



**Technical assistance on organisational management for
establishing the new Integrated Information System in the
Ministry of Labor and Social Welfare, Kosovo***

(Final report)

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* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence

Summary

Given the hardware infrastructure deficiencies in the institution, it would be ideal to develop a unified IT system for the entire institution.

Initially the focus has been on two departments only, designing an operating software for these two departments, and in the later stages to look for a possibility of creating a software for the entire institution.

Therefore based on the request of the contracting authority, I have received the following documents for analysis:

1. Operational Manual for Provision of Employment Services
2. Social Assistance for Asylum Seekers
3. Benefits for Children with Permanent Disabilities
4. Modules of the Department of Pension Administration
5. Development of Modules in the Integration System for the Department of Martyrs' Families, War Invalids and Families of Civil Victims
6. Description of Functionalities and Workflow in the Development of Multi-channel Services for Public Employment in Kosovo*
7. The Scheme of Internal and External Housing

During the analysis of these documents it has been noticed that in this institution, IT components are decentralised within each department and all IT communication is done by exchange of files.

Based on these documents and joint meetings, I have prepared the first report with the terms of reference. After receiving the comments for this document, I have included those comments in this preliminary report.

As a result of these joint meetings, relevant documents and comments received, it follows that we have prepared a document with detailed technical terms, more exactly a detailed specification for these departments.

The same TORs were accepted by all members, and the authority has decided to initiate a project based on these ToRs.

This system is already in the final stage of development.

Based on the analysis of the documented findings and the factual situation in the future, it is recommended to create an integrated information system, in which all relevant departments will be linked. Below we will give the findings and recommendations for the unified system to be established in the future.

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ANALYSIS OF DOCUMENTS AND FINDINGS

The Integrated Information System of MLSW consists of 15 applications and databases that are interconnected and exchange data with each other:

1. *Social Assistance*
2. *Social Assistance for Asylum Seekers*
3. *One-off Assistance*
4. *Social Services*
5. *Benefits for Children with Permanent Disabilities*
6. *Internal and External Family Housing*
7. *Basic Pension*
8. *The Contributor's Pension Contribution*
9. *Pensions for Persons with Disabilities*
10. *KPC Pensions*
11. *Pensions of the KSF*
12. *Trepca Pension*
13. *Blind Persons Benefits*
14. *War Invalids and Their Neighbor (ILAT)*
15. *Veterans of the KLA "*

TECHNICAL SPECIFICATIONS OF THE SCHEME OF INTERNAL AND EXTERNAL HOUSING

The document is very generalised and there is no clear picture of what services this module offers or what will it offer in the future. It describes which institutions have an agreement for data exchange but does not describe the details which data need to be exchanged.

Description of the work process

Within this document there is a scheme of how this module works, and as such does not explain the actual state or condition after the implementation of the new system

Deficiencies include:

1. The lack of module of communication with other institutions.
2. There is no description of which documents are needed for this scheme
3. There is no description what will happen after the decision is made.
4. There is no control through the IT system on whether individuals are part of any other category.

GENERAL FUNCTIONALITY

Within this part a current situation has been presented, but as a process has not been described, it is left to the Operator / Company to decide on how they would like to develop this scheme, based on generic data.

Also part of this document states: *"The Contractor will determine through the use of Administrative Instructions Business Rules for each Module and Functional Requirements"*

Contractor can never define Business Rules, such action must be made by the Authority where all the Business Rules should be described.

NAMESPACE APPLICATION

The DB part of this section does not describe what exactly you are looking for, what exactly this Module should really provide.

HARDWARE AND NETWORK INFRASTRUCTURE

It is important to describe if it is needed to have a secondary server / backup, if yes, do we have to use a cluster, how the communication between the primary server and secondary server is established.

BENEFITS SCHEME FOR CHILDREN WITH PERMANENT DISABILITIES

The document is very generalised and based on this document there is no clear picture of what services this module offers or what will it offer in the future. It describes which institutions have an agreement for data exchange but does not describe the details which data need to be exchanged.

Description of the work process

Within this document there is a scheme of how this module works, and as such does not explain whether the actual state or condition after the implementation of the new system

Deficiencies include:

1. Lack of a module of communication with other institutions.
2. There is no description of which documents are needed for this scheme
3. There is no description what will happen after the decision is made.
4. There is no control through the IT system on whether individuals are part of any other category.

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SOCIAL ASSISTANCE SCHEME FOR ASYLUM SEEKERS -TECHNICAL SPECIFICATION

The document is very generalised and based on this document there is no clear picture of what services this module offers or what will it offer in the future. It describes which institutions have an agreement for data exchange but does not describe the details which data need to be exchanged.

