

Terms of reference for MRD

SYSTEM FOR MONITORING BALANCED REGIONAL SOCIO-ECONOMIC DEVELOPMENT

AXA LLC

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DEPARTMENT FOR REGIONAL SOCIO-ECONOMIC PLANNING AND ANALYSIS

TERMS OF REFERENCE OF THE ELECTRONIC SYSTEM

Feasibility study for monitoring balanced regional socio-economic development in Kosovo and system design

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1. Abbreviations

Ministry of Regional Development
Kosovo Agency of Statistics
Line Ministries
Department of Regional Socio-Economic Planning and Analysis
Department of Regional Development
Development Region
Monitoring balanced regional socio-economic development
System for monitoring balanced regional socio-economic development
Balanced Regional Development

The abbreviations used in this document are as follows:

2. INTRODUCTION

Regional development is not a new topic and field of development in Kosovo, it has been known for years; however, in terms of more structural use of EU funds is known since 2008.

Balanced regional development means reducing the differences in terms of socioeconomic development and increasing the quality of life in developing regions. Balanced regional development cannot be achieved without capacity building of the regions in order to have a genuine inter-regional competition. Measures need to be taken in order to increase inter-regional competition so that higher levels of productivity, employment and prosperity are achieved. Balanced regional development policy intervenes to correct inequalities between different regions of a country and also to raise the standard of living to a higher level with an equal norm.

The Ministry of Regional Development (MRD), in accordance with its duties and responsibilities defined by the legislation in force and the 2020 Work Plan for 2020, has provided the drafting of terms of reference for the implementation of the feasibility study related to monitoring balanced regional socio-economic development. This duty also includes the design or description of the system which will be built by the MRD and used by competent persons for purposes of monitoring and measuring regional performance.

The drafting of reference terms for the feasibility study and the design of the system for monitoring the balanced regional socio-economic development of the region represents a starting point for the construction of the system for monitoring the social and economic developments of the development regions. This system will identify all relevant areas of social and economic development on a regional basis, followed by indicators for monitoring socio-economic development, and through this system regular monitoring of economic and social development in development regions and incentives, promotion and management of regional performance will be carried out whereby these are a strategic objective of MRD.

3. Purpose

MRD has finalized the Regional Development Strategy Plan 2020 - 2030, which has been approved by the Government.

MRD has already set long-term strategic objectives in the field of regional development in Kosovo. Establishment of an efficient system of regional performance is part of the strategic objectives of MRD. Since 2017, a year when the MRD was established as a new Ministry, the same has drafted and published a considerable number of analytical documents with regard to the reflection of balanced regional development in Kosovo. It has implemented these activities on the basis of a good cooperation that it has managed to implement with central level institutions (M.L and KAS) and local (municipalities). Each year, MRD has drafted and published at least two (2) analyses as follows: 1.) Capital investment analysis and 2.) Analysis of balanced regional socioeconomic development (subsidies and grants for businesses). However, reporting and data collection, their systematization and reflection across development regions, in the absence of an advanced electronic system, is carried out in a manual manner and in Excel.

The purpose of the MRD is to reflect in the most accurate and fair manner possible the balanced regional socio-economic development in Kosovo, by addressing issues that go beyond the competencies of municipalities and are related to other institutions and the central level. Balanced regional socio-economic development in some respects exceeds the municipal boundaries defined by the legislation in force, and is not related to administrative issues of organization of levels of government. Balanced regional socio-economic development, but rather exceeds it by reflecting the development of sectors and projects developed in two or more municipalities.

Monitoring balanced regional socio-economic development of the region is a new field which has not been developed before by the central level institutions. This document is development in order to establish a starting point for the construction of a system which will be managed by MRD, the users of which will be local and central level officials in terms of the inclusion of data. The establishment of a system containing data on the social and economic developments of the development regions promoted by the MRD, will affect the balance of investments in the regions, as well as the accurate reflection of the areas in which we have development stagnation and that we need to commit more to progress. This also aims to highlight inequalities in various aspects of socio-economic well-being in all regions of Kosovo and to reflect changes over time, promoting the influencing factors and those seen as an obstacle.

The purpose of this document is for MRD to initiate procedures and contract an operator or company which will identify all topics, areas, indicators and determine the manner in which MRD will provide the necessary data for the review of regional social and economic developments. The accurate reflection of socio - economic

developments will affect the orientation of strategic policies and balanced investments of line ministries in development regions. The feasibility study, in addition to identifying areas, indicators, data collection methodology, reporting, should also provide MRD with the model of the system to be built, as well as with all the elements of efficiency that it should have.

4. Methodology for the drafting of the document

MRD, through the decision No. 183, dated 14 May 2020, has established a Working Group consisting of five (5) members with the aim of drafting this document. The Working Group has conducted four (4) working consultative meetings until the finalization of the document "Drafting of terms of reference for the study of feasibility for the design of the system for monitoring the balanced regional socio-economic development in Kosovo".

Pursuant to the Decision No. 183, the WG has taken the analysis and indicators for monitoring the balanced regional socio-economic development drafted and published in 2019 as well as the strategic goals of the MRD related to the establishment and development of an efficient regional performance management system as a basis. Also, DRSEPA in order to increase the quality of the guideline has held a consultative meeting with other relevant Departments of Line Ministries such as (MAFRD and MED).

