

## STATE TO STATE LOAN

### QUESTIONNAIRE

Year : 2018

Annexes :

#### General information

##### Information on the Applicant

- Applicant: **MINISTRY OF EDUCATION**
- The Public Institution guarantor, the Ministry of the involved State or third party which is covered by the guarantee of its government: **MINISTRY OF FINANCE**
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- Chief project officer : WILHELMINA ASAMOAH (DIRECTOR, GEN. ADMIN)
- Contact person for this file :

##### Context

- National context

Succinctly describe the political, economic, social and cultural context of the country and region involved and detail the orientations and the objectives which present an interest for the project.

Ghana achieved independence in 1957, making it the first independent nation in sub-Saharan Africa. It is made up of 16 administrative regions and a population of 28.2 million growing at the rate of 2.2% annually. The overall literacy rate is 76.6%. Ghana is a multiparty parliamentary democracy. Between 2008 and 2012, Ghana was heralded as the pearl of West Africa in terms of economic growth, averaging rates of 8.7%. Since then, the economy has slowed substantially to an estimated 3.6% in 2017 due to a combination of various macroeconomic factors including commodity prices, inflation, energy rationing and fiscal consolidation. Meanwhile, expenditure has steadily increased even while revenue has remained stagnant thereby increasing the fiscal deficit. Part of this increasing expenditure is explained by the increasing wage bill which, in 2013, made up two-thirds of the tax revenue. While total government spending as a proportion of GDP peaked in 2014 at 34.3%, this has since been curbed and in 2016 it declined to nearly 16%. This

decrease has been unevenly distributed across sectors, with the social sector's expenditure halving from 9% in 2012 to 4.6% in 2016. In terms of inequality, the Gini coefficient has remained unchanged between 2006 and 2010 at 0.41, while the incidence of poverty is highest in the northwest of Ghana and lowest in the southeast. These trends are also reflected in the regional distribution of the proportion of the population living in urban areas and proportion of educationally deprived districts.

- Sectoral context

Describe the situation and the policy of the sector to which the project belongs, with a special attention to the region in which the project is located. At the same time, give a general idea of other projects that have been carried out or planned in the same sector during the last five years. How have these projects been financed?

The Education Sector of Ghana is positioned to deliver services that will lead to the delivery of quality and equitable education for all citizens of the country. Ghana's key education policy driver is the provision of free, compulsory universal basic education and the intention to provide a progressively free secondary and tertiary education if the resources are available. Since the introduction of education in the nineteenth century, governments have prioritised education as a critical sector in the national development agenda. Currently, the key education goals and the focal areas in the sector for implementing activities to achieve the goals are indicated below:

Education Strategic Goal	Education Sub-Sector
Improved equitable access to and participation in quality basic education	Basic Education
Improved equitable access to quality senior high school education	Secondary Education
Strengthened competency-based skill development in technical and vocational education	Technical and Vocational Education and Training
Improved opportunities for the non-literate youth and adults to have free access to meaningful quality education and training	Non-Formal Education
Improved access for persons with disability, the vulnerable and the talented	Inclusive and Special Education
Improved equitable access to world class tertiary education	Tertiary Education
Improved planning and management efficiency in the delivery of education	Education Management and Financing

While the process of developing the education sector is affected by some challenges the strong commitment to the sector has enabled governments to adopt a variety of strategies and activities to ensure that the goal of quality and equitable education that provides opportunity for all is achieved. To this end some projects that have been undertaken include Education Reforms in 1987, 2007 and ongoing changes in the sector to improve access, quality and management. Other projects that have been undertaken include:

- Quality Improvements in Primary School (QUIPS), aimed at improving education quality in Primary schools through improvement in teaching and learning processes. It saw the procurement of more teaching and learning materials and the provision of infrastructure in Primary Schools.

- ii. Education Quality for all (EQUAL): This provided support to targeted districts school management support with emphasis on the improvement of literacy. This was supported by USAID
- iii. Pilot Programmatic Scheme (PPS): Was a World Bank sponsored project that aimed at strengthening district education management and school improvement. It involved the construction of school building, the provision of textbooks and in-service training for teachers in basic schools
- iv. Whole School Development (WSD): A DFID assisted project that supported Government efforts at strengthening education delivery using a decentralised approach. The project provided logistical support for district towards improving supervision and school effectiveness.
- v. Ghana Partnership for Education Grant (GPEG): Supported by the Global Partnership for Education with resources that targeted over 100 district identified as deprived. The project goal was to strengthen the policy formulation by ensuring the effectiveness of existing systems and process as well as the introduction of new systems to accelerate and ensure the effective management and support to education delivery in Ghana.
- vi. Televic Project: Support from the Belgium Government to strengthen the use of Information, Communication and Technology process in the delivery of teaching and learning. The project targeted secondary schools by providing equipment and training to selected senior high schools.