Description of the work process

Within this document there is a scheme of how this module works, and as such does not explain the actual state or condition after the implementation of the new system

Deficiencies include:

1. Lack of a module of communication with other institutions.
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SCHEME FOR DESCRIBING FUNCTIONALITIES AND WORKFLOW IN THE DEVELOPMENT OF MULTI-CHANNEL SERVICES FOR PUBLIC EMPLOYMENT SERVICE IN KOSOVO*

Based on this document i consider that it is very clear all the work that needs or is done.

DEVELOPMENT OF MODULES IN THE INTEGRATION SYSTEM FOR THE DEPARTMENT OF MARTYRS' FAMILIES, WAR INVALIDS AND FAMILIES OF CIVIL VICTIMS

Modules that will be integrated into the "Integrated Information System of MLSW" are:

1. War Invalids and Their Neighbor (ILAT)
2. KLA veterans
3. Victims of Sexual Violence in War

GENERAL FUNCTIONALITY

Within this part a current situation has been presented , but as a process has not been described, it is left to the Operator / Company to decide on how they would like to develop this scheme, based on generic data.

Also part of this document states: *"The Contractor will determine through the use of Administrative Instructions Business Rules for each Module and Functional Requirements"*

Contractor can never define Business Rules, such action must be made by the Authority where all the Business Rules should be described.

NAMESPACE APPLICATION

The DB part of this section does not describe what exactly you are looking for, what exactly this Module should really provide.

HARDWARE AND NETWORK INFRASTRUCTURE

You've made a description of what's in reality, but as noted in the section "**Databases Schema**", it is not described if it is needed to have a secondary server / backup, if yes, do we have to use a cluster, how the communication between the primary server and Secondary Server is established.

MIGRATION OF DATA FROM DOWNLOADED DATABASE

This form of data migration is not only incomplete but is too vague as it does not show in what form the current data are and how to migrate data to properly store the history of those data, which data should be used as current data, and many other components.

The steps for which documents to apply for these schemes are described within this document. However, no analysis is made of which documents are unnecessary for behaviors that can be requested through the Automatic Systems.

DEPARTMENT OF PENSION ADMINISTRATION MODULES - TECHNICAL SPECIFICATION

This document is very generalised and several topics have to be clarified:

1. In the title and in the document you are looking for an integrated Information System, but within this document you want to upgrade the current systems / applications and link them.
 - a. The question is whether you want to create a system for the entire institution with which will have all information in one place, or just want to advance the current systems / applications and work as decentralised.
2. Based on this document, the Institution has 7 different systems,
 - a. Base Pension
 - b. Contribution Base Pension
 - c. Pension for Persons with Disabilities
 - d. Blind Persons Benefits
 - e. KPC Benefits
 - f. Benefits for KSF
 - g. Benefits for Trepça
3. The objectives of this document do not coincide with documents and as such are deficient due to the following reasons:
 - a. Base Pensions
 - i. A desire is to link all the existing SII modules, however it is very unclear since the requirement is to interconnect and advance the modules, which makes the idea confusing.
 - ii. Linking to all third party data sources. The analysis of this document shows that there is no link to Third Part Systems to exchange data in real time, which according to the document is required to be linked for verification purposes only.
 - iii. Interconnection with all common modules. If we analyse this module, we observe that they are very deficient and as such do not offer any advancement of the system due to:
 1. The Report / Statistics section is not foreseen for this process.
 2. The exchange of data does not indicate in what form it will be and what data should be transferred
 3. How to Monitor Users
 - iv. Request for advancement of other modules. It is very unclear which modules should be advanced, and what is the correct idea for this process.
 - v. Standardise the workflow process according to the diagram (which diagram, if you refer to the diagram in the "Job Process Description" section, then at least eight diagrams are missing, which should be part of this document. Once you have resolved the scheme for that, there are no schemes with the same work steps