5. Terms of reference for the development of the feasibility study and the design of the system

Several objectives were initially prepared for the purpose of elaborating the content and description of the study development process and design the system for monitoring the balanced regional socio-economic development in a more detailed manner.

The objectives that MRD aims to achieve through the implementation of the feasibility study for monitoring the balanced regional socio-economic development in Kosovo and the design of the system, are as follows:

- Through the implementation of the feasibility study with regard to the monitoring of balanced regional socio-economic development, MRD aims to define all topics/activities (social and economic) that can constitute regional social and economic developments and which can be measured are reflected in periods specified by the MRD.
- 2. MRD aims to provide a source of information that can be used in the future, for purposes of implementing the monitoring of balanced regional socio-economic development; what are the topics to be treated and which ones can be included

in the balanced regional socio-economic development, areas of treatment, what are the indicators for measuring regional social and economic developments, implementation of reporting processes and data collection/working methodology, stakeholders to be involved, a description of the expected impacts of published analytical documents by MRD for regular coverage of monitoring of balanced regional socio-economic development, etc. All activities that will be included in the study and that are recommended for the MRD to carry out in the future, must be in accordance with the legislation in force and adhere to the scope of activity of other institutions.

- 3. The electronic system will be developed for MRD for measuring social and economic developments on a regional basis, followed by concretization in units (municipalities) or more concrete issues (areas and sectors). What should be its content, who may be the users and their number, safety and maintenance, changes and modifications, software documentation, on what platform it should be developed, etc.
- 4. All elements related to the electronic system for monitoring the balanced regional socio-economic development (regional performance) are to be presented in a separate section which will be used by the MRD to contract the company for the development of this system.
- 5. After analysing all issues related to monitoring balanced regional socio-economic development, determining the indicators to be used, etc., MRD should provide an efficient system for measuring socio-economic development/regional performance and coverage through the publication of socio-economic analyses or other documents, in certain timeframes (annual or longer).

The bidder who will carry out this study, must at least complete and carry out the following actions:

- Should be an experienced operator in this field (at least 3 years), with at least three

 (3) contracts (showing the values, dates, nature and place of realization) for the
 provision of similar services realized in three (3) recent years for private or public
 institutions, from the last day of publication of the contract notice and should be
 proved with references.
- The operator must prove that it has sufficient human resource capacities to perform the services, namely a highly qualified expert:

1. Completed university education – master's degree, providing evidence "Diploma" in the field of information technology, respectively computer science

2. Completed university education – master's degree, providing "Diploma" certificate in social fields and

3. One expert should have a bachelor's degree in economy.

4. Five (5) programmers who have completed bachelor's university education or licensed professional education in the field of (IT) software development.

5. A system designer should have a master's degree in design.

Experts must also have work experience in at least two (2) jobs or services in the respective fields. Also, for experience, provide evidence regarding employment/engagement contracts, preferably products.

- Operators should provide evidence of economic viability, evidence from the bank on turnover for the last three (3) years, not less than 100,000.00 euros.
- The system development process is headed by the operator, together with the process of consulting the document with the institutional representatives appointed by the MRD.
- The system for monitoring the balanced regional socio-economic development should contain the description of the parameters on which the information/electronic system (monitoring) will be built, which should also enable the visual presentation, the connection with the involved institutions, the deadlines, data entry, treated areas, indicators, user authorization system, calculation of qualitative and quantitative indicators, etc.
- During the process, MRD reserves the right to submit additional requests for their involvement in the feasibility study or system design.

MRD is responsible for ensuring and providing the availability of:

• MRD will provide the operator with all documentation drafted and published (in the years 2018,2019,2020) and which would present one of the sources of information for the establishment and development of the system.

Project results:

- The Operator should hold two (2) presentations to the MRD with regard to the product/study it is preparing, in order to provide MRD staff the opportunity to provide comments.
- The system must be submitted to the MRD in electronic form and the MRD will retain the authorship.

1.1 Objective

Establishment and design of an electronic digital system for monitoring balanced regional socio-economic development in Kosovo is highly necessary in order to have a clear picture of the overall development at the level of the Republic of Kosovo.

Digitalization of processes and services at the regional level has long been one of the most necessary requirements as a way to provide more efficient services and increase quality and provide accurate and detailed reporting. It is of particular importance that in addition to data collection in the regions of Kosovo we have the best possible monitoring and are able to orient investments and strategic policies of economic character in certain regions based on real data that will be provided by the electronic system as well as by the performance assessment.

The report of the feasibility study for monitoring the balanced regional socio-economic development in Kosovo and the design of the system aims to establish a platform which will be implemented in all municipalities of Kosovo focusing on the relevant parameters and features in regional level in order for the data exchange, systems interaction and reporting provide a clearer and more transparent overview where this study will be a guide which will be used in the future as a tool for implementing data access and increase efficiency for monitoring balanced regional socio-economic development in Kosovo where it is also part of meeting European Union standards for Kosovo and in particular the Ministry of Regional Development.

