Policy and Planning Services
Policy and Planning Services – Needs Assessment and Gap Analysis (OESC01PP01)

Description

The Needs Assessment and Gap Analysis service involves in-country fact finding activities organized in partnership with key education stakeholders by IT, Governance and Education specialists to conduct a thorough needs-assessment and make recommendations for project implementation. Through the process, the mission team will gather information from school, district, provincial and national level on existing data collection forms (school census/questionnaires), data structure(s), reporting requirements, existing hardware/software and conduct a gap analysis on institutional capacity and human resource capacities. This service may make use of the wider World Bank SABER EMIS Assessment Tool (SEAT) that helps countries identify areas for improvement in data collection, data management and data use in decision-making. The tool assesses the Education Management Information System related to inputs, processes and outputs. It assesses the infrastructure, staffing capacity and financial resources allocated to systematically collect, analyze, monitor and disseminate information about the health of the education system.

Purpose(s)

To undertake a needs assessment by collecting information to classify and analyze requirements for the implementation of OpenEMIS

Deliverable(s)

1. An OpenEMIS Needs Assessment and Gap Analysis Report for project development

Duration

The duration of this activity is approximately 10 days.

Location

The location of this activity is onsite, including sub national and school visits.
Policy and Planning Services – Data Collection Analysis
(OESC01PP02)

Description

The Data Collection Analysis involves in-country activities organized in partnership with key education stakeholders by IT and Education specialists to conduct a needs analysis and develop a specific strategy for data collection. Through the activities and the analysis process, the mission team will gather information on data requirements, reporting requirements, existing data structure(s) and data collection forms (school census/questionnaires).

Purpose(s)

To conduct a data collection needs assessment (audit).

Deliverable(s)

1. Data Collection Analysis Report with recommendations

Duration

The duration of this activity is approximately 8 days.

Location

The location of this activity is onsite, including sub national and school visits.
Policy and Planning Services – Policy Development  
(OESC01PP03)

Description

The development of coherent policies and plans is crucial to bring about real and sustainable change in education systems to achieve the goal of Education for All. UNESCO supports national decision-makers in developing solid and relevant education policies and in managing their effective implementation. This support can come in the form of policy formulation and donor mobilization to support national educational priorities for the development and use of Education Management Information Systems. The policy review aims to gather information on current policy settings and implications for implementing OpenEMIS. The outputs of this activity can be integrated into the planning process.

Purpose(s)

To develop policies that make better use of Education Management Information Systems.

Deliverable(s)

1. Education Management Information System Policies Report with recommendations

Duration

The duration of this activity is approximately 15 days.

Location

The location of this activity is onsite.
Policy and Planning Services – Project Scoping  
(OESC01PP04)

**Description**

The project scoping activity is the first step within the implementation process of OpenEMIS. The service involves in-country activities jointly organized with key education stakeholders to introduce and discuss the OpenEMIS initiative with senior education officers including education planners, monitoring and evaluation staff and IT specialists.

**Purpose(s)**

To introduce the OpenEMIS initiative and discuss options for implementation in the country context.

**Deliverable(s)**

1. OpenEMIS Project Scoping Report

**Duration**

The duration of this activity is approximately 2 days.

**Location**

The location of this activity is onsite.
Policy and Planning Services – Strategic Planning  
(OESC01PP05)

Description

The Strategic Planning service offers organizations the opportunity to develop a strategic plan by working with stakeholders to understand and document the current situation and future vision for their Education Management Information System. This service assists clients in making decisions about allocating resources to pursue the strategy. In order to determine the direction, it is necessary to understand its current position and the possible avenues through which it can pursue a particular course of action. As such, this service will include a vision, mission and values statement, a SWOT analysis and strategies (goals, objectives and targets).

Purpose(s)

To develop an Education Management Information System Strategic Plan.

Deliverable(s)

1. Education Management Information System Strategic Plan

Duration

The duration of this activity is approximately 15 days.

