

**VIETTEL PERU**

**<DEPARTMENT: >**

**<Project name>**

**REQUIREMNET ANALYSIS**

**Project code:**

**Document code:**

**<Lima, Date>**

**TRACING TABLE**

\*A – Create New, M – Modify, D – Delete

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Day**  **change** | **Position**  **change** | **A\***  **M, EASY** | **Source** | **DISCIPLINE** | **Description change** | **Note** |
| October 15, 2010 | Request change number 1 | A | Dispatch XYZ | PTC, PKH | Content requested to change |  |
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***Note:***

- Texts enclosed in square brackets [] and presented in blue text are detailed descriptions and suggestions for respective headings.

- Texts enclosed in square brackets [] and presented in brown text are illustrative examples.

- These text should be removed when the writer writes documents on this template.

# INTRODUCE

## Document purpose

[Indicate the purpose of the PTYC document, by answering the following questions:

* What does this document cover?
* Who uses this document?
* What is the document content used for?]

[The User Requirements Analysis (PTYC) document is intended to explicitly present the user requirements for the training management system, including the goals and scope of the system, the following business processes when computerized, functional and non-functional requirements and other related constraints and system acceptance criteria.

PTYC documents are used as a basis for product unification and acceptance between the customer and the software center, the IT Center for the training management system, and as an input for the construction design analysis process. system.]

## Scope of documents

[This section covers:

* Identify the software product names to be built
* Explain the extent to which the proposed software products will meet (and will not, if necessary) meet the same benefits, outcomes, and goals as accurately as possible.
* Noting the acceptance conditions and handling plans when conflicting issues arise]

Eg:

[The document only includes requirements related to the training management system, collected and analyzed through the survey process at M1 Training Center, including requirements on objectives, system scope, requirements, etc. business process requirements, functional requirements and non-functional requirements as well as system acceptance standards.

Requirements that do not fall into the above categories or that are not related to the training management system are not covered by this document.]

## Definition of terms and abbreviations

[This section will list definitions, or references to other literature, of concepts, terms, etc.]

| Terms | Define | Note |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Table : Terms and definitions

[ Eg:

| **Terms** | **Define** | **Note** |
| --- | --- | --- |
| TimeSheet | Manage personal tasks at periodic intervals |  |
| ICT | Center of Information and Technology |  |
| TTPM | Viettel Software Center |  |
| staff | Officers and employees |  |
| CNV | Employees |  |
|  |  |  |

Table 1: Terms and definitions

]

## References

[This section provides a complete list of related references. Each document is identified by its title, author, and issue date, and must also indicate whether the work is available or for reference only. If appropriate, specify the report number, title of journal and issuer.]

|  |  |  |  |
| --- | --- | --- | --- |
| file name | Release date | The source | Note |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

[Eg:

|  |  |  |  |
| --- | --- | --- | --- |
| **file name** | **Release date** | **The source** | **Note** |
| Professional study materials | 05/2012 | Project team |  |
| Work Management Process | 01/2011 | Labor Organization Department - TTPM |  |
|  |  |  |  |

Table 2: References

]

## Document Description

[This section will:

* Limit description of the user request document
* Description of organization of user requirements document]

[The document consists of 5 sections organized as follows:

* Section 1: Introduction – This section will describe the purpose and scope and significance of the document.
* Part 2: System overview – This section will present an overview of the training management system built.
* Part 3: Business Processes - This section is the focus of the document, presenting the business processes of the Training Management System after computerization and rationalization.
* Part 4: Business object model - This section presents the business objects of the system.
* Section 5: User functional requirements – This section describes the functional requirements (what should the system do?) of the system.
* Section 6: Other Requirements – This section deals with the non-functional requirements and constraints of the system.
* Part 7: System Acceptance Standards – This section presents the standards that will be used for system acceptance once the system is built and delivered.]

