



**Ministry of Education, Science and Technology**

**OpenEMIS Kosovo  
Scoping Mission Report  
November 2017**

## Acknowledgements

The authors would like to acknowledge the kind and valuable contributions of the Save the Children Kosovo country team in coordinating the activities for the scoping mission. A special thank you to Ms. Maliha Kabani and the Save the Children Sweden country office for their support and contributions to this initial mission and to the IKEA Foundation for funding this important activity.

## Table of Contents

<b>Acknowledgements</b>	<b>2</b>
<b>Table of Contents</b>	<b>3</b>
<b>Executive Summary</b>	<b>4</b>
<b>Introduction</b>	<b>6</b>
<b>Needs Assessment and Gap Analysis</b>	<b>7</b>
<b>Observations and Recommendations</b>	<b>20</b>
<b>Pilot Plan</b>	<b>24</b>
<b>Annex A – Needs Assessment Mission Agenda</b>	<b>26</b>
<b>Annex B - Needs Assessment and Gap Analysis Questionnaire</b>	<b>28</b>

## Executive Summary

The Scoping Mission, comprising of a Needs Assessment and Gap Analysis, was conducted, with the Ministry of Education, Science and Technology (“The Ministry”) and in conjunction with Save the Children Kosovo and Save the Children Sweden, from the 6<sup>th</sup> to the 10<sup>th</sup> of November in Pristina, The Republic of Kosovo.

The overall methodology of the initial activity was to engage all key education stakeholders in mapping processes and needs, identifying gaps in the data collection processes in order to support improved long-term planning in the education sector. The scoping mission will plan an approach to strengthening data collection tools and strengthen the education information system, with a special focus on children with disabilities.

The consultancy team, supported closely by The Ministry and Save the Children team, held in-country meetings with education stakeholders in order to assess their needs and gaps. The initial goal of this activity was to evaluate ways in which OpenEMIS can address and streamline current processes; however, due to the recent World Bank loan accepted by the MEST to improve the Education Management Information System (EMIS), the following report will focus on describing gaps which should be filled by the new EMIS. During the time in country, the OpenEMIS team took the opportunity to speak with education stakeholders, gather samples of data collection forms, and other documentation to understand the current processes in place. A set of standard questions were administered (see Annex B) to understand the following:

1. The current and desired situation for education planning
2. Current data and communication processes at The Ministry
3. Gaps in administration and service delivery
4. Functional and data requirements for the Education Management Information System

The overall desired change that the implementation of OpenEMIS aims to deliver is to drive the process toward better education outcomes through the use of a Ministry wide tool that promotes the availability of better data in Kosovo; more timely, accurate, disaggregated data for decision-making. The specific objectives are:

1. To ensure that existing educational data are put to good use.
2. To identify gaps in the country’s EMIS.
3. To build capacity and transfer technology for the government to be able to update and manage the new EMIS from year to year.
4. To leverage technological mechanisms for education information dissemination (tables, graphs, maps, profiles, dashboards).
5. To eliminate data redundancies and duplication of efforts within The Ministry.

The report which follows will provide a detailed account of each stakeholder meeting. It will include a description of the purpose and objectives of the units, the data captured by each

unit, their data needs, how the new EMIS should support these functions and how OpenEMIS could fulfill those needs.

The report will culminate with a series of recommendations for the next stages of EMIS development.

The key findings of the needs assessment and gap analysis are:

1. The Ministry has implemented an EMIS system that successfully collects aggregate level data directly from principals.
2. The current data collection system could benefit from improved data communication and participation from units within the Ministry.
3. The Ministry has secured a loan from the World Bank to enhance the current EMIS system. The OpenEMIS team encourages the Ministry to implement a tool that is flexible, easily customizable and open sourced.
4. Data collection relevant to Inclusive Education is lacking within the current EMIS system and should be a key in the redesign process. The new EMIS should support the data collection needs of the Inclusive Education unit.
5. Proper use of the system can streamline the highly time-consuming and burdening processes within the Ministry, improve response and reporting times, reduce operational costs, and increase the quality of the data.

## Introduction

The Ministry of Education, Science and Technology (MEST) is mandated with the responsibility of providing quality education services to all citizens of Kosovo. The Ministry has set up a policy framework guided by three principles: Inclusion, Quality and Accountability. The Kosovo Education Strategic Plan highlights the obligation of the Ministry in providing a system that imparts quality education promoting a literate society with access to continuous learning opportunities through a competency based curriculum. As part of the strategy to achieve this objective, the Ministry is working to improve the current EMIS process.

Currently, digital access is available for recent education data at an aggregate level; however, there is no access to data on an individual level. Data is available at the aggregate level in the EMIS office and other units within the Ministry have their own unique database, but there is no robust learner level data management system. The current system does not provide comprehensive relevant information to the Ministry in regards to priority areas, including but not limited to, individual attendance and behavior, the state of literacy, examinations, repetition and dropout rates, textbooks as well as assessments that outline in the Education Sector Plan.

The success of the new EMIS system will depend on the process and capacity of The Ministry to clearly define the requirements and needs of each unit for the new tool. Data processes and needs must be sound and clearly defined and staff must possess the knowledge and skills to execute their assigned roles within these mechanisms. Capacity within the Ministry in the use of database tools and digital data collection formats is quite advanced and will be a positive factor in the implementation of the revised tool. It is very important to the success of the new EMIS that The Ministry facilitate a supportive organizational culture and sound communication practices.

As it relates to Inclusive Education, the Kosovo Education Strategic Plan the Ministry defines as its first objective The creation of an integrated system for the collection, processing and use of data which will also enable monitoring of children with special needs and dropout children and the improvement of quality of teaching both through the provision of training programmes for inclusion and the implementation of basic ideas. In order for this objective to be met it is imperative that the Inclusive Education team play an important role in the development of the TOR which will define the parameters for the new EMIS system. At the time of the scoping mission, it was unclear what was included in the TOR and how the requirements of this unit were to be included.

In the subsequent sections, the report will discuss the meetings that took place during the scoping mission, the needs identified and how OpenEMIS could help address those gaps. A set of findings and recommendations for the next phase of EMIS development will close the report.