Location

The location of this activity is onsite.
Analytical Services
Analytical Services – Business Intelligence
(OESC02AS01)

Description

The Business Intelligence service aids education planners in analyzing and understanding OpenEMIS data by providing a customized set of indicators and analytical tools to help identify disparities and enable data driven decision-making. The data analysis and data visualization tools can be used to view data in tables, graphs and maps.

Purpose(s)

To provide customized business intelligence tools and data for education planners

Deliverable(s)

1. Datawarehouse database and queries
2. Customized Online Analytical Processing (OLAP) tools, cubes, dimensions and measures

Duration

The duration of this activity is approximately 20 days.

Location

The location of this activity could be both onsite and offsite.
**Analytical Services – Monitoring and Evaluation**  
*(OESC02AS02)*

**Description**

The Monitoring and Evaluation (M&E) service provides assistance to develop or improve an M&E Framework at both a national or sub national education system. This service provides assistance to identify and analyze information from OpenEMIS to improve a project or program by comparing planned verses actual outcomes. This framework serves to aid education planners in assessing their performance on meeting their targets in the sector development plan.

**Purpose(s)**

To provide technical assistance to develop and/or improve a Monitoring and Evaluation Framework to enable evidence-based decision-making.

**Deliverable(s)**

1. Monitoring and Evaluation Framework

**Duration**

The duration of this activity is approximately 20 days.

**Location**

The location of this activity could be both onsite and offsite.
Analytical Services – Online Dashboard  
(OESC02AS03)

Description

This activity creates an online interactive dashboard to extend the utilization of the OpenEMIS data. The interactive dashboard could be used as a top-level internal system performance-monitoring tool or as a showcasing tool for external communication to stakeholders. The dashboard can display real-time monitoring of OpenEMIS data. For example attendance records for students and teachers or gender based enrollment information. Content of the dashboard is customizable from the OpenEMIS dataset. The dashboard can be embedded in any website or hosted on an OpenEMIS server.

Purpose(s)

To provide a tailored online interactive dashboard to be used for analyzing OpenEMIS data.

Deliverable(s)

1. User-friendly web-based dashboard as per client requirements

Duration

The duration of this activity is based on complexity of the desired outcomes.

Location

The location of this activity is offsite.
Analytical Services – Profiles
(OESC02AS04)

Description

This activity extends the reach and impact of available OpenEMIS data through the development of standardized statistical profiles at the national, sub national or school level. Standardized profiles are particularly useful for planners. The profiles are generally a one or two page summary document displaying education indicators using visual info graphics such as tables, graphs, maps and images.

Purpose(s)

To provide a set of tailored profiles at the national, sub national or school level to be used for analyzing and presenting OpenEMIS data.

Deliverable(s)

1. Standardized profiles at national, sub national or school level, designed in compliance with the client requirements

Duration

The duration of this activity is approximately 18 days.

Location

The location of this activity is offsite.
Analytical Services – Report Publication
(OESC02AS05)

Description

This activity creates a custom analytical report drawing on data from OpenEMIS. Topics could include: disparities analysis; bottleneck analysis; gender analysis. The report could be prepared annually and released as complement to the annual education yearbook. The report would consist of in-depth write-up supplemented by info-graphics.

Purpose(s)

To publish a tailored report to be used for analyzing and presenting OpenEMIS data in either electronic format and/or paper-based

Deliverable(s)

1. Report Publication produced in compliance with client requirements

Duration

The duration of this activity is approximately 30 days.

Location

The location of this activity is offsite.
Analytical Services – Simulation Modeling  
(OESC02AS06)

Description

The Simulation Modeling service is designed to assist countries with the use of the UNESCO Education Policy and Strategy Simulation (EPSSim) tool. EPSSim is a "generic" simulation-modeling tool first developed by UNESCO in 2001 for strategic education development planning and resource projections. EPSSim is primarily used for national planning, aimed to design credible medium and long-term education policies, strategies, and/or detailed action plans, enabling countries to test the viability of changes to education policy and strategy options, to devise alternatives that can help cope with dynamic and changing environments, to indicate necessary actions and resources required, as well as to provide monitoring and evaluation indicators.