1.2 Range

During the drafting of the report for monitoring the balanced regional socio-economic development of Kosovo and the design of the system, the main focus of the scope will be regions of Kosovo, respectively the municipalities, followed by the ministries where they will interact and support closely by providing services from their existing electronic IT systems as well as Agencies which will also provide support with their data whereby, in real time or periodically, will enrich our system with the necessary data for the preparation of reports and orientation of short-term, medium-term and long-term investments. This exchange of inter-institutional information will be carried out based on inter-institutional cooperation by agreeing on processes in accordance with the laws in force of the Republic of Kosovo.

In the framework of this analysis, the following areas have been identified as ones in which the level of the system should be assessed:

1. Evidence of current systems.

2. The current manner of exchanging information between them.

3. Future requests for exchange of information between regions - municipalities, agencies and ministries.

4. Processes and services that are currently not digitized (manual).

1.3 Methodology

Given the requirements and the main purpose of this study, the methodology that has been followed is based on these steps:

- Compilation of the list of key systems and institutions in this project
- Collection of information and in-depth analysis of current systems by responsible persons. Drafting a questionnaire for assessment of capacities, features and needs.
- Recommendation about systems and resources.
- Proposing the most appropriate platforms referring to the region and the EU, with special emphasis on the analysis of the international system for regional development (Inforegio EU Regional Policy European Commission).
- Presentation and interpretation of results according to the requirements of MRD.
- Reporting and suggestions from the system.

1.4 Time of Implementation

Stages	Milestones	Deadline
Collection of information (First Stage)	 Choosing key institutions Choosing key systems Drafting assessment questionnaires 	(10 days)
Systems assessment (Second stage)	 Assessment of the capacity in terms of Hardware Software Legal aspects Assessment according to action possibilities Assessment according to system safety 	(10 days)
Documentation and mapping of systems according to phases 1 and 2 (Third phase)	 Documentation and general report (detailed analysis) Mapping according to software infrastructure Mapping according to importance and action opportunities Recommendation for choosing infrastructure and solutions 	(10 days)
Development of the database	 Summary of database information Establishing the database according to the report and recommendations Links and relations according to database requests with existing databases for receiving data 	(15 days)
Development of the app	 Creating forms in harmony with the requirements Connections to APIs or WEB Services links that enable communications with other applications Testing Publication 	(30 days)

Table 1. Time of Implementation

1.5 Acronyms and Abbreviations

HBS13	Household Budget Survey
KBRA	Kosovo Business Registration Agency
ARIS	Address Registration Information System
TAK	Tax Administration of Kosovo
AIS	Agency for Information Society
KAS	Kosovo Agency of Statistics
ASP.NET	Active Server Pages .NET
ASYCUDA	Automated System for Customs Data
KFVA	Food and Veterinary Agency of Kosovo
AAD	Agency for Agricultural Development
EU	European Union
KIS	Kosovo Insurance Bureau
BMS	Border Management System
CRM	Customer Relations Management
DB	Database
КС	Kosovo Customs
DPD	Department for Production of Documents
DCAM	Department of Citizenship, Asylum and Migration
DVIS	Domestic Violence Information System
CPI12	Consumer price index
IMHI	Inspection and Monitoring of Health Institutions
KJC	Kosovo Judicial Council
KPIS	Kosovo Police Information System
ARK	Assembly of the Republic of Kosovo
LHI	Licensing of Health Institutions
LFS	Labour Force Statistics
lmis	Labour Management Information System
MPA	Ministry of Public Administration
MLGA	Ministry of Local Government Administration
MEST	Ministry of Education, Science and Technology
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MESP	Ministry of Environment and Spatial Planning
MIA	Ministry of Internal Affairs
MLSW	Ministry of Labour and Social Welfare
MFA	Ministry of Foreign Affairs
МоН	Ministry of Health
MS-SQL	Microsoft SQL
MTI	Ministry of Trade and Industry
OnTra	Online Tracking

HEIP	Higher Education Information Platform
KP	Kosovo Police
PPIdbr	Product Price Index Database
PRIMS	Police Resource Information System.
SP	State Prosecution
RIMS	Resource Information Management System
HSES	Health Statistics Evidence System
RMS	Revenue Management System
FMSJ	File Management System for Judges
HEIMS	Higher Education Information Management System
PSMS	Pharmaceutical Stock Management System
HRMS	Human Resource Management System
EMIS	Employment Management Information System
CLIS	Cadastral Land Information System
SESC	System for Electronic Submission in Courts
WAS	Work Attendance System
PMS	Project Management System
IT	Information Technology
VPN	Virtual Private Network
OPM	Office of the Prime Minister

Table 2. Acronyms

1.7 Municipal contacts:

Municipality:	Municipal Official	Directorate	E-mail
Deçan	· · ·		
Gjakove			
Gllogoc			
Gjilan			
Dragash			
Istog			
Kaçanik			
Kline			
Fushe Kosove			
Kamenice			
Leposaviq			
Lipjan			
Obiliq			
Rahovec			
Peje			
Podujeve			
Prishtine			
Prizren			
Skenderaj			
Shtime			
Shterpce			
Suhareke			
Ferizaj			
Viti			
Vushtrri			
Zubin Potok			
Zveçan			
Malisheve			
Novoberde			
North			
Mitrovica			
South			
Mitrovica			
Junik			
Hani i Elezit			
Mamushe			
Graçanice Rapillua			
Ranillug			
Partesh			
Kllokot			

