



Final Report

Of

**Stakeholders Workshop on Short-term Priority of ICT Projects Jointly Convened by
the Ministry of Posts & Telecommunications, Liberia Telecommunications Authority
and USAID-Liberia held at the Mamba Point Hotel, Monrovia, Liberia,**

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1. Executive Summary

This report presents key service and infrastructure projects in Liberia's ICT sector that stakeholders have identified to be undertaken over the next two years (2016-2018) as priority projects. It was generated at the workshop held at the Mamba Point Hotel on December 15, 2015 through the joint initiative of the Ministry of Posts and Telecommunications, Liberia Telecommunications Authority and USAID-GEMS. Dozens of other participants representing other Ministries, Agencies and Commissions (MACs), were also present. As a consensus document, its strength lies in the fact that authorities across MACs reasoned together to address key infrastructure and service delivery gaps that currently affect e-Government, e-health, e-education and e-commerce programs.

Essentially, significant strides have been made in the sector over the years. These include access to submarine cable landing station; the development of the necessary frameworks to drive e-government programs; the establishment Internet Exchange Point, among others. In spite of these strides, the lack of a metro fiber network and national fiber backbone as conduits for service delivery remains a challenge. Furthermore, given the strategic roles of both the Project Management Office (PMO) and Chief Information Office (CIO) in supporting service delivery across MACs, the existing lack of resources (both human and financial) presents a huge barrier to the advancement of the sector.

While the lack of resources to support ICT programs was a recurring concern, it was equally reasoned that additional voice to champion ICT programs at Cabinet level is necessary. Coordination among stakeholders in terms of information sharing in a timely manner was of specific concern. The Ministry of Posts and Telecommunications was required to lead coordination effort to ensure that Ministries, Agencies and Commissions are consolidating strategies and other kinds of resources for the advancement of the sector.

This coordination effort is expected to address the need to:

- Create aggregate budget line for ICT projects in national budget with the objective of raising resources to support initiatives that are most needed;
- Validate infrastructure projects that are of core significance to the provision of other infrastructures and services
- Adopt innovative approach in mitigating the impact of service and infrastructure gap,
- Suggest the need to establish Science and Technology focused institution

This report consolidates consensus on infrastructure and e-services that must be addressed as a fundamental need to accelerate the provision of online services. It also identifies how to provide support for these programs and concludes that establishing a Science and Technology focused institution will be a sustainable way in designing policies, programs and strategies that will promote the ICT sector.

2. Background and Introduction

Policy makers, ordinary citizens, business executive and many other end users need access to communication to enable them access service or reach out to their target group. Therefore addressing access gap in the ICT sector remains a priority. One lesson learned for not having access to communication services across the country was the challenge it presented during the Ebola crisis. For example, interventions to counter the Ebola Virus Disease became more challenging in other parts of the country where there was access gap. Consequently, case finder, Incident Management Team and other stakeholders could not readily exchange information with each other in real time due to access gap. This case illustrates why access gap needs to be addressed.

Efforts have been made to address this challenge. On May 16, 2015, The Ministry of Post and Telecommunications (MoPT), the Liberian Telecommunications Authority (LTA) and USAID organized a stakeholder forum to raise these issues. Basically the forum examined the impact of Ebola on ICT infrastructure and services and articulated the need to address access gap in our national communication sector.

In furtherance of this objective, the December 15, 2015 ICT Roundtable event was organized as another joint initiative by MoPT, LTA and USAID-GEMS the Mamba Point Hotel. This time, the event discussed other challenges across policy, regulatory and operational issues that will impact project executions with focus on putting in place core infrastructure and services as a short-term priority from 2016 to 2018.

3. Goal of the 2nd ICT Roundtable Forum

The goals of the 2nd ICT Roundtable Forum included the following:

- Provided insight and knowledge to ensure awareness of ICT status
- Identified priority projects in ICT for execution over the next 2 years
- To improve collaboration amongst stakeholders to support collective problem-solving
- To seek political will to support ICT programs

4. General methodology

Following the opening ceremony of the workshop, participants were grouped into e-Services and Infrastructure categories. The decision to limit the functionality of the workshop to the two categories speaks to the fact that service and infrastructure are two issues that matter most in the sector. This methodology was endorsed by all participants making the content of the report a reflection of the outcomes of the deliberations from the Service and Infrastructure groups. Hence, this report was compiled using consensus reached from both the Service and Infrastructure groups.