Purpose(s)

To enter variables (schools, students, teachers and staff) into a simulation modeling tool and analyze different scenarios.

Deliverable(s)

1. A simulation model that can be used for designing a detailed action plan

Duration

The duration of this activity is approximately 30 days.

Location

The location of this activity could be both onsite.
Implementation Services
Implementation Services - Installation and Configuration

(DESC03IS01)

Description

This service consists of installing and configuring the OpenEMIS application software on a standalone computer, onsite server or OpenEMIS cloud based server. This includes configuring the web server, database management system and application. The OpenEMIS software will then be configured to the specific education system classifications and aligned with the International System for the Classification of Education (ISCED). Administrative boundaries will be created, set-up variables and system configuration items will be defined and the security configured. The team will also ensure that the system has adequate backups.

Purpose(s)

To conduct installation and configuration of the OpenEMIS software according to specific country requirements.

Deliverable(s)

1. OpenEMIS installed, configured and tested

Duration

The duration of this activity is dependent on the size and complexity of the implementation.

Location

The location of this activity is onsite.
Implementation Services - Data Migration Service  
(OESC03IS02)

**Description**

The Data Migration activity provides a service for transferring existing data from a previous EMIS into the newly installed OpenEMIS database. Through the process, data specialists will address issues of data quality, data consistency and data matching to ensure the historical data is accurate and compatible with the new database structure.

**Purpose(s)**

To migrate existing data into the new OpenEMIS database.

**Deliverable(s)**

1. OpenEMIS database with time-series data from previous EMIS  
2. Database summary report

**Duration**

The duration of this activity is dependent on the size and complexity of the implementation.

**Location**

The location of this activity is onsite.
Support Services
Support Services - Annual Application Cloud Hosting  
(OESC04SS01)

Description

The Cloud Hosting service provides an off-site solution for hosting the OpenEMIS platform in a highly reliable and secure data center that is monitored 24 hours per day. The data center includes physical security, environmental temperature and humidity controls, dual network links, battery backups and power generators to ensure high availability. The Cloud Hosting service includes regular backups and disaster-recovery assurance.

Purpose(s)

To provide secure information technology infrastructure at the highest level

Deliverable(s)

1. Report on Server / Database / Application statistics including availability

Duration

The duration of this activity is 12 months / 365 days.

Location

The location of this activity is offsite.
Support Services - Annual Maintenance and Support  
(OESC04SS02)

Description

The Annual Maintenance and Support activity provides 24 hour / 7 day remote technical Help Desk for troubleshooting and assistance. This activity also includes the regular provision of software updates and patches to ensure the OpenEMIS system is up to date with the latest fixes and features.

Purpose(s)

To provide comprehensive and continuous software maintenance and technical support for OpenEMIS

Deliverable(s)

1. Software Updates  
2. 24-hour Help Desk  

Duration

The duration of this activity is 12 months / 365 days.

Location

The location of this activity is offsite.
Ad Hoc Services
Ad Hoc Services - Data Entry  
(OESC05AH01)

**Description**

This activity provides support in the area of data entry - transferring paper files or electronic documents into the OpenEMIS database. Through the process, data specialists will address issues of data quality and data consistency.

**Purpose(s)**

To provide data entry support services

**Deliverable(s)**

1. Updated OpenEMIS database  
2. Database Summary Report

**Duration**

The duration of this activity is dependent on the size and complexity of the implementation.

**Location**

The location of this activity could be both onsite and offsite.
Ad Hoc Services - Data Validation and Quality Assurance
( OESC05AH02 )

Description

The Data Validation Service provides clients external quality assurance through processes that address data consistency, accuracy, validation and analysis, and the identification of data outliers. Services can be provided in collaboration with local partners through a blended onsite/offsite approach, depending on the client requirements.

Purpose(s)

To conduct quality assurance process and provide an audit of existing data

Deliverable(s)

1. Data Validation Report

Duration

The duration of this activity is approximately 15 days.