# SYSTEM OVERVIEW

## Problem statement

[ This section will:

* Briefly state the cause and content of the problem to be done
* Based on customer requirements as well as actual survey status to come up with problems that need to be solved
* The problem stated here often arises from a certain management / business need in reality of the user and the problem is set out to hope that if building software, it will solve that problem. ]

[Currently, the daily work management of employees at TTPM is facing many difficulties because it has to be done manually and there is no tool to manage and monitor each employee's working time according to the plan and time. actual work of each employee.

Based on the actual performance of the work as well as the direction of the PMTT leadership, the problem is towards the computerization of the manual operations to solve the difficulties in the management of the work progress. Personal work at TTPM:

* Computerize the process of creating and assigning jobs to individuals
* Computerize the process of updating individual work progress
* Manage and store work information, work progress]

## System target

[ This section will:

* Briefly state the current system status and problems encountered. From there, clearly state the purpose of building the product.
* System objectives are the results to be achieved when solving the problem stated above

]

Eg:

[The Timesheet Management System must meet the following objectives:

* Allows managers to control and track the tasks assigned to employees over time
* Allow employees to update the actual progress of work completed during the day
* Allows to calculate the employee's work performance

]

## System scope

### List of system user groups

[ This section will:

* The user group is the object that uses the system. The users of the system are determined from the survey documents
* List of product user groups
* The list of user groups should be drawn in a tree-like hierarchy
* It is necessary to describe in detail the functional roles of each user group in this section

]

[List of system user groups is described in the model below



In the above model:

* Unit manager: Has the role of reviewing the work progress of employees under their management, can get performance reports for each employee, can assign work directly to the employees under their management
* Project management: Assigning jobs to employees in projects according to the plan. Monitor the work progress of each member of the project, can get performance reports for each employee
* Employees: Receive jobs from direct managers or upper management, update the assigned work progress, get their own performance reports
* QA: Has the role of getting individual or departmental performance reports]

### Overall model of the system

[ This section will:

Sketch the model of the total system with the participation of: User objects, business objects, functional business flows, system boundaries.

]

Eg:



1. Overall system diagram

# UNION FUNCTIONAL REQUIREMENTS / CAREER

[ Guideline:

A business process is a sequence of tasks arranged in a certain order to complete a business. The outstanding feature of business processes is repetition

The business process described in this step must be a computerized process (with the participation of alternating effects of computers in the process).

In order to write this section well, it is necessary to identify business processes from the Status Survey and analyze the current implementation process.

Business processes should not be confused with business functions.

Each step in the business process, if well described, is the basis for defining the functional requirements below

Only use verbs to describe user actions (user actions) and not system actions

Limit the use of words meaning "automatic" of the system such as: The system calculates the contract price after tax based on the tax percentage and the contract value,

]

## Name of process/business function/module

### Business Process (If any)

[Example: workflow management]

#### General information

[This section will:

* Briefly, concisely describe the content and purpose of the business process
* Actors participating in the business process]

[Eg:

* This business process describes the steps taken on the system from the task of the manager to the employee and allows the employee to update the work according to his actual progress.
* Participating in the process, the actors are: Unit Manager, Project Manager, Employees

]

#### Process flow

[Guideline:

The business process model drawn here is the customization of the real-life business process model with the following conditions:

There has been an analysis and evaluation of the steps in the process + Ask the user to figure out which steps in the model are removed, which steps are replaced, and which steps are added.

There is an analysis of the users involved in the process

Remove business objects that are not computerized, not managed on the system

The model is drawn in the style of cross function diagram

The steps in the process should be numbered for easy tracking in the step descriptions below

The steps in the process are the corresponding actions of the user on the software. Each named step must begin with the rule: Verb + Noun. The verb is the user's action, the noun is the business object that the user manipulates

Only use symbols as prescribed in the center to draw business models:

|  |  |
| --- | --- |
| Reference to another process. |  |
| Ovals are used to represent process start and end points in the block diagram. |  |
| Rectangles are used to describe an activity performed or a task completed. |  |
| The rhombus contains issues that need to be decided “Yes” or “No”. |  |
| With regard to data input/output, a slanted rectangle is used to represent a point in the process where data is entered or retrieved. |  |