At present, the Government of Ghana is implementing a free senior high school policy with the intention to ensure that all young children passing out of the junior high school have access to and complete senior high school.

By this free senior high school policy, the attention of Government's efforts has shifted from basic education to secondary education. Consequently, to enable the implementation of an inclusive education policy, the Government intends to make basic education free from kindergarten to senior high school.

#### General information on the project

- Designation of the project
- The export transaction consists of:
  - Provision of services
  - Supply of a complete installation/infrastructure
- General description of the projected activities
  - *Supply, delivery and installation of an e-learning system with related infrastructure, smart ICT classrooms fully equipped, power management unit, services for curriculum and content*
- How are the projected activities integrated into the economic policy and the development of the country?
  - *Ghana shares in the determination to integrate Information, Communication and Technology (ICT) education and utilization at both school and management levels of its operation. Supporting the realization of this objective is what Government is stopping at nothing, in pursuit of this investment to*

*achieve the goal is to avail every opportunity to assist in ensuring that both theory and practice capacity in the education sector is enhanced.*

- Location of the region where the activities will be developed.
  - *The project seeks to ensure appropriated distribution based on needs assessment basis which will leverage the Ministry of Education and Ghana Education Service efforts in bridging the gaps in terms of infrastructure regarding ICT and related capacity building around it.*
  - *As part of the needs assessment process, there shall be qualification of schools, based on national needs and needs of specific schools. We will take into consideration school population to enable equitable distribution that will guarantee positive impact.*
  - *The Ministry shall request for proposals from the beneficiary schools based on their specific needs assessment.*
  
- Organisation(s) which will contribute to the achievement of these activities: give the name as well as a short description of the objective and the activities of this/these organisation(s).

*The implementing organisation of these activities will be the Ghana Education Service- it is an agency under the Ministry of Education.*

*The mandate of the Ghana Education Service is to co-ordinate national education policy on pre-tertiary education. This makes it responsible for Basic and Second-cycle education, a critical stage of education for young learners. The Service's mission is to ensure that all Ghanaian children of school-going age irrespective of tribe, gender, disability, religious and political affiliations have access and are provided with quality formal education and training.*

*In keeping with today's high technological world, it is my pleasure to launch our new Website that will be the cyber gateway for gaining access to the efforts made to deliver improved services to all beneficiaries and stakeholders. This 24/7 service will bring up to the minute information on innovations, developments and progress being made towards enhancing quality education delivery at the pre-tertiary level in Ghana.*

#### Assumptions, risks and preliminary conditions

- Are there any conditions which must be fulfilled before the project starts?
  - *The listed schools must have a classroom which is ready to receive the equipment.*
  
- Which events and decisions located outside the boundaries of the project can have an impact on the development of the activities as well as on the achievement of the objectives?
  - *There is a Vice Presidential initiative to connect all Senior Secondary Schools with Fibre optic internet. Upon completion of this project, the internet accessibility challenges of secondary schools shall be solved to a larger extent.*

- On the issue of Microsoft software office suite license, the Ministry of Education shall use its Education Package offered by Microsoft to enable pre-installation of the software during the manufacturing stage by Televic.
  - Orientation sessions shall be conducted around the country to enable efficient use of the equipment. Teachers are going to be trained before the installation of the ICT lab.
  - By the leadership of the Minister and the Deputy Minister of Education, Centre for National Distance Learning and Open Schooling (CENDLOS) shall be directed to make available the Interactive content from World Bank's I-BOX project to Televic to enable direct installation during the manufacturing stage to enable seamless synchronization with Televic accessmentQ and AVIDANET Platforms. Further ensuring optimization of technology in teaching and learning.
- Describe the specific risks which, even though not being under the responsibility of the project, fall nevertheless under its zone of influence and which must therefore be taken into account.
    - Government's ability to find the matching resources to ensure the smooth implementation of the project
    - The possibility that some schools may not have the required conditions but have been included in the target list of schools
    - Availability of electricity in the schools to ensure sustained use of the equipment and devices supplied under the project
    - Availability of requisite personnel to implement the project in the identified schools under the project.