1.8 Institutional contacts:

Artan Dreshaj, Director of the Systems and Communications Administration Department

Ministry of Internal Affairs

Mensur Maloku, System Administrator Department of Information Technology

Ministry of Justice

Resim Novobërdaliu, DBA Department of Information Technology

Ministry of Justice

Afërdita Thaçi, IDE Director of the Information Technology Directorate

Kosovo Cadastral Agency

Rifat Hyseni, Director of Information Technology

Tax Administration of Kosovo

Ilir Hetemi, Database Administrator

State Prosecution

Bekir Morina, Head of Information Technology Sector

Kosovo Customs

Agim Qela, IT Director

Ministry of Finance

Sead Sinani, Systems Administrator, Department of Information Technology

Office of the Prime Minister

Fatmir Stublla, Systems Administrator, Department of Information Technology

Office of the Prime Minister

Shpetim Kalludra, Department of Information Technology

Ministry of Labour and Social Welfare

Vedat Macastena, IT Official

Kosovo Business Registration Agency

Dardan Xhoshi, Systems Administrator

Kosovo Agency of Statistics

Vullnet Kabashi, Director of the IT Directorate

Assembly of the Republic of Kosovo Merita Prestreshi, IT Official Assembly of the Republic of Kosovo Genc Blakqori, Network Official Assembly of the Republic of Kosovo Poliksena Berisha, IT Official for Municipalities Ministry of Local Government Administration Shehadin Rrustemi, IT Official Ministry of Local Government Administration Gazmend Krasnigi, Director of the IT Department Kosovo Police Fëllanza Balaj, Director Ministry of Agriculture, Forestry and Rural Development Zenel Hisenaj, acting Department for Health Information System Ministry of Health Afërdita Arifi, Director of IT and Logistics Department Ministry of Foreign Affairs Ardian Berisha, Database Administrator Kosovo Judicial Council Mubekir Begiri, Government Network Administrator Agency for Information Society Nazmi Çollaku, Information Technology Official Kosovo Food and Veterinary Agency Elhami Hajdari, Information Technology Official Agriculture Development Agency Teuta Sopjani, Information Technology Official Ministry of Education, Science and Technology Granit Elshani, Information Technology Official

Ministry of Trade and Industry Bekim Hoxha, Director Department for Production of Documents Abedin Mehmeti, Head of Division (AFIS & SYSTEMS) Department for Production of Documents

1.9 Some of the systems data will be exchanged with are:

System\App	URL	Description
e-Kosova	<u>https://ekosova.rks-</u> gov.net/	Online services platform. State platform where public services located in the offices and physical counters of institutions are provided in an electronic manner.
MINISTRY OF INTERNAL AFFAIRS	Civil Status System of the Republic of Kosovo	Civil status system and provision of official and personal documentation of the citizens of the Republic of Kosovo.
E-Pasuria	<u>https://e-pasuria.rks-</u> gov.net/	The Asset Management System, or e-pasuria in short, was developed for the needs of the Government of the Republic of Kosovo. E-pasuria has been implemented in all ministries, municipalities, agencies and other institutions of importance to Kosovo. All assets are manged through this system (assets, consumables, etc.) of institutions.
e-Arkiva	<u>https://e-arkiva.rks-</u> gov.net/	It was developed for the needs of Kosovo institutions. The system has been implemented in Municipalities, Ministries, Agencies and other institutions of the Republic of Kosovo. Through this system, the centralized electronic archive of our institutions has been established.
Online Businesses	<u>https://e-bizneset.rks-</u> gov.net/	Registration and Licensing of Online Businesses.
Business Registration Agency	https://arbk.rks- gov.net/	Electronic system for displaying business data
Business Registration Agency	https://rbk.rks-gov.net/	BUSINESS REGISTRATION SYSTEM OF KOSOVO
Business Registration Agency	https://arbk-rp.rks- gov.net/	SYSTEM FOR REGISTRATION OF BUSINESS MORTGAGE OF KOSOVO
e-Shkolla	https://e- planprogrami.rks- gov.net/User/LogOn?R eturnUrl=%2f	Dedicated to MEST