Location

The location of this activity could be both onsite and offsite.
Ad Hoc Services – GIS Mapping
(OESC05AH03)

Description

This GIS Mapping service assists in identifying the locations of educational institutions in the desired geographical area. This service utilizes the data within OpenEMIS to provide output in any geospatial information system (GIS) such as Google Earth, Google Maps and DevInfo. This activity may also include additional services for mapping of provincial/district education offices, roads, rivers, water supplies, electricity etc. This feature is particularly useful in assessing location information to analyze infrastructure surrounding educational institutions.

Purpose(s)

To provide location mapping services for educational institutions in the desired geographical area.

Deliverable(s)

1. Location/Coordinates integrated into OpenEMIS
2. Where’s My School Report (Google Earth file of school locations)
3. Institution Site Coordinates Report

Duration

The duration of this activity is dependent on the size of the implementation.

Location

The location of this activity could be both onsite and offsite.
Ad Hoc Services - Language Translation
(OESC05AH04)

Description

OpenEMIS is available in the 6 official UN languages (Arabic, Chinese, English, French, Spanish, Russian). The software can be translated and customized into any language. The Language Translation Service provides translation and customization of the OpenEMIS software to meet any specific language requirements.

Purpose(s)

To provide language translation services to configure OpenEMIS for the specific language(s) requirements.

Deliverable(s)

1. Language translation text string file
2. OpenEMIS operating in the required language

Duration

The duration of this activity is approximately 10 days.

Location

The location of this activity could be both onsite and offsite.
Ad Hoc Services - System Integration
(OESC05AH05)

Description

The Systems Integration service addresses the requirement of integrating OpenEMIS with other existing information systems. Integration will enable connectivity between organizations allowing one or two-way data exchange. Examples include sharing of school information between government ministries.

Purpose(s)

To provide tailored integration service and support to connect OpenEMIS with specific information systems.

Deliverable(s)

1. System Integration Report
2. Operational User Guide

Duration

The duration of this activity is approximately 15 days per system.

Location

The location of this activity is onsite.
Software Development Services
Software Development Services – Custom Report  
(OESC06SD01)

Description

The Custom Report service provides clients with the option to build tailored reports to meet their unique requirements such as developing a new indicator report to monitor the performance of the education system.

Purpose(s)

To provide tailored and customized reports to meet unique requirements.

Deliverable(s)

1. Customized report(s), designed with the client’s unique requirements and integrated into the OpenEMIS reporting module

Duration

The duration of this activity is dependent on the complexity of the implementation.

Location

The location of this is offsite.
Software Development Services – Mobile Application
(OESC06SD02)

Description

The Mobile Application service provides both design and development capacity to build apps to meet specific client requirements. Mobile applications are developed for both Apple IOS (iPhone and iPad) and Google Android (phone and tablet) devices.

Purpose(s)

To provide customized mobile application to meet specific requirements.

Deliverable(s)

1. Mobile application ready for download and usage

Duration

The duration of this activity is dependent on the complexity of the implementation.

Location

The location of this activity is offsite.
Software Development Services – Module Customization
(OESC06SD03)

Description

The Module Customization service respond to specific client needs to modify the standard OpenEMIS modules (ie. Institutions, Students, Teachers and Staff). This activity may be required to change the functionality of the existing standard OpenEMIS application and/or database to meet specific country requirements.

Purpose(s)

To modify the standard OpenEMIS modules to meet specific requirements.

Deliverable(s)

1. OpenEMIS modified according to client requirements

Duration

The duration of this activity is dependent on the size and complexity of the implementation.

Location

The location of this activity is offsite.
Software Development Services – New Feature  
(OESC06SD04)

Description

The New Feature service provides tailor-made software development to meet specific client requirements including design, development and testing. Details of the services provided are negotiated with the client on a case-by-case basis. An example of a New Feature could be an interface that integrates an existing system with OpenEMIS for analytical purposes.

Purpose(s)

To provide tailored software development services to meet specific requirements.

Deliverable(s)

1. The new feature designed, developed and tested according to the specific client requirements and needs

Duration

The duration of this activity is dependent on the size and complexity of the implementation.