#### Target group for the activities

- Give an overall description of the local groups of people targeted by the activities;
  - *The target group are higher secondary schools countrywide and some teacher training centers.*
- Social situation of the targeted group;
  - *Government Schools and training centers. A mix of urban and rural schools that are funded by the Ministry of Education of the Republic of Ghana.*
- How will the local population be affected by the activities?
  - *Education means development and since the project focuses on ICT education, it will serve as a catalyst for training many individuals into computer literates.*
  - 
  - *since it is ICT training it will serve as an enabler for further technology training.*

#### Objectives of the activities

- Describe the concept of the project, the proposed solutions and the method to be applied. What are the intermediate and final results expected? Specify the quantitative and qualitative indicators used for the evaluation of the intermediate and final results.

- *Use of smart classrooms, not only for ICT lessons but other subjects as well. To be able to achieve this, there shall be a prequalification process for the schools. The Ministry of Education have realized that, The ICT Teachers keeps the lab to themselves, limiting access and usage by teachers of subject and students. To solve this problem, the Ministry is employing ICT coordinators around the country. The ICT coordinators shall be custodians of the lab and shall be responsible for the schedule/timetable for each teaching period.*
  - *There shall be an orientation for Head of schools, Teachers and ICT Coordinators for the targeted schools before installation. This shall help remove the human factors that haboured the efficient use of the lab during Phase I.*
  - *Televic shall implement a dashboard tracking tool to enable the Ministry track usage per beneficiary school.*
  - *Supply, delivery and installation of an e-learning system with related infrastructure, smart ICT classrooms fully equipped, power management unit, services for curriculum and content*
  - *Pre-study, advice on equipment/solution/services within the budget. Project management, commissioning, training, technical assistance, warranty and follow up.*
  - *200 schools/smart ICT classrooms countrywide*
  - *Automatic technical quality reports and automated reporting*
  - *Pre- and post-installation surveys*
- In which manner will the activities improve the situation of the targeted group over the long term?
    - *It is part of the Ghana Government Education program*
  - How do the activities fit into the social, cultural and economic development?
    - *It gives an answer to the Sustainable Development Goals (SDGs)*

#### The impact of the project on development

- How will the project favour the sustainable development? (sustainable development: improvement of the situation of the targeted population without compromising the chances of development of the future generations).
  - *Education is key for the Ghana Government. Secondary education and training prepares the students for higher education. It also gives guarantees for the development young digital minds and tech savvy population in the long term.*
  - *This project will promote interest in technology, while fostering digital inclusion.*
  - *Education means development and since it is ICT training it will serve as an enabler for further technology training.*
- What is the technical feasibility of the project? Considering the local situation (capital availability, factors of production, knowledge) is the technology to be used suitable? Which efforts are deployed in terms of transfer of technical knowledge? What kind of training is expected to be given to the managers for the implementation of the project?

- *It is an extension or phase II based on the experiences of phase I. We refer to the evaluation report of BTC/Enabel of December 2017. The recommendations in this report have been taken into account for the design of phase II.*

#### The impact of the project on the environment

- Is the project located :
  - On an existing site/existing infrastructure (port, airport,...) – school building
- Which international or local environmental standards does the project meet? Has an environmental permit been awarded by the local authorities?
  - *Not applicable*
- What are the environmental factors surrounding the project?
  - *Not applicable*
- Which are, if any, the environment impact assessments that have been undertaken? Give the references of such assessments and summarize the decisions that have been taken. Is an environmental management plan available or is it planned?
  - *Not applicable*
- What are the positive and negative impacts of the project on the environment?
  - *Not applicable*
- How can the potential risks on environment be controlled? In this respect, which alternative solutions can be considered?
  - *Not applicable*

#### The institutional feasibility

- Which institution (Ministry, State corporation, organism with State guarantee) will be responsible for the implementation of the project in the future? **Ministry of Education in collaboration with the Ministry of Communication and the Ministry of Science, Technology and Innovation**

#### The financial feasibility

- Provide an estimate of the operating and maintenance costs as well as the costs of alternative investments. How will these costs be financed after completion of the project?
  - *The project design is as such that the solution has been Africanised/localised. No consumables are needed, only spare equipment for warranty maintenance and post warranty maintenance.*
  - *Televic's solution guarantees offline use and online use when there is internet connectivity.*