Criteria of a business process:

1. Starting the business process is the first step
2. There is only 1 step in the process
3. Ending the process is the End step
4. There should be only one termination step in the process (however, in the case of a process with many different branches, to avoid confusion, allow each branch to have an end, but understand that all ends only is 1).
5. The remaining steps in the process fall into one of the following categories:
   1. A (add): more information
   2. B (browse): view a specified information object.
   3. C (change): change information
   4. D (delete): delete information
   5. S (Search): search for information. Usually step S is before step B.
   6. V (validate): check information. Usually step V is after step B.
6. After the initiation step, there must be an information receiving step, the information receiving step belongs to one of the following three types:
   1. A (add)
   2. B (browse)
   3. S (Search)
7. Before the final step, there must be a step to save information, the step of saving information belongs to one of the following three types:
   1. A (add)
   2. C (change)
   3. D (delete)
8. Step V (validate) has >= 2 branches
9. A business diagram is a directed graph, each step is a node of the graph such that:
   1. From the beginning note can go to any note
   2. From any note can come the End
10. Each business diagram must have no less than 4 steps and no more than 10 steps (excluding Start, Finish).
    1. If a business diagram has less than 4 steps, consider including it in another business process, or in essence, it is simply a utility.
    2. If a business diagram has more than 10 steps, consider splitting it into two business diagrams. Should separate words after the information saving step, or each business diagram corresponds to a branch of the validation step.
11. The steps of the process must begin with a verb.
12. The information exchanged in the process must be a noun.
13. The steps must be numbered in ascending order. The next step must have a larger sequence number than the previous step. In a branching case, you can choose to type in level 2 (eg 3a, 3b) or still type 1 level (eg 3, 4).

]

Eg:



#### Describe the steps in the process

[ Guideline:

* Draw a table to describe the steps in the process according to the pattern drawn above
* Note the description of both the main data stream and the branch data stream

]

[Eg:

|  |  |  |  |
| --- | --- | --- | --- |
| Step | Step name | Describe | User object |
| **Main data stream** | | | |
| first | Assign | Unit manager/Project manager into the system to create a job and assign an executor to his unit | Unit management  Project management |
| 2 | Update work progress | Based on the work assigned by the unit leader or the Project Manager, employees are assigned to update the work progress according to the actual progress. | staff |
| 3 | Close job | After the employee's work is over (implementation progress = 100%), the unit leader or the project administrator enters the system to close the assigned work for the employee. | Unit management  Project management |
| Forked data stream | | | |
| 4 |  | Perform steps 1, 2, if the job is not finished, the employee continues to return to step 2 to update the work progress. | staff |
|  |  |  |  |
|  |  |  |  |

]

### Detailed functional requirements

[Guideline:

* It is necessary to decompose the system function hierarchy model in this section
* Decomposable functions, by determining through the steps of the processes in the previous step
* The decaying branches in the functional hierarchy model can correspond to each of the above processes.
* The functional requirements described in this section can be classified according to user requirements as:
  + Must-have requirements
  + Desired requirements (yes will be good support for ND)
  + Ask for a choice (yes or no)
  + Requests may appear in the future
* Functions are described briefly, accurately, concisely
* It is necessary to code each functional requirement both in the description and in the decomposition model
* Functional requirements should not be described like: validate this data field, that data is here. This must include binding in the specification of each function

]