## Needs Assessment and Gap Analysis

This section of the report will discuss each stakeholder meeting, the responsibilities as described by Ministry officials, the data processes and the data gaps of each unit. It will also briefly mention how OpenEMIS can address these needs.

Below is a description of what is meant by gap:

The **Institutional Capacity gap** addresses the ability of The Ministry to manage and maintain the system by reviewing the organizational and IT structure, technical capacity, decision-making mechanisms and geographical diversity. This will highlight the importance of structures to govern, manage and administer the new EMIS, along with processes to ensure it is handled efficiently.

The **EMIS gap** analyzes the current EMIS system and how this tool can or cannot fulfill the needs as described by the different units in the Ministry. This section will also try to address the changes and additions needed for new functionalities in the new EMIS tool to satisfy The Ministry's needs.

The team covered the following key topics:

1. Current state of EMIS
2. Plan for the development on the new EMIS based on the understanding by each unit
3. Data collection processes and tools for each unit
4. Use of additional data to fill current gaps
5. Reporting tools requirements
6. Functional and data requirements for the new EMIS.
7. Connectivity and data redundancy issues with sub and external systems

In addition to the conditions stated above, successful implementation of the system will depend upon the following factors:

1. Stakeholders are successfully identified
2. Responsibilities within the system are clearly stated
3. Expectations are clearly stated
4. A support network is established within The Ministry to assist in the initial stages
5. Capacity building is conducted at the local and central level

## Ministry Stakeholder Meetings

### Initial Introduction Presentation

The in-country activities began with presentation by Save the Children Kosovo, Save the Children Sweden and the OpenEMIS team at the Ministry's offices. During the meeting, the project objectives were presented and the specific week objectives were discussed. The Save the Children Country Representative discussed the country offices priority and how they would be strengthened by the project. The discussion also touched on the following points:

1. Introduction into wider IKEA funded project
2. Introduction into Community Systems Foundation
3. Introduction into OpenEMIS and its capabilities
4. Objectives of the scoping mission

The meeting gave the MEST an initial chance to ask questions and estate concerns for the mission moving forward.

### EMIS Division Meeting

The EMIS division of the Ministry is responsible for the compilation, management and the dissemination of education statistics. During this initial meeting the EMIS team described their current data collection process and the current EMIS system they use. Currently data is being collected by an EMIS software program based on a preset data collection form. Aggregate data is entered into the system twice a year by the school principals on an aggregate level and reported to the central EMIS office. The EMIS office then collects and compiles the information shared by all the institutions and disseminates upon requests and also publishes the yearly digest.

The administrative division of the Ministry relies on Municipalities conducting inspections and assuring quality of the institutions. With regards to the data collection process; the Municipalities do not enter data. Municipalities review the information that is shared by the institutions and contact the institution if they observe a discrepancy in the data. At the same time they may retrieve information and run reports from the EMIS system in order to complete their inspections.

The current EMIS collects information on the name of the school, address, physical infrastructure of the school, access to drinking water and hygiene, electricity, total attendance, violence incidences and an early warning system. They also collect information on student gender, race, ethnicity, distance travelled to school, socio economic status and family composition. For staff, individual information is collected on date of birth, position, race, gender, subjects taught, qualifications and licenses. The Ministry has a separate tool that keep track of licensing process. This license number is then used in the EMIS system to track the staff. Related to Inclusive Education the only information gathered through the EMIS related to this topic is total number of children with disabilities.



The MEST has a framework for education indicators which guides the work of the EMIS section in terms of monitoring and publishing indicators. This year with the assistance of UNICEF they have revised the framework of indicators and they hope to start using in for the publishing of next year's digest. When receiving data request the EMIS unit is able to respond relatively quickly. The EMIS unit is organized and has the human capacity and willingness to lead the implementation of the EMIS tool.

During this initial meeting the EMIS section described a new project to revamp the EMIS system through a loan from the World Bank. The currently EMIS was developed by a Macedonian company in 2011 and they began using it in 2013. The tool is a proprietary tool developed specifically for Kosovo. Not all members of the Ministry have access to the tool and the service agreement with the company has now expired, so access cannot be given anymore.

Given the development of the new EMIS tool, a committee was set up in order to gather the requirements from the different units. During this mission we were unable to see the TOR; however, as described by the EMIS unit, the new tool will most importantly collect individual student data.

Given the requirements and the gaps identified during this meeting; OpenEMIS will be able to support the work on the EMIS unit by:

1. Providing individual, student, teacher and staff profiles
2. Collecting data in Children with Disabilities
3. Allowing unlimited access into the database based on permissions without service request
4. Assigning tasks in a workbench
5. Conducting longitudinal studies of children
6. Assigning textbook to students
7. Mapping schools in Kosovo
8. Designing and implementing surveys and rubrics
9. Developing and delivering assessments and competencies
10. Using OpenEMIS integrator, DataManager and Dashboard to visualize and report on indicators and data.
11. Providing a central data repository for all education data

## Inspectorates

The inspectorates, under Law 2004-37, are responsible for the supervision of schools as it pertains to curriculum, infrastructure, data collection, registrations, staff, and overall delivery of quality services according to the law. Due to this extensive mandate and the lack of resources, the inspectorates have a difficult time being able to service the institutions and learners as much, or as often as they would like to.

They are responsible for inspections of:

- Preschool education
- Elementary education
- Lower and Upper Secondary Education
- Higher Education
- Special Education
- Non-formal Education
- Vocational Education
- Organized settlement for children, pupils and students (children gardens, pupil and student dormitory)
- Education in Diaspora
- Correctional houses and prisons

Inspectors conduct one of four inspections:

1. General
2. Special
3. Control
4. Emergent

After each field visit they prepare formal documentation, a charge sheet. The sheet contains a detail account of what has been found which is then sent to the schools. The education inspector compiles a charge sheet in which the factual state is presented and proposes measures for avoiding failures. The charge sheet should be signed by education inspector and the authorized person of the institution. Institutions then have a deadline to remedy the issues highlighted by the inspector. A copy of charge sheet should be submitted to: inspectorate of education institution, higher education officer HEO, municipal education directorate if that is on their responsibilities and in the MEST. The reports compiled by the inspectorate are shared in paper copy.