- Describe the added value of the proposed activities (the expected results at the time the objectives will be achieved).
  - *Introduction into global trends in the delivery of quality education through the application of ICT in Science, Technology, Engineering and Mathematics (STEM) and TVET at all levels.*
  - *Improve the standards of certification for teachers*
  - *To get numeracy and literacy skills on the right path to the benefit of students/learners*
- Describe the efficiency of the proposed activities (are the expected results in line with the resources invested?)
  - *STEM curricula is based on the idea of educating students in four specific disciplines — science, technology, engineering and mathematics — in an interdisciplinary and applied approach. Rather than teach the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world applications*
  - *STEM promotes (amongst others) innovation, spur creative and catalytic thinking, trigger students' exploration skills, enhance problem-solving based learning and 21st-century skills*

### Implementation

- Who organizes the international competitive bidding?
  - *Ministry of Education*
- Is a feasibility study of the project already available?
  - *Kindly find Summary Report on iBox Project (SEIP) attached*
- Attach to this financial request a copy of the bidding documents.
  - *In line with the bidding documents of phase I*
- On the basis of the bidding documents, give a budget estimate for following items :

Total amount: *(see phase I)* *11.594.000,00 €*  
 (175 schools to benefit from the project, taking into consideration the needs of each school and post warranty support services)  
 (technical services 1 mio €)  
 (training services technical/pedagogical/user 1 mio €)  
 (TA 594.000 €)

Expected expenses in foreign currency: - for the material €  
 (provide details for the main items)  
 - raw materials €  
 - services €  
 (provide details for the main items)  
 - salaries €  
 - other added value €



- Local expected expenses
  - material  
(provide details for the main items)
  - raw materials
  - services -  
(provide details for the main items)
  - salaries
- Anticipated financing
  - State to State loan requested from the Kingdom of Belgium : 7.729.333,33 €
  - Other Official Development Aid (ODA) financing :
    - Bilateral :
    - Multilateral :
  - Self financing :
    - foreign currency
    - local currency
  - Commercial financing: 3.864.666,67 €
- Indicate the planned schedule of the activities. Enclose a planning showing the expected monthly progress of the works as well as the total duration of the project.
  - Planning : *reference is made to the project plan of phase I, the report of BTC. The roll out plan is two years.*

Location : AECRA Name : WILHELMINA ASAMAH  
 Date : 5<sup>TH</sup> JULY, 2019 Signature : [Signature]

## **Explanatory note: sensitive areas**

Sensitive areas are mentioned among others on the websites of the following organisations:

- The United Nations Environment Programme: <http://www.unep-wcmc.org>  
This website notably lists:  
Protected areas, national parks and natural reserves;  
Coral reefs;  
Mangroves;  
Forests;  
The Ramsar convention: <http://www.ramsar.org>  
Unesco World Heritage List: <http://www.unesco.org>

And more specifically about:

- Coral reefs: <http://www.reefbase.org>
- Desert areas: <http://www.infoplease.com/ipa/AO778851.html>

## SUMMARY REPORT

### iBox in Senior High Schools (SEIP)

The ***Intelligent Box (iBox)*** is Ghana's home-grown technology for education delivery. It provides eContent (text/notes, audio-visuials and interactive quizzes and lessons) without the need for internet connectivity. It is designed to support a Flexible Multi-Delivery mode of education.

CENDLOS (an Agency of MOE) leads in the project and is responsible for the concepts & specifications. The technology is therefore a partnership work by a team of public and private ICT, research, portal, quality assurance & curriculum experts.

Since 2017, the iBox has been installed in 125 Senior High Schools across the country. By mid-April 2019, 14 additional SHS will be provided with iBoxes.

#### **Electronic Content**

Each iBox carries eContent in varied forms:

##### **Core Subjects for SHS 1,2 and 3 (English, Mathematics, Integrated Science, Social Studies)**

- 600 lesson notes
- 14,988 Interactive quizzes
- 600 audio-visual lessons
- 540 Interactive lessons (virtual laboratory experiments and simulations)

##### **7 Elective Subjects for SHS 1, 2 and 3 (Physics, Chemistry, Biology, Mathematics, Agric. Science, ICT, French)**

- 210 lesson notes
- 5,390 interactive quizzes

The Elective subjects are being enhanced to bring up to the level of the Core subjects. Production of additional 840 lesson notes and 16,800 interactive quizzes for SHS 1, 2 and 3 will be completed by end of July and loaded onto the iBoxes by August 2019. Thereafter, 1,050 audio-visual lessons and 945 Interactive lessons (virtual laboratory experiments and simulations) will be produce.

##### **Additional Lessons in Open Source (Open Educational Resources)**

3,000 notes and videos.

#### **Utilization**

The utilization of the iBox (eLearning technology) in schools is constantly improving over the past year.