Location

The location of this activity is offsite.
Training Services
Training Services – Professional  
(OESC07TS01)

Description

This course is designed for data entry staff and/or education officers who want to gain a functional understanding of OpenEMIS. This course provides an overview of the main features of OpenEMIS coupled with hands-on instruction for data entry staff and data providers. After completing this course, participants will be issued a certificate of attendance and may also choose to undertake assessment tasks to become a Certified OpenEMIS Professional.

Purpose(s)

To build capacity amongst those responsible for the daily operation of OpenEMIS.

Deliverable(s)

1. Trained persons (maximum 12) equipped to work with OpenEMIS on a daily basis including data entry and export of reports

Duration

The duration of this activity is 2 days.

Location

The location of this activity is onsite.

Prerequisites

Participants are expected to have a basic knowledge of education management and information systems.
Training Services - Administrator
(OESC07TS02)

Description

This course is designed for OpenEMIS administrators, who require full technical overview of the OpenEMIS software architecture and a detailed understanding of how to install and configure OpenEMIS. After completing this course, participants will be issued a certificate of attendance and may also choose to undertake assessment tasks to become a Certified OpenEMIS Administrator.

Purpose(s)

To build capacity in the management of OpenEMIS, ensuring that participants are able to understand the OpenEMIS architecture and technical concepts; install and configure OpenEMIS and undertake general OpenEMIS system administrative tasks.

Deliverable(s)

1. Trained persons (maximum 12) equipped to serve as a system administrator for OpenEMIS

Duration

The duration of this activity is 3 days.

Location

The location of this activity is onsite.

Prerequisite(s)

Participants are expected to have a basic knowledge of education management and information systems. It is recommended that participants also complete the OpenEMIS Professional training course.
Training Services - Analyst
(OESC07TS03)

Description

This course is designed for education leaders, planners and analysts who require an understanding of OpenEMIS and the processes of generating and utilizing standard education management reports through the software. This course provides overview of the report module in OpenEMIS, along with Education Statistical Literacy (understanding and utilizing education indicators) and a range of education data analysis and visualization techniques using tools such as DevInfo. After completing this course, participants will be issued a certificate of attendance and may also choose to undertake assessment tasks to become a Certified OpenEMIS Analyst.

Purpose(s)

To build capacity in the analysis and use of OpenEMIS data

Deliverable(s)

1. Trained persons (maximum 12) equipped to access and analyze information from OpenEMIS

Duration

The duration of this activity is 5 days.

Location

The location of this activity is onsite.

Prerequisite(s)

Participants are expected to have knowledge of education management and planning course.
Training Services - Trainer
(OESC07TS04)

Description

This course is designed for experienced OpenEMIS managers/users, who intend to lead further training with colleagues and counterparts. Participants will receive advanced training on OpenEMIS, along with strategies and skills in designing and executing OpenEMIS training. After completing this course, participants will be issued a certificate of attendance and may also choose to undertake assessment tasks to become a Certified OpenEMIS Trainer.

Purpose(s)

To build capacity in a cohort of trainers, who will further conduct OpenEMIS training.

Deliverable(s)

1. Trained persons (maximum 12) equipped to provide training on OpenEMIS

Duration

The duration of this activity is 5 days.

Location

The location of this activity is onsite.

Prerequisite(s)

Participants are expected to have a basic knowledge of education management and information systems. It is mandatory that participants have completed both the OpenEMIS Professional and OpenEMIS Administrator training courses.
Training Services - Advanced Lab
(OESC07TS05)

Description

This course is designed for OpenEMIS administrators, who require customized and advanced training on key areas of the system. The Advanced Lab training gives OpenEMIS administrators an opportunity to work with software developers, data experts, trainers and education planners during the visit.

Purpose(s)

To build technical capacity and advanced skills to confidently manage the OpenEMIS environment.

Deliverable(s)

1. Trained persons (maximum 4) equipped to serve as an advanced system administrator for OpenEMIS

Duration

The duration of this activity is based on desired learning outcomes (3 to 10 days).