5. Remarks from Organizers

5.1. Ministry of Posts & Telecommunications

Dr. Norkeh, the Minister of Posts & Telecommunications welcomed participants and encouraged them to seek strategic collaboration in addressing issues of common concern affecting the sector. While he underscored information sharing as essential, he pointed out the lack of budgetary support to the sector ministry as a major bottle affecting its policy making functions. He thanked USAID for supporting the initiative and urged all participants to remain focused during the workshop as their contribution will help to make the difference in advancing the agenda of the sector. He pointed out that ICT is one of the legacies of the president, and noted it is now important to move beyond research and into the implementation phase. He stated that MOPT, and the President, are in full support of these ICT initiatives, noting that they are important legacy of the President.

5.2. USAID Liberia

Dr. Chan, the Mission Director of USAID emphasized how ICT has already transformed our lives, and challenged the gathering to imagine how it could transform the development landscape in Liberia, including in rural areas. Integrated e-Services can increase the quality of government service delivery and encourage better use of resources to serve Liberian people

He encouraged the identification of actionable ICT priorities that can be achieved in the next two years. USAID has and will continue to be a strong supporter of the ICT sector. USAID has supported MOPT to strengthen its capability to develop and put in place key ICT strategies and plans, including the e-Government Strategy and Enterprise Architecture, and is supporting capacity development of CIO office. Fourteen GoL MACs now have established IT platforms with 30 technologists acquire specialized skills to operate them.

USAID has supported the use of ICT to improve health information systems, such as helping Ministry of Health, to map the national health systems architecture to identify issues hampering the efficient delivery of health care services. Despite progress made, the ICT sector is faced with many challenges, such as the need to find mechanisms to extend the benefits of the ACE cable beyond its current access point.

Priorities identified by the roundtable will guide USAID development of USAIDs ICT related support and post-Ebola recovery planning efforts. USAID is working to secure congressional approval to support several ICT related Ebola recovery efforts. He thanked Minister Norkeh and Chairperson Weeks for their leadership and commitment.

5.3 Liberia Telecommunications Authority

Madam Angelique Weeks, the Chairperson of the Liberia Telecommunication Authority provided a broad overview of progress made in the sector and how building on those work could help to further the growth and development of the sector.

She named the landing of the ACE cable station in Liberia as a major milestone, emphasizing that access to the cable has dramatically reduced the cost of international bandwidth.

She also identified the establishment of Internet Exchange Point in Liberia as critical as it has helped to address another critical infrastructure gap with positive feedback for keeping local content within our national borders. Commenting on e-government, she informed the audience that while much needs to be done, the West Africa Regional Communication Infrastructure Program with funding from the World Bank, in collaboration with the Ministry of Posts & Telecommunications has provided an inclusive platform for the further development of e-government services. The e-government initiative that now has a national portal in place as a one-stop shop that seeks to provide services for government-to-government, government-to-business and government-to-citizens being implemented by MoPT as success stories.

6. Sector Overview

Mr. Anthony Waddell, the ICT Advisor to the Ministry under the support of USAID-GEMS climaxed the remarks with a presentation that highlighted areas of progress, challenges and opportunities. He outlined the development of e-government strategy as a framework that will drive improved collaboration amongst stakeholders and improve government performance. He identified the need to build critical infrastructure such as the metro fibre network and building the national fibre communication backbone as enabler for the provision of services. He identified the lack of resources to facilitate critical project as a challenge that needs to be addressed.

As the five years validity period of the current National ICT and Telecommunication policy ends in 2015, he called on stakeholders to support the formulation of the next ICT Policy being drafted by MoPT (2016-2021).

Points raised in the overview are noted:

1. GoL's plan was to have a metropolitan fibre network in Monrovia in place by the time the ACE cable landed in Monrovia in 2012. This network is still not fully realized and is a major constraint to better utilisation of capacity of the ACE cable. In its absence services are provided by microwave, which are slower, less reliable and costly.
2. There are plans to develop a country-wide national communications backbone, with advanced studies led by LTA. This is necessary to provide improve access throughout the country. Backbones are costly, and it is an ambitious project. The country is vulnerable to national data outages as it is only serviced by one cable.