The Inspectorate currently has 63 people working in the department across all 7 regions of Kosovo. They are not all inspectors. As they look towards the future they would like to have subject specific inspectors but currently due to the lack of resources this is not a possibility. In addition to the subject experts, the inspectorate would like to have a system that provides a tool to conduct and manage inspections and serve as a digital ledger of inspections and fulfillment of inspection requirements and that can assist with their regular reporting periods.

The Inspectorate does not collect any data on Inclusive Education nor are there special inspections as it pertains to accessibility or services provided for children with disabilities. It was unclear what role the inspectorate played in the development on the TOR and whether or not they will be using the new EMIS to support their processes

OpenEMIS will be able to support the work of the Inspectorates by:

1. Providing an up to date picture of each institution under their supervision.

2. Integrating data collection instruments into the system so data is recorded and reported directly in OpenEMIS.
3. Providing individual institution, student and staff profiles.
4. Providing a tool to conduct assessment and surveys of their institutions, staff and learners.
5. Generating reports to help their inspections.
6. Keeping track cases and deadlines.
7. Generating reports to monitor learner's retention.
8. Providing access to real time data from institutions.
9. Providing a log for communication and visits with institutions.

### **Inclusive Education –IE**

The Inclusive Education Unit at the MEST is in charge of overseeing the programs related to Inclusive Education in the Ministry. Key among their responsibilities is to support the MEST in achieving lifelong education for all students in Kosovo applying the Inclusion Education model. To support this mandate, the IE unit has Resource Centres (RC) which provide education services for Children With Disabilities (CWD) with the end goal of mainstreaming the children into regular schools. The IE team has been working on improving the services provides by the RC by increasing the capacities of the teachers and working towards a new financing model that would provide greater resources for CWD. Resource Centres provide data to the MEST through the EMIS.

Much like in other countries meeting the challenges of providing appropriate services for CWD is difficult in Kosovo and they recognize this difficulty but they are also working towards increasing awareness and eventually improving the service provided. One of the biggest challenges in Kosovo is identifying CWD as well as obtaining accurate up to date data on their condition, education status, needs and graduation/promotion rates.

The process towards Inclusion is a long and difficult adjustments for Ministries; it requires the active participation of all Ministries and government stakeholders. The approach should be unified and comprehensive and this is perhaps the biggest challenge for Kosovo due to the silo working of all units and ministries. That being said Kosovo took the first steps towards Inclusion by creating a legal infrastructure to the passing of the legal framework for pre-university education which has inclusion at the heart of its principals. Save the Children has worked with the Ministry of Education to recruit teachers and build capacity in order to improve the services that are provided to CWD.

The data collection process for the IE unit is also done by the EMIS department. Data is collected in their yearly EMIS form in aggregate format and then shared with the IE team. Data only really covers the type of impairment; they would like to have access to more data and at an individual level.

A significant issue being faced by the IE team is the accuracy of the data and missing data. The issues regarding data include:

- Due to lack of proper information on CWD there are instances where disabilities are being over reported; for example, due to improper definitions children with eye glasses were being reported as having a disability.
- Lack of diagnosis of the child disability or impairment
- The total number of CWD is only reliable for Resource Centres since the IE team oversees the data collection. It is difficult to have a total number of CWD is all of Kosovo
- In many municipalities they do not have the total number of CWD that require transportation nor the number of beneficiaries from transportation programs.
- They are currently missing the information of the education plan of CWD.

Recognizing the shortcomings of the data collection processes, as it relates specifically to CWD, the MEST has created Evaluation Teams. The evaluation teams assess the pedagogical issues of the child and the assistance or services that should be provided for them. The Evaluation Team must then issue a decision report for the child. The recommendation can include to be provided with a support teacher, assistant teacher, transportation or other professional support.

The importance of data for the Inclusive Education unit cannot be overestimated. As the MEST moves to a new financing formula, the resources allotted to IE will be based on the number of CWD needing services. If CWD remain uncouneted and marginalized the resources allocated by the MEST will never be sufficient to cover the needs of these children.

The availability of Evaluation Teams has helped ameliorate the situation where they are available; however, currently, due to limited resources not all municipalities have Evaluation Teams and in the areas where Evaluation Teams are available; they have not been able to visit all the identified children.

As previously mentioned, providing services for CWD is a significant challenge for many countries; however, in order to ensure appropriate services, it is first crucial to identify these students. It is furthermore important to ensure that, where needed, a medical diagnosis is provided and proper documentation and follow-up take place. The MEST and Inclusive Education team could benefit from a tool that allows for case management counselor management.

Currently, the process for identifying a child with a disability has many steps and communication between the health care provider, the school, the case manager and the parents is difficult and lacks a data repository where all stakeholders can access the latest data. Very recently, administrative processes were changed which provide guidance for a teacher in case she suspects a child of having a disability. I would be beneficial for the MEST and the IE team to have a tool that supports that new administrative process.

The Inclusive Education team would like to collect data on the following:

- Name and Last name

- Level of education
- Total number of children with a disability
- Type of disability per child and severity
- Services provided by the school
- Services provided by the municipality
- Transportation services and the beneficiaries
- Teacher qualifications, especially those that have qualifications for teaching CWD
- Students receiving individual learning plans
- Data from Municipalities on the Evaluations Teams and how many students they evaluate and the reports
- Data from Itinerant teachers
- Children out of school
- Transition rates from resource centers to regular schools
- Dropout rates and retention rates
- Teacher training – being able to identify teachers who have received IE training
- Accessibility of schools

Through the conversation with the Inclusive Education unit it is quite evident that they have a severe need for data and proper data collection processes in their unit and within the MEST. While the EMIS is able to collect information on the total number of students with disabilities it does not provide disaggregation at an appropriate level for the MEST.