#### Functional decomposition model

*[Draw a system functional decomposition model]*

#### Function 1

*[Describe the function of the system according to the structure below]*

##### Function General Information

|  |  |
| --- | --- |
| **Function name** | *[System function name – reference to function list ]*  [ATM automatic withdrawal function] |
| **Describe** | *[Functional information: describe the role and purpose of the function (operation, what it does, what data it affects, the scope of the function, ...) ]*  [This function specifies how bank customers use ATMs to withdraw money from their accounts, what is the limited scope of the withdrawal function: For example, only withdraw money from the current user's current account perform the function, only withdraw the amount within >10,000 VND, <= the amount in the account –minimum balance,...] |
| **Agent** | *[Actor is not part of the system. It represents another person or system interacting with the system. An Actor can:  - Only provide information to the system.*  *- Only get information from the system.  - Receive information from the system and provide information to the system ]*  [- Bank customers  - Bank] |
| **Pre-conditions** | *[A state of the system that must be present before the function can be performed (e.g. the user must be logged in, the user belongs to the group that is allowed to perform the function, ...)]*  [- Network connection to the bank works  - Users have registered the function of withdrawing money from the account.  - ATM has money] |
| **The following conditions** | *[System information status after running function finishes, there are two cases after run function finishes as success and failure.*  *For example, in the system login function*  *Successful case: User receives a successful login message, the system updates the login log*  *In case of failure: the user receives a request to log back in or locks the account while waiting for login, the system updates the login log.]*  [ - Successful case: user receives money, system updates withdrawal log  - In case of failure: the system updates the withdrawal log] |
| **Exception** | *[Error event, occurs when executing function (post cannot be posted, error is entered by user incorrectly, database has duplicate id, ...) ]* |
| **Special requests** | *[These are special non-functional requirements for a function, not described in the function flow diagram.*  *Examples of special requirements include: legal requirements; application standards; the system's quality attributes include: usability, reliability, speed, and supportability; operating system and environment; compatibility requirements; design constraints.]*  [ATMs only pay money in multiples of 10k VND  Maximum amount per withdrawal is 3M VND  The ATM system will keep a log, including the date and time, of all transactions with the bank] |

##### Function processing flow chart

*[- Definition: Functional processing flow diagram describes the system behavior (behavior) flow, including main thread and sub-thread.*

*An agent interacting with the system is reduced to the following basic operations:*

*Enter information -> Enter, Input*

*Create, create -> Add, create -> Is there a word nature -> A*

*Select -> Brown -> Have A nature -> A*

*Search -> Find, Search -> Have A nature -> A*

*Delete, remove -> Delete -> Have A word nature -> none*

*Update -> Change, Update -> Substance -> A -> A'*

*Check -> Validate -> Is it intrinsically A?*

*=> Thus, the system requirements specification is to determine what the system does (how to behave, when an agent manipulates the system?) with basic operations, how does the programmer do it? any?*

*]*

##### Describe the main event flow (Basic Flow)

*[The main event stream describes the main behavior of the system in the following form:*

|  |  |  |
| --- | --- | --- |
| **Actor's actions** | **System response** | **Related Data (C/R/U/D)** |
| [User input content: input information, action on the system] | [System actions and responses] | [Is create, update, read, delete on business objects] |
|  |  |  |
|  |  |  |
|  |  |  |

*Note:*

*Related data: logic-level business objects*

*C: Create*

*R: Read*

*U: Update*

*D: Delete*

*]*

##### Alternative Flow Description

*[Sub-stream: describes exceptions, or forks, from the main event stream (there can be many sub-events, but only one main stream).*

|  |  |  |
| --- | --- | --- |
| **Actor's actions** | **System response** | **Related Data (C/R/U/D)** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

*]*

##### Note

*[This section is optional, intended to describe requests that have not been fully reflected:*

*- Business rules:*

*+ Constraints while performing the function that are not described above. For example, about the data closing time of the day, in the month, only the professor position can guide the thesis, etc.*

*+ Calculation formulas*

*+ Code generation rules*

*+ Rules to check the validity of data*

*+…*

*- Table describing the state of the business object*

*]*

#### 2 . function

[ Guideline:

- Structure similar to function 1.

