem / CR:</i>					
<i>Owner:</i>					
	Design	Development	Testing	Documentation	Total
<i>Estimated Effort: (man hours)</i>					
<i>Impact on Project Schedule:</i>					
<i>Impact on Project Cost:</i>					

Status Trail

<i>Status</i>	<i>Date</i>	<i>Comments</i>
Submitted	<dd/mm/yyyy>	
<Postponed, Duplicate, Rejected, or More Info>	<dd/mm/yyyy>	
Opened	<dd/mm/yyyy>	
Assigned	<dd/mm/yyyy>	
Resolved	<dd/mm/yyyy>	
Test Failed	<dd/mm/yyyy>	
Verified	<dd/mm/yyyy>	
Closed	<dd/mm/yyyy>	