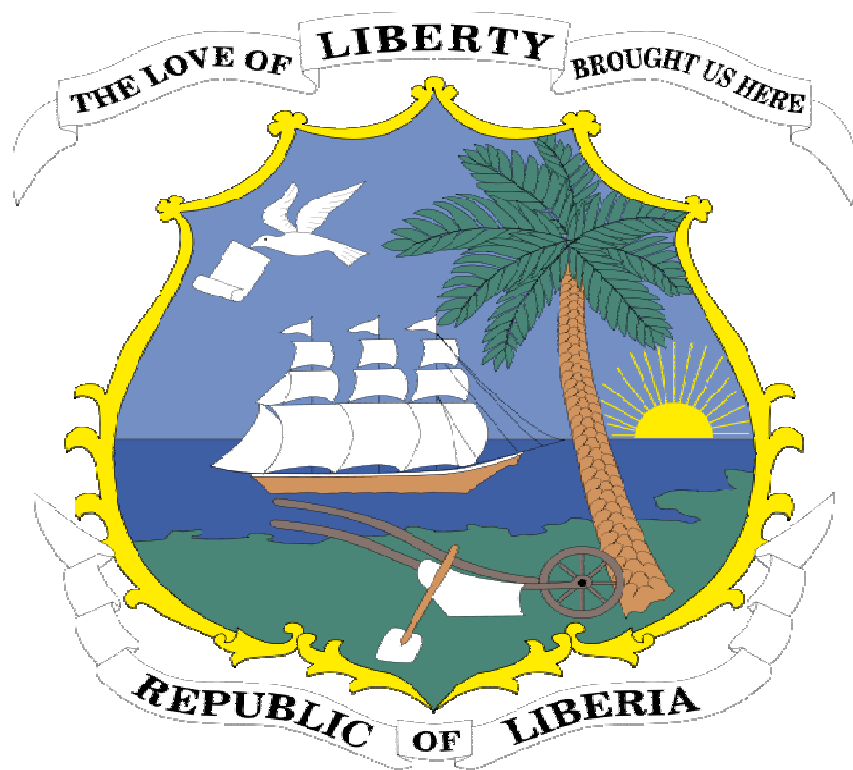

Policy Directive on
Tower Safety Measures and Co-location Imperatives (TSMACI)

Ministry of Posts and Telecommunications

Republic of Liberia

27November 2012



TSMACI – RL/MPT-FBN/ZT 2012 – 002

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Policy Focus: Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Sub Group: ICT Governance Unit, Ministry of Posts & Telecommunications

Summary: This policy seeks to put in place safety measures that require owners of existing information technology towers to ensure that their towers are in compliance with safety requirements that guarantee the security of all flights using Liberia's airspace. This policy measure also applies to towers and related infrastructure to be constructed that vertically protrude into Liberia's airspace and capable of causing hazard to planes in flight. It also addresses environmental concerns, human security and issues of economic sustainability bordering on how towers are constructed. Equally covered under this policy directive is the need to enforce policy on infrastructure sharing as stipulated in the Telecommunications Act of 2007 and also outlined in the National ICT and Telecommunications Policy. This policy directive is issued under the policy making authority of the Ministry of Posts & Telecommunications (MOPT) requiring the Liberia Telecommunication Authority (LTA), the body responsible to regulate the sector to implement it.

Signed:

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Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)



Dr. Frederick B. Norkeh, Minister of Posts & Telecommunications, Republic of Liberia

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Acronyms

EPA	Environmental Protection Agency of Liberia
ICT	Information and Communication Technology
IT	Information Technology
ITU	International Telecommunication Union
GoL	Government of Liberia
LCAA	Liberia Civil Aviation Authority
LTA	Liberia Telecommunications Authority
MOPT	Ministry of Posts & Telecommunications
RL	Republic of Liberia
TSMACI	Tower Safety Measures and Co-location Imperatives

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Introduction:

One of the major objectives outlined in the 5-year National ICT and Telecommunications Policy endorsed in June 2011 by Government of Liberia (GoL) is to stimulate the construction of national telecommunication infrastructure needed to support the delivery of ICT services throughout the country. This vision is driven by the agenda premised upon the belief that the provision of such infrastructure shall be consistent with national safety laws that is mutually coherent in protecting lives and properties across the nation. The vision also stipulates that the construction of towers shall take into consideration the principle of infrastructure sharing.