]

# NON -FUNCTIONAL CLASSES

## System security requirements - ATTT

*[Compulsory]*

[Guideline:

Make security requirements:

* System security: system security requirements such as when deploying the system, need to install a firewall for security or use CA.
* ~~Data security: for data, especially important and sensitive data of the system. These data must be encrypted and kept secure by a reliable encryption algorithm.~~
* Table of severity levels of security and information security risks

]

[Eg:

* The function of signing and approving documents must use digital signatures to ensure security.
* Attachments uploaded to the server must be filename-encoded.
* The pass information must be encrypted one-way.
* Table of severity levels of security and information security risks

|  |  |
| --- | --- |
| Level | Risk  <Depending on the security level of the system, specific implementation, and users of the system, the risks will be divided into different levels> |
| Serious | <Particularly serious risks, serious consequences>  Eg:  With the document management system Voffice   * Risk of reading unreadable text.   With Viettel homepage system:   * Risk of deface home page. Error XSS * The risk of uploading unauthorized files to the news site. |
| Tall | <Severe risks, if high consequences occur>  Eg:  With internal system:   * Threats of system hijacking   For public systems:   * Errors revealing system information, revealing user information, errors that allow listing users, ... |
| Medium | <Moderate, probable risks> |
| Short | <Low risk, low probability> |

]

## Request backup

[Guideline:

* List the customer's backup requirements (when surveying, surveyors need to talk to the customer about backup needs).
* If the customer does not make a request, it should be clearly stated that "the customer does not have a backup request", but not to N/A.
* Basically it is possible that some of the customer's backup requirements are unrelated to the system's functionality. But it needs to be recorded in PTYC so that when sizing the system (storage hard drive capacity) this parameter also needs to be taken into account.

]

[Eg:

* Backup period of CDR files is 6 months.
* The files users attach to are backed up periodically on a monthly basis.

]

## Stability requirements

[Guideline: Gives the number of system downtime by period (month/year), ie the number of times the system fails in month/year.

]

## Performance requirements

[Guideline:

List the client's system performance requirements. It should be clearly listed for each item below:

* + Performance Goals: 5 mandatory goals according to software KPIs (table below)
  + Functions that need to meet performance requirements
  + Success criteria (% pass, fail acceptable)

| Test objectives | Names of respective test business functions | Value to be achieved and unit of measure |
| --- | --- | --- |
| *Response time* | < *Select functions*   * *Has a high usage density* * *It's an important job* * *Has complex logic handling* * *It's an important job* * *Has a lot of use for communicating with external systems* >   Eg:   * Function A * REMOVE function | *<5 s>* |
| *Throughput* | *<Select Functions*   * *Has a high usage density* * *It's an important job* * *High resource occupation and contention* * *Has a lot of use for communicating with external systems>* | *<200 transactions>* |
| *Concurrency* | *<Select Functions*   * *Has a high usage density* * *Is an important profession>* | *<200 transactions>* |
| *CPU usage* | *<Select Functions*   * *Has a high usage density* * *It's an important job* * *Can handle complex logic>* | *<…%>* |
| *RAM usage* | *<Select Functions*   * *Has a high usage density* * *It's an important job* * *High resource occupation and contention>* | *<…%>* |

]

[Eg:

*The performance requirements corresponding to the test environment should be described as follows:*

* The total number of active users that the system needs to meet is 200, the average number of simultaneous online users is 70 and distributed according to the following functions:

|  |  |  |
| --- | --- | --- |
| Deal | Actual number of active users | Number of concurrent users max |
| Connection | 800 | 100 |
| Inventory report | 40 | ten |

* Transaction processing time requirements:

|  |  |  |
| --- | --- | --- |
| Deal | Average processing time | High load handling time |
| Connection | <= 5s | <= 10s |
| Inventory report | <= 6 s | <= 15s |

* High-load functions that need to be tested in large volumes:

|  |  |  |
| --- | --- | --- |
| Function | Average handling standards | Standard handling at high load |
| Import goods in batches | 5s/lot 100,000 records  15s/lot 200,000 records  35s/lot 1,000,000 records  5 minutes/lot 10,000,000 records  20 minutes/lot 40,000,000 records | 15s/lot 100,000 records  25s/lot 200,000 records  55s/lot 1,000,000 records  15 minutes/lot 10,000,000 records  45 minutes/lot 40,000,000 records |
| Detailed import and export report | 5s/ warehouse NVBH  15s/ Warehouse type 2  35s/ Warehouse type 1  5 minutes/ Branch warehouse type 2  20 minutes/ Class 1 branch warehouse  1h/ Nationwide warehouse | 15s/ warehouse NVBH  35s/ Warehouse type 2  55s/ Warehouse type 1  15 minutes/ Branch warehouse type 2  35 minutes/ Class 1 branch warehouse  1:30'/ Nationwide warehouse |

* Functions to be tested: sales function, connection function...