3. Resiliency requires a redundant connection; the national communications backbone could serve as a conduit for that redundancy from a neighbouring country.
4. Capacity at the ACE Landing Station will shortly be upgraded by about 300%, which will accommodate expected growth
5. The Cable Consortium Company of Liberia (CCL) is a public private partnership to ensure effective utilisation and operation of the ACE cable.

Reviews are ongoing to analyze its governance structure to ensure it is well managed in the best interests of the GOL and Liberia.

6. Government plans to divest its 55% share in CCL; the LTA has provided technical assistance to advise this transaction. This could also have implications on the structure and governance of CCL
7. GOL's intention is to privatize Libtelco. Libtelco has a presence in the retail and wholesale side of the market that, as a national operator, is different to the private sector players. There is a perception among many interested parties that Libtelco's role and position provides risks to potential investors coming into the market, and also impedes current investments
8. The Universal Access Fund/Service is being operationalised. Funds are levied as a percentage of the gross revenues of the MNO's. The intention of the Fund is to provide ICT infrastructure and services to communities that are not well served by commercial service providers.
9. Government has plans to develop its e-Government capability, and has adopted a e-Gov strategy to use ICTs to help GOL improve its performance, and to encourage the GOL to work as "one government", instead of as siloes of individual MACs, to enable synergies and improve efficiencies. e-Services include Government-to-Citizen, providing citizens with new or enhanced services through a variety of channels such as Smart Phones, text messaging, and standard computers, Examples of Government-to-government services would be IFMIS, Asset and Fleet Management at GSA, or HR services from CSA
10. Government needs to decide how to build up its e-Gov capability to advance the strategy. GoL Policy is to develop a Chief ICT Officer (CIO) Program to operate at a senior level in MACs and guide the strategic transformation of their services through ICTs, while also participating in a central CIO Council that sets government-wide standards, identifies and prioritises initiatives, and co-ordinates activities
11. A Program Management Office has been instituted at MOPT. The intention is to staff this office with skilled technicians, who will be able to assist with the execution of e-Government initiatives and provide technical assistance to MACs, which have very limited ICT capacity

12. New technologies can transform the way people work and interact. GOL should change its design to adapt to these new technologies (ICTs). GOL needs to find a way to resource and sustain the PMO and CIO programs. Also to make changes within the MACs so that CIOs can be effective (eg. perhaps change the reporting arrangements, etc.)
13. A Shared-Services-Center, preferable in a National Data Centre, is required to host GoL e-Services. The status of a National Data Centre is uncertain.

An interim arrangement is that a “mini”-shared service infrastructure platform will be hosted in the LTA data centre
14. Government requires connectivity between government institutions, and to shared facilities, including the service centre and the internet. A fibre-based GovNet is being deployed very slowly. IFMIS uses a microwave radio network to link 32 MACs with plans to upgrade to 64. A GovNet plan is required
15. At a MAC level internal connectivity still requires attention. A few of the larger MACs have internal networks at their head offices; USAID supported ICT platforms for Administrative Support at 14 MACs. Many MACS have little or no connectivity.
16. Large MACs with facilities distributed across the country, such as MOH do not have satisfactory connectivity to these remote facilities. This issue can't be solved on its own; needs to be done in partnership with larger, strategic plans addressing National, or GoL-wide needs
17. Government institutions suffer from very inadequate and expensive internet, and quality of service is often poor (eg. The entire MOH Head Office had 1Mb of dedicated internet capacity during the Ebola crisis – and for a period it was cut off
18. GoL leadership would benefit from improved understanding of the strategic and operational benefits of ICT.
19. Examples of e-Government e-Services that have been developed include IFMIS, Health Information Systems, Concessions Information Management System (CIMS), with plans for a National Identity System, a National e-Portal and Fleet and Asset Management Systems

7. Consensus from Infrastructure and E-Services Groups

Each of the two groups was required to identify priority projects that are core to the sector that can be implemented over the next two years, 2016-2017. These are the projects considered as priority from the perspective of both groups.

I. The Infrastructure Group

The priority projects identified by the Infrastructure Group are as follows:

- A. Building of Metro Fiber Network
- B. Building of Redundancy Links
- C. Establishing National Data Center

While each of the priorities identified in the infrastructure group met consensus, there was no guaranteed source of funding to facilitate its execution. Consequently, the group resolved to communicate possible solutions for the endorsement of government where applicable.

