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Feasibility study for the implementation of EITI data integrated system in Albania

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Glossary and abbreviation

Abbreviations	Explanation
EITI	Extractive Industries Transparency Initiative
ALBEITI	Albanian Extractive Industries Transparency Initiative
IT	Information Technology
TOR	Terms of Reference
MEI	Ministry of Energy and Industry
NANR	National Agency of Natural Resources
GDT	Directorate General of Taxation
DGC	Directorate General of Customs
Authentication	The process of validating the credential information (digital certificate or User ID/password).
Correlation ID	A unique identifier assigned by the Gateway. For example a correlation ID is returned in response to a document (form) submission. This can be used (in DSP) to poll for the response
DIS (Departmental Interface Server)	Provides the interface between the service owner (i.e. Department) and the central Gateway. Communication with the Gateway uses SOAP reliable messaging and XML Gov Talk standards.
Digital Certificate	An X.509 digital certificate contains identifying information and a public key. The owner of the certificate possesses the corresponding private key, which proves the certificate (and therefore the information on it) belongs to them. Any attempt to change information on the certificate will be detected. The certificate/private key is also used to sign transactions. A

	certificate is obtained from a certification authority.
HTTPS (Hyper Text Transfer Protocol Secure)	Employs the Secure Socket Layer (SSL) protocol to provide a secure HTTP communication channel over the Internet between the user's computer (browser or application) and the Portal/Gateway, and between the Portal and the Gateway
Portal	A Portal typically refers to a web Portal (i.e. web site). Departments (i.e. a Government Departments, Local Authorities or other Government Agencies) provide online access to secure interactive services, as well as generally available information, through Portals. A Portal uses the Gateway to register users with the Gateway and enroll them in services. Users can then logon to the Portal (i.e. authenticate with the Gateway) and use these services securely to submit business forms - for example, file a Self Assessment tax return online from the HM Revenue & Customs Web site
Service	Consists of a grouping of one or more transactions. A service represents the lowest level of granularity by which access is granted. A service specifies the minimum authentication level a credential must have to access (see/enroll) in the service. See Authentication level.
SOAP Portal Interface	Exposes a full range of methods to be called from a Portal.
SOAP Public Interface	Exposes methods that can be called directly from an application. This is restricted to the 'read-only' methods offered by the SOAP Portal Interface.
SSL (Secure Sockets Layer)	Protocol uses Public Key Infrastructure (PKI) technology to provide encrypted communication over the Internet. It is used by the HTTPS access method.
Transaction Engine	Core component of the Gateway that and provides an interface to enable electronic forms and requests to be submitted to service owners.

XML (Extensible Markup Language)	A specification designed especially for the definition, transmission, validation, and interpretation of data between organizations.
XML Schema	Describes a particular XML syntax. It defines the structure of the document in terms of elements and sub-elements, whether they are optional or not and the number of times they can be repeated. It also specifies any attributes associated with an element.

1. Executive Summary

This feasibility study is focused on integrated assessment system for EITI data. The study was undertaken in close cooperation with EITI and all interested parties. For preparing this report we have been held meetings with the representatives of the information technology departments for each of the institutions. Data and information that we are referring to are taken from meetings and electronic communications between the interested parties, as well as documents, laws and other important information for the performance of the published study.

This study is the first project step to computerize EITI data system in an institutional level. The study was conducted by a team of DMCS's experts. The team of experts[1] has developed the necessary recommendations based on meetings with EITI staff's and representatives of other stakeholders such as the Ministry of Finance, General Directorate of Taxation, General Directorate of Customs and NANR, based on relevant documents and best practices from similar projects. The study consists on seven sections where the second section presents the study objectives as well as information about the concerned parties. The third chapter reflects DMCS methodology followed for the conduction of this feasibility study and evaluation method that is followed to reach the following conclusions.

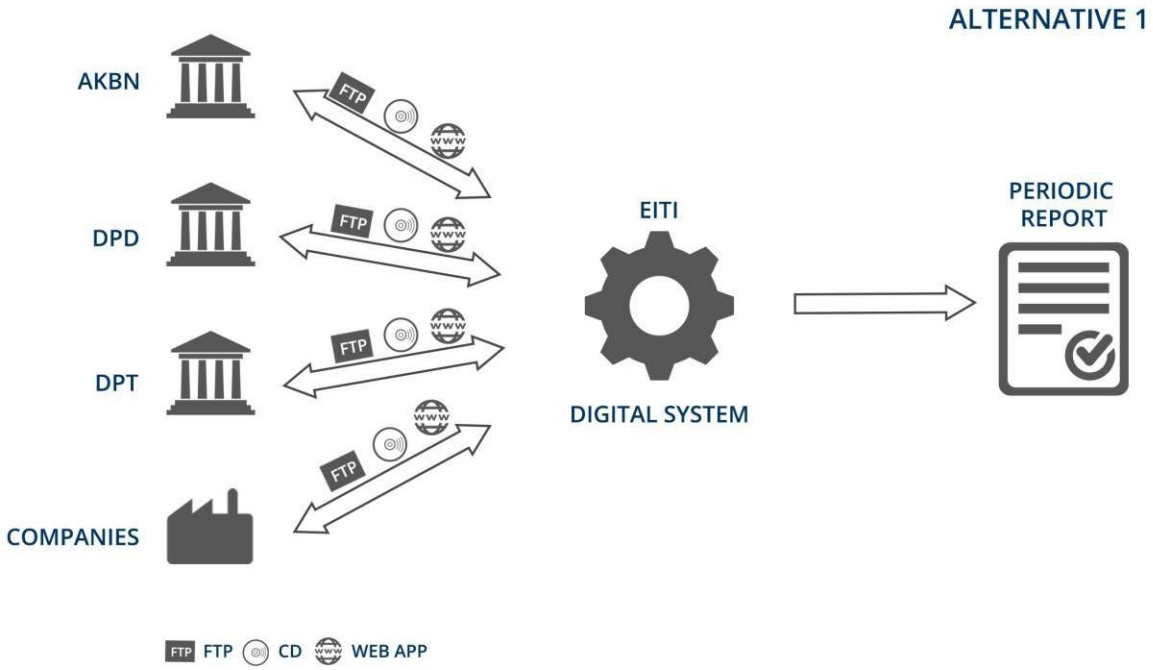
In the fourth section are reflected the analysis of the current situation for each of the institutions. The working group has assessed the respective institutions if they possess a system for keeping and data processing, as well as the institutions integrating possibility with EITI. The team of experts has evaluated the broadcasting possibility in an automated form by the system of interested parties to the EITI system via secure GovNET channel. Following our work is carried out the evaluation in the case when institutions possess a system for receiving and sending data through GovNET and where the institution does not have such a system. It is also evaluated the plan for the computerized system construction in the future and the staff possibilities on the process of systems integration or if the system should be maintained by a third party. Also, this section gives an overview of the legal framework involved in the integration process of EITI system with the interested parties and whether it needs any changes or additions to consolidate this process.

[1] The team consists of three experts: Mr. Dritan Mezini, Mr. Silvin Laze and Mr. Ervin Cfarku IT experts

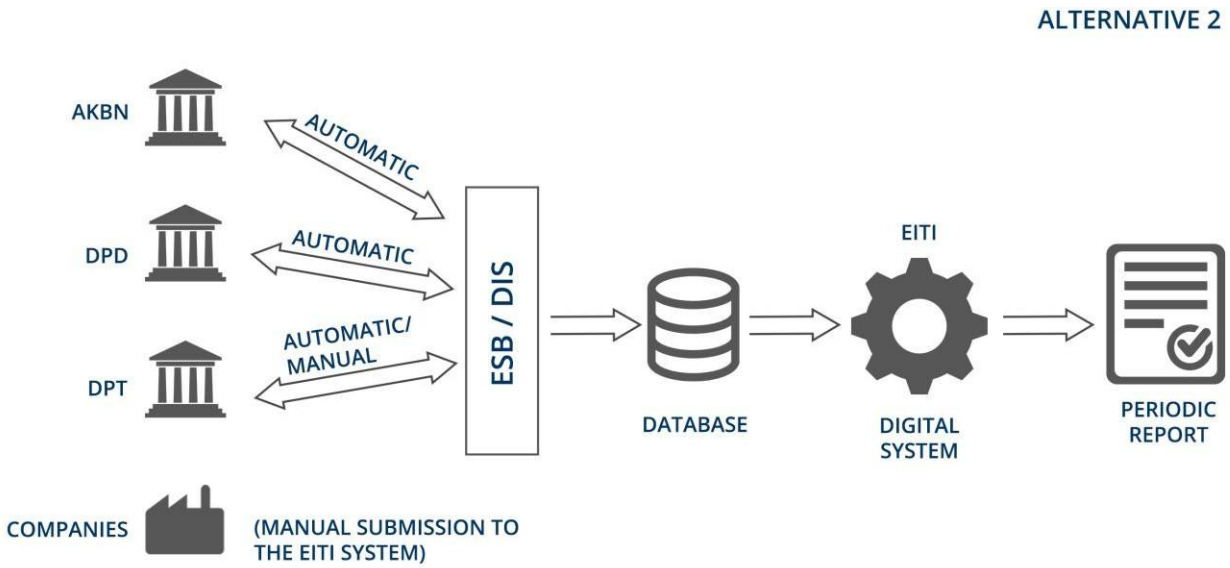
EITI system approach is reflected in the fifth section which presents the functional requirements and non-functional requirements of the system that EITI should have. Also is described the whole process for the interoperability framework reflecting the interaction among the interested parties and technical specifications to achieve this integration by describing the steps to be taken for the implementation of institutional interaction.

In the following sections are presented our conclusions and solutions that are suggested to EITI to integrate the data system. At the end of the report are recommended two alternatives, automated alternatives (online) and manual alternatives (offline).

In the manual alternative the system in EITI will not be part of GovNET and the data are transmitted through secondary channels such as CD, web application, FTP and so on, in a predetermined format among the interested parties. EITI should import these data into the computerized system where the system produces reports to be used in the final report. In this alternative are included only the construction costs of the computerized system and the server where this system will be installed. Given that in this alternative are not included the connection costs with GovNET as well as hardware and software equipment that are needed, the total cost is lower than the automated alternatives and is evaluated at a total cost of 92.400 USD.



In the automated option are included all interested parties that possess a computerized system for data storage and are part of GovNET. In this alternative system of EITI should be part of GovNET and the required data by EITI are transmitted through the ESB channel part of GovNET. With this method are avoided the errors arising from human factor in laying and data processing. Also the data to be transmitted are digitally certified by who can prove their authenticity and security during transmission. This alternative has higher costs than the first explained option above because there are included the construction costs of EITI system and the connection costs with GovNET. After the analysis that are done in the six chapter, the implementation of this alternative has an estimate cost of 259.440 - 270.720 USD



We suggest implementing it sub divided in two steps. First is the creation of a manual system estimated to be completed within 6 months. In the second phase, the system will be developed and extended including the communication through ESB channel part of GovNET, allowing data exchange between institutions in the faster process, more accurate and safer.

2. Introduction

2.1. ABOUT EITI

The Extractive Industries Transparency Initiative ("EITI") is a voluntary international coalition of governments, extractive industry companies and civil society organizations engaged in management and use of natural resources, such as oil, gas and minerals. EITI initiative comes as a concern, for those economically poor countries which have abundant underground assets; in order to find the destination of the material goods coming from extractive industries, while these countries are economically poor.

EITI has a flexible methodology that assures a sustainable global standard for all the implementing countries. The EITI Rules defines the methodology that countries should follow, in order to become EITI Members. The main Rule of EITI, is the open collaboration of government, civil society and the companies that operate in extractive industries.

The Extractive Industries Transparency Initiative in Albania (ALBEITI, www.albeiti.org) was established in 2009 by the Government of Albania with the purpose of promoting good resource governance through the implementation of the international criteria and principles of the EITI. Albania joined EITI as a candidate in May 2009 and obtained the EITI compliant status in May 2013.

2.2. ABOUT DMCS

DM Consulting Services according to the contract no. ALBEITI/CQ/004 with EITI for "EITI data integrated systems in Albania" is contracted to deliver this study.

DM Consulting Services (DMCS) was established in 2006 to provide clients with top-quality, innovative, reliable, cost effective, and time-saving business and IT solutions. Our main areas of expertise consist of the following:

1. IT Consulting Services and Solutions
2. e-business (mobile applications, e-commerce, could computing and web application)
3. HR Management, Recruitment and Training
4. Market Intelligence Services (market study, feasibility studies, etc)

DMCS is committed to delivering long term success for its clients. Its vision is to become a regional leading company with a positive influence in our areas of expertise.

DM Consulting Services is member of International telecommunication and IT Consultants Network (ITIC Group) one of the leading consulting groups in Europe.

DMCS main offices are located in Tirana (Albania), in Pristine (Kosovo), and with a strong presence in Montenegro and Macedonia.

DMCS is awarded with ISO 9001:2008 as expression of its commitment towards quality, and also with IT Mark and CMMI for development and services as expression of commitment towards IT quality.

Our experience in similar studies for government systems in the region gives DMCS an advantage for the competition of this feasibility study.

2.3. FOCUS OF THE STUDY

EITI reporting in Albania is regulated by Law no. 10304 "For the mining sector in Albania", which obliges all mining companies to implement EITI. Hydrocarbons Sector has voluntarily accepted EITI through the memorandum of understanding signed between the Albanian Secretariat EITI and all companies operating in the hydrocarbons sector.

Some of the EITI objectives are:

Number	Objectives
1	Development and implementation of a mechanism to make the income statement collected by the use of natural resources through the Extractive Industries,
2	The publication of these data in a understandable format by everyone and their supervision in order to enable the general public to have information regarding revenue and public expenditure,
3	Contribution in the mechanisms creation for better management of these revenues to the

	benefit of communities.
4	Corruption prevention,
5	Increased investment in the Extractive Industry.

In order to realize these legal obligations EITI needs to build an information system, which functions as a unique platform and to be a powerful tool for all levels in the framework of the initiative on transparency in Albania. This platform will be the information management system in order to conduct EITI activity efficiently. In this document are provided the technical requirements, with the aim to build an electronic solution that will help to manage EITI daily chores to increase efficiency, effectiveness and transparency.

The focus of this study is:

- Data storage system evaluation for MEI, NANR, GDT, DGC, LGU for the connection possibility with EITI system
- Business processes identification for each of the institutions involved in this process.
- Evidence for the sending possibilities of data that requires EITI in an automated manner.
- Creating a plan and defined actions, costs, resources and qualities of the system implementation.

Also this system will be a powerful tool for EITI function, in order to facilitate the objectives achievement and to build and monitor a transparent process of data flow. The objective of the new system is to provide EITI all necessary information in order to properly manage the natural resources.