- vi. Creating Financial Reports. There is a lack of a clarity of how financial reports should be made and how to manage the finances, starting from the budget planning till the end of the fiscal year in the Annual Reports.
 - vii. Standardisation of Reports (the idea is whether to have a Joint Reporting System or these reports are to be created and dependent solely on IT, as you have made this description. The Reporting System is missing and everything depends on the IT)
- b. Contribution Base Pension
- i. As regards this part the same comments that are described in the Base Board can apply for this scheme as well. No need for changes in the description of the Pension Fund.
- c. Pension for Persons with Disabilities
- i. As regards this part the same comments that are described in the Base Board can apply for this scheme as well. No need for changes in the description of the Pension Fund
- d. Blind Persons Benefits
- i. The application needs to be developed from the beginning based on the technology presented. It is very necessary to also indicate what it should be used for:
 - ii. NET FRAMEWORK 4.5.1 and not any other version
 - iii. INTERFACE: Telerik ASP.NET UI Controls, AJAX Toolkit, why these should be used?
 - iv. REPORTS: Reporting Services 2014, why this version should be used rather than any other?
 - v. DAL / BL EntityFramework, Stored Procedures, Web Services, Enterprise Library 6 (as needed), why these should be used?
 - vi. To migrate the current data from the current application to the new one, the description of the migration process is missing.
 - vii. A desire is to link all existing SII modules, and in the middle of text it is described that the requirement is to interconnect and advance the modules, which makes the idea very confusing.
 - viii. Linking to all third part data sources. This table provides only basic information that these systems will be linked. Also, the analysis of this document shows that there is no link to Third Party Systems and how to exchange data in real time, which according to the document is required to be linked for verification purposes only.
 - ix. Interconnection with all common modules. If we analyse these modules, we observe that they are very weak and as such do not offer any advancement of the system due to:
 - 1. The Report / Statistics section is not foreseen for this process.
 - 2. The exchange of data does not indicate in what form it will be and what data should be transferred
 - 3. How to Monitor Users

- x. Request for advancement of other modules. It is very unclear which modules should be advanced, and what is the correct idea for this process.
 - xi. Creating an Integrated and Online Assistance System within the system. At this point you have not described any details what you are doing and how you want to develop a business process.
 - xii. Standardise the workflow process according to the diagram (which diagram, if you refer to the diagram in the "Job Process Description" section, then say that at least eight diagrams are missing, which should be part of this document. Once you have resolved the scheme for that there are no schemes with the same work steps
 - xiii. Creating Financial Reports. Within this table and this module, there is a lack of a complete concept of how financial reports should be made and how to manage the finances, starting from the budget planning till the end of the fiscal year in the Annual Reports.
 - xiv. Standardisation of Reports (the idea is whether to have a Joint Reporting System or these reports are to be created and dependent solely on IT, as you have made this description The Reporting System is missing and everything depends on the IT part)
- e. KPC Benefits
- i. The same comments that are described in the Blind Persons Benefits apply to this Scheme, too.
- f. KSF Benefits
- i. The same comments that are described in the Blind Persons Benefits apply to this Scheme, too.
- g. Benefits of Trepqes
- i. The same comments that are described in the Blind Perosn Benefits apply to this Scheme.

Based on this document, it is not clear whether you want to create 7 different applications / systems or you want to create a unified system. You have described again all data that will be distributed in all applications / different systems.

1. Interoperability with other data sources:
 - a. Within this module the question arises whether you want to standardise this process or let it work the way it is now.
2. Visual Interoperability Scheme
 - a. A very good description has been made, but this scheme does not coincide with the request as you are requesting to set up 7 different applications and to exchange data with third parties (the question is how do you manage this process when the scheme has the Integrated Information System, while on the other side you are asking for 7 applications)
3. Interoperability planned with the Minister of Health:

- a. This exchange should take place in real time rather than a massive exchange of data, because you as an institution should create a platform with WS where all interested institutions shall exchange the data.
4. Processing of ICS and SEKN Payment
 - a. This process is extremely deficient and as such it does not explain how this file is loaded, how file management is done, how any eventual errors are displayed, how the reports are made, etc.
5. Naming rules for entities, methods, and objects in the database

Within this part, the rules of this part of the developer should be strictly adhered to, as they are used in the development of all other modules of the system and are standard. This way is very wrong, because if you make a decision in this form, you should reflect all fields of the tables and you must provide a detailed DB Scheme as it should be developed, since the operator has no idea about the liaison tables which should be used in this process.

6. Obligatory conditions to be met by any application within the Integrated Information System.
 - a. You have specified that you have some rules and standards. Please specify in the document what are those rules and standards?
 - b. Generating reports - Do you want to create a reporting system or each application shall design separately its reports and what happens to the report when a individual is in two schemes?
 - c. Civil status does not pull the biometric data, but personal data. Please as specify the fields to be pulled
 - d. Data Auditing System - Please specify what exactly is required at this point
 - e. The application should have the error module Please specify what you consider as error, and in what form the same should appear.
 - f. User Module- this point is contrary to the entire concept described by you, since you call it in some places the Common User Module and the requirement is to have the special modules? Also, please specify the role of the users correctly.
 - g. What do you think of atomic search?
 - h. Monitoring Module- would you like to have this as part of the User Module or as the Special Module? If you think of the special module, then the entire system should be monitored and not just the users.
 - i. Relief System- it is very unclear what is required

7. Description of the Work Processes:

If we refer to the diagram then there are at least 8 diagrams missing, which should be part of this document, and all schemas are not described by the same work steps, and not all schemas have to pass the Medical Commission, etc.