OpenEMIS would be able to support the work of the Inclusive Education team by:

1. Providing individual student and staff data
2. Providing an academic profile for all CWD
3. Providing information on the child's disability and severity
4. Providing access to institutional information including the services being provided for CWD and accessibility
5. Providing case management tool for Evaluation Teams
6. Generating alerts when a new child with a disability enters the system
7. Providing information on student transfer from a RC to a regular school
8. Reporting on Out of school children
9. Reporting on dropout rates with a special focus on CWD
10. Registering students for examinations and easily identifying testing centers that are accessible.

Due to the current EMIS redevelopment project being undertaken through a World Bank loan it is worth highlighting the importance of the Inclusive Education team in the design of the new tool. As Kosovo moves to implement processes to help them achieve the objectives set out in the Education Sector Strategy, they will need to pay close attention to the Inclusive Education unit and include data collection fields for the missing data. It is also important to note that as research emerges on Inclusive Education, data collection trends and practices in this field will evolve; it will be important for the tool that is used by the MEST to be flexible and evolve as the trends evolve.

### Sylejman Vokshi School

The OpenEMIS team visited the Sylejman Vokshi School in Mitrovica South. During the visit we met with the principal and teacher of the school to discuss school processes undertaken to collect information on their students and staff. At this school information is collected on each students age, ethnicity, family status, distance travelled to school, special needs, social situation, guardian, parent's phone numbers and the students physical address on a paper registry. Aggregates of the information requested in the EMIS are put into the EMIS program by the School principal. He inputs data into the system two times a year once in September and the rest of the time he collects information on paper registries and paper school cards. The system allows for data to be extracted by the principals as well, so principals are able to generate reports on their institution.

Primary school education is compulsory and free for in Kosovo and the Ministry provides textbooks for the subjects. Condition of the textbooks is tracked by the school teacher but it is not compulsory. The condition of the textbooks is used to create the textbook order list. Principals must also collect information on their staff. Information on staff absence and leave if collected and this information is also kept on paper. Principals also work with staff to collect the registries, schemes, timetables and any other student activity / behavior that takes place in their individual classrooms.

The principal at Sylejman Vokshi School kept detailed paper records of all the students that had been in that institution since 1948 on a registry book. This book is also used in case verifications of graduations are needed. This registry book also collects information on retrieval of graduation certification.

From the meetings with the school representatives, it is clear that they have a thorough data collection process for their institutions; however, this data is being kept in several different books and the process is quite tedious for both the teachers and the principals. This process could benefit from being in a digital format that would allow then to search and reuse some of the information being put into the system. It was noted during these discussions that the requests for only aggregate data provides little incentive for principals to collect data at the individual level.

In terms of CWD, the principal explained they do not collect any further information on CWD that the information that is requested in the EMIS; however, they said this was the case since they have not had an instance of a child with a disability in over ten years. When asked if he believes that the lack of CWD cases is due to underreporting or truly to the fact that there are no CWD, he explained that Mitrovica South is a very small and close community that is there was a child with a disability they would have heard from the community.

The Principals could benefit from collecting data on:

1. Transition from Primary to secondary
2. Guardianships

3. Parent's workplace
4. Vaccinations
5. Vulnerable students
6. Cases for those learners that have been identified with emotional trauma
7. Performance
8. Students with special needs to receive intervention in a timely manner
9. Student health information

OpenEMIS will be able to help principals of all institutions in Kosovo by:

1. Providing a comprehensive profile on all student and staff
2. Providing an easily filled attendance and behaviors registry that generates reports
3. Tracking student promotion, repetition and dropouts
4. Completing subject based assessments
5. Recording student fees
6. Generating alerts for at risk learners
7. Tracking vulnerable students
8. Generating report on student examination results
9. Generating reports on student fees
10. Easily alerting the special needs units of learners with special needs
11. Tracking teacher training
12. Tracking counselor's activities and cases
13. Integrating case management for children with special needs
14. Tracking textbooks and monitoring book condition

### **Directorate of Education – Metrovica South**

Each Municipality in Kosovo has a Directorate of Education. The Directorate of Education is fully in charge of the district respecting the standards set forth in applicable legislation with respect to the provisions of public pre-primary, primary and secondary education, including registration and licensing of educational institutions, recruitment, payment of salaries and training of education instructors and administrators. The Director is a political appointee while the Chief of Education is a civil servant.

By law the Directorate is responsive for:

- Registration and admission of students
- Construction of educational
- Employment of teachers and staff
- Registration, public health and safety inspection and licensing pre-primary schools
- Training
- Reporting on pre-primary level education, budgetary and management operations to municipal governments and the MEST in accordance with municipal and central legislation
- Monitoring education achievements



The Directorate uses the data collected through the EMIS system in order to inform its projects and processes. The Chief is able to extract information from the system and run reports needed for this own reporting and assessments. The Ministry does share other forms with the Directorate but it was unclear as to what information is collected since the Chief made clear that all data collection is done through the EMIS form and there are rarely any ad hoc data collection exercises done. If there are extra surveys or data request from the Ministry, these come to the Directorate and the Directorate is then in charge of sending to the institutions. Once the information is gathered from the schools then the Directorate shares once again with the Ministry.

In terms of collection data on Inclusive Education, there is a form that is shared with the Directorate every 6 months. In order to fill out the form, the Chief must rely on the data that has been put into the EMIS system; which as discussed is quite limited in terms of fields related to Inclusive Education. In some instances, the Ministry will share a table which needs to be filled and the Directorate will share with the schools, then compile the data and share the table with the Inclusive Education team.