SMIAL	MASHT	HIGHER EDUCATION INFORMATION MANAGEMENT SYSTEM (HEIMS)
Document Management System	http://smd.rks-gov.net/	It was developed for the needs of Kosovo institutions. The system has been implemented in Municipalities, Ministries, Agencies and other institutions of the Republic of Kosovo. The centralized document management of our institutions was established through this system.
Human Resource System	<u>http://simbnj.rks-</u> gov.net/	Human Resource System
Communicator Service (Office Communicator 2007 R2)	<u>http://www.rks-</u> <u>gov.net/sq-</u> <u>AL/vegeza/Pages/Co</u> <u>mmunicator.aspx</u>	In the framework of the e-government strategy, the Institutions of the Republic of Kosovo have implemented the project Communicator Service (Office Communicator 2007 R2).
State E-Portal	http://www.rks-gov.net	Developed to provide central access to information and services provided by government institutions.
PMS Project Management System	http://smp/smp/	Project Management System
e-Turizmi	https://e-turizmi.rks- gov.net/LogIn.aspx?I=0	Tourism system
MINISTRY OF HEALTH	<u>https://mshws.rks-</u> gov.net/	Pharmaceutical stock management system
MINISTRY OF HEALTH	<u>https://sessh.rks-</u> gov.net/#/Home	Health Information System and reporting of statistical health data
MINISTRY OF HEALTH	<u>https://rhmsh.rks-</u> gov.net/	Licensing
MINISTRY OF HEALTH	<u>https://smsf.rks-</u> gov.net/	Pharmaceutical Stock Management System for the Department of Prisons
KOSOVO CADASTRAL AGENCY	http://geoportal.rks- gov.net/	Geoportal
KOSOVO CADASTRAL AGENCY	<u>https://siktk-online.rks-</u> gov.net/Online/	Digital Cadastral Services System

1.9 Safety

The level of security from the aspect of electronic communication within the government based on the study and survey is very satisfactory; however, there is undoubtedly need for higher advancement in future planning periods, especially in cases where communication crosses the domains of certain departments or agencies for purposes of exchanging information between them or even with citizens.

Internally, the Government of the Republic of Kosovo has a domain controller which performs secure authentication for access to the internal network in all relevant institutions. Regarding the aspect of communication of institutions between each other, apart from the independent fiber network, this connection is realized with VPN and information is exchanged in an encrypted manner.

Implementation of security policies and clear procedures which will clearly present how the individual or entity accesses the information of interest in electronic form is necessary as a key part of the security aspect and the exchange between state administration entities. In this regard it is also worth mentioning the fact that AIS as a body responsible for the internal and external organization of IT systems for the Government of the Republic of Kosovo, is also responsible for defining these procedures, therefore we as the Ministry, will place the electronic system for balanced regional socio-economic development on AIS servers, where there will be sufficient safety from attempts to misuse the web application and unauthorized logging as part of the authorization in the system using strong users and passwords through which will achieve a completely reliable communication.

The electronic system for balanced regional socio-economic development must be in full compliance with the regulation for the development of apps at the state level and will be scanned in advance by AIS experts for the suitability and acceptability of placement on their servers.

The system must:

- Make access by unauthorized users to the app impossible.
- Provide access to the app only to pre-authorized persons and the list of authorizations for access to the system.
- Ensure storage of documents in the system in accordance with the policies and procedures of the MRD regarding the storage and longevity of electronic documents.
- Has zero tolerance for loss of electronic documents.
- Ensure that documents are not lost during various migrations and transfers.

• Ensure the preservation of the original format of electronic documents after the migration of MRD information.

• Ensure storage of documents during the transfer of electronic documents.

The system must:

- Enable the classification of electronic documents from the aspect of security.
- Enable document classification at these four levels:
 - Internal MRD access with exceptions,
 - Limited access,
 - Confidential access.
- Enable the increase or decrease of access levels based on the needs of the MRD:

o The sign "Internal access of MRD" Documents which are not public and have a lower degree of confidentiality must bear the sign, internal access of MRD. These documents can be viewed and read by all employees of the Ministry of Regional Development authorized to view the documents according to the approaches. Authorizations to view documents must be obtained in advance. Disclosure of these documents without prior authorization harms the interests of the Ministry of Regional Development.

o The sign "Restricted Access" identifies documents which have the highest degree of confidentiality and unauthorized disclosure of which seriously harms the interests of the Ministry of Regional Development.

o The sign "Confidential approach" identifies the documents with the highest degree of confidentiality, the disclosure of which seriously harms the interests of the Ministry.

o Access to these documents should be restricted and strictly managed.

2.0 CHARACTERISTICS OF THE ELECTRONIC SYSTEM FOR MONITORING BALANCED REGIONAL SOCIO-ECONOMIC DEVELOPMENT

The system must ensure the possibility of managing the electronic information of the ministry starting from the initiation, cooperation during the drafting, authorized distribution, finalization and storage of electronic data throughout their life cycle, defined in advance by the MRD, and must meet the following conditions:

- Reliability
 - The system must be able to operate, on an ongoing basis, in accordance with the MRD procedures regarding electronic data management.
 - The electronic system should be able to support changes in the MRD and should ensure that the characteristics of electronic documents do not change after any transfer of data or documents and exchanges from other systems.
 - The system should be able to receive and capture electronic documents generated by the functions and activities of the MRD.
 - The system should enable the organization of documents in such a manner that reflects the processes of the MRD.
 - The electronic system should protect electronic documents from possible alterations or destruction.
 - The electronic system should leave traces on any changed or deleted document and access to it.
 - The electronic system should function as the main source of information and should provide access to authorized users
- Integrity
 - In order to prevent unauthorized access, relocation and deletion of documents and data, the electronic system should provide control measures such as strict monitoring of access to the system, verification of users, authorized destruction of documentation and security.
- Compliance
 - The electronic system should function in accordance with the legal requirements of the Republic of Kosovo.
- Inclusion
 - The electronic system should manage electronic documents or data which result from the full range of activities according to the indicators mentioned in the attached report.
- Usability

- The electronic system should provide easy retrieval of electronic data, extraction of reports and documents from the system and storage of the document in accordance with the requirements of MRD.
- Systematic management of electronic documents and data
 - The electronic system must enable the systematic management of electronic data by beginning with the creation, maintenance and destruction.