8. General Design of Modules

This section describes what operations the current software performs, while the Operator is required to make a description within the Requirement Specification as well as the diagrams How do you think the Operator will do if you have not specified the entire process?

9. Database Scheme (Scheme)

Based on this document you have just made it clear how you want to view the Labels' names. Also, based on these documents you are asking for data to be kept separately in 7 different schemes.

Please describe a precise pattern on how the tables will be interconnected.

10. Profiles, Types and Roles of Users within the System.

This document describes only four types of users and is fully generalised. In order to have a completed document this part needs to be supplemented .

Administration module should have the opportunity to report on the verifications made by this system.

1. At least the following information should be kept in this database
 - a. Name and surname of the person who wants to verify this document
 - b. His/her email address
 - c. The country in which the verification is made
 - d. Reason for verification
 - e. IP and the name of PC the verification is made from
 - f. The data used for verification as mentioned in point (4 - e)
2. There should be the possibility of reporting on the following:
 - a. Reporting by type of document
 - b. Reporting by person who is doing the verification
 - c. Workplace Reporting
 - d. State-by-case reporting by verification
 - e. IP Report or PC Name
 - f. Reporting by verification reason
 - g. How to report the reports

USER GROUPS AND USER ROLES

All users should have the access to only one location, and the same access, from two different locations at the same time, should not be allowed.

- a. Add expiration date to the user
- b. Increase the possibility of blocking the user
- c. Include the site users access from (IP and computer name)
- d. Include time (year, month, date, hour, minute, seconds) when the user accessed and when disconnected
- e. Maintain the history of every action of the official including the search history
- f. Increase the likelihood of controlling users by seeing who is active and who is passive in real time to have reports on user's activities at different times.
- g. Allow users to leave (disconnection from the system) through the application every time it is needed.

Administering and managing the system is to be manageable by the User Interface.

1. The Administrator can create different groups and access to various forms depending on the request
2. The Administrator can create different user reports depending on their request (This means that the application can add or modify reports and statistics without developing the forms for this purpose, as noted in the REQUIREMENT REQUIREMENTS - business intelligence)

Some of the groups to be created are:

- a. Management
- b. Coordinator

- c. Officer
- d. Finances
- e. So, the applied solution must be flexible - dynamic, so that the administrator has unlimited access to the fulfillment of his/her duties.

Access to the system will only be accessed by authorised persons

The user group privileges are also included under privileges with the ALLOW and DENY details to have the ability to change any set of privileges at the access level but not all of the groups as well

ACCESS TO THE SYSTEM WILL BE ORGANISED ACCORDING TO ROLES

- i. Role 1. For registration, the same user will have the right to view his/her work reports as well as the individual's history
- ii. Role 2. To control the recordings made and generate various reports as they may be:
 - 1. Report on the work of officials
 - 2. Report by documents
 - 3. Report by date
 - 4. Report by institutions
- iii. Role 3. Financial control and reconciliation, by which all payments and reports from the respective banks should be verified (all this should be done through this application)
 - 1. Financial Reports
 - a. The reconciliation report made under ICS is uploaded
 - b. Report on waste dumped by loaded ICS
 - i. Report on payments issued by the official and which were not reported by the bank.
 - ii. Report on bank accounts reported by the bank but not issued by the official.
 - c. Report on the category of exemption from payment.
 - d. General report where all payments paid will be submitted
 - e. The possibility of modification of payments, their return from regular payments in payments under exempted from payments
 - f. Uploading ICS files from two different institutions
 - g. Each ICS has the economic code and UNIREF different
 - i. The issuance of payment slips will be made with the appropriate UNIREF divided according to the type of document
 - ii. Reconciliation of revenues will be made according to ICS PERKATES.
 - h. The report for items a, b, c, d should be divided into groups according to the institution and the respective user group
 - i. Management group- I should have the opportunity to see reports from all institutions.
- iv. Role 4. To administer the roles and create new users

All roles should be separated depending on their authorisation. The dynamic module must be created in order to modify the Reports through administration and to add various parts such as:

-
1. Create new accounts
 2. Incorporating new authorisations for signature
 3. Creating new institutions
 4. Controlling user activity

This module should allow the administrator to see user activity in real time:

- a. From which IP and computer name is being accessed,
 - b. What is the action the individual is doing now,
 - c. Ability to remove this user's power
 - d. Password reset option
 - e. The user password must be stored in the encrypted DB and the same cannot be seen even by the system administrator.
-