OpenEMIS can support the Directorate of Education by:

1. Providing a tool to register students and assign them to institutions
2. Tracking children movement between institutions
3. Centralizing data collection for all the units
4. Facilitating communications between the departments
5. Providing reporting on the institution and student information needed
6. Providing profile information on students and staff
7. Documenting School visits

### **Student Assembly Meeting**

Involving communities in the process of identifying out of school children and CWD has proven successful in many contexts. In order to understand the different avenues for identifying CWD in Kosovo, the team met with children of Metrovica South to understand how they would approach identifying CWD and the issues they encounter and what factors they feel keep children out of school. The main factors identified were:

- Lack of interactive curriculum and focus on memorization and repetition which makes engagement difficult
- Homelessness
- Lack of financial resources to get school supplies
- Cultural sensitivities – certain families believe girls do not need to go to school
- Children have to work in order to assist their families
- Student has a bad relationship with the teacher

Having identified the factors that keep children out of school we discussed the ways in which we could intervene and promote children attending school. Once again the overarching themes included:

- Giving families a financial incentive for their child going to school



- Asking the community to self-report when they know a child is out of school. They are more likely to do this if it is anonymous
- Educating parents on the importance of school
- Making the curriculum more interactive
- Make schools friendly for children with disabilities
- Having activities targeting CWD in smaller communities

### **Ministry of Labor and Social Affairs**

The Ministry of Labor and Social Affairs has the responsibility of providing social services to the citizens of Kosovo. The discussions with the Ministry of Labor focused around the social schemes available for CWD.

The legal framework for the work of the Ministry of Labor in relation to CWD was set in 2009. The law states that services should be provided for children that are identified to have a permanent disability. While this law provides financial assistance to those that are diagnosed with a permanent disability, it fails to provide coverage for those children that may suffer from a disability but may not be severe enough to be considered permanently disabled. Applications to the program are received on a rolling basis; however, the evaluation team meets once every three months to determine if the applicant is permanently disabled and therefore eligible for the assistance.

The social scheme available for CWD provides 100 euros per month per child to the families that qualify based on the decision by the evaluation committee. There is no current cap on the budget available for this program. All those children identified with a permanent disability will receive assistance. The money is available to all families that pass the assessment of the evaluation committee without regard to financial need; it is completely dependent on the disability of the child. Currently, there are 2700 beneficiaries. All of the beneficiaries of the program are under the age of 18 and have a permanent disability. The municipality is required to visit the beneficiaries in their home twice a year to ensure that there is still a need and see assess whether or not they are indeed benefitting from the assistance.

Currently, data on beneficiaries is collected at the municipal level through an access database. Data collected at the municipal level is then fed to the Ministry at the national level. The Ministry of Labor is not required to share information with the Ministry of Education; however, in recent years they have shared the data on the beneficiaries so that the MEST can verify whether these children are in school. The data shared included information on beneficiary's name, last name, gender, age, municipality and disability. Data is not shared from the MEST to the Ministry of Labor. The Ministry of Labor is currently developing a beneficiary database that will allow them to collect the necessary data to improve their projects and that is connected seamlessly from the national level to the Municipality providing an easier data collection and reporting mechanism.

The Ministry of Labor expressed the need for further cooperation between different

Ministries most importantly as it related to data sharing. In addition to data cooperation, the Ministry expressed the need to collect information on those applications that are not approved by the evaluation commission. Currently, there is no follow-up with the applications or applicants that are denied support.

As the Ministry of Labor works to develop their new database it is highly encouraged that a clear link and cooperation protocol is established between the Ministry of Labor and the MEST. The Ministry of Labor will be a good entry and identification point for CWD, since it is very likely that families with children with disabilities will apply for financial support. It is often the case that most families will request money from social affairs but will not send the children to school by linking the two databases the MEST will be able to identify children that are not in school.

### **Statistics Division – KAS**

The statistics division is responsible for collection, management and dissemination of data in Kosovo. They work closely with the MEST in order to publish data on education. Currently they have a Memorandum of Understanding (MoU) where the MEST is responsible for data collection from the institutions and they share the aggregate data with the KAS.

Due to the effectiveness of the current EMIS system to collect aggregate level data, KAS shares with the MEST a table or form with the data they need, related to education, and the EMIS division is then responsible for filling their request and sharing the data back. This is currently a paper based process. KAS could have access to the EMIS, through the MoU, but this has not been possible since they do not have a login to the system. They were not able to get a login to the system due to the service contract being ended with the software company.

The MoU was put in place in order to decrease data duplication and to improve communication between the two Ministries. Cooperation between the two groups seems to be working well. KAS plays an important role in providing a complete picture of education in Kosovo, since they are the only unit that collects data from the Serbian Schools and the universities.

Serbian schools do not provide data through the EMIS nor fill out the questionnaire for the MEST. These schools, mostly located in the north of the country, follow a Serbian curriculum; therefore, they feel they do not need to report to the MEST. It is through the data that the Statistics division collects, that a full picture of the education sector in Kosovo is attained. A data collection form is shared in September.

As it relates to CWD, the MEST is solely responsible for collecting data on CWD. The last time KAS conducted a survey on this topic was in 2011.

Through the conversation with KAS the national civil registry was discussed. The government of Kosovo plans to build a national registry that allows for all 17 departments to share data on the individuals they serve. The system is to be functioning in 2021.

Information will be put into the system based on individual's birth certificate number. Currently, there is a debate on where the database will be hosted and who will be responsible for the administration on the database.

### **Infrastructure and Education Facilities**

The Infrastructure and Education Facilities unit is responsible for setting up the guidelines for spacing and design of school buildings for pre-primary, secondary and higher education. They are also responsible for building new institutions and overseeing big renovation projects within the MEST.

The Infrastructure unit has their own Access database that they use to keep information on the structure and composition of all the institutions. In order to keep their records updates this unit employs 6 engineers. In addition to their access database they also collect information from the MEST that has been collected through the EMIS.

The infrastructure unit does not collect information on CWD, although they do collect information on whether the institution has ramps, bathroom facilities and classrooms that are accessible. Essentially, they collect information on whether a building is accessible or not; however, it was unclear from our conversations what it means for a building to be accessible.

OpenEMIS would be able to support the work on the infrastructure unit by:

1. Providing institution profile with relevant information on infrastructure
2. Institutions are able to submit requests related to infrastructure and the infrastructure team is automatically informed.
3. One central data repository for the MEST.

While a conversation did not take place with the human resources or the Teachers Commission. It is important to note that the new EMIS should have the capability to support the data collection on teachers. Information on teacher's qualifications, licenses employment records could all be done within the same tool. Currently, license information is kept in a separate database. It is unclear whether the new tool is being designed to include this information or communicate with this licensing database. This is also the case for the teacher training database.