2.3.1. TECHNICAL SPECIFICATIONS

Technical specifications are also reconciled with EITI strategy and the approach of the Ministry of Energy and Industry and the Albanian government. These technical specifications provide a clear statement of the hardware, software and IT services needed and appreciated. An effective evaluation requires the identification of many factors influencing for the application and its parameters. These factors are based on the development and trend for the next 5-10 years, in the

dynamic growth of the system users, obtaining data from institutions in other elements related to management, such as planning, management of historical data (this will be subject to a new consideration), the number of competing users, system flexibility, issues relating to security, maintenance, warranty, Internet bandwidth, etc.

2.3.2. BUSINESS PLAN AND PROJECT:

Based on the analysis, the Expert Group has developed a strategy to implement EITI, which will be parallel with the expansion of MEI with ALBEITI implementation strategy. The strategy consists of a detailed business plan and its implementation action. The plan is based in the real conditions and capacities of MEI and other public institutions. Also this plan includes a list of activities that will occur in each step approach.

The list is grouped into: technological improvements, implementation of policies for the improvements, improvement of law and specific activities to be carried out, once these improvements are implemented. The list of activities is presented, based on an order of priorities associated with the date of commencement and completion of each activity. DM Consulting Services experts have also submitted a risk management approach and the links between the different activities with their needs, ensuring an easier implementation.

2.3.3. EITI DESIGN OF OPERATIONS AND THE INFORMATION FLOW

While the group of experts has evaluated the system, EITI Department task has been supervising other departments and the technical support for them. All other departments have been willing to submit their data in EITI as well as to evaluate the quality of information coming into the system from other institutions.

Also there is some specific information coming into the system from any department. To fix all these procedures, the experts have carried out a prediction in a starting material for the internal arrangements / limits for each department regarding specific issues workflow, where these are possible and necessary. Under these arrangements, each department will have some specific responsibilities and the definition of information that should be placed in database. Their activity will be completed with the support of the IT department.

For determining the workflow, experts predict the following elements:

Number	Institution
1	Ministry of Energy and Industry - MEI
2	National Agency of Natural Resources - NANR
3	General Directorate of Taxation – GDT
4	General Directorate of Customs – GPC
5	Local government

Procedural rules will need to adjust the interactions between EITI and other institutions that operate with system for the incomes as follows:

a. Production Share
b. Royalty
c. Taxes on profits
d. Signature Bonuses
e. VAT

This regulation will establish rules and standards for institutions users about the system operation. Another area of regulation will be the data definition that will be made public to a wider public (to be published on the online site), the data and information that will have a confidential status, data and information to be accessible by institutions and which data will be available for MEI and for some other responsible institutions.

In terms of interaction with the system, the rules also establish administrator rights and create a level of management status of each institution. Level and their respective rights are determined during a phase of analysis and are described in those alternatives to be offered to EITI. Also, the role of different institutions should be clear, taking into account their relationship with other institutions and the proposed solution for managing their data.

Another issue that has been analyzed and regulated by these rules of procedure is related to the power to make different decisions in the database.

2.3.4. INTERACTIVE COMPONENTS IN SYSTEM AND SAFETY

An important component for the operation of the employee's staff is electronic communication interface with other systems. During the analysis based on our methodology, the Expert Group has revalued the communication interface and has discussed with the responsible entities for a more advanced and more secure communication. In this context, experts have done research to find a more convenient interface for the system, which can be obtained in this system. All these details are described in the technical part of the report that the experts have compiled. The technical specifications relating to the implementation of this interaction are also part of the document. This activity should be fully implemented by IT experts.

3. Methodology

In order to improve the quality of service of EITI system, during this study we have used a Software Development Product Life Cycle framework, known as 7-step Application Development Cycle. This process includes the following services for advanced development evaluation of the objectives of the EITI.

The development of this project is based on the best professional experiences to rate each step through the PMI methodology and documenting the policies and procedures through CMMI methodology as follows. This methodology enables the decomposition of the project in relatively small basic activities in order to enable accelerated development of the project steps.

3.1. CMMI

DMCS's management and development activities are based on the Capability Maturity Model Integration V2.0. DMCS is one of the first companies to be awarded with IT Mark and CMMI V.2 quality certification for software development, and the only one company with IT Mark and CMMI V.2 quality certification for services.

The CMMI V2.0 framework includes the following components (Some of the key components are also based on PMI framework approach):

No.	Process phases	Description
1	***Requirement Management Plan (REQM)***	The purpose of REQM Plan is to establish a framework for managing requirements and document plans related to Management System and Web design project. After the full clarification of the requirements in between the DMCS and Client, a monitoring and traceability methodology will enable the visibility of the project status and progress.
2	***Project Plan (PP)***	The purpose of Project Plan is to create a detailed estimate of tasks and resources needed to fulfill the requirement and to then produce schedules and work products for the project. This process will produce a detailed Work Break Down structure with all the activities related to the completion of the project. The Project Plan is the main working document and very dynamic, which enables the parties

		to monitor the project, and to provide corrective actions. The final project plan reflects the whole history of the project.
3	***Project Monitoring and Control (PMC)***	Project Monitoring and Control represents the whole activities DMCS performs to ensure the smooth progress of the project, or the identification of the bottlenecks in order to take the corrective actions in the right time, and make them effective.
4	***Measurement Plan (MP)***	The scope of Measurement Plan is to ensure that the metrics and the data to be collected have been specified; the management goals and sub goals are defined, providing the input for Measurement and analysis process area for DMCS. *The metrics are indicators for the site performance, such as the technical performance, and functional performance. There is an analysis provided to the metrics, which enables a thorough insight of the project.*
5	***Process and Product Quality Assurance (PPQA)***	PPQA is to provide staff and management with objective insight into processes and associated work products. The scope of PPQA activities is to check and assure quality is maintained in all process areas that DMCS has implemented and identified Corrective Actions Requirements (CAR).
6	***Configuration Management Plan (CMP)***	The purpose of Configuration Management Plan for the Web Management Information System project is to ensure the integrity of identified work products using configuration identification, configuration control, configuration status accounting, and configuration audits. This is a very important document, which can be used to trace down the whole components of the product, also plays a key role during the delivery process of the product after the final acceptance. DMCS possesses a specialized team for the implementation of the project based on the most comprehensive development and services standards. They have participated in the classes, and have been awarded with personal certifications.
7	***Roles and responsibilities***	Roles and responsibilities are defined based on their skills and competencies. The key element to the team is the majority of them are multi-skilled and they can cross their responsibilities based on their expertise.

3.2. PMI DHE SDLC

Planning and implementation of this project is done by following strictly PMI methodology (Project Management - www.pmi.org) at all stages of the development of evaluation.

Knowledge of audit purposes and opportunities and methodology to achieve the objectives are necessary to understand the purpose of consulting, to judge about the results achieved and to what is reported and to understand the specific limits.

The report describes the complexity and treatment of work carried out in order to realize the objectives of the consultancy. Experts explain the relationship between the agencies, identifying hardware and software components used and the requirements that each agency conducts based on EITI requirements for data. This report also highlights all the limitations imposed by regulations and / or data limits or restrictions on the scope.

The final report includes the methodology used to achieve the objectives, explanation of information collected and the techniques that were used for the analysis.

3.3. STEPS TAKEN

Based on preliminary requirements, is required to understand the current state of infrastructure and labor flow in EITI, to suggest a suitable project plan and the development, expansion and implementation of the system. To achieve this should be provided necessary resources and technical framework that support this initiative.

The project is structured in three main phases, as follows:

1. First Phase – Creation of a model system of the obtaining information processes
2. Second Phase - The current system design of the obtaining information process
3. Third Phase – The attitude of these systems against each other

3.3.1. FIRST PHASE

In the first phase DM Consulting Services has designed a complete diagram and the required data for the system based on the EITI requirements. Following her, is preparing a clear picture

with appropriate specifications for EITI system, to fully perform its functionality and to produce the necessary results. This model was used to control systems of any agency, if they can provide the information required by EITI and to understand which the most appropriate alternative is.

3.3.2. SECOND PHASE

During this phase is considered the current situation and are carefully assessed the possible options that can improve EITI. The main focus is the identification of the primary reasons, internal or external, technological or software.

Through software documentation and structure system, is evaluated and checked whether the data required by EITI are included in the saved information and whether there is a way which these data become available for EITI in a safely manner.

So, the IT audit in our case is related with the examination whether IT processes and IT resources are combined together to meet planned objectives of EITI to measure if the requested information is passed to EITI system in its operations complied with existing rules.

For each system agencies, DM Consulting Services has a checklist that is used to have full information that is needed in the final report.

3.3.3. THIRD PHASE

This phase includes TOR preparation and project plan for the implementation and development of EITI for its full operation and a recovery plan for all institutions and other users' applications at any level associated with EITI and preparation of technical specifications supporting the proposed settlement. Integrated solution for interoperability is among the institutions involved that contain input data for EITI system by developing and providing consistently results.

The Expert Group has also implemented the identification and prioritization of work for all interest groups involved in the process.

Is mainly worked very closely with the staff of the Ministry of Energy and Industry, which is currently involved in the process. Also, are held meetings with other interested parties, who will be involved directly or indirectly, in the implementation of the EITI project.

4. Current situation analyses

4.1. INTERESTED PARTIES

EITI annual mission is to produce a report including analysis and statistics on the mining sector and the confrontation between licensed companies and state entities on allegations of payments made during the year. The focus of EITI reports, by 2012, has been the extractive industries of oil, gas and mining industry. In the following is expected that part of these reports must be the hydro-power sector.

By the end of 2014, the mining sector accounts about 700-750 active licensed, but for management effects, EITI has selected contrasting statements about 60-70 companies with relevant statements from 4-5 state entities. This reconciliation is made possible based on the information that the companies and state institutions have declared by completing several reports in excel format designed by EITI. Later these reports are delivered by mail and / or post mail in the offices of EITI. For more on EITI requirements on reporting from companies and public entities, we must refer to the Annexes 1-6.

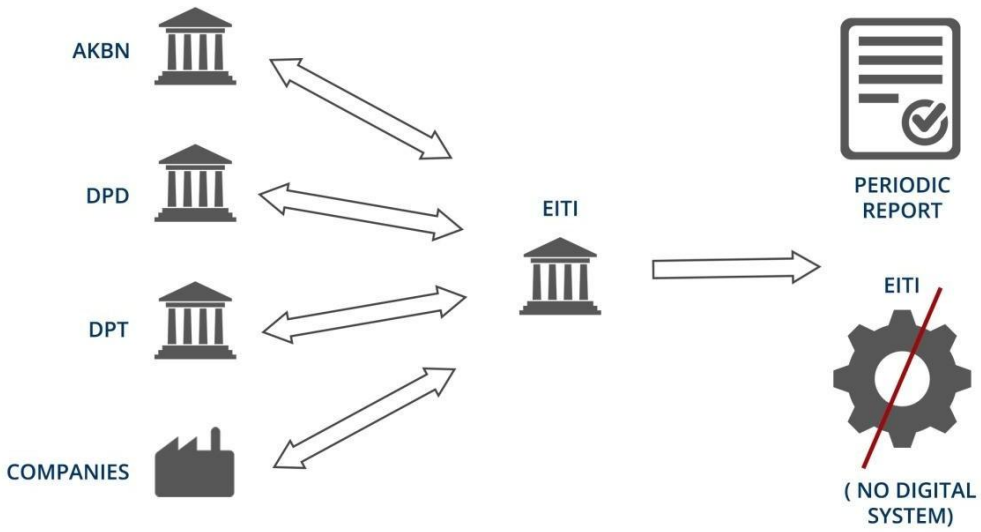
State entities that are simultaneously the main interested parties of EITI initiative with direct impact are listed below:

Institution	Roles and responsibilities
National Agency of Natural Resources (NANR)	NANR is responsible for gathering information from companies in the extractive industry sector.
Directorate General of Customs (DGC)	DGC plays an important role in the reporting of exports and imports wines that the companies perform in the mining and petroleum sector.
Ministry of Finance (MoF)	MoF plays an important role in the payments verification made by mining sector and hydrocarbons companies.
Local Government Units (LGUs)	LGU are the institutions that have direct contact with the companies
National Licensing Centre (NLC)	NLC is responsible for the registration of companies licenses including those companies operating in the mining and

	hydrocarbons sector
Directorate General of Taxation (GDT)	The responsible institution for transactions report (sales and purchases) and declaration of the tax on profit of all companies in the mining and hydrocarbons sector.
Ministry of Energy and Industry (MEI)	MEI is one of the directly concerned parties in this initiative cooperation with EITI until it is un important part of licensing Companies in the mining and hydrocarbons sector.

4.2. CURRENT CHALLENGES

During the evaluation process of programs for data storage of key institutions in this initiative were observed that some of these institutions do not have or have limited systems in terms of storage and data processing electronically. By the interested parties in this study it results that GDT, MF and DGC have a proper system for storing and processing data and their ability to access the data taking that EITI needs.



According to NANR is being built a system for storing and processing data that NANR receives from extractive companies in the mining and petroleum sector. However, NANR currently has only a simple accounting system that does not allow the creation of electronic files for licensed companies that they monitor.

In terms of other institutions involved in this initiative there is no computerized system to have a database to store data. Among these institutions are MEI but at this stage there is no data available to the Ministry of Energy and Industry that are required to be processed by EITI. Albpetrol currently only uses Excel format and does not plan to build computerized system.

Also, difficulties present even the data that should come from the LGU where in the latest Deloitte report in 2012 are identified that LGUs have no accurate records for receipts from mining companies and the hydrocarbon sector as a result the data that have to be taken by the ministry of finance will be inaccurate.

Furthermore, it must be said that currently by the government parts are created reforms in restructuring and changes to the LGU leaving a gap in how the information that EITI needs should be obtained from these units.

It is important to note that besides the construction cost for EITI system that receives this data and process them according to the reporting needs, obtaining these data from each institution involved in this initiative will be an additional cost for companies that will ensure the maintenance of these systems as the institutions themselves do not have staff to make changes or to intervene in the system to retrieve data that EITI requires in the predetermined format.