Location

The location of this activity is offsite (Singapore).

Prerequisite(s)

Participants are expected to have knowledge of education management and information systems, experience with OpenEMIS and have successfully completed the OpenEMIS Professional and Administrator training courses.
Advocacy Materials Services
Advocacy Materials – Brochure  
(OESC08AM01)

Description

This activity creates a customized brochure to raise awareness and build support for the OpenEMIS initiative. The brochure can be prepared for launch of the OpenEMIS project, or thereafter to maintain awareness and support. Content of the brochure would be discussed with and endorsed by the client. The brochure can be created in single or multiple languages.

Purpose(s)

To provide a tailored brochure to be used to create awareness for OpenEMIS and advocate for the use of OpenEMIS data.

Deliverable(s)

1. OpenEMIS brochure (500 single-page, full color)

Duration

The duration of this activity is approximately 3 days.

Location

The location of this activity is offsite.
**Advocacy Materials – CD-ROM**  
(OESC08AM02)

**Description**

This activity creates an information package on CD to broaden the reach and utilization of the OpenEMIS database. The interactive CD can be prepared for launch with the annual education yearbook, or thereafter to extend the lifespan and value of the report. Content of the CD would be derived from the OpenEMIS dataset.

**Purpose(s)**

To provide a tailored CD-ROM to be used to create awareness for OpenEMIS and extend the reach and use of the OpenEMIS data and reports.

**Deliverable(s)**

1. User-friendly interface for access to OpenEMIS reports and data (100 CD’s)

**Duration**

The duration of this activity is 15 days.

**Location**

The location of this activity is offsite.
Advocacy Services – Poster  
(OESC08AM03)

Description

This activity creates a customized poster to communicate information related to a specific cause or project using OpenEMIS data. For example the poster could be used to support the launch of the annual education yearbook. Design and content of the poster would be discussed with and endorsed by the client. The poster can be created in single or multiple languages.

Purpose(s)

To provide a tailored poster to be used to create awareness for OpenEMIS and advocate for the strengthened use of OpenEMIS data.

Deliverable(s)

1. OpenEMIS poster (10 posters 36x72” of one design)

Duration

The duration of this activity is approximately 4 days.

Location

The location of this activity is offsite.
Advocacy Materials – USB Drive
(OESC08AM04)

Description

This activity creates an information package on a USB drive to broaden the reach and utilization of the OpenEMIS database. The interactive package could be prepared for the launch with the annual education yearbook, or thereafter to extend the lifespan and value of the report. Content of the USB drive would be derived from the OpenEMIS dataset.

Purpose(s)

To provide a tailored USB drive to be used to create awareness for OpenEMIS and extend the reach and use of the OpenEMIS data and reports.

Deliverable(s)

1. User-friendly interface for access to OpenEMIS reports and data (100 USB Drives)

Duration

The duration of this activity is approximately 20 days.

Location

The location of this activity is offsite.
Advocacy Materials – Video
(OESC08AM05)

Description

This activity creates a customized video presentation to raise awareness and build support using OpenEMIS. For example, the video could be prepared in conjunction with the launch of the annual education yearbook. The script and content of the video would be first discussed with and endorsed by the client. The video can be created in single or multiple languages.

Purpose(s)

To provide a tailored video to be used to create awareness and advocacy using OpenEMIS data.

Deliverable(s)

1. Video presentation (maximum duration 5 minutes)

Duration

The duration of this activity is approximately 25 days.

Location

The location of this activity is offsite.
**Advocacy Materials – Website**  
(OREC08AM06)

**Description**

This activity creates a customized website to communicate information related to a particular cause or project derived from OpenEMIS data. The website could be launched in conjunction with the annual education yearbook to communicate progress within the education sector. The website can be created in single or multiple languages. The content could be integrated into an existing website.

**Purpose(s)**

To provide a tailored website to be used to create awareness and advocacy using OpenEMIS data.

**Deliverable(s)**

1. Website designed (20 HTML pages)

**Duration**

The duration of this activity is approximately 20 days.

**Location**

The location of this activity is offsite.