2.1 DATA IMPORT

The electronic system for monitoring the balanced regional socio-economic development should enable data import from the above-mentioned systems but also from other existing inter-ministerial systems in order to best display the indicators with real value through links or web services which will be established within the government network but also within the municipal one.

The data will be mainly empirical, meaning values or figures, which will be clear indicators, which will enrich the electronic system for balanced regional socio-economic development where they will then be processed according to their relevant character and categories through compilation of lists, tables, diagrams, functions but also generation of reports where then this data must be processed by artificial intelligence integrated into the system according to our directives, in order for them to be able to display results and make comparisons between the respective regions.

Communication between this exchange will be provided by the existing technological system and infrastructure within the public institutions of the Republic of Kosovo maintained by AIS and beyond.

In addition to being automatically imported from other systems, data must also be able to be uploaded through electronic documents such as excel or another type accepted by the system.

- Guarantee that the documents and data sent to the system must retain their original form.
- Enable authorized users to submit documents in all formats as follows:
 - o Word,
 - o Excel,
 - o PowerPoint,
 - o Access,
 - Digital schemes and maps,
 - o Images,
 - All other forms of documents.
- Enable sending documents existing electronically directly from any computer of any authorized user.

- Enable sending e-mails directly from any authorized user, thus becoming a form of internal communication.
- Enable sending documents and data from existing applications of the Republic of Kosovo and MRD.
- Enable sending documents from all other document sources to MRD.
- The system must enable the mass sending of electronic documents or by sending the path where the document is located.
- The system should generate its own reference number which will enable the MRD to send documents in large number with the same designation.
- The system should enable the user to rename documents with the same name.

2.2 UPLOADING DOCUMENTS AND DATA

- Register and manage all documents regardless of the format and structure of the electronic document.
- Ensure that all submitted documents are accompanied by the classification scheme according to the requirement of the MRD.
- Enable sending documents and data individually.
- Enable users to choose where to place the document.
- The system should enable the user to send the document in electronic files, from which the document file is taken for processing or reading according to the request, respectively from the category or where the indicator is located.
- Enable sending documents in large numbers to the electronic system.
- Generate an automatic report at the moment of sending the data to the system.
- The report should provide information regarding the number of documents or data sent, the result of sending as well as the time of sending as well as any other field according to the selection.
- When sending documents or data, it should enable the leaving of traces in both systems.

2.3 METADATA

Metadata is structured information on the electronic document which enables the creation, management and use of electronic documents throughout their life cycle.

Metadata means indexing and enriching electronic documents with additional data.

The system should:

- Apply metadata to all electronic documents at all levels of aggregation.
- Enable the creation of metadata list and the creation of new metadata.
- Support data formats defined in ISO 8601.
- Apply metadata at the moment of entering data or creating a new document.
- Allow uploading electronic documents if the mandatory metadata are not completed
- Allow the application administrator to define mandatory and optional metadata.

• Be able to identify mandatory metadata and optional metadata and act in accordance with their level in terms of relevance.

• Enable inheritance of hierarchical aggregation metadata and electronic documents from previous aggregation.

• Limit the number of metadata allowed for each document, aggregation, or class.

• Use the content of metadata to determine the functionality of electronic documents. Using metadata provided information, the system identifies the document in terms of security, relevance and access management.

• Enable updating and changing metadata for different electronic documents depending on the needs and legal obligations of MRD.

- Support at least these metadata formats:
 - Alphabetic
 - Alphanumerical
 - Numerical
 - Data
 - Logic format (yes / no; correct / incorrect)

• Enable the search of electronic documents by knowing all the above-mentioned metadata formats.

• Provide the possibility of automatically extracting metadata elements from the document at the moment of entering the document or data in the system (e.g., business name, registration number, unique identification number, city, address, registration date, status, owner name, and other data according to the character and category of data) that the system will display according to the need or definition adapted by MRD.

- Ensure displaying of the metadata list in a slider menu.
- The user should be able to choose from the list of metadata provided by the slider menu.
- Enables the user to print additional metadata, if not provided by the slider menu.

- Enable metadata retrieval from the system
- Ensure that metadata does not change when importing electronic documents.

• Prevent automatic change of metadata of electronic documents imported from other applications.

• Enable authorized users to manually make changes to metadata of electronic documents imported from other applications.

- Prevent changes to metadata by unauthorized users.
- Metadata elements for the classification scheme:
 - Denomination This element can be the name of the indicator responsible for the classification scheme.
 - Identification number,
 - Description
 - Elements defined for users
 - Other elements according to request from the attached report

Elements of mandates for class and aggregation:

- o Identification number,
- o Name,
- o Description,
- o Date of creation of the class or aggregation,
- o Closing date,
- o Current status (open, missing or closed),
- o Person or position responsible for the maintenance of class or aggregation,
- o Access rights of authorized users,
- o Access rights of authorized groups,
- o Level of security,
- o Date of deletion,
- o Deleted by,
- o Classification,
- o Classification history,
- o Reclassification,
- o Connections with other aggregations,
- o Storage period.