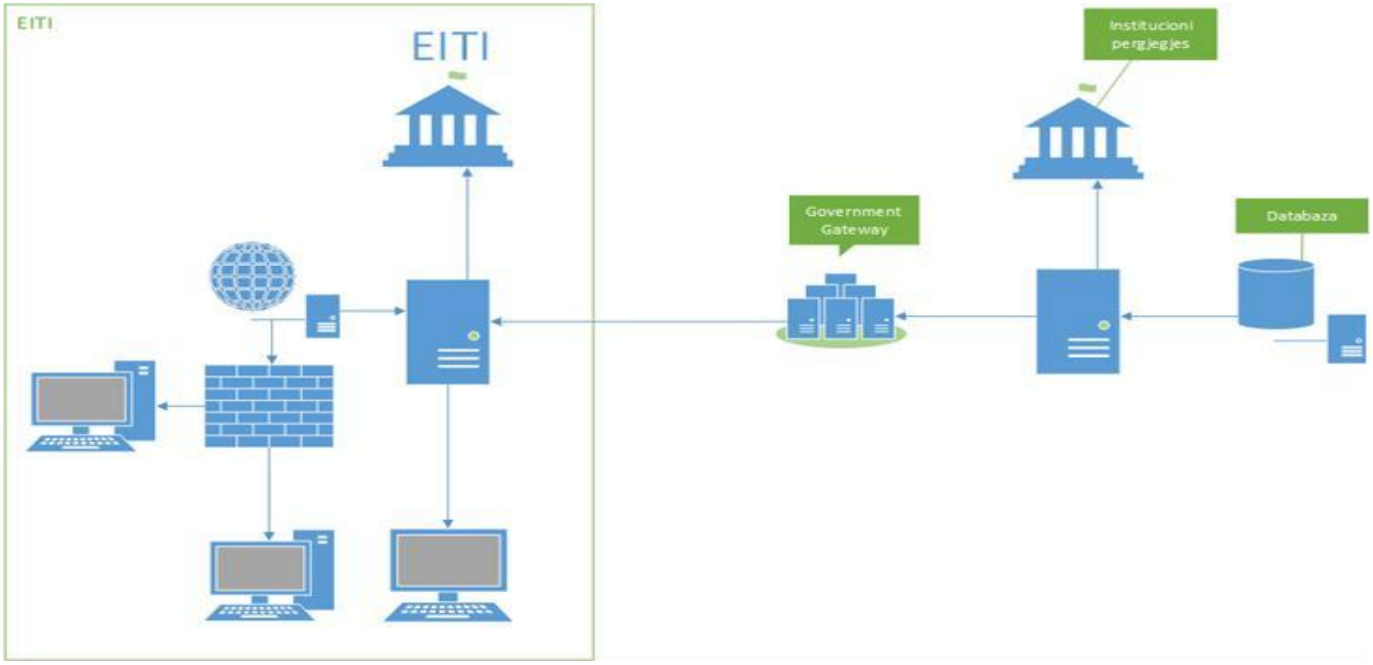
4.3. SITUATION IN ANY INSTITUTION

During the evaluation process for establishing an automated connection for obtaining data for EITI by interested parties, the working group conducted a series of meetings with each of the interested parties by making a number of requests for information about systems that each of the institutions involved in this process uses. Also requested information and if these systems are connected to each other through GovNET channel.

In the meetings have attended primarily the staff from the department of information technology and the responsible staff for preparation and data sending to EITI.

The meetings subject with the interested parties was to assess the internal preservative data system for each institution that will take part in this process and if it can be done an automation of receiving data via GovNET at the moment that EITI will have her system.

The below scheme visualizes the institution role with EITI.



4.3.1. NATIONAL AGENCY OF NATURAL RESOURCES

NANR function is the approval and monitor of annual mining production. Also, based on the national strategy of exploitation of natural resources, NANR license establishes guarantees for minimum investment. Information relating to these guarantees, together with the annual production are processed in excel / paper records.

Referring to the responses returned by NANR for questions addressed by the expert group, it was concluded that NANR currently does not have a computer system for the collection and storage of data and work with Excel files to store information reported by mining sector and hydrocarbons companies. From this information that they collect and process and send an informative report of MEI and in a predetermined format by EITI.

Also the data for active galleries and in use / closed are maintained in excel / paper, which means that NANR currently has no system to determine sources and the galleries location.

According to NANR is in a building process a system that will be able to realize the process of collection and processing of data standards in a central database. The company which is building

is CSS and after a meeting with their representatives in the spaces of NANR dated 24 February 2015 was left clear that it is possible to connect the system of EITI with the CSS system that is building. At the moment that EITI will have a system of her own, taking automated data will have an extra cost.

4.3.2. DEPARTMENT OF TAXATION AND TAX

EITI cooperation with the General Directorate of Taxation is essential to create a new system of EITI. GDT has recently implemented and updated the new program which preserves the data and processes it according to its needs. IT staff will make no modifications to the new system but they are given to the responsible company for construction and maintenance. The company which has the maintenance system for a period of 4 years will be responsible for obtaining the EITI requirements and data production and then sending them to the format prescribed by EITI.

According to the meeting that was held at the spaces of GDT on 23 February 2015 was discussed about the indicators for which EITI needs and whether it is technically possible to produce such data from their current system. According to the GDT not all required information can be extracted from the current system of GDT as some of the information that companies report to GDT loaded in PDF form which makes it difficult to get the data in electronic form. Moreover, it's not in the plan that this form will change in the future. For this, a detailed list of data that EITI requires from GDT and the questions about data that can be taken in an automated manner and which cannot (you can find the full questions in Annex 7), have run GDT, but we have not received a response to our questions.

4.3.3. GENERAL DIRECTORATE OF CUSTOMS

GDC is one of the institutions that like GDT have a system of contemporary standards and that is also maintained by a company contracted to build it. According to a meeting that was held in the premises of GDC with Mrs. Mullaj, specialist in the department of informatics, but also by the official electronic mail, was informed that the study subject and our requests for a possibility confirmation of obtaining data export - import of mining and hydrocarbon sector in order to automate the system GDC to the system that EITI will have. According to the specialist these

data are in the GDC system and through a formal request can be issued the approximate cost after was received a confirmation from the company that maintains the GDC system.

Currently GDC confirms that reports to EITI these data in the required format so far in Excel and that there is no technical barrier to provide the following information in the format that EITI will ask after having a system of hers and that the costs of this application should be covered by EITI.

Meanwhile, the expert group has run to GDC some more detailed questions about their current system for data management or in connection with the costs of implementing a new reporting module, which transfers the data required by the GDT to EITI in an international format. We have not received a response from GDC about the directed questions. For more on these questions, refer to Appendix 8

4.3.4. MINISTRY OF FINANCE

MF is one of the institutions that control the treasury system and as such has electronic information for all payments made on behalf of the state. During a meeting at the Ministry of Finance, DM Consulting Services presented a study overview that is conducted and presented data on which EITI may need in the future in an automated manner. Given that the treasury system is part of GOVNET then there is no technical obstacle to realize automatically receives data that EITI will need. It is not clear who will make the intervention in the treasury system and the exact costs required implementing this requirement.

What is on our interest to get from the treasury system are the royalties that companies in the mining sector and hydrocarbon do through LGU given that these units do not have any system in use.

By the official answer that was received on 25 February 2015 by the Ministry of Finance is confirmed that the required data can be extracted in an automated form in the periodicity of the first set and sent via secure channel Government Gateway according to the standards set by NAIS.

4.3.5. MINISTRY OF ENERGY AND INDUSTRY

Currently EITI assumes no data by MEI and being that MEI has no database with vested interest to make an automated connection will not be included in the connection that EITI will make with other cooperating institutions.

4.3.6. ALBPETROL

Albpetrol as all the companies that report data is on interest that EITI gets these data in an automated manner. According to the meeting made by the person in charge of IT ALBPETROL, was confirmed that Albpetrol has no database that can be integrated with other systems in order to handle data electronically according to a predetermined standard. Currently the data are processed by Albpetrol before they are sent to EITI in an Excel format. According to the meeting conducted in Albpetrol spaces was also confirmed that it is in their plan to build a system of data storage which impedes the automation of sending data between EITI and Albpetrol.

According to the discussion between EITI and DM Consulting Services held in the office of Albpetrol dated on 27 February 2015 were discussed the options for such institutions that do not have a computerized system for data storage and constitutes an obstacle for the automation of sending data between EITI and the institution that does not have a standard system information to the data storage. The first was to create an interface where such institutions temporarily throw the data directly to EITI system by avoiding sending them to excel to EITI and then EITI puts them in the system avoiding human errors that can be made during this long process. The second is that EITI must finance for the construction of the system for those institutions that do not have such a system. The third version was the suggestion to companies that have built finance that in reports increase an option to download the data in a predetermined format for EITI. This report will be only for the companies in the mining and hydrocarbons sector.

4.3.7. LOCAL GOVERNMENT UNITS

LGUs play an important part of the data with respect to royalties that companies in the mining and hydrocarbons sector perform in these offices.

Currently there are two problems with LGUs:

The first one, is done a LGU restructuring and that these units or have different systems for storing computer data or do not have one.

Secondly the data that these local government units have are not accurate according to the latest Deloitte report.

4.4. ASSESSMENT OF THE LEGAL FRAMEWORK

The initiative for Transparency in the Extractive Industry intends management and use of natural resources fairly and transparently. EITI aims to prevent corruption, and provide citizens a basis to seek proper use of revenues coming from the mining sector. EITI is regulated under existing laws in Albania and the team of experts has assessed the existing legal framework regarding the EITI functioning.

Referring to Law **No. 10 304, "For the mining sector in the Republic of Albania",** dated 07.15.2010, **Article 36, paragraph 25 / a and 25 / b** explicitly define the obligation of licensed companies in the sector to report their payments tax in line with the Initiative for Transparency in extractive Industry, and the form of technical report, financial or tax payments which should be in line with international best practices for extractive industry.

While under **Article 50 of the Law "On the mining sector in the Republic of Albania"** on **mining data and their confidentiality** in the context of transparency, information on local tax payments and national are published, and the form or publication ways are determined by the Council of Ministers decision. These data are not considered confidential. Expressly in **Article 51** of the same law, is stipulated that the data for local taxes and national payment are open to the public, under the initiative for transparency in the extractive industry. The level of confidentiality is determined by the Council of Ministers.

EITI Project for the management of the natural resource includes other interest groups, among which the Ministry of Energy and Industry ("MEI"), which is a key component of this project. This ministry is responsible for issuing licenses to exploration and production in the oil, gas and mining.

MEI is also responsible for the design of public policies for natural resource management and monitoring of the legislation implementation. This MEI function, which allows the Ministry to sign the Petroleum Agreement, is governed by **Law no. 7746 "On hydrocarbons (Exploration and Production)"** dated on 28 July 1993 ("Hydrocarbon law"). After initial approval, the law was amended by the laws of number 7853 (29 July 1994), 7811 (12 April 1994) and 9975 (28 July 2008).

National Agency of Natural Resources ("NANR") is another group of interest of this project. The data of this agency are important for transparency initiative, namely the functioning of EITI. NANR supports MEI in the proceedings before licensing procedures associated with these production licenses.

Albpetrol JSC is a company owned by the Government acting in the development, manufacture and marketing of crude oil and gas. Albpetrol is also a company interested in EITI project. This company operation has changed over the years. Albpetrol initial activity involved research, production, refining, marketing and sales, as well as oil and gas services. In 1998, as a result of the restructuring process, Albpetrol was divided into three public companies: Albpetrol JSC.

On **December 15 2011, by Law no. 10490,** the Albanian Parliament decided to privatize Albpetrol. Later in **2012, the Law "On hydrocarbons"** was changed and the **Law no. 31/2012** redefined the Albpetrol position as a trade company.

The law gives Albpetrol the rights as primary licensed allowing the company the ability to sub-licensed oil and gas companies, after approval from the Ministry of Energy and Industry.

5. Our approach for EITI management information system

The purpose of an information management system is the collection, storage, and processing of information. As mentioned above, the EITI should get input from several stakeholders in this initiative, including data from the reports of the licensed companies. If this information will be loaded directly into a system managed by the EITI, this would create an ease in reporting and improve the process and analysis.

Using a new system in EITI creates the opportunity to collect and process reports from stakeholders, where the ideal would be that the entire industry (over 700 licensed companies) would report. The implementation of a new system would also reduce the time for producing reports.

5.1. SYSTEM DEVELOPMENT LIFE CYCLE

The EITI final system should go through the following life cycle's steps:

- Analysis
- Design
- Customization/Development
- Implementation
- Warranty and Maintenance

5.1.1. General technical requirements

- Uses a relational database (RDBMS)
- Possibility of import/export data in standard office application
- User friendly graphical design;

5.1.2. Setting the architectural framework

The internet-based HR service delivery architectural framework should be designed to be robust, scalable, flexible, and secure. In addition, it should allow accessibility for a number of

application users. These conditions demand a complex integrated network of applications, processes, databases, and servers, composed of internally maintained system.

The architecture should consider a model based on at least a two-tiered approach.

The first tier (Client-Side) represents the technology that would be evident to the user, and would be maintained on a desktop computer, or laptop. The customer interface technology would contain the presentation graphics, or GUI components.

The middle tier (Server-Side) contains the Internet servers, application servers, all the presentation and business logic, processes, system calculations, and core system. These components would move the data from the databases of different institutions that will communicate with EITI.

5.1.3. Hardware and network infrastructure platform

Hardware platform will be proposed, delivered and installed by the Supplier. The hardware platform should include all the hardware components for a successful current and future implementation of the system.

The Hardware should include central servers, data storage, PC-s. The number of servers, data storage depends on the solution. However, it is recommended not less than 2 (two) servers for that purpose.

Since the central database and application servers need to properly sized and optimized to support the desired number of concurrent users, the supplier will be responsible to provide additional resources such as RAM or CPU, if necessary, after the completion of a full load testing.

Every user that is authorized to use the EITI system should have available one PC camera, and one microphone in order to communicate for any support service.

The recommended minimum hardware technical specifications are presented as follows:

No	Hardware category	Description
1	Server (System server)	Form factor Rack mount

		Two Dual Core Processors, 64 bit capable Memory 16 GB DDR3 1 TB Hard disks
2	Server (Database server)	Form factor Rack mount Two Dual Core Processors, 64 bit capable Memory 32 GB DDR3 1TB Hard disks
3	Server (Backup Server)	Form factor Rack mount Two Dual Core Processors, 64 bit capable Memory 8 GB DDR3 Up to **5TB Storage** RAID 6, 0, 1, 5, 10, w/ over 1400 MB/s Transfers
4	Uninterrupted Power Supply	To offer power protection

The Supplier should ensure that the configuration fits to the provided EITI system solution.

5.1.4. Database management platform

This layer refers to all the information that will be stored in the database in the EITI. We have defined procedures of how data from different institutions will be stored and accessed in database, and how to use these data for reports and analysis.

Database capabilities must support the growth of users. The number of persons who may access the system simultaneously at any time should not be limited. The RDBMS must satisfy the following criteria.
Assigned rights on data and procedures in the database:

- Select
- Insert
- Update
- Delete
- Execute

Possibility of use on diverse computer platforms and network environments

Management of distributed relational databases;

Insuring of reference integrity;

Possibility of transaction processing;

Compatibility with the SQL standard;

Cascade data deletion;

Data encryption;

Support of security, protection and integrity functions;

Have the capacity to trap and present error messages

5.1.5. Interoperability platform

The Supplier must perform system integration of the existing informational resources with the new information system to enable simpler transition to work in the new network environment.

The Supplier must ensure system integration services and a project for system integration, as well as ensure functionality of all installed program solutions.

5.1.6. Installation and Implementation of EITI system

The Supplier must develop and implement the EITI system in several phases, as follows:

1. Design of documentation for developing the EITI system. The final output is the acceptance of the documentation;
2. Developing/Customizing the system, this ends with preliminary acceptance tests;
3. Pilot implementation and adaptation of the subsystem at agreed locations, which ends with a final acceptance test;
4. Implementation of the system including support in introduction of personnel date into the system;
5. Training;
6. Support.