Defining the Problem:

Tower construction in Liberia is creating problems that need remedy. The problems range from towers protruding into the sky without beacon that alerts other users of airspace to service providers constructing cluster of towers in one location and transferring the cost to consumers. GoL believes that a guiding light on a sky-high tower is capable of preventing a potential hazard to planes in flight. Without taking the necessary corrective measure, the probability that planes using our airspace could crash into high towers is high. Such incident could lead to loss of lives and properties, a totally avoidable tragedy. GoL also believes that co-sharing of infrastructure shall prevent the unnecessary proliferation of towers and reduce service cost often borne by consumers. Co-sharing essentially spares the landscape from being misused.

Policy Context:

Constructing towers to enhance the coverage of communication services is not unique to Liberia's ICT sector. Generally, service providers across the globe construct towers to boost their coverage and to also deepen their market penetration. Such construction accelerates their footprint. Since most towers run into the sky and consequently pose security risk to planes in flight, governments adopt measures to prevent and or mitigate such risks.

GoL therefore mandates that sky-high towers carry beacons to ensure the safety of its airspace for all other users while equally directing an end to constructing cluster of towers, sometimes meters apart from each other where existing towers can serve the same purpose.

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

IT (information technology) towers are required to meet the best technical conditions and be maintained under proper operating condition consistent with scientific progress as laid down in the International Telecommunications Union (ITU) protocols¹

The policy directive on **Tower Safety Measures and Co-location Imperatives (TSMACI)** therefore seeks to address threats associated with existing towers that violate safety requirements and provides safeguards that will prevent the construction of tower from posing similar threats. It shall also ensure an end to the arbitrary construction of towers by service providers on a stand-alone basis that ignores co-location.



One of the few sites of co-locations in Liberia

¹ Final Acts of the Additional Plenipotentiary Conference [of the] Constitution and Convention of the International Telecommunication Union, (Geneva, 1992):38

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Consumers are the victims of the arbitrary construction of towers as the construction, maintenance and operational costs are transferred to them compared to two or more operators co-sharing the cost with the consumers that can invariably reduce consumers' burden. By removing some of the distortions in the provision of infrastructure, this new policy regime provides a platform for the sustainable development of the sector.