Metadata elements for documents and electronic data:

- Identification number,
- Name,
- Title,
- Subjects,
- Person responsible for maintenance of the electronic system,
- Date of receipt of the document or data from the system,
- Addresser,
- Addressee,
- Document type,
- Level of security,
- Indicator for vital documents and data,
- Indicator for classified documents or data,
- Storage period.

2.4 DOCUMENT AND DATA MANAGEMENT

Documents of the Ministry of Regional Development exist in electronic and physical form. Documents in physical form are print documents. The relationship between physical and electronic documents is very different.

- Also enable the management of physical documents.
- Ensure the functionality of physical documents.
- Physical documents cannot be registered in the system; however, the system must enable the registration and maintenance of metadata, markers, and links between documents or physical aggregations with documents or electronic aggregates which will be stored in a space within the relevant module of the sending institution.
- Enable the definition of physical aggregations and should enable the same management of physical documents with electronic documents and data.
- Define, in the classification scheme, the aggregates which contain documents of both natures, electronic documents and physical documents if they exist.
- Enable integrated management for both types of documents.
- Identify and categorize physical documents related to electronic documents through metadata as hybrids.
- Enable the connection of metadata between electronic data and documents through web services.
- Enable the marker to identify the data.
- Enable the marker to identify the exact location of the data.
- Enable aggregations that contain physical and electronic documents that share the same metadata should be defined by the hybrid aggregation system, and should be treated as hybrid aggregates.
- Enable different configurations of metadata elements for physical aggregates and electronic aggregations.
- Enable a physical aggregation which is a hybrid one with an electronic aggregation, for purposes of using the same title reference number and other information.
- Distinguish physical aggregation which is hybrid with electronic aggregation and which uses electronic aggregation data and identification as physical aggregation should be marked with a sign indicating that this aggregation is physical aggregation.
- In terms of metadata for aggregations and physical documents the system must contain information about the physical archiving of the document or aggregation.
- Enable tracking of aggregation movement and physical documents.

- Enable that when searching and finding physical documents, these documents are accompanied by metadata.
- Enable physical documents to have security categories, just like electronic documents.
- Provide the ability to control access and security over documents.
- Enable the registration and recognition of documents and data.

2.5 SEARCHING AND FINDING DATA

- Enable authorized users to search and find electronic data and documents in all formats.
- Enable searching for indicators based on denomination.
- Enable searching for indicators based on content.
- Enable searching by date.
- Enable searching based on other information contained in the report metadata.
- Obtain information on the creator of the marker data.
- Provide information on the application in which the data was generated.
- Enable simple search of electronic data and documents.
- Enable advanced search of electronic data and documents.
- Enable searching using any appointment mechanism.
- Enable searching by the whole system.
- Enable searching by location of the authorized user in the "search only here" application.
- Enable filtering and searching of required data.
- Provide the number of required results.
- Provide the opportunity to enrich the research with additional information.
- Reduce the number of findings, depending on the additional information provided in the search.
- Enable saving results for subsequent access.
- Enable the opening of the data found.
- Enable the sending of data found in the places of their storage in accordance with the rules and procedures of the Ministry of Regional Development.
- Enable sending documents found in official email addresses of the Ministry of Regional Development and others.
- Disable sending electronic documents to private emails, unless differently regulated differently by MRD.

2.6 TRANSFER

- Provide the possibility of data transfer to other electronic systems.
- Ensure that transferred documents and electronic data retain their original format, are not degraded, are exported as an integral unit, and do not lose metadata, other additional information and links to documents and other electronic data.
- Ensures that in case of transfer or export of electronic documents, they are exported in their current structure, parent aggregation, child aggregation and electronic document. It means that the system enables the transfer of documents without damaging the organizational hierarchy of aggregations.
- In case of transfer of a class, must keep all the aggregates and documents within that class.
- In case of transfer of an aggregation, must keep all child aggregations and documents within that aggregation.
- In case of transfer of an electronic document, must save all the metadata that constitute that document.
- Ensure that the transfer is carried out in a sequence of operations such as:
 - Protecting the content and structure of documents from degradation and ensuring that the content and structure are not degraded,
 - All electronic document components are transferred together. Multicomponent electronic document can be reports which include all supporting documents for payment, it can be the email which contains the attachment, etc.
 - All links between the document and its metadata are stored and not affected,
 - All links between document, aggregation and classes are preserved and not damaged.
- Provide the possibility of export of documents and electronic data in large numbers.
- Enable the storage of audit trails for all transferred documents.
- Keep all documents and electronic data until the transfer is completed.
- Provide two options after the transfer:
 - Store data in the system
 - Delete data from the system,
- In case of transfer or export failure, must generate a report immediately informing the user which documents have been transferred and which have not.
- Provide compression capability and data transfer functions.
- Must ensure that in case of transfer, the transferred documents and data keep the classification scheme unchanged.