]

## Communication requirements

[This section describes the entire system input and output]

### User interface

[This section describes the general requirements of the system's user interface. Requirements may include: model of an interface, standards to which the interface conforms (if any), display warnings, keyboard shortcuts…

The specific design of each interface will be described individually in a separate file, not included here]

[Eg:

The system meets the following requirements:

* Web display
* The interface is modern and aesthetically pleasing
* Unicode font 6909
* Interface design on the screen minimum resolution 800x600, minimum color mode high color (16 bits)
* The language used in the entire system is Vietnamese
* The date format used in the system is dd/mm/yyyy
* The number format used in the system is 00000000]

### Hardware interface

*[If the system has interfaces with other hardware, list them here]*

[Example   
The system connects to terminal devices such as: PDA, touch screen….

]

### External software interface

[Guideline:

This section defines the new system's interfaces with other software systems

]

[Eg:

* The assurance system integrates with the company's existing Finance PM.
* Input employee data is taken from HR PM.
* …

]

## Request for support

[Guideline:

List system support requirements and commitments

]

[Eg:

* After the time of deployment, the system is supported for maintenance for a period of 2 months.
* Within the first 1 year of use, all PM errors are prioritized for handling]

## Technology requirements and constraints

[Guideline:

This section outlines the technological and design constraints of the new system. Design decisions must adhere to design constraints. Examples include software language, software process requirements, rules for using programming tools, requirements for architecture and design constraints, additional components, libraries. , browser, platform.

]

[Eg:

* The system built on the basis of JAVA technology and database is ORACLE
* The system ensures stable running on Firefox and IE browsers.
* Or the system is guaranteed to run on both WIN and LINUX.

]

## User documentation requirements and online support

[Eg:

* Provide soft copy manual and can download documents directly on PM
* There is information on the PM for support clues (email, SDT)
* PM provides frequently asked questions and solutions (online help)
* …

]

## Components purchased from outside

*[This section describes the purchased components used by the system, applicable licenses or usage restrictions, and any standards for compatibility, communication*

*Listed requirements or fill in N/A if no requirement of this type exists]*

## Requirements on mining operation

*[This part is mandatory, to determine the necessary requirements that the cultural and technical unit meet for the application operation and exploitation process. The project team carried out a survey of the VHKT unit about the necessary conditions such as monitoring tools, encoding configuration files, etc.]*

## Requirements for infrastructure solutions

*[This section provides solutions on hardware infrastructure, which is chaired by the project management team and implemented by the IT department.]*

## Logging requirements

*[Compulsory]*

*[This section must clearly describe what types of business logs need to be recorded, how to write content, describe important system data (usually money data, rows, system core data). system) and the operations that need to be logged for this important data. For the user impact log, the document must be weighted into 3 categories of high level - medium level - low level. For the types of business logs stored in the system database, the solution can further specify the minimum time to save the log, if not specified, the default is not to delete this log data. For other log types, the mining operation determines the minimum time of logging .]*

## Requires compliance with the Data Governance standard

*[Compulsory]*

[Guideline:

Provide standards-compliant solutions and requirements for Data Governance:

* Data security complies with issued standards: TC.CNVTQD.QTDL.01
* Data quality complies with the issued standards: TC.CNVTQD.QTDL.02
* Other Data Governance standards if any

]

[Eg:

* Data Security Compliance Requirements:
  + Define a list of data that should comply with the Security standard:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **STT** | **Data** | **System/Module** | **Processes,  Regulations related** | **Security hierarchy** | **Security classification** | **Defining roles and corresponding data permissions** | **Blur - masking data** | **Data use and sharing  (If any)** | **Monitoring & Alerting** *- Does the system log any impact on the data?  - Is there an anomaly warning threshold for the data?* | **How to receive warnings** |
| Example 1 | Personal health data | Medical information module - Viettel Family | 3915 | Honey | Medical/health data | The data must be clearly assigned roles, as well as the system must be able to decentralize authority according to the role:  - Access/Update/Delete: Individual owns the data, Military medic in the unit (Military medic in any unit can only access its personnel data), personal data that is updated to the software requires the individual's permission to have access to military medical staff. | Data is hidden with unrelated roles | N/A | The system must log data impact (who can access/edit/delete data, at what time) | SMS/Email |
| Example 2 | Customer Personal Data | BCCS\_CC | 3915 | Honey | Personal data | Data must be clearly assigned roles, as well as on the system must be able to decentralize according to roles:  - Access: Customer care staff, administrative staff - Update: Admin staff - Delete : Admin staff Which province staff can only affect that province data | The customer service agent role can only see certain fields of information, the fields that are not allowed must be obscured  Data is hidden with unrelated roles | Data when sharing to other systems must use security protocols such as SFTP, HTTPS ... | The system must log the data impact (who can access/edit/delete the data, at what time)  The system allows to configure the abnormal impact threshold: - 1 user searches > 200 times/day - Maximum report file size: 1GB When there is an action that exceeds the abnormal level, there must be a warning by message, email | SMS /Email |

* + Guaranteed Solution (indicate features/solutions to help ensure compliance):
    - Definition of roles & decentralization: Decentralize users according to individual roles, Military medical unit ensures decentralization.
    - Blur: The lookup function with individual users only displays personal information. The lookup function with the user Military medical unit 🡪combobox unit fixed by the user's unit.
    - Save log: Perform impact logging with data impact functions: lookup, update, delete.
* Data Quality compliance requirements:
  + Define a list of data that should comply with the Data Quality standard:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **STT** | **Data** | **System** | **Accuracy** | **Completeness** | **Consistency** | **Timeliness** | **Uniqueness** | **Validity** | **Monitoring log** | **How to receive warnings** |
| Example1 | revenue data  up to the nth day of the month of the unit | Corporate Communication Software | + Check rule:  - The data is wrong compared to the calculation formula- Accumulated on n days < accumulated on n-1+ KPI threshold: number of violations/month < 2 | + Check rule:  - No accumulated data up to date n- Missing revenue data on day n (for cumulative calculation)+ KPI threshold: number of violations/month < 2 | + Rule of check: The data on 2 reports must be the same in different reports: Business report on n-2 and Business report on n-1  + KPI: data is incorrect = 0% | '+ Check rule: Data is updated at the latest before 8:00am on day n  + KPI Threshold: number of violations/month < 2 | '+ Check rule: Data of 1 unit (by unit code) is unique, not duplicated in 1 report  + KPI: data is incorrect = 0% | + Check rule: Data must be > 0  + KPI threshold: number of violations/month < 2 | Logging data quality includes information:  System, data, name/check rule code, data table, rowid/violation column name, KPI-threshold violation | SMS/Email |

* + Guaranteed Solution (indicate features/solutions to help ensure compliance):
    - Build test progress/reports to data quality standards & send alerts to relevant users.
* Requires compliance with other Data Governance standards where applicable

]

## <Add other request types, if needed>

# SYSTEM COLLECTION STANDARD

[Guideline:

List out the business processes, the user requirements described above need for the customer to accept the system

There are utilities and support for people that may not be a condition for customers to test

Listing out the functions here as the system acceptance standard will help the later testing process with the customer to have a basis for reference.

]

[Eg:

Requirements to be tested

|  |  |
| --- | --- |
| **STT** | **Test function** |
|  | Enter contract information |
|  | Update contract status |
|  | Delivery period update |
|  | Update payment information |
|  | Liquidation |

]