OpenEMIS has the ability to assist with administrative records for teachers:

1. Providing a comprehensive database with teacher's information
2. Registering teacher employment, dismissal, leave, salary, training among others
3. Providing a place to collect teacher's qualifications and licenses
4. Receiving alerts when a teacher's license has expired
5. Providing information to teachers on training opportunities as well as being able to register teachers for available training and assigning the scores for the training once it has been completed
6. Having information on each teacher including the subjects and the classes taught

7. Completing competencies on each teacher to assess whether or not they may be available for a promotion
8. Ability to keep administrative information on each teacher including their pay grade and years in service
9. Running report on teachers by their qualifications so when there is a new assignment open they can easily see those teachers that are available for the post
10. Generating reports on teacher attendance and qualification

Another important process within the MEST that is currently held separately is the examinations unit. Currently the national level examination data is not integrated into the EMIS system. If the MEST is looking to keep track on performance and improvements, it will be helpful for the EMIS system to integrate with examination and allow for the MEST to conduct deeper analysis into the status of education in Kosovo.

OpenEMIS can assist the Examinations Council by:

1. Providing one comprehensive system for all processes
2. Creating a connection between different databases
3. Conducting longitudinal studies
4. Providing a repository for institution and student data for examinations
5. Creating and tracking of assessments, examinations, items and centers for sitting of examinations
6. Providing survey tools for collection of additional data
7. Providing SMS communication tools to bridge the gap between the unit and institutions
8. Providing a system where students can be registered for examinations seamlessly.

## Observations and Recommendations

During the in-country mission and the numerous meetings with The Ministry stakeholders the OpenEMIS team can make the following observations and recommendations.

### Observations

1. The Ministry is making significant investments towards the improvement of the education sector.
2. Ministry officials are committed to improving education data in the hope of formulating evidence-based policies.
3. The Ministry has secured a loan from the World Bank in order to redevelop their EMIS.
4. The Ministry successfully manages collection of data at an aggregate level.
5. There is a solid team available to carry forward the implementation of a new EMIS.
6. Schools are well equipped with the hardware necessary to support OpenEMIS including internet connection.
7. Data is being generated and shared with the EMIS unit at an aggregate level

8. Currently, The Ministry is not able to track data by individual students or teachers at school, regional or national levels.
9. Different units and ministries have different databases and data collection processes.
10. There is little communication between units and Ministries in regard to data sharing.
11. Principals are well equipped to carry out the activities related to the EMIS.
12. Due to the success of the current EMIS system and protocols, Kosovo MEST is well positioned to take on data collection for individual students and staff.

It is evident that The Ministry is working towards the improvement of its education sector and is committed to achieving the goals set in the new Strategic Plan. The changes being implemented and the plans forward will benefit the successful implementation of a new EMIS in Kosovo.

### **Recommendations**

1. Standardization of data collection processes - The Ministry will need to decide what the agreed procedure will be for the processes once they include other units and departments. Currently the process is very functional since it includes only the principals and central EMIS unit. As EMIS grows to collect individual student and staff data with interventions from other units, processes should be clearly defined.
2. Private institutions should eventually be included in the implementation of OpenEMIS. Data on Serbian school can be included in the DataWarehouse through KAS and data could be used for indicator creation.
3. Unique identification numbers should be implemented in OpenEMIS to ensure consistency with birth registration.
4. The Civil registry database should have seamless integration with the new EMIS.
5. All units within the Ministry should have access to the tool, regardless of service contract with the software developer.
6. Education key performance indicators (KPIs) should be generated for monitoring the education strategy.
7. The new tool should integrate all databases within the MEST or at least provide data sharing through APIs.
8. The MEST should take advantage of the abilities of the principals and MEST staff to promote a tool that robust and comprehensive and promoted the level of analysis that is being requested by members of the MEST.
9. The existing process needs to be enhanced from the current approach of an annual survey to an integrated, real-time management information system that is able to assist (a) teachers in managing classroom level data for attendance, achievement and behavior; (b) principals in managing school level data for teacher qualifications, competency-based assessments and PTA activities; and (c) The Ministry to manage all levels of the national education system while monitoring progress in the implementation of the national education policy.

The needs assessment and gap analysis are the first step in developing a customized, comprehensive education management information system for Kosovo. The OpenEMIS team recommends the following implementation principals to be followed regardless of the tool to be used, since it will ultimately benefit the MEST.

The key underlying implementation principles of any effective, efficient EMIS are:

- An evidence based approach, which uses reliable data to inform the education planning and policy-decision processes through the strengthening of existing national information systems;
- National leadership with full participation and engagement of national stakeholders in diagnosis, formulation and implementation of a plan;
- Alignment of the EMIS within the overall national education development goals and objectives;
- Support to the government in developing effective and robust information systems and data collection tools, through the use of open source, generic and cost-effective IT tools;
- Use of international standards for data exchange on education in the country for improved access to and use of information;
- An exit strategy which results in a government-owned EMIS integrated with a robust education decision-support system with the management of the system transferred to key government institutions without dependencies on external technical support.

The new EMIS should support the Ministry through the building of a solid and reliable Education Management Information System (EMIS) and strengthening of national capacities in the management and provision of reliable information for the planning, monitoring and evaluation of education in Kosovo. The tool should be easily flexible and evolve as the education sector in Kosovo evolves, without a significant financial burden on the Ministry.

## OpenEMIS

OpenEMIS software is made freely available to UNESCO Member States under an open source Common Development and Distribution License. OpenEMIS is designed as a highly aligned, loosely coupled system of interoperable products for data capture, management, and analysis, which are designed to either work independently or as part of the OpenEMIS architecture ecosystem. This allows the Ministry to choose the set of tools that meet their needs.

The tagline of OpenEMIS is “Better Data, Better Outcomes.” The system aims to improve the full data life cycle. With improved data collection, The Ministry will be able to use data to make better decisions that will result in the overall improvement of the education system.