A. Building of Metro Fiber Network

Several options were explored to address the building of the Metro Fiber Network. In the first option, the group lauded Government for deciding on Google to build the Metro Fiber Network. With concerns that Google Business Proposal is yet to be received by Government, Dr. Chan, the USAID Mission Director accepted the responsibility to provide feedback from Google to enable Government if there will be any issue for consideration.

As the message resonated amongst stakeholders that awaiting Google response does not translate into any guarantee, a second option in building the Metro Fiber Link was advanced. Concessional Financing was the alternative approach and sector players are charged with the responsibility to engage the Government (President) for her endorsement.

The cost of building the Metro Fiber Link from the USTAD-sponsored feasibility study conducted in 2008 was about US\$7 Million.

B. Building of Redundancy Links

The next priority to laying Metro Fiber Network is to build Redundancy Links with connectivity options to Sierra Leone or Ivory Coast.

The cost for undertaking this project has not been determined but is assumed that it can be facilitated using concessional loan.

C. Establishing National Data Center

Establishing National Data Center was the third priority. No source of funding was identified but it can be implied that seeking concessional funding will address this need.

II. The E-Services Group

The outcomes of the deliberation of the E-Services Group did not identify services that should be prioritized but it instead identified actions that must be taken to address the provision of enhanced e-Government services in Liberia. The actions are as follows:

- A. That the Chief Information Office (CIO) and the Project Management Office (PMO) be “RESOURCED” to enable both entities to implement GoL’s eGovernment programs. Presently it is grossly incapacitated. This is not just about funding, but also capacity building and training.

- B. Provisioning of reliable, affordable and sustainable Internet Access to MACs, with effective utilization of capacity available at the Cable Station
- C. The Creation and Advocacy for an ICT institution/Agency with clout to implement ICT/eGovernment programs in Liberia. The Ministry of Science and Technology or the National Information and Technology Agency were the suggested names for the proposed institutions. Strategies to achieve this should be put in place
- D. That Mini Shared Services Center be implemented to enable MACs to gradually enroll into the program.
- E. Out-sourcing to the private sector should be considered for the development and operation of e-Services and facilities

8. Funding for the provision of E-Services

This group identified the need to amalgamate the budget for ICT in the national budget. The sum total of individual MACs budget lines for scratch cards and internet service should be re-considered in this regard. Hon. Dorbor Jallah subsequently provided said data. In FY2015/2016 the amount appropriated towards ICT was **US\$4,080,579**, a 22% increment from the appropriation in the FY2014/2015 budget (**US\$2,955,246**) and a 40% increment from the actual amount spent in FY2013/2014 (**US\$2,613,831**).

9. Next Steps and Action Plan Matrix

The stakeholders concluded that pending actions be assigned to institutions to enable the sector to achieve the priority projects identified and adopted during the workshop. The matrix below provides the name of institutions and the task they are required to address.

	Institution	Task Assigned	Feed back	Remarks
1	Dr. Chan/ USAID	Follow up on Google for its proposal on behalf of GoL	Inform MoPT about status	GoL needs info for decision
2	LTA, MoPT, Libtelco	Engage the President to get the political will in getting a concessional loan or direct budgetary support	Convene stakeholder meeting to share progress	Political will is a critical factor for the success of projects
3	PPCC/Dorbor Jallah	Expenditure data collected.	Data has been Communicated to MoPT for action	Make one budget line for ICT programs
4	CIO/PMO	Use data to propose low cost solution	Share proposed solution with other stakeholders	

10. Conclusion

The workshop succeeded bringing together relevant stakeholders across both the public and private sectors. Its objectives were to facilitate a consensus among stakeholders regarding areas of cooperation and collaboration towards sector development and how to apply innovative ways in mobilizing funding to undertake some core projects in the sector.

One of the notable outcomes of the workshop was the identification of projects for possible execution over the next two years. However, projects identified are capital intensive. While stakeholders acknowledged the role of the private sector in building a metro fiber network, they also acknowledged public funding or investment in the building of national communication backbone. Clearly, the lack of clear sources of funding to ensure project implementation presents a crucial challenge that Government needs to address.

This consensus document illustrates the urgent need to win political will as a guarantee that resources can be mobilized for the implementation of infrastructure and e-services. It also shows how important collaboration is in achieving objectives that are common to the needs of various stakeholders. Underpinning all these, is the need for an active and an engaging leadership that should follow-up on sector programs and development.

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