2.7 **REPORTING**

- Reporting is a very important function that it must provide. The system should provide, but not be limited to the types of reporting mentioned below:
 - Number of classes,
 - Number of aggregations,
 - Number of electronic data,
 - Number of users,
 - Number of active users,
 - Number of passive users,
- Reports should be clear and concise.
- Reports should only provide information that is requested in advance
- The SYSTEM should provide access to unauthorized users.
- Reporting should be provided only to authorized users.
- Automatically, reports should be provided only to the SYSTEM administrator.
- The SYSTEM should provide the possibility of printing reports.
- The SYSTEM should offer the possibility of sending reports by email.
- The SYSTEM should provide the opening of reports with other programs, office programs or other programs for further processing of reports.
- Reports should be provided for different periods of time, according to the needs of the Ministry.
- The SYSTEM should contain the characteristics for sorting and selecting information from the report.
- The SYSTEM should contain features for summarizing the information extracted from the reports.
- In case of transfer of hybrid documents, the SYSTEM should oblige the administrator to confirm whether the physical documents have been transferred or what their status is.

2.8 **BETIM-DELETION, MODIFICATION AND RELOCATION OF** ELECTRONIC DATA

- Deletion and modification of documents must be strictly controlled.
- The SYSTEM must enable strict control of the deletion and modification of the content of the document in order to ensure the integrity of the documents.
- The electronic document, in principle, must not be deleted by users as long as the storage period has not expired, determined by the Ministry of Regional Development of the Republic of Kosovo in accordance with the legal needs and obligations.
- The SYSTEM must deprive users for deleting or relocating electronic documents.
- The SYSTEM must provide the possibility in case of specific requests, provide exemptions and allow the deletion or relocation of the documents.
- The electronic document can be deleted only after the expiration date.
- The SYSTEM must provide the possibility of deleting the document in case of error of the authorized user.
- In case of deletion of the electronic document due to the error of the authorized user, the SYSTEM must provide the possibility of saving the information for the deletion the document in the audit traces.
- Also, in case of deletion of the document, the SYSTEM must mark the document as "deleted or relocated, date of deletion, author".
- In case of relocation of the document, the SYSTEM must place an indicator in the new location.
- Marking is not mandatory in case of transfer of documents from the SYSTEM to any other application.
- The SYSTEM, in any case, must provide the possibility of marking classes, aggregations or transferred documents.
- The SYSTEM must enable the possibility to recognize the difference between relocation and transfer. These two must be treated as two different processes.
- The SYSTEM must provide strict controls for deletions and modifications of aggregations and classes.
- The SYSTEM must enable the extraction of the electronic document. Extraction means saving the original document and the edited copy.
- Extraction must be enabled in special cases, where the MRD should publish electronic documents which contain sensitive information.

2.9 INTEGRATION

- Enable the integration of all existing applications developed, which are an integral part of the Electronic System developed by us.
- Provide the possibility to integrate with all existing applications and databases
- The integration of the SYSTEM with other applications of the Ministry of Regional Development must be done in accordance with the policies, rules and procedures of the Ministry.
- Provide the possibility of finding electronic documents from other existing applications in accordance with the policies of the Ministry.
- Documents received from other applications of the Ministry, in accordance with the rules and procedures of the Ministry, must be provided separately and must be distinguished from the electronic data found in the system.
- Deprive the provision of information if requested by applications.
- Provide information only if required by the SYSTEM and only if the user has prior authorization.

3.0 NON-FUNCTIONAL REQUIREMENTS

Navigation and use

The system must:

- Be easy to use.
- Upon access, to each user, the first page of the application must appear. The first page of the application should be the starting point.
- The first page of the application must not be loaded with data unless otherwise required during development.
- The user should see only those data for which they are primarily authorized.
- Users who do not have access to any document should see the front page but the page must not contain any information. The page must be blank.
- Enable the insertion of electronic documents in any window / book, as it does physically.
- Organize documents within the system based on the identification number, or in case of its absence, based on the name of the document.
- The user must be able to know his location at any time while navigating.
- The SYSTEM must present in running gear the entire path of the user during navigation.

Homepage

- The homepage of the SYSTEM must not be loaded with information.
- The homepage must be easily accessible to the user and easy to navigate.
- The homepage must provide the search area for electronic documents.
- The homepage must provide the user with information for which the user has prior authorization.
- The information must be organized in the form of a tree, hierarchically.
- The hierarchical form must contain classes, aggregates, and documents within aggregations.
- The user must be able to find the document in the search area for the document.
- The user must be able to find the electronic document by navigating through clusters and aggregations.
- The homepage can also provide a list of the most searched documents.
- The homepage must also provide the logo of the Ministry of Regional Development.
- For the user, the homepage must provide one page for each protocol book.
- The user, depending on the nature of the document, must be able to register the document on the relevant page.
- The SYSTEM must send the document to the specified class, aggregation and subaggregation, being able to read the identification number or name of the document.

• The SYSTEM must provide the possibility of finding the name of the document from the list of documents and identification numbers, and to attach the relevant name to the document by reading the identification number. The same applies for attaching the identification number to if the document is inserted into the system using the document name.

Support

- Provide support for at least 200 users.
- Provide access for all users inside the Ministry building.
- Enable the application's administrator to allow or deny access for the aforementioned parties, according to the Ministry's information management policies.