Strategy for Implementation

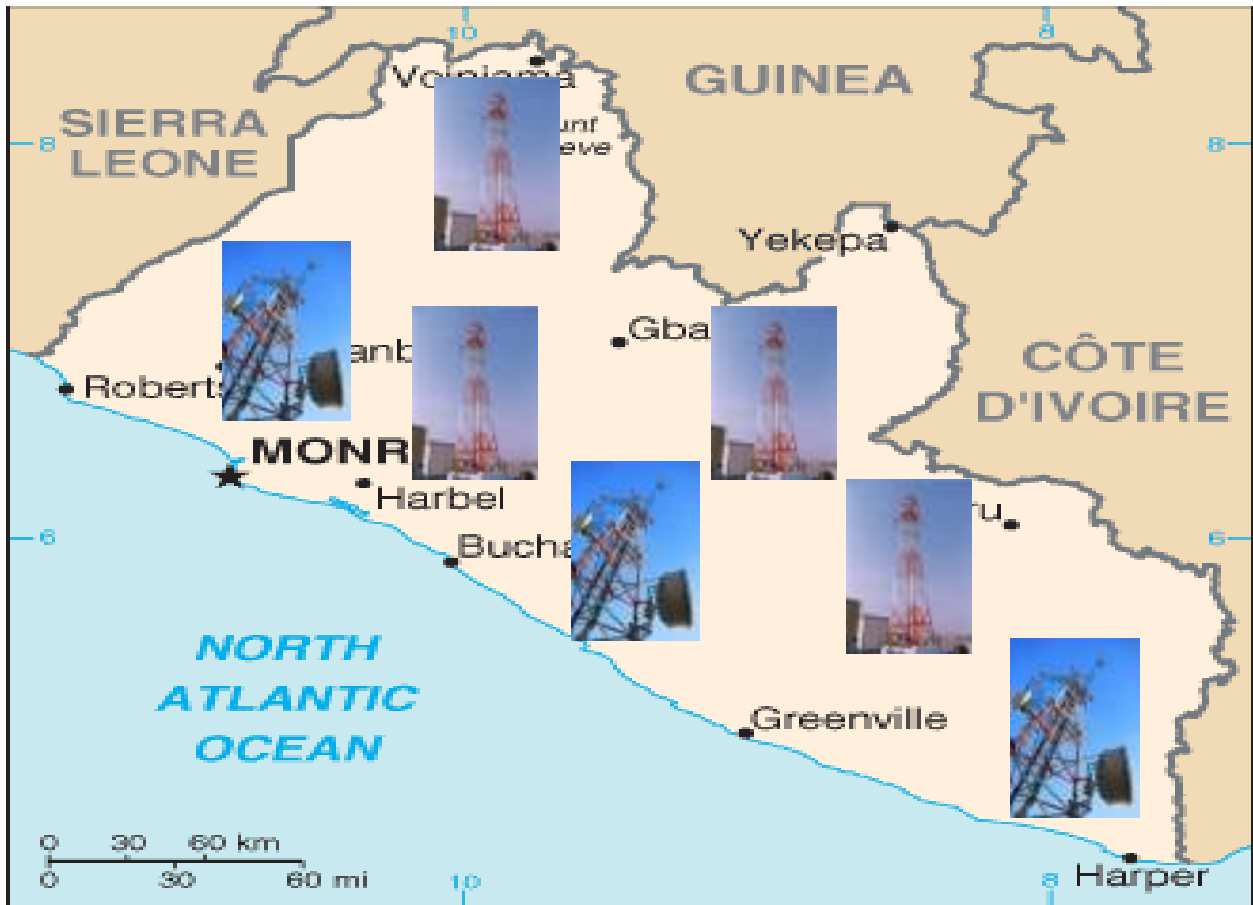
This policy shall require the Liberia Telecommunications Authority (LTA) responsible to regulate the telecommunications sector to implement this policy instrument. In addressing pre-existing threats, LTA shall engage all service providers and other stakeholders, informing them of the urgency to avert potential hazard in our airspace regarding towers without beacon.



This is a scenario of a plane about to crash into a tower without a beacon: a tragedy that can be avoided.

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

LTA shall advance a compliance schedule to meet existing towers lighting requirement. There shall be public awareness activities prior to finalizing the schedule. The objective of the awareness is for LTA to inform the public about the essence of the regulation in the context of the policy directive which ultimate objective is to protect life and property.



A Glimpse of towers around the country not prioritizing co-location as well as the essence of navigation light

LTA shall also undertake public awareness following the finalization of the compliance schedule, outlining critical benchmark that operators must meet. LTA shall therefore convene special sessions with owners of towers as well as other concerned parties to inform them about the urgency of the policy directive and hence provide any further information concerning why pending and subsequent regulations driven by the policy (TSMACI) cannot be further delayed. LTA shall collaborate with the Liberia Civil Aviation Authority (LCAA) to determine the length of tower that must meet the lighting requirement, covering both day and night. Emphasis shall be

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

placed on where such light shall be situated on the tower. The purpose of the policy shall be defeated if owners of towers elect to place beacons anywhere on the tower short of its summit. The danger of not illuminating the uppermost part of the tower is that it could deceive other users of our airspace into believing that the space above the light is obstacle free. LTA needs to ensure that towers whose lighting approach fall into this category is addressed with urgency.

Furthermore, lights on tower shall be conspicuous to the effect that it shall be recognized but not to interfere with the security of other users of Liberia's airspace. Service providers shall be considered to be in breach of national security for failing to comply with this directive. In maintaining a people friendly environment and a secured tower-airspace security, the LTA shall issue detailed guidelines or regulations requiring operators to, amongst others, meet the following conditions:

1. EPA (Environmental Protection Agency) permit