5.2. DOCUMENTATION

The user documentation of application software that must be delivered includes, but is not limited to:

- Technical and Software Manuals – Technical users manuals about the operating environment of the System;
- Administrative Manuals – User's manuals;
- Online help – provide a continuous System online help;

The Supplier should also provide all the technical and business documentations that it is related to the System, in order to make easy the know-how to the Purchaser technical and business team.

The technical documentation of application software should include but is not limited to:

- System specification documents (system description, conceptual system design, description of system architecture, etc.);
- Commented database schemas;
- Input forms design;
- Output and reports design;
- Documented system logic for all system components
- Business Continuity Plan
- Disaster Recovery Plan

5.2.1. SYSTEM FUNCTIONAL REQUIREMENTS

EITI system in a portal form should be accessible via the web interface of EITI staff and the interested parties must access or enter information required by EITI. System interfaces should be better organized through menu logic. According to the model of information collection system should check this information before the system is stored in the database.

The system must have the following key services:

- Access by identification - The system is accessed only through a secure method of user identification

- Import of collected information - The system must perform the import of information gathered from the interested parties according to the prescribed method.
- Save - The system must save the data in EITI database after importation of collected information from interested parties.
- Delete - Any authorized user must be able to delete the erroneous data from the system. This action will leave traces in the system for auditing purposes.
- Edit - Each authorized user should have the option of data editing for correction reason after recording an error. This action will leave traces in the system for auditing purposes.
- Add - Each authorized user should have the option of data editing for correction reason after recording an error. This action will leave traces in the system for auditing purposes.
- Export - The system should have the option of data exporting in tabular or graphical form according to user requirements.
- Generation of reports – The system must process and generate reports according to a predetermined logic or ad-hoc manner.

At the moment that the data are imported into the system and the check is performed that this information is by a predetermined format then the data are stored in a secure database where through the web interface can be accessed records by enabling EITI staff to perform the services below.

The system database should be normalized in order for us to create query manually if necessary to draw complex reports.

The system should automatically produce EITI predefined reports, which should be presented in tabular format and / or graphic, based on the report type. Also, the system must be able to produce reports ad-hoc type where EITI staff can combine several data sources logically connected to produce a report as appropriate.

All data presented in the web interface as in tabular and graphical form should be exportable in Microsoft Excel and PDF format.

5.2.2. NON-FUNCTIONAL REQUIREMENTS

The main system advantages are represented undoubtedly from the great homogeneity of the proposed solutions and grading system that is set up. All portal components must communicate with each other easily allowing information to pass the gathering of information in the processing and production of reports.

5.2.2.1. BACK-OFFICE

The system must be built and configured to have several types of users where each system user must be assigned a predetermined role. Each role gives different rights to a user. So if a user does not need to make changes to the information then to this user is assigned the guest role. If a user needs to enter, modify, add records then this user is assigned a role that gives these rights. The system should also have a role that is administrator who has full access rights to add and remove users, and to set to each user a specific role.

5.2.2.2. MULTI LINGUAL SUPPORT

The portal should be built and configured to be used with more than one language. Users of this portal can be foreign and where they need access to export reports for the production of the final report. This includes all text that contains the structure of the system (Menu, explanatory text, tables and graphs etc.) except the data that will be collected from the interested parties.

5.2.2.3. PLATFORM SECURITY PORTAL

Given that the portal will be accessible from the web interface should be configured the network and the channel in which users would access the system to be sure so the information that the interface sends and receives must be encrypted and any request must be stored for auditing purposes. Each user must be equipped with the credentials to identify and to access the information in the system. Safety will include internal policies and system use and storage of credentials that users have to log into the system. Below are the safety measures that should be considered:

- The prohibition of malware more effectively by integrating multiple scanning engines to computer users.

- Blocking dangerous attached documents by posts or downloads files with filtration.

- The prohibition of loading and unloading out policy content via filtration.

- Regular scanning server where are held the scripts and database system to eliminate any malware or virus that can be inserted into the server.

- Passing traffic and access through intermediary companies certified to encrypt information transmitted by the system through the web, identification and prevention of any danger that may arise from unauthorized persons.

- Establishing and maintaining copies of scripts and system database each end of the day in a different server.

- Planning a plan disaster cases for system recovery using the saved copy in the second server.

5.2.3. INTERACTION FRAMEWORK

Interoperability Framework referring to the National Interoperability Framework for the Republic of Albania is conceived as a structure based on 5 points:

The political context. This point is important because all the institutions involved directly in this process should be clear and determined on a common vision, priorities and objectives. This item includes all items on a summary form.

Legal interoperability. This section presents an overview of the legal system governing organizational and information system, legal opinions on services, data, security systems and information.

Organizational interoperability is the ability of institutions to provide services to each other with the help of interoperable information systems. Documentation of the organizational point contains descriptions of operational processes, regulations, which define the processes, service agreements, etc.

Semantic interoperability is the ability of the organization to understand the concept of data exchange in the same way.

Technical interoperability is the interaction of technical infrastructure and software. Documentation of this section presents the overall architecture, a summary of the regulations and standards as well as the specific user interface (interface).

5.2.3.1. POLITICAL CONTEXT

The creation of a new public service is a result of direct or indirect political level, i.e. new bilateral agreements, multilateral or administrative. However, political support and sponsorship is also needed in cases where new services are not directly linked to new legislation but are created to provide more focused public services to users. Likewise, political support is also needed for interagency interoperability efforts to facilitate cooperation between public, private sector and citizens. For effective cooperation, all parties involved must share visions, agree on objectives and priorities. The action in an institutional level can be successful only if all actors involved give sufficient priority and resources in their respective interaction efforts towards the goals set.

5.2.4. LEGAL INTEROPERABILITY

Every public administration institution works within the legal framework but of course internal regulations. Sometimes, incompatibilities between these regulations, technical procedures or practices resulting in a more complex cooperation or even impossible. Legislative initiatives are needed to ensure homogeneity. When the information is exchanged between different sectors of society to provide public services, the legal validity of such information should be treated according to the legislation in force, as for the sending party as well as for the host party.

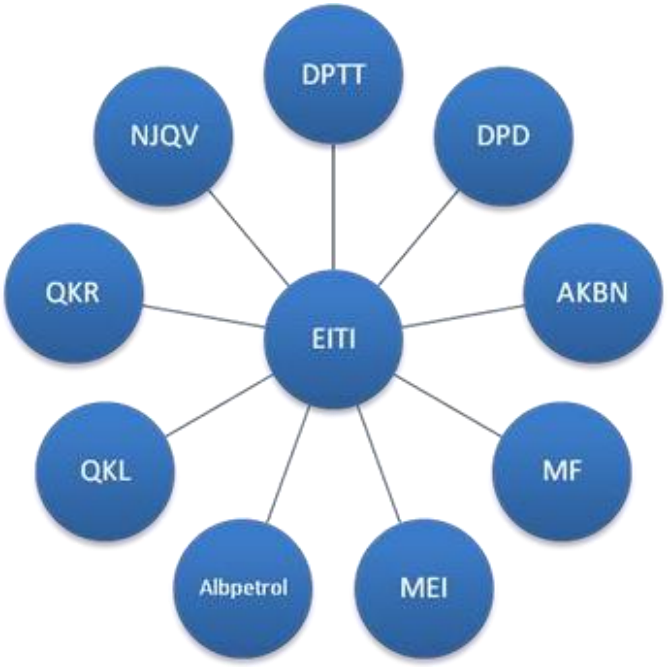
5.2.5. ORGANIZATIONAL INTEROPERABILITY

This aspect of interoperability is concerned with how the institutions in this initiative should cooperate to achieve their goals adopted jointly. In practice, organizational interoperability implies integrating enterprise processes and exchange of relevant data.

Organizational interoperability also aims to meet the requirements of each interested parties by making services available, easily identifiable, accessible and oriented towards their goal. In order that the administrative entities can work together efficiently and effectively to achieve their goals, the parties may need to connect their existing processes or even to define and create new processes as needed.

5.2.6. ORGANIZATIONAL RELATIONSHIPS

Service orientation, on which is built the conceptual model for focused public services, means that relations between the parties should be clearly structured. This involves finding instruments to formalize this interaction. Examples of such instruments are Memoranda of Understanding (MoUs) and or Service Level Agreements (SLAs) signed between the actors of this initiative which, in EITI case is shown in the below scheme.



5.2.7. SEMANTIC INTEROPERABILITY

Semantic interoperability enables interested parties to process the information in a meaningful way. It ensures that the precise meaning of exchanged information is understood and preserved

throughout exchanges between parties. In the context of the National Interoperability Framework made by NISA, the semantic interoperability includes the following aspects:

- Semantic interoperability is about the meaning of data elements and relationships between them. It includes vocabulary developing to describe data exchanges, and ensures that the elements are understood in the same way during communication.
- Syntax Interaction is about describing the exact format of information to be exchanged in terms of grammar, format and schema.
- Semantic interoperability achieving at national level requires to be considered at least specific sector and cross-sector agreements.

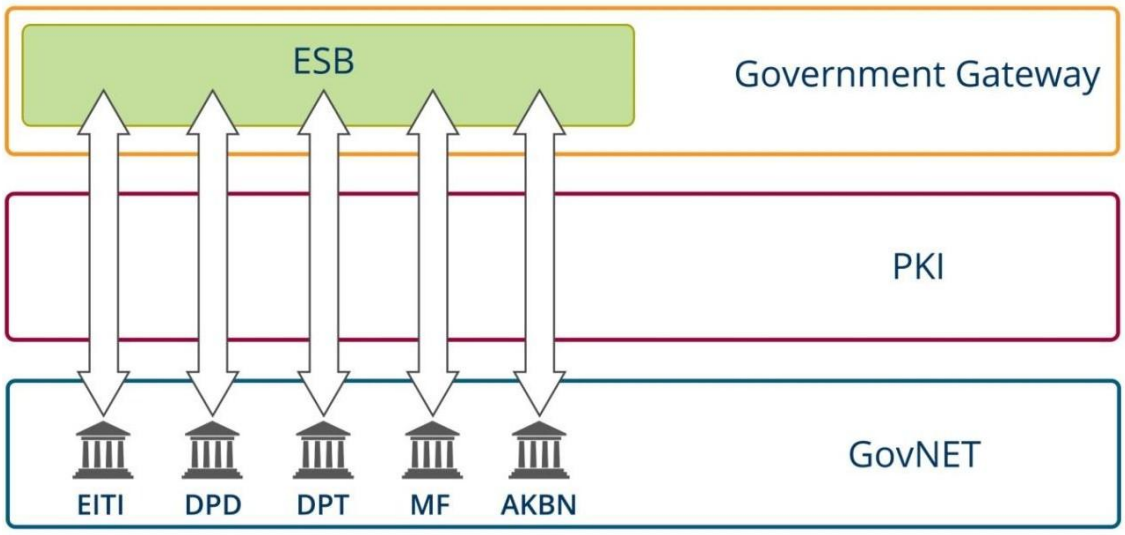
5.2.8. TECHNICAL INTEROPERABILITY

This covers the technical aspects of linking information systems. It includes aspects such as interface specifications, interconnection services, services of data integration, data presentation and exchange, etc. While public administration has specific characteristics in political, organizing and partly semantic level, interoperability at the technical level is not specific to public administrations. Therefore, technical interoperability should be ensured, public administration standards approved by NAIS. Systems mentioned below together with the government network GovNet enable technically interaction between institutions and their systems

Government Gateway (GG) In order to ensure interoperability, despite technology and using solutions, Government Gateway system is built.

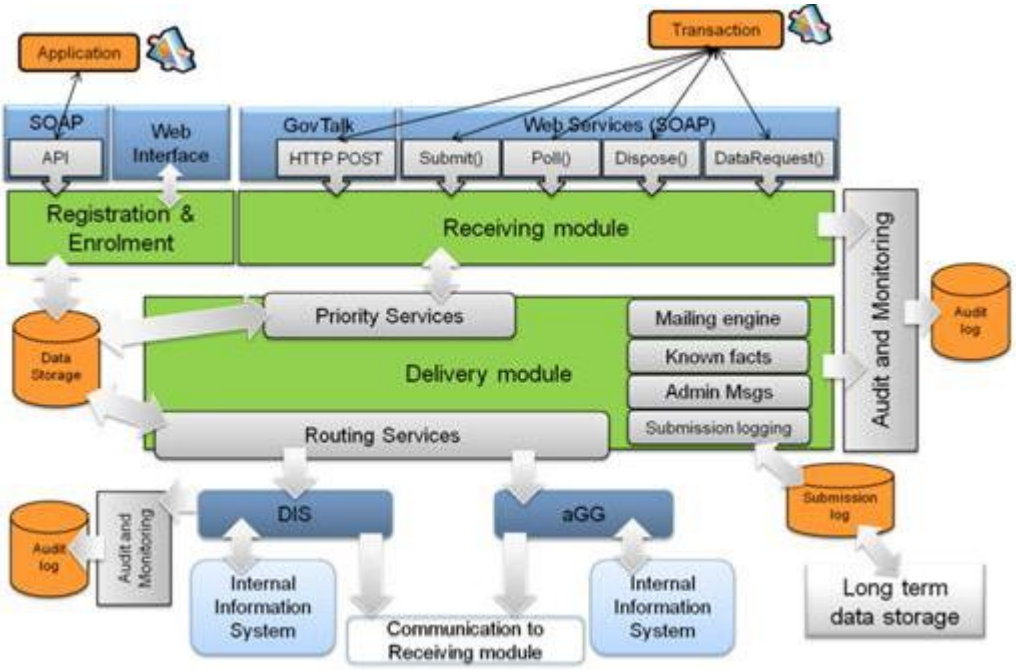
PKI This system enables that the data those institutions will exchange between them electronically must be safe, reliable and preserve confidentiality and integrity.

GovNet A fiber optic network which connects physically in Layer 1 all central institutions of the Albanian Government.



5.2.9. SYSTEM INTERACTION OF DATABASE AMONG STATE INSTITUTIONS

Government Gateway its basis architecture on which enable interoperability. Based on it, it is possible to integrate all internal electronic systems of Government. This architecture is based on a messaging mechanism called "publish / subscribe". Through this architecture can integrate and enable interoperability between internal electronic systems, various governmental. ESB architecture is the "heart" of interoperability, which maintains and monitors the state of all types of electronic messages that are exchanged between internal systems to each other and between the main portal and internal systems. In the below figure appear the main builder's modules for the architecture of GG Core:



5.2.10. EITI COMMUNICATION WITH INTERESTED PARTIES THROUGH THE DEPARTMENT INTEGRATION SERVER

Each internal electronic information system of government should communicate with GG Core through an integration system. This system, called the Department Integration Server (DIS) will allow the exchange of messages between GG inner core and backend systems, including the new EITI system and other interest groups systems.

DIS has a double communication, on one side with GG Core:

- Must take data from GG (Request *GovTalk*) – inbound

- Must send data to (*Reply GovTalk)*- outbound

On the other hand DIS should communicate with backend systems involved in the integration system:

- Must send data to back end systems (*integration messages*) – outbound

- Should take data from backend systems (*Reply*) – inbound

In addition to the standard functionality of the receipt, delivery and storage of data, DIS has several other functions such as:

- Decrypting of Body elements

- Security Control

- Data Transformations

- Protocols communication respect of back-end systems

- Audit of messages

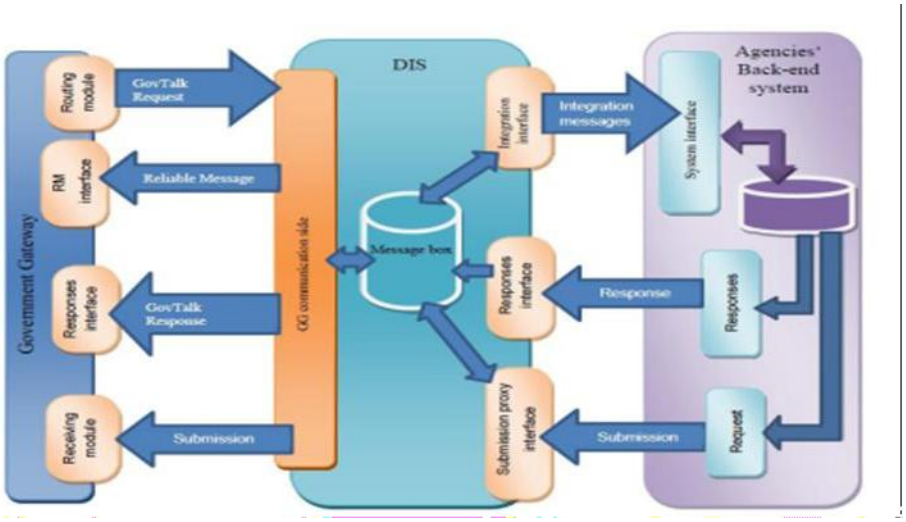
DIS of EITI and also of each of the other interest groups should be a specific client of Government Gateway. An institution which is a client of GG, therefore responsible for backend system will complete the document “Questions package " for his service and transactions will be configurable in GG. He should be registered in the module "Registration and Enrollment" with user name and password or certificate. Later DIS:

- Must be registered in a certain service

- Must have rights to selected business transactions

- Must have rights to selected transactions administration

The figure below shows the communication modes:



5.2.11. TECHNICAL DATA FOR DIS

According to a communication with the IT Director in the Ministry of Energy and Industry, Mr. Fotjon Costa DIS should have the following minimum technical specifications:

Software

Type	Description
Windows Server 2008 R2	Operating system that operates in server
BizTalk 2010	Program that enables communication automation between institutions
MS SQL	Database where the data are saved

Hardware

Type	Description
Physical model	Accessible rack, 1U
Processor –Minimal points	Minimum performance CPU Mark ≥ 4600 according to benchmark published in "http://www.cpubenchmark.net"
Including memory	min 16 GB DDR3-1333MHz
Storage Controller	SAS Raid Controller with 512 MB cache, RAID 0/1/1+0/5
Included HDD	6 x 300 GB SAS, min 10K rpm hot-plug 2.5"
Network	minimum 4x 1 Gb Ethernet; 1 Management Port
Optical disk	DVD-ROM
Power supply	2, Redundant Power Supply, hot-plug
Guarantee	3 Years

This server will be configured as a Hyper-V host that will stand DIS test and DIS Production to provide an implementation process as standard and safe

Regarding DIS licenses can be issued by NAIS or may be tendered to get other offers from competing companies that operate in the market.

5.2.12. COMMUNICATION PROTOCOL GOVTALK

The complexity of integration depends on a set of factors. From a technical perspective there are two ways how back-end systems communicate:

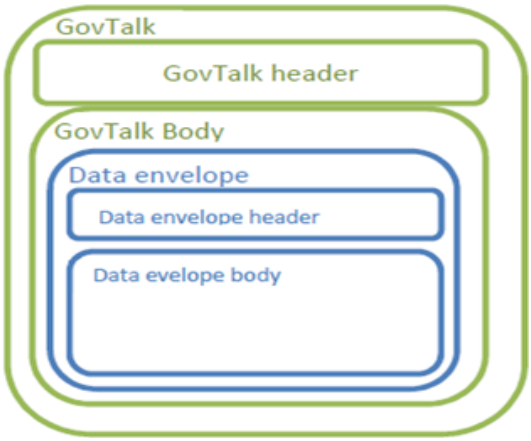
- Synchronous and

- Asynchronous

So DIS supports two communications way using reliable messages (Receipt) by GG and back-end systems.

All communication messages and data exchange between EITI and other interest groups must pass through Government Gateway, that why they have to be good messages formed by the standard GovTalk.

The figure below shows the messages structure of GovTalk:



GovTalk message example:

```
<GovTalkMessage xmlns="http://www.govtalk.gov.uk/CM/envelope">
<EnvelopeVersion>2.0</EnvelopeVersion>
<Header>
<MessageDetails>
<Class>QKR_TRACK_BY_NIPT</Class>
<Qualifier>request</Qualifier>
```

<Function>submit</Function>
<CorrelationID></CorrelationID>
<Transformation>XML</Transformation>
</MessageDetails>
<SenderDetails>
<IDAuthentication>
<SenderID>leda06</SenderID>
<Authentication>
<Method>clear</Method>
<Role></Role>
<Value>mypassëord</Value>
</Authentication>
</IDAuthentication>
</SenderDetails>
</Header>
<GovTalkDetails>
<Keys />
</GovTalkDetails>
<Body>
<Message xmlns="urn:g2.al:envelope:request:v1">
<Header>
<Vendor productName="eTracking" version="1" />
</Header>
<Data encrypted="no" gzip="no">
<Request xmlns="urn:g2.al:qkr:call:TrackStatus:v1">
<Parameters>
<Param name="nipt" value="K51621007M" />
</Parameters>
</Request>
</Data>
</Message>
</Body>
</GovTalkMessage>

DIS must also supports the NET protocol, as should develop integration logic in a assembly, which should include:

- Obtaining Body element from the request message GovTalk

- Decrypting the body element which is encrypted before being sent to Government Gateway

- Sending decrypt element in the backend system as a parameter of Web Services

- Receiving the response from backend system as a response of Web services

- Encryption of this response

- Adding encrypted response to a response message format GovTalk.

5.2.13. MESSAGES AUDIT

One of the most important functions that DIS offers are audit messages that go into it. When the message is passing through DIS orchestra, key benchmarks (time, correlation, and audit information) must be written in a database audit. This audit provides administrators with a powerful tool and helps them make daily operations especially in cases where users have a problem with sending messages.

5.2.14. EITI COMMUNICATION AND OTHER INTEREST GROUPS THROUGH DIS

When backend EITI system requires data from another backend system belonging to the interest groups, it will apply the request to GG through DIS. But by the same DIS to GG, these requirements will be presented in another backend system (whether the backend system has not DIS). If the second backend system has its DIS, then the requirements after are sent to GG through DIS of EITI backend system will be sent to the second backend system via the latter's DIS.

5.2.15. COMMUNICATING VIA ADAPTER (REMOTE ADAPTERS) FOR GOVERNMENT GATEWAY

In the case when EITI system or systems of other interest groups will not use their DIS to communicate with GG, they can communicate with GG via an adapter for the Government Gateway (aGG). Adapter should be developed on the basis of specifications and communications protocols of Government gateway and can be implemented in any technology. The option to use the adapter is more complicated and needs a lot of programming work. This adapter (aGG) consists of:

- An internal DIS of GG, in the case of a backend system that exposes data. This would be the adapter in the case when EITI and other interested parties will not use their DIS to communicate or

- An auxiliary library, which will send the request to the web Services GG (for delivery), in the case of an application.

In these types of communication, as in the case of the backend system using DIS, will be supported protocol GovTalk message. DIS The GG and auxiliary library will be responsible for writing or creating GovTalk messages.

5.2.16. TYPES OF COMMUNICATION

DIS systems must support two types of communication:

- The principle of communication for the User

- The principle of communication for the back-end systems

For EITI is important the principle of communication for the Back-end systems. In this communication back-end system (usually represented by an employee of an agency, EITI in this case) starts communication which is explained below, even graphically, where DIS Is EITI DIS and DIS B is DIS of another interested institution that communicates with EITI:

1. Back-end system creates a request and sends it to DIS A (Inbound Request/Submission)

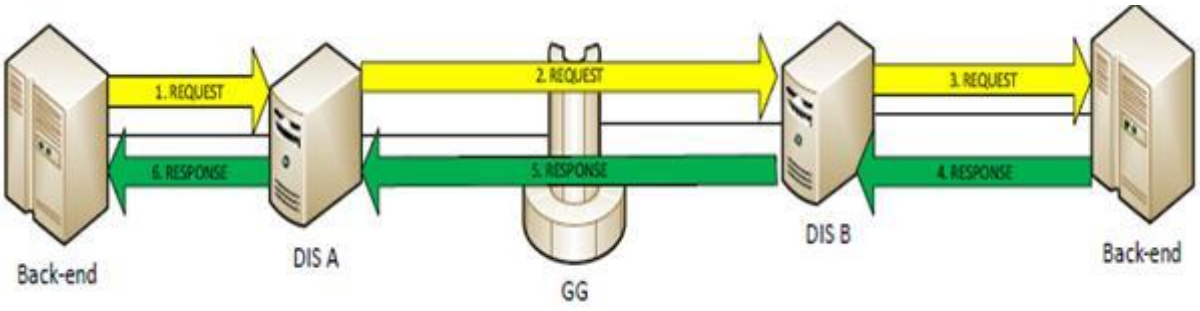
2. DIS A sends the request (Outbound Request) through GG to DIS B (Inbound Request).

3. DIS B sends the request (Outbound Request) to back-end system.

4. Back-end system prepares the reply and sends it to DIS B (Inbound Reply).

5. DIS B sends the response (Outbound reply) through GG to DIS A (Inbound Reply). In this case it is used the functionality of Hub and Spoke and GG reply immediately to DIS A. No need to send continual request for answers from DIS A. Is expected that DIS A (or back-end system) must have prepared the request with the Response Endpoint elements, which indicates where to send GG answer.

6. DIS B sends the response (Outbound reply) to the back-end system.



5.2.17. CERTIFICATES IN GOVERNMENT GATEWAY

Data exchange between EITI and other agencies involved in this project requires high level of security, proof of the sender and proof of receipt; therefore it is mandatory to implement community certificates in Government Gateway to achieve the required level of security. It is important to recognize that not all certificates should be implemented. The amount of certificates and complexity depend on various aspects (i.e. network security legislation or government).

Data exchange Client-GG-DIS must now supports security types

5.2.18. SSL COMMUNICATION

Client -> GG – Provides transportation to the client (external information system EITI or other interest groups). Certificates for SSL communication must be issued by certificate authorities (CA) widely used. Practically this means that each client must trust to the issuing Certificates Authority.

GG -> DIS (DIS i GG) – Provides transportation between the Government Gateway and DIS (DIS of GG must have an SSL generated certificate). This type of communication should be treated as internal and can be used the CA internal or CA widely used. Using internal CA is less costly because does not require payments for certificates issued by each DIS from commercial CA.

DIS (DIS of GG) -> GG - DIS is a specific client GG and should be treated as a communication Client ->GG.

5.2.19. WCF – REGISTRATION AND ENROLMENT MODULE (R&E) – MESSAGE SAFETY

Client -> GG –R&E modules use the mechanism for messaging security to call web Services. It must be issued by CA widely used. It may be the same certificate as the communication SSL Client -> GG.

5.2.20. TIMESTAMP

Timestamp digitally sets the date and time of the XML document. The certificate must be issued by the CA widely used.

5.2.21. CODE SIGNATURE

Code signature of ActiveX components for logs with certificate. Certificates will be issued by CA widely used.

5.2.22. DATA ENCRYPTION

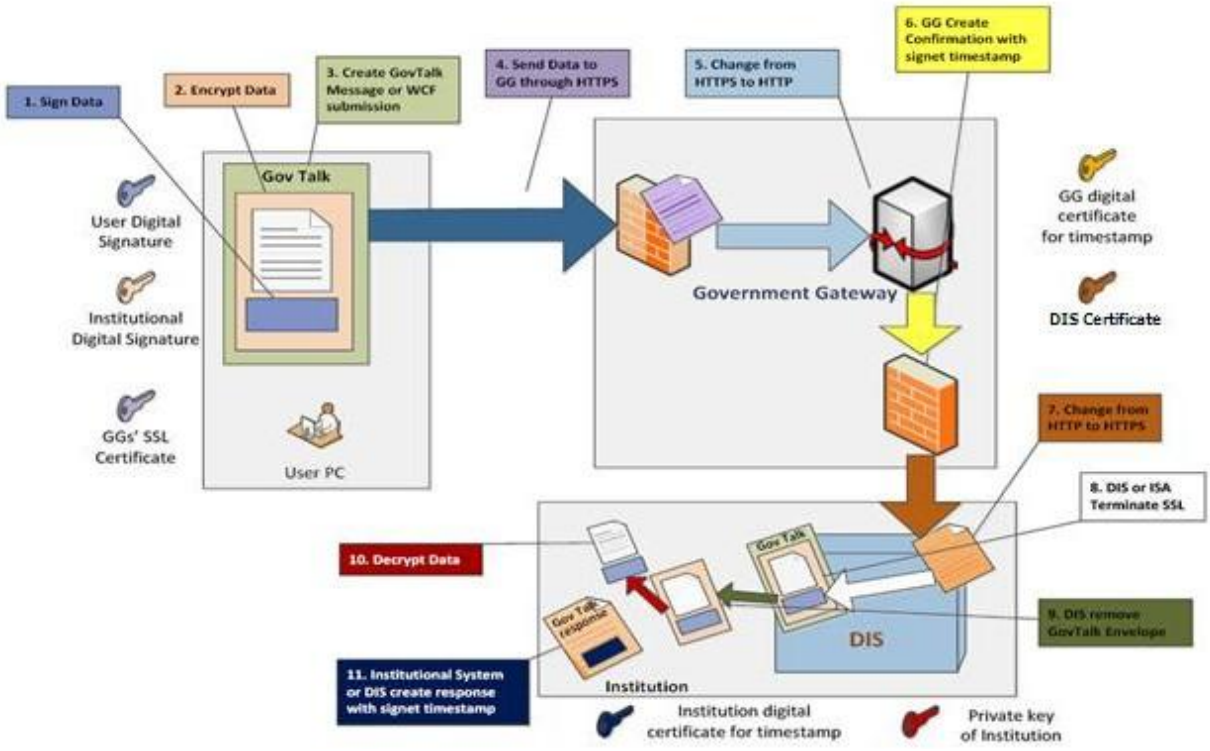
Client-> Agency - This functionality is used when the data package is encrypted before it is sent to GG. The certificate must be issued by accredited CA or any other CA that issues certificates for encryption under the legislation.

5.2.23. QUALIFIED CERTIFICATES OF END USER (DIGITAL SIGNATURES)

GG must believe all CA that issue certificates for digital signatures that can be used for log in. The certificate must be issued by accredited CA or by any other CA that issues certificates for digital signature based on the legislation.

It is clear that it will be mandatory to define processes to update certifications throughout the solution. Each area has specific rules and is necessary to define responsibilities for it.

Below is presented graphically how the security is enabled in the process of data exchange:

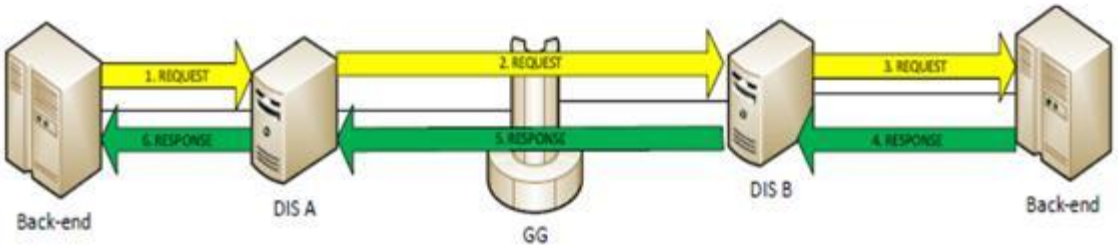


6. Recommendations and proposed alternatives

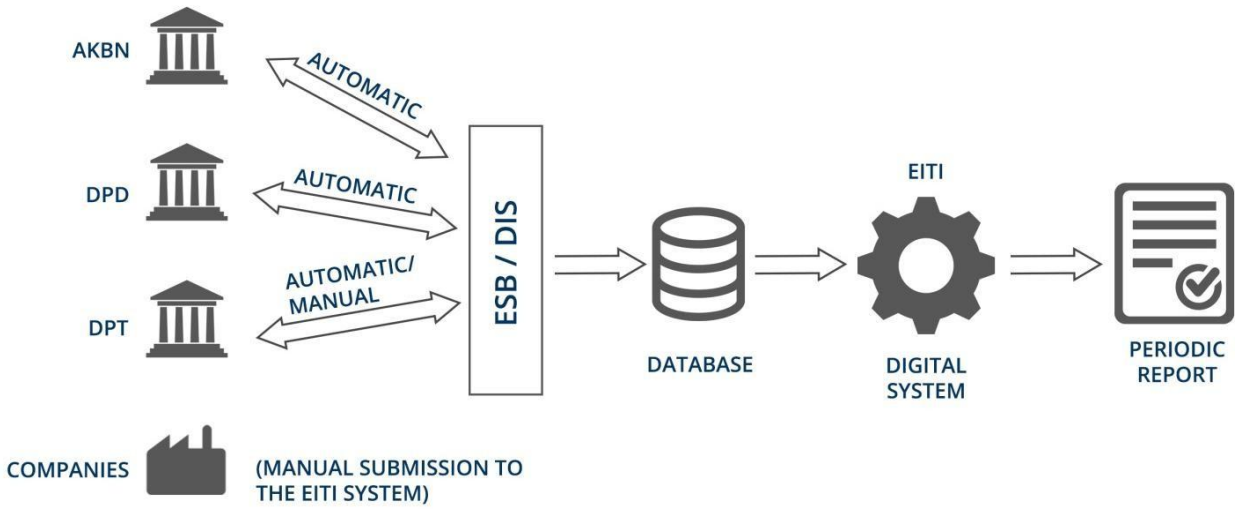
After a series of meetings and information in all involved institutions in this process we reach the conclusion that should be considered the following alternatives for solving the receipt of data from the institutions involved in this process.

6.1. AUTOMATIC

This is the alternative where the entire process of application and receiving information between institutions becomes automatic. This process takes place between the DIS of each of the institutions from where EITI through its system sends the request for information from its DIS to the DIS of the respective institution. This communication is done via ESB channel of GovNET network, safely through security certificates which are reflected above. In this way the institutions are sure that the information in this channel is unaltered and accurate. For the format of the message that is sent and received between interested parties we must refer to the standards that NAIS responsible institution has set



EITI requires from the company that will realize the implementation of the system, commitment and maintenance of the digital system to implement the Government Cloud Computing infrastructure in NAIS places. Final obtaining in delivery of the new system by administrative and operational team will be after successful completion of implementation of the system for a period of 4 years.



In addition to this commitment, the company that will provide the system should provide 4 years warranty on all products allotted for the operation of this system in terms of defects in design, material and human work. It should also provide the following issues:

1. How to enable maintenance of the proposed solution during normal work in the coming years?

2. To submit a maintenance plan for the first 4 years of work.

3. Give a list of the warranty elements and maintenance by explaining the difference between them, which elements are included in cost of sales, as well as the type and duration of warranty.

4. Provide a list of elements for which there is no warranty or maintenance.

5. To provide an estimate of the support cost and maintenance required for the proposed system. By the provider company should keep in mind that this value should not exceed 18% of the system for a year.

6. It should include all the up-grade as "bug fixes, security fixes, software enhancements, additional features, firmware release, and Operating Systems updates" and all the up-date infrastructure components as given by their manufacturers, in order to keep the system operating at the required level.

7. The system company development should also provide 4 years warranty on all elements developed, such as "bug and security fixes."

8. This company needs to support operational and administrative team of EITI with additional resources to fulfill the obligations under the guarantee and maintenance of the system without additions at cost.

6.1.1. WORK PROCESSES

The scheme below shows the typical sequence that is followed when an application sends a request to one of the interested parties taking for granted that there are no errors.

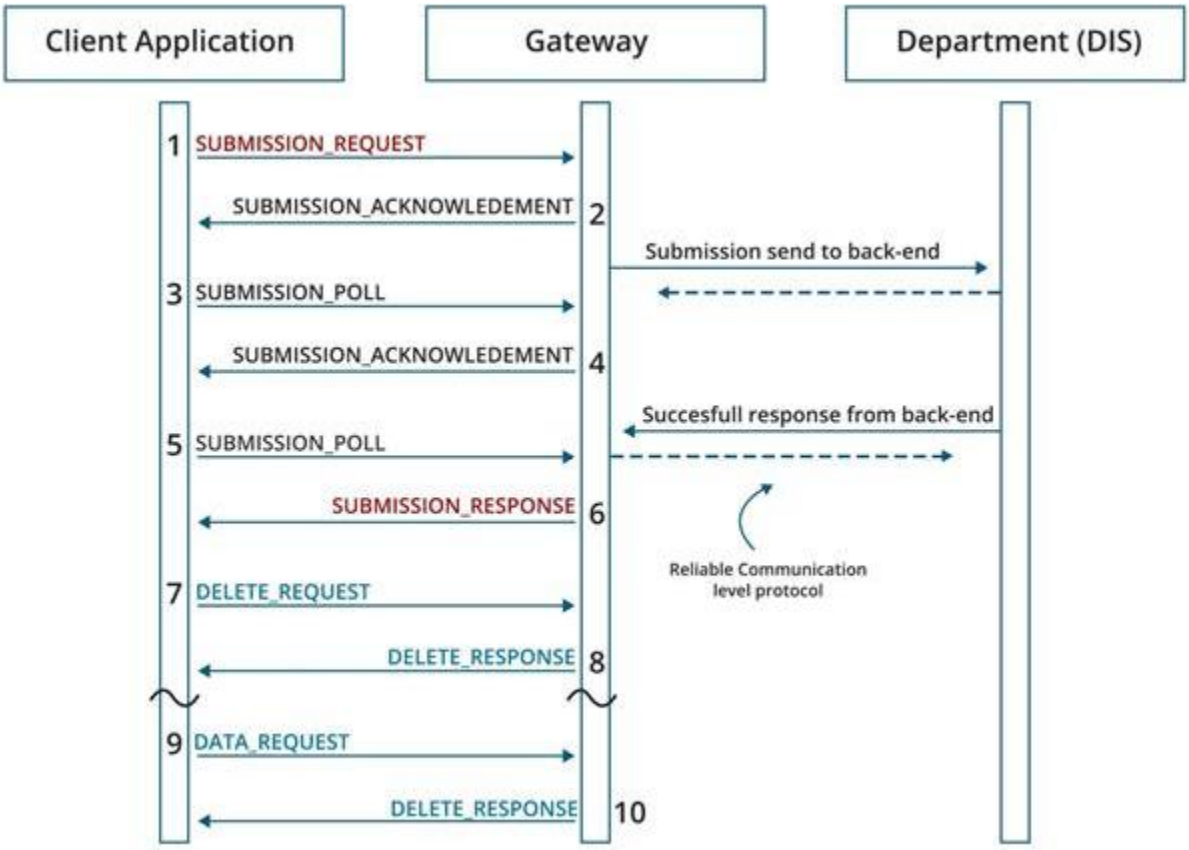
Sending and then getting information according to a predetermined period depending on the institution is used from EITI system to issue predefined reports from EITI system.

Below are the advantages and disadvantages of this option:

6.1.2. ADVANTAGES OF AUTOMATED ALTERNATIVES

The initial suggestion by the expert group is on a computerized system of EITI in which can communicate with interested parties systems through the Government Gateway.

Automated processes reduce involvement in routine tasks, such as data organization coming from system components or reports creation, which require a relatively high time for their performance. This time could be used for some other tasks related to EITI operation. Automation system enables employees, maybe not with a high level of skill, to perform complicated tasks.



Also an automated information system reduces physical spaces that can be necessary for data storage. Options for data loss are reduced when their processing and storage are done electronically. Cost reduction is also an advantage because when data is stored electronically, there is no need for expenditure on paper. It also brings a friendly approach to EITI with ecological environment. An automated system is more effective for as long as it allows employees to access the same data at the same time. In the new computerized system can be easily incorporated quality control data from the messages audit or produced reports, making easier the verification and data control enabling more consistent and uniform data. With this

automation is nearly impossible to alter data or alienated by sending between the two institutions while eliminating errors that come from the human factor.

Such interagency communication practices through Government Gateway have resulted successful, materialized this fact with the communication that takes place between the National Registration Center (NRC) and the Directorate General of Taxation (DGT).

6.1.3. DISADVANTAGES OF AN AUTOMATED ALTERNATIVE

A main disadvantage for the implementation of a fully computerized system is its cost. Designing, implementation and maintenance are the phases that are associated with this new system and that each stage requires a certain investment. Purchase and installation of hardware devices have a relatively significant cost. After the financial analyze that is more detailed below, the implementation of this alternative has an estimate cost higher than the manual alternatives explained below because its included not only the building cost of EITI system, but also the connection cost with the GovNET system. These costs are estimated to be 408% higher compared to the alternative suggested below in which EITI will not be part of GovNET.

Also, monitoring and maintenance are very important to ensure the system effectiveness. To realize these two processes, it may need to hire individuals who have appropriate skills and this is translated for EITI into costs.

Also should bear in mind that not all institutions that participate in this process have a standardized system and related to GovNET. Enabling and receipt of this information's in an automated form can bring the cover of infrastructure construction costs Also, the new system develelopment and implementation time may be relatively long.

Another important aspect to be mentioned is this system acceptance by the employees. Employees are a very important component for the system function and when these employees are adapted with the manual methods for information obtaining and processing, they have difficulties to operate with the automated processes.

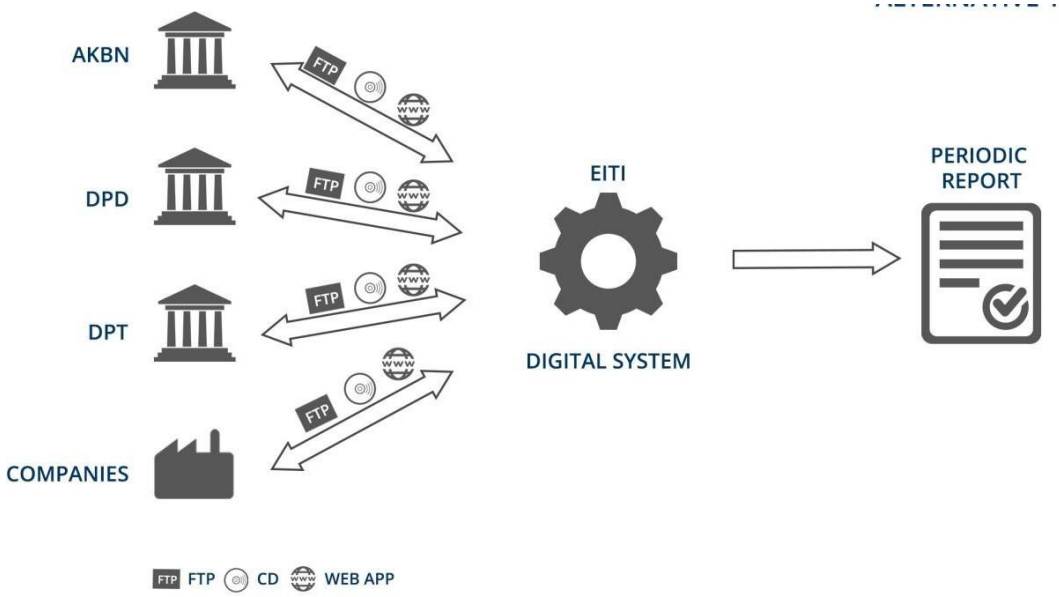
This can take time and additional training for employees, which means additional expense for EITI. In some cases it may bring the operation change / system adaptation by taking as a basis the experience and staff comments.

6.1.4. SAFETY OF AND RECEIVING INFORMATION SENDING

Given that the entire process is automated and runs through GovNET channel, the information is encrypted and verifiable through security certificates.

For more, every data transaction is auditable in DIS and easily verifiable for the information authenticity.

6.2. MANUAL

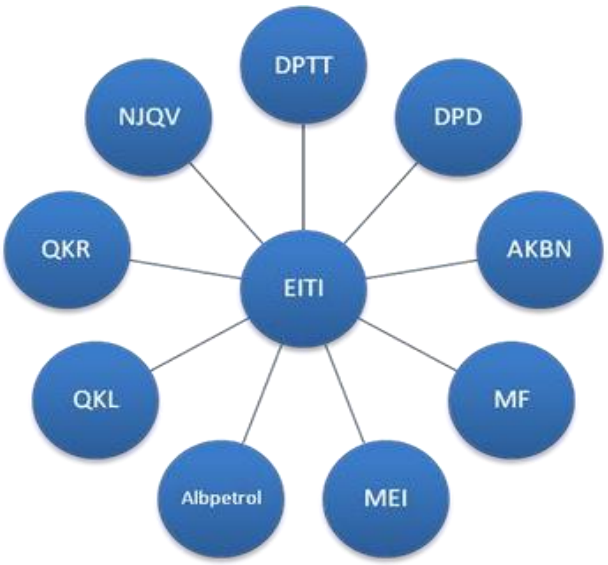


The second alternative is a manually data import solution where the information is sent by the concerned parties in a predetermined format (XML or Excel) which is imported into EITI system and then used and processed to produce reports that EITI needed.

This option requires to EITI system to carry out the import data process according to the prescribed format by the institutions involved in this process.

Also, for the construction of EITI system we need to predict the transmission channel and data reception for the institutions that have a standard infrastructure and related with GovNET channel's and simultaneously provide in the future the ability to make an automation with institutions that currently do not have or are in a construction process and system implementation.

EITI process scheme in the manual alternative is reflected in the figure below:



6.2.1. ADVANTAGES FOR ALTERNATIVE MANUAL DATA RECEPTION

This method gives EITI an advantage for the construction and implementation of the system in a faster time and with less cost because the process is divided into two phases:

- The first phase system construction of EITI
- The second phase the connection of this system with the interested parties through GovNET.

Given that the automated link has more costs as are presented in the table below and take a longer time its full implementation, the manual option of data import has an advantage in initial cost and time after the system is put into work in a faster time and the reports process will be carried out like taking data in an automated mode. Given that this option does not include the costs of connection with GovNET, it is clear that the total cost is lower than the automated alternatives.

This mode eliminates several processes such as the extraction reports by the staff by processing the received data from the institution. The data that come from institutions are imported and processed by the system which issues the default reports from EITI to be used in the annual report draft. In this way the margin of error is halved. And the timing of reports issuance is getting shorter and with standards.

EITI staff is already familiar with the manual data processing. They know all the problems and have gained an experience from previous processes of data entry. This option eliminates the costs that would be required for staff training.

6.2.2. DISADVANTAGES FOR ALTERNATIVE MANUAL OF DATA IMPORT

Manual way of importing data itself consists on a 5 stage process:

1. Data exportation from the interested party system.
2. Control / processing and conversion into the format required by EITI
3. Sending via an insecure channel (Web application, FTP, CD) of EITI
4. Format Control from EITI part
5. Importing process from the system and data storage in EITI system

During this 5 stages process plays an important role the human factor and as consequence is increased the chance of errors and alterations to the data during this process.

Another obstacle is the delay or disrespect by the staff of the relevant data exportation institutions, data processing, conversion in the required format, and sending of EITI at a predetermined time according to the periodicity that these data should be taken.

This has a direct impact on producing timely and on an accurate manner the final reports that will be issued by EITI.

6.2.3. DELIVERY SECURITY AND INFORMATION ACCESS

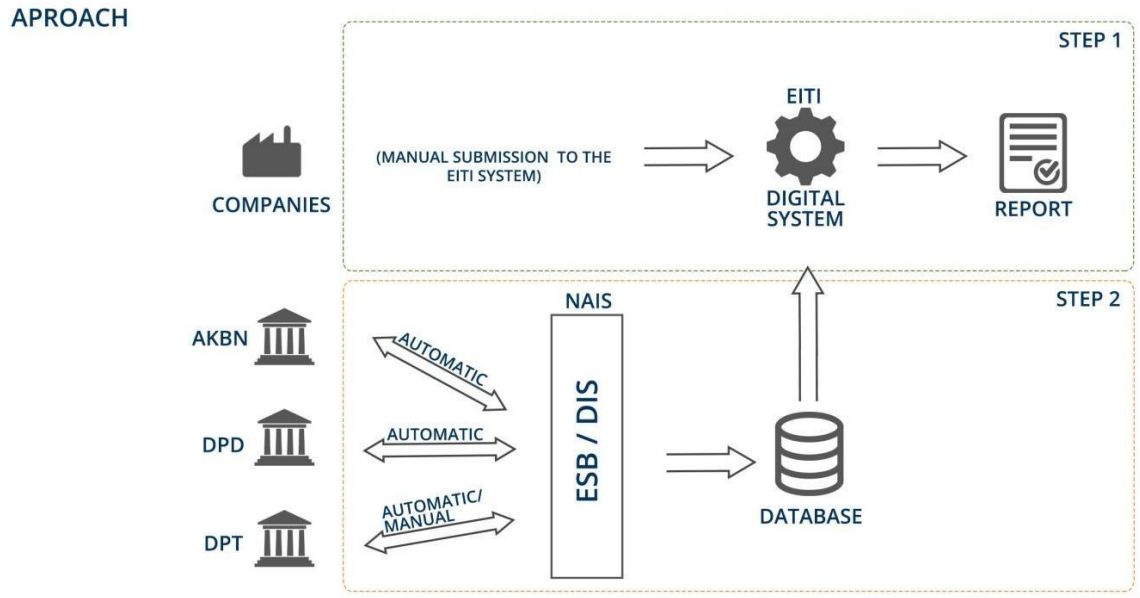
This method does not provide a security certificate during data transportation and is not equipped with digital signature for the information provided by the sending institution of EITI. For this reason this method is less secure compared to the alternative of full automation and receipt of data via GovNET secure channel.

6.2.4. OUR SUGGESTED ALTERNATIVE

Based on our analysis and assessment, we suggest implementing a new system through two steps. First is the creation of a manual system. Processing of reports under this alternative would

be uniform as taking data in automated mode. This first phase is scheduled for completion within a period of 3-6 months from the beginning of the process.

We suggest that the system enable connection with ESB / DIS in the first stage, without being required further intervention in the second phase. However, considering the estimated costs and questions and difficulties that may be encountered when initiated from the beginning with the communication through ESB / DIS, we also suggest a second phase explained as below. In the second phase, the same implemented system will be developed and extended including the communication through ESB channel part of GovNET, allowing data exchange between institutions in the faster process, more accurate and safer. The expansion of this system means the connection with GovNET not only of EITI system, but also the systems of other interest groups involved in this initiative.



6.3. TECHNICAL DEVELOPMENT OF THE SYSTEM

Financial table for the construction, implementation and training for electronic platform:

No.	Description	Quantity	Value	Total
1	System development for data processing Analyses, Design, Development/adoption, Testing, Training, Implementation, Launch live (Portal, front-end, back-end) Average price per hour 25 USD/hour Average price per day 200 USD/manday Implementation team: 1 Project manager, 3 Developer, 2 Tester, 1 Designer, 1 Trainer, 1 Quality Controller Estimated implementation time 350 mandays	1	70,000 USD	70,000 USD
	Implementation costs of the system without VAT			**70,000 USD**

6.4. IMPROVEMENTS AFTER DEVELOPMENT

EITI during system maintenance may need additional improvement or components development in accordance with the development of the inspections sector or as a result of legal amendments or legislation in this sector

For realization of these improvements will be based on the cost of labor hour which will be quoted along with the whole system.

No.	Description	Quantity	Price	Value
1	Average Cost hours software development procedures or under the new modules integrated in the platform for EITI	1	25 USD/hour	25 USD/hour

The table below provides a summary of the costs of all the alternatives that are available to implement the system:

	Services	EITI	DPT	DPD	AKBN	MF	Totali (USD)
Option 1	System development, System maintenance, user training	70,000	**0**	**0**	**0**	**0**	**70,000**
	Technical infrastructure**	5,500	**0**	**0**	**0**	**0**	**5,500**
	Windows server 2008 R2 BizTalk 2010, SQL Server**	1,500	**0**	**0**	**0**	**0**	**1,500**
	Total						**77,000**
	Total including VAT						92,400
Option 2	System development, user training	**70,000**					**70,000**
	Technical infrastructure **	5,500					**5,500**
	Windows server 2008 R2 BizTalk 2010, SQL Server**	1,500					**1,500**
	DIS**	25,000					**25,000**
	Gtalk license**	50,000					**50,000**
	Interface implementation enabling interoperability**		14,000	14,000	4,000	4,000	**36,000**
	Maintenance**	15-20% of total costs					**28,200 - 37,600**
	Total						**216,200-225,600**
	Total me TVSH						**259,440-270,720**

* The first year of the maintenance is covered from the developing company, the 2nd year until the 4th year the cost of the maintenance is calculated to be 15% - 20% of the contract total value.

** These costs can be covered from AKSHI or the institution itself if it is within the previous contracts with other third parties.

7. Deadlines for project implementation and work plan

7.1. IMPLEMENTATION STAGES

The offered solution is based on the following phases of project implementation:

i. Analysis, design, development, testing and implementation of the complete system.

ii. Supply, delivery, installation and application of licenses needed for an **unlimited number of users.** Installation, configuration and setting of the proposed software, transition from test in a work platform, as well as maintenance.

iii. Train of the users and ID staff, in connection with the use, application maintenance.

iv. Maintenance and support services for standard or customized software for a period of 4 years after the end of the guarantee period and the eventual handover.

7.2. DEADLINES OF PROJECT IMPLEMENTATION

Implementation of this project will go through the following stages:

Phase 1. Bid announcement and preparation.
Phase 2. Evaluation and contract signature.
Phase 3. System Design Document, which includes the design and development of all processes, workflows, policies that will be used for infrastructure planning and legal framework.
Phase 4. EITI Approval of the System Design Document proposed by the company contracted to develop the system.
Phase 5. The development of personalized applications needed for EITI
Phase 6. Configuration and Infrastructure customize HW and SW.
Phase 7. Tillage, Installation and testing of the system.
Phase 8. Correction of the problem (bug fixing), in the emerging and reconfiguration.
Phase 9. Integrated testing of all system
Phase 10. Final submission to EITI.
Phase 11. Training realization.

Phase 12. Application at work, the realization of receipt and the start of maintenance for a minimum period of 4 years.

Implementation provided Chart is as follows (and includes 350 mandays)

Average time performance is 3-6 months. This time will have to correspond sufficient to put the data of 2011, 2012, 2013, 2014, and the system will be ready for the 2015 year.

No.	Description	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month
1	Documentation of system designing						
2	Approval from EITI						
3	Development of system						
4	Preparation of Infrastructure						
5	Implementation and Testing						
7	Integrated Testing						
8	Training						
9	Implementation in job processes and maintenance						

8. References

Official website of National Agency for Information Society (NAIS) (20 March 2015). Government services offered by NAIS. Source: http://www.akshi.gov.al/sherbime

National Agency for Information Society (20 March 2015). Interoperability System of Government Database. (July 2013). Source: http://www.akshi.gov.al/Standarde%20Teknike/specifikime_teknike_sistemi_i_nderveprimit_te_db.pdf

National Agency for Information Society (20 March 2015). National Interoperability Framework made for the Republic of Albania (30 June 2014). Version 1.Source: http://www.akshi.gov.al/images/Korniza_kombetare_e_nderveprimit.pdf

Official website of National Agency for Information Society (NAIS) (20 March 2015). Legislation. Source: http://www.akshi.gov.al/legjislacioni

9. Annex

ANNEX 1. REPORTS AND TABULAR DATA PRODUCED BY SYSTEM

No	Reports
1	Cash flows generated by extractive industries
2	Oil and gas fields in Albania
3	Research blokes situation in October 2014
4	Map chromite deposit
5	Map copper deposit
6	Map nickel deposit
7	Deposits of stones and Non-metal minerals
8	The main oil export destinations
9	Cash flows to be reported by the licensee and the collection state entities

Table 1- Reports produced by system

Source: Deloitte, Report by year 2012, URL: http://www.albeiti.org/wp-content/uploads/2015/01/EITI-Report-2012_Albanian_15_1_2015-1.pdf

No	Reports
1	Some key data for extractive industry
2	Mineral rents paid by extractive industry
3	Summary of reconciliation of payments to the State Budget
4	Summary of reconciliation of payments to j Albpetrol
5	Summary of search activity in Albania
6	Geological reserves of recoverable oil in million tones

7	List of search blocks
8	Historical production of minerals under AKBN
9	The main input for production and employment
10	Kay financial data for Albpetrol
11	Statement of government revenues from extractive industries
12	Rent and production
13	Statement of Government spending
14	The cumulative value of oil exports during 2008 - 2012 and the main destinations
15	Report of oil independence (2008 - 2012)
16	Summary of reconciliation of payments for the State Budget
17	Summary of reconciliation of payments to Albpetrol
18	Summary of payments from the sector of oil and gas in the State Budget
19	Summary of reconciliation of payments from oil and gas sector in the state budget by type of income
20	Summary of reconciliation of mining royalties for exports - oil and gas
21	Summary of reconciliation of mining royalties for sales in the country - oil and gas sector
22	Summary of reconciliation of tax penalties - oil and gas sector
23	Summary of reconciliation of signing bonuses - oil and gas
24	Summary of reconciliation of payments from the mining sector in the State Budget
25	Summary of reconciliation of payments from the mining sector in the State Budget - by type of income
26	Summary of reconciliation of income tax for the mining sector
27	Summary of reconciliation of mining royalties for exports - mining sector
28	Summary of reconciliation of mining royalties from the mining sector -internal sales
29	Summary of reconciliation of tax penalties - mining sector
30	Summary of reconciliation of tax on dividends from mining sector

31	Cases to be investigated further by the state reporting structures
32	Summary of reconciliation of payments from oil and gas sector for the production of separation - collected by Albpetrol
33	Summary of cash flows from the petroleum sector for signing bonuses - received from Albpetrol
34	Summary of cash flows paid by Albpetrol
35	Payments for any society
36	Mining rent on internal sales
37	Mining rent on export
38	Tax Penalties
39	Signed bonuses
40	Payment for any society
41	Mining rent on internal sales
41	Mining rent on internal sales (continued)
42	Mining rent on export
43	Income tax
44	Tax Penalties
45	The tax on dividends

Table 2- Tabular data produced by system

Source: Deloitte, Report by year 2012, URL:http://www.albeiti.org/wp-content/uploads/2015/01/EITI-Report-2012_Albanian_15_1_2015-1.pdf

ANNEX 2. REPORTS FROM GENERAL DIRECTORATE OF TAXATION

No	Reports
1	Payments of income tax for companies of sector (EI)
2	Mining royalties payments for sales within the country
3	Payment of dividend taxation for companies of the sector (EI)
4	Other charges as appropriate material
5	VAT paid / reimbursed
6	Paying social insurance
7	Payment of tax on personal income
8	Number of license
9	Office beneficiary
10	Date of transaction
11	Amount
12	Currency
13	Type of tax
14	Description of transaction
15	Comments
16	Annual Sales in ALL.
17	Annual profit in ALL.
18	Personnel expenses in ALL.
19	Investment in equipment / wells / gallery / manufacturing capacity etc. in ALL
20	Payment for environmental rehabilitation in ALL
21	The average number of employees (foreign nationals / Albanian)
22	Paying society
23	NIPTI (NUIS)

24	Type of tax / payment
25	Amount
26	Currency
27	Date of transaction

Table 3- Reports from General Directorate of Taxation

ANNEX 3. REPORTS FROM GENERAL DIRECTORATE OF CUSTOMS

No.	Type	Parameters
1	General data	NIPT
2		Subject name
3		Sector
4	Other data	License number
5		Shareholders of the company
6		Administrator(s)
7		Contacts(email, address, telephone number etc.)
8		Area(s) where is operated (District, city, village, etc.)
9		Economic sector in which society operates
10		Owned licenses
11	Customs declaration	Customs declaration number
12		Decelerate generation date
13		Declaration admission date (payment date)
14		The amount of rent in Lek
15		Export value in Lek
16		Product Id
17		Description
18		The amount of minerals
19		Mining royalties payments for export
20		Customs taxes payments

Table 4- General Directorate of Customs Reports

ANNEX 4. REPORTS FROM NANR

No.	Type	Parameter
1	Company details	**District / City**
2		**Source name**
3		**Mineral type**
4		**Administrator**
5	Data according to company declaration	**Employees no**
6		**Measuring unit**
7		**Production in quantity**
8		**Price (Lek)**
9		**Production in value (Lek)**
10		**Sales in quantity**
11		**Sales in value (Lek)**
12		**Environmental rehabilitation guarantee (Lek)**
13		**Investment plan guarantee (Lek)**
14		**Works for the environment rehabilitation (Lek)**
15		**Investments (Lek)**
16	Data according to NANR monitoring	**Employees no**
17		**Measuring unit**
18		**Production in quantity**
19		**Price(Lek)**
20		**Sales in quantity**
21		**Sales in value (Lek)**
22		**Environmental rehabilitation guarantee (Lek)**

23		**Investment plan guarantee (Lek)**
24		**Works for the environment rehabilitation (Lek)**

Table 5- Parameters for licensed entities in mining sector

No.	Type	Parameter
1	Company details	**District**
		City
2		**Source name**
3		**Type (oil / gas / mining)**
		Galleries no
4		**No if wells**
5		**Administrator**
6	Data according to company declaration	**Employees no**
7		**Measuring unit**
8		**Production in value**
9		**Annual production by mineral and oil fields (m3 / ton / barrel etc.)**
10		**Number of wells / active galleries by area / main oilfields**
11		**The average number of active galleries**
12		**The average number of active wells**
13		**Potential and exploitable reserves according minerals**
14		**Price (Lek)**
15		**Production in value (Lek)**
16		**Sales in quantity**
17		**Sales in value (Lek)**
18		**City/Village**
19		**Environmental rehabilitation guarantee (Lek)**
20		**Investment plan guarantee (Lek)**
21		**Works for the environment rehabilitation (Lek)**

22		**Investments (Lek)**
23	Data according to NANR monitoring	**Employees no**
24		**Measuring unit**
25		**Number of wells / active galleries by area / main oilfields**
26		**The average number of active galleries**
27		**The average number of active wells**
28		**Potential and exploitable reserves according minerals**
29		**Annual production by mineral and oil fields (m3 / ton / barrel etc.)**
30		**Production in quantity**
31		**Price (Lek)**
32		**Sales in quantity**
33		**Sales in value (Lek)**
34		**City/Village**
35		**Environmental rehabilitation guarantee (Lek)**
36		**Investment plan guarantee (Lek)**
37		**Works for the environment rehabilitation (Lek)**
38		**Investments (Lek)**

Table 6- Parameters for licensed entities in the hydrocarbon sector

No.	Type	Parameter
1	Payment	**NUIS**
2		**Entity name**
3		**Payment way (Bonuses, penalties, Renta mining fee, fee for State> $ 50,000, fee for .government> $ 50,000)**
4		**Sector(Hydrocarbon, Mining, etc)**
5		**Payment date (Note)**
6		**Payment description**
7		**Beneficiary institution**
8		**Cashing currency**
9		**The deposited amount in the original currency**
10		**The liability currency**
11		**The liability amount in the original currency**
12		**Comments and other transaction data**

Table 7- Payment parameters

ANNEX 5. ALBPETROL REPORTS	
No	**Reports**
1	Signing and training bonuses
2	Other payments provided or not the concession agreements of oil / mining
3	Total annual production (for industry) according to minerals and oil fields (m3 / ton / barrel etc.)
4	Maps of the main sources according to minerals and city / village location place
5	Number of wells / active galleries by area / main oilfields
6	Potential and exploitable reserves according minerals

Table 8- Albpetrol reports

ANNEX 6. REPORTS FROM MINISTRY OF ENERGY AND INDUSTRY	
No	**Reports**
1	Other payments provided or not the oil concession agreements / mining
2	Dividend
3	Payments for mining permits

Table 9- Reports from Ministry of Energy and Industry

ANNEX 7. QUESTIONS TO THE DIRECTORATE GENERAL OF TAXATION

Information Management System (System)

1. Can you provide a brief description of the new system that you implement in your organization, in terms of functionality and technology used?
2. At what stage is and could be considered completed?

Rents and the number of foreign workers to companies licensed

1. Attached is Appendix 3, which provides a rent structure that is used by the EITI in the preparation of periodic reports.
   Please sign in Tables I and II those units rent structure that you gather in the self-declaration by licensed companies.
2. If you have any information which is not included in our tables, you can add the respective table.
3. One of the indicators that collects EITI is and no employees of foreign nationality. The document attached Appendix 2, section 9 and 16 specified that "Marked citizenship of foreign nationals on the basis of official documents submitted by them". Are data relating to foreign nationals part of the plea licensed company to your system?
4. Enable new system that you implement, data transfer to local tax-listed as Annex 1?

System integration with your other systems management information

1. Exist any structured links between system you use and the Ministry of Energy and Industry?
2. Based on data from the extractive industry, have secure electronic communication channel between your new system and the following agencies?

- Ministry of Finance
- General Directorate of Customs
- National Agency of Natural Resources
- National Registration Center
- National Licensing Center
- Local Units Municipal

If not, what form of communication for the exchange of information related to data extraction and processing industry exist?

3. Is it possible to transfer data from the current system through a standard format (ie XML)

4. Do you have a specialized team focused on the non-reconciliation of taxes for companies licensed?

Management of new applications associated with the new system information

1. In the contract you have with the company that developed your electronic system, have predicted the development of channels of communication and dissemination of information between your Department and other institutions for further steps?
2. How much is approximately building a new reporting module which transfers to an international format (ie XML, JSON) data required by the directorate general of taxes in favor of EITI?

ANNEX 8. QUESTIONS TO GENERAL DIRECTORY OF CUSTOMS

Management of Information System (MIS):

1. Can you, please give us, a short description of the ASYCUDA system adapted to your needs, concerning the type of technology used?
2. Which is the company offering system's sustainability and development?

Rent and number of foreign employees at the licensed societies

1. Extension 1 offers the rent structure used by EITI to prepare periodical reports. You can see it attached here.

   Please, check on the table only rental structures, which you collect in your system for commercial companies.
2. If you have any information, which is not included in our reports, please add them on the respective table, or sent them in another one.

The integration of your System with other MIS

1. Are you part of GovNet and of the Government Gateway? If not, are you planning to join us?
2. Is there any structured connection between your system and The Ministry of Energetic and Industry?
3. Based on the data of the extracting industry, do you have a secured electronic channel of communication between your newest system and the following agencies:
   - Ministry of Finance (MF)
   - General Directorate of Taxation (GDT)
   - National Agency of Natural Resources (NANR)
   - National Registration Center (NRC)
   - National Licensing Center (NLC)
   - Local Municipal Unit (LGU)

If not, what type of communication for data exchange related to the extracting and processing industries exists?

4. Is data transfer from your actual system through a standard format (i.e. XML) possible?

Management of new requests related to the new Informatics System

1. According to the agreement with the developing company of your electronic system, have you prognosticated the development of the communication channels and the distribution of Information between your Directorate and other institutions later on?

2. Is there any possibility for us to propose a report module (new service) in favor of EITI?
3. Which is your methodology of costing for a new service? In a few words, how much can the building of a new reporting module (service), which transfers in an international format the requested information from General Directorate of Customs in favor of EITI cost?

ANNEX 9. RESPONSE FROM NATIONAL AGENCY OF INFORMATION SOCIETY

Dear Mr. Mezini,

Concerning your request for integration of the information system needed to be built in account of EITI, Initiative for Transparency in Extracting Industry, we pronounce that:

1. EITI's object is the publication of incomes from the exploitation of natural resources as well as public costs aiming that the groups of interest "Stake Holders" profit as much as possible from these incomes (source – official site of EITI).
2. The service (informative) given by EITI is an annual report (source – official site of EITI) based on the periodical reports of the corresponding institutions (MF, GDT, GDC, NANR).
3. EITI, Initiative for Transparency in the Extracting Industry, is an initiative of the civil society, which does not have any public functionality. This means, that the database that needs to be created will not be considered a state database.
4. Said that, we cannot integrate on the governmental platform of interaction. The information you need can be taken from the newsletters of the corresponding institutions and from other monthly reports, which the owners of the exploitation permits should deliver to the adhered initiatives.

Yours faithfully,

Yrgys Cela
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ANNEX 10. QUESTIONS TO THE MINISTRY OF ENERGETIC AND INDUSTRY

Dear Sir/Madame,

After speaking to The Mines Sector, the responses are:

1) Which is the system used by MEI for licensing? **: There is no system. The materials are hard copy. They are scanned and then sent to NLC.**
2) Does the system include all the different types of licenses? **:**
   There are 3 types of licenses:
   a) Research – Invention License
   b) Exploitation License
   c) Research – Invention – Exploitation License
3) Does the system support registration of licenses' payments? **: The payment goes to MEI's account.**
4) Where are these licenses paid? **: Licenses are paid in the Bank.**
5) Does the Ministry request the registration and tax certificate to the applicants? **: NLC verifies all parts of the applicants' documentation. Then, MEI uses them.**
6) Have you ever planned to or are you implementing improvements to your system? **: There is no system and there is no planning, because MEI only takes reports.**
7) **An extra question:** Who is responsible for the control of production, sales and remaining of the respective companies? **: Responsible for the control and the verification are: Taxation**.

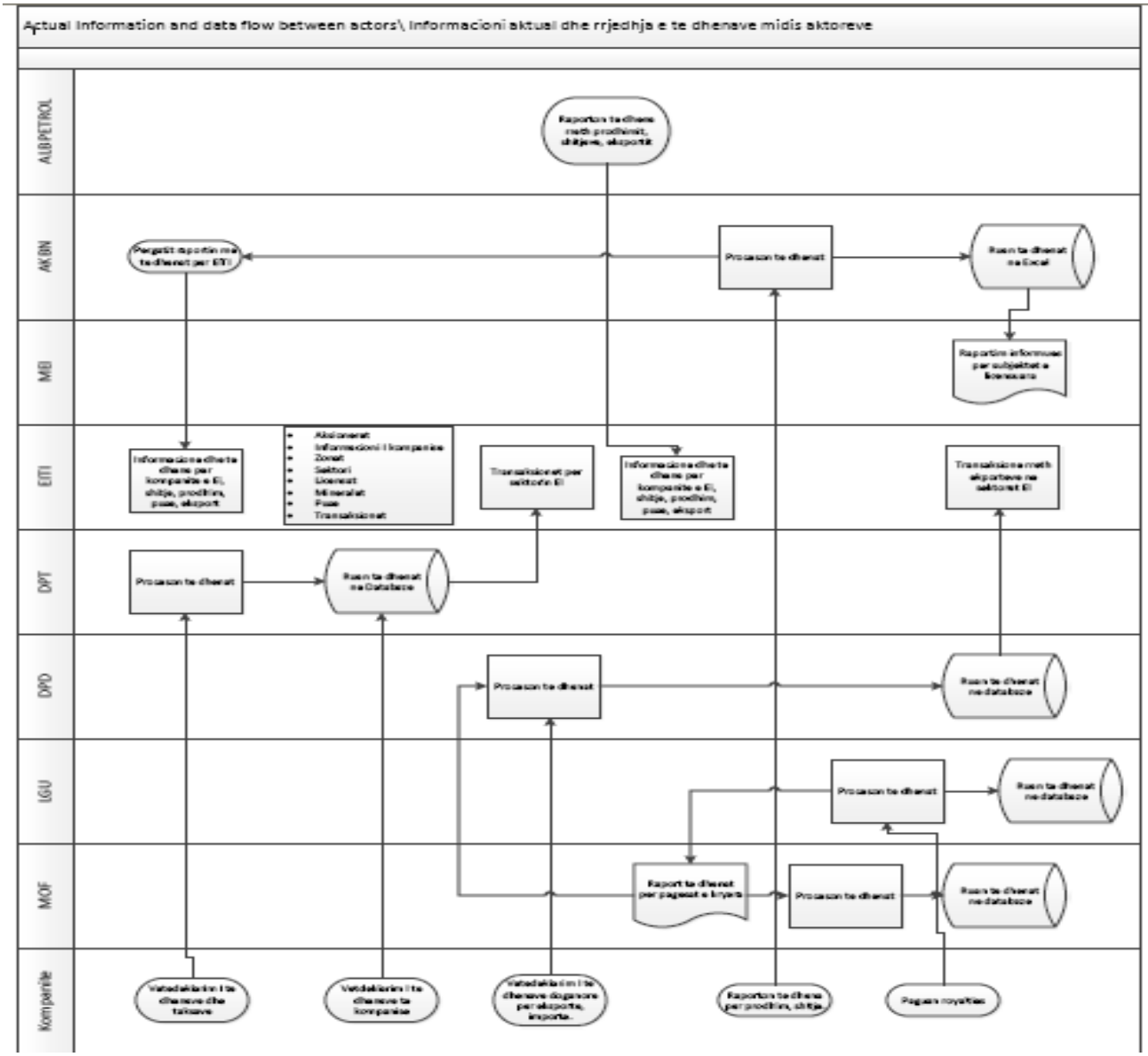
ANNEX 11. A BRIEF TECHNICAL DESCRIPTION CONCERNING THE GDT SYSTEM

C@TS system and the reporting one are accessible by the employees of the Taxation Administrate. This allows them to accomplish all their daily duties and responsibilities. E-Filing system is a Web application, which serves as an interface for the administration of taxation duties to the taxpayer itself. This one is accessible through the Internet, from about 200, 000 taxpayers. This is the reason why, the new administrative, controlling and collecting system for taxes (e-Tax) should offer availability, performance and high security level. The solution of the encountered problems and the implementation of legal changes should be in real time.

The solution to the system is based on a platform with these characteristics:

- Microsoft Windows Server 2012 me .NET Framework 4.5 and Internet Information Service 7
- Apache Tomcat 7
- In-finica Process Engine
- Microsoft SQL Server 2012 with the following characteristics:
    - Database Engine Services
    - Analysis Services
    - Integration Services
    - Reporting Services
    - SQL Server Data Tools and Client Tools Connectivity

SHTOJCA 12. Schematic flow chart



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