The underlying Software Development principles for OpenEMIS are:

### Design with the user

- Develop context appropriate solutions informed by user needs;
- Include all user groups in planning, development, implementation and assessment;
- Develop projects in an incremental and iterative manner;
- Design solutions that learn from and enhance existing workflows and plan for organizational adaptation;
- Ensure solutions are sensitive to, and useful for, the most marginalized populations: women, children, those with disabilities, and those affected by conflict and disaster.
- Understand the existing ecosystem
- Participate in networks and communities of like-minded practitioners;
- Align to existing technological, legal, and regulatory policies.

### **Design for scale**

- Design for scale from the start, and assess and mitigate dependencies that might limit ability to scale;
- Employ a “systems” approach to design, considering implications of design beyond an immediate project;
- Be replicable and customizable in other countries and contexts;
- Demonstrate impact before scaling a solution;
- Analyze all technology choices through the lens of global, national and regional scale;
- Factor in partnerships from the beginning and start early negotiations.
- Build for sustainability
- Plan for sustainability from the start, including planning for long-term financial health i.e., assessing total cost of ownership;
- Utilize and invest in local communities and developers by default and help catalyze their growth;
- Engage with local governments to ensure integration into national strategy and identify high-level government advocates.

### **Be data driven**

- Design projects so that impact can be measured at discrete milestones with a focus on outcomes rather than outputs;
- Evaluate innovative solutions and areas where there are gaps in data and evidence;
- Use real-time information to monitor and inform management decisions at all levels;
- When possible, leverage data as a by-product of user actions and transactions for assessments.
- Use open standards, open data, open source, and open innovation
- Adopt and expand existing open standards;
- Open data and functionalities and expose them in documented APIs (Application Programming Interfaces) where use by a larger community is possible;
- Invest in software as a public good;



## Next steps

The scoping mission recommends the implementation of the below described pilot plan. Furthermore, for autonomous and sustainable implementation, the team recommends that consideration be given to the development of a three-year work plan for the implementation of a new EMIS in Kosovo considering the following methodology:

1. Fast-track implementation of a new EMIS by keeping the scope of the implementation plan manageable, starting with the basic building blocks of the EMIS (the core module to monitor data on schools, teachers, and students).
2. Designate Day-to-day management of the system to a central staff member with responsibility and authority to administer the EMIS and implement the project on behalf of the EMIS Steering Committee;
3. Build the capacity of the EMIS Technical Team to fully own and manage the system on behalf of the government, including learning the technical skills required to manage the business processes necessary to efficiently use the system and the IT skills required to administer the system;
4. Identify required support for the implementation of the EMIS reform;
5. Configure the new system based on a detailed data collection analysis to streamline data managed by the new EMIS in order to meet the education system requirements of the country;
6. Establish a cadre of EMIS trainers to carry out technical training for users and administrators of the system at all levels: institutions, regions and national;
7. Integrate the EMIS data with other relevant data and capacity building to establish an education decision support system for planning and management;
8. Implement an EMIS monitoring system for measuring trends in key performance indicators of the national education policy.
9. Align data collection and the production of key performance indicators with the monitoring and planning needs of The Ministry, ensuring data demands are taken into account by data producers.

## Pilot Plan

The Ministry of Education of Kosovo will begin the implementation of OpenEMIS through piloting. This pilot aims to test the implementation of the tool in the country in the institutions serviced by Save the Children. Feedback from institutions and surveys would be later compiled the lessons learned to make an amended rollout plan for the rest of the national institutions.

As the Ministry prepares for the pilot stage it will be important to:

1. Brief School Management on objectives of the project and expectations of the pilot, building ownership and stake in national process for the improvement of education.
2. Brief participants to persist and 'hang-in' right to the end even if at times they may feel a bit lost and clearly state the avenues where they may seek assistance.
3. Brief participants as to the positive benefits that can come out of their experience
4. Create sufficient opportunities for participants to raise issues or make inputs.



5. Encourage participants to: ask questions, express uncertainties, draw attention to difficulties or perceived dead-ends.
6. Capture inputs in sufficient detail to follow up later.
7. Create a report on the complete lessons learned and overarching themes of the comments shared by the pilot institutions.

Initial preparations for the pilot need to be made by the Ministry. These preparations will ensure that participants can begin testing the tool without major obstacles. Included in these preparations are:

1. Preparing sound communication channels with the institutions
2. Setting policies and guidelines for those institutions that will be involved in the pilot
3. Sharing the data import template with institutions so they begin inputting information in digital format
4. Establishing timelines for the beginning of the pilot, review, and conclusion of the pilot.

For the successful implementation of the pilot the OpenEMIS team encourages the Ministry to:

1. Ensure a strong partnership with the relevant participants
2. Raise awareness and clearly communicate of the reasons for and importance of such pilots
3. Guarantee the commitment of relevant Ministerial management to ensuring that participants are given the time and mandated to attend etc.
4. Promote active involvement of participants in the Pilot, setting out in some detail their roles within the desired approach the Pilot.
5. Clearly state how participants may be encouraged to communicate their experience of the software to the Ministry to then be shared with the OpenEMIS team.

## Annex A – Needs Assessment Mission Agenda



# Program Plan for Save the Children Sweden and Community Systems Foundation visit to Kosovo

6-10 November 2017

### Objectives of the field visit:

- Meet with project team to discuss the progress, results and challenges on piloting the Education Management Information System (EMIS) for inclusion of children with disabilities.
- Conduct a needs assessment to determine the user requirements for the design of the inclusive education tool.
- Meet with first-hand project's direct beneficiaries, implementing partners, and stakeholders.

### Visitors:

Ms. Maliha Kabani, Save the Children Sweden

Ms. Haydee Izaguirre, Community Systems Foundation

### Contacts in Kosovo/o CO:

Ahmet Kryeziu, Country Director: +377 44 599 599

Natyrja Bokshtj Tahiri, HR & Administration Manager: +377 44 148 307

Blerim Murtezi, Monitoring, Evaluation, Accountability, and Learning (MEAL) Officer: +377 44 742 384

### Agenda:

Save the Children  
Gaposed, Gajd, No.1  
improvement  
10000 Gajdara  
Kosovo

Phone: +381 38 23 26 91  
Fax: +381 38 23 26 93

[sk@savechildren.org](mailto:sk@savechildren.org)  
[kosovo.savechildren.net](http://kosovo.savechildren.net)

Save the Children fights for children's rights.  
We deliver immediate and lasting  
to children's lives worldwide.

Time	Discussion Item	Participants from SCIK
<b>Monday, November 6, 2017</b>		
8:30 - 8:45	<b>Walking to the office / Introduction to staff</b>	Blerim Murtezi - at 8:30 pick up at the hotel lobby and walk to the office (7 min. walk)
9:00 - 9:30	<b>Security Brief</b>	Natyra Bokshi, HR & Administration Manager,
9:45 - 11:00	<b>Meeting with project team at SCIK</b>	Mr. Ahmet Kryeziu, SCIK Country Director Mr. Artan Bilaca, Program Implementation Manager Ms. Rudina Adem Shala, Program Development and Quality Manager <del>Diana Bakaj Demaj</del> , Awards Manager Mr. Valid Zhubi, Program Implementation Coordinator Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Mr. Blerim Murtezi, MEAL Officer
13:00 - 15:00	<b>Meeting with representatives of the Ministry of Education, Science and Technology (MEST)</b> Mr. Alush Istogu, Permanent secretary. Ms. Lulavere Behluli, Head of Division of Education for Children with Special Needs Mr. Enver Mekolli, Head of the department of Education Information Management System. Senior Advisors of the Minister of Education, Science and Technology.	Mr. Ahmet Kryeziu, SCIK Country Director Mr. Artan Bilaca, Program Implementation Manager Ms. Rudina Adem Shala, Program Development and Quality Manager Mr. Valid Zhubi, Program Implementation Coordinator Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Mr. Blerim Murtezi, MEAL Officer Walk to the MEST (2 min)

Time	Discussion Item	Participants from SCIK
<b>Tuesday, November 7, 2017</b>		
9:00 - 10:00	<b>Joint meeting</b> Division of Social Statistics & Division of Education Statistics within Kosovo Agency of Statistics	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education

10:30-11:30	<b>Meeting</b> Department of Education Management Information System	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
13:00 – 14:00	<b>Meeting</b> Education Inspectorate in the Republic Kosovo (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
14:05-13:05	<b>Meeting</b> Division for Education of Children with Special Needs (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
15:10 – 15:55	<b>Meeting</b> Department of Infrastructure and Education Facilities (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education

Time	Discussion Item	Participants from SCIK
<b>Wednesday, November 8, 2017</b>		
9:30 – 10:15	<b>Meeting</b> Center for Social Work at the Municipality of Mitrovica South	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Fahrije Kabashi, Geographic Coordinator
10:20-11:05	<b>Meeting</b> Directorate of Education at the Municipality of Mitrovica	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Fahrije Kabashi, Geographic Coordinator
11:30 – 12:15	<b>Meeting</b> Child Led Municipal Assembly in Mitrovica South	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Fahrije Kabashi, Geographic Coordinator for Mitrovica South
13:15-14:00	<b>Meeting</b> School Teacher in <u>Sylejman Vekshi</u> School, <u>Brobenjig</u> , Mitrovica South	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
14:30 – 15:15	<b>Meeting</b> School Principal of <u>Sylejman Vekshi</u> School, <u>Brobenjig</u> , Mitrovica South	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education

Time	Discussion Item	Participants from SCIK
<b>Thursday, November 9, 2017</b>		
9:00 – 10:00	<b>Meeting</b> Department for Social Policy and Families within the Ministry of Labor and Social Welfare (MLSW)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
10:30-11:15	<b>Meeting</b> Department of European Integration - Division for Coordination of Politics and Statistics (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
11:20 – 11:50	<b>Meeting</b> Department of Higher Education (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
13:00-13:30	<b>Meeting</b> Department of Science and Technology (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
13:35 – 14:05	<b>Meeting</b> Department of Finance and General Services (MEST)	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education

Time	Discussion Item	Participants from SCIK
<b>Friday, November 10, 2017</b>		
9:00 – 11:00	<b>Debrief session</b> Session on findings from the visit with key stakeholders at Ministry of Education, Science, and Technology	Mr. Blerim Murtezi, MEAL Officer Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education
11:30-12:30	<b>Debrief with SCIK Team</b>	Mr. Ahmet Kryeziu, SCIK Country Director Mr. Artan Bilaca, Program Implementation Manager Ms. Rudina Ademi Shala, Program Development and Quality Manager Mr. Valid Zhubi, Program Implementation Coordinator Ms. Dea Pallaska O'Shaughnessy, Thematic Specialist in Education Mr. Blerim Murtezi, MEAL Officer

## Annex B - Needs Assessment and Gap Analysis Questionnaire

### Current Situation Analysis

Question	Response
1. How is data being collected? (e.g. paper, excel, web, mobile)	
2. When is data being collected? (e.g. daily, weekly, monthly, yearly)	
3. Who is collecting data? (e.g. department and position)	
4. Where is data being collected? (eg. national, sub-national, school)	
5. Where is data being stored? (eg. national, sub-national, school)	
6. What data are being collected? (eg. fields)	
7. Who accesses the data? (eg. department and position)	
8. How is the data being used? (eg. reports, analysis, examples)	
9. What are the strengths of the existing system?	
10. What are the weaknesses of the existing system?	

## Desired Situation Analysis

Question	Response
1. How would / not you like to collect the data? (eg. paper, excel, web, mobile)	
2. When should / not data be collected? (eg. daily, weekly, monthly, yearly)	
3. Who should / not be collecting the data? (eg. department and position)	
4. Where should / not the data be collected? (eg. national, sub-national, school)	
5. Where should / not the data be stored? (eg. national, sub-national, school)	
6. What data should / not be collected? (eg. fields)	
7. Who should access the data? (eg. department and position)	
8. How should the data be used? (eg. reports, analysis, examples)	
9. What are the opportunities of the new system?	
10. What are the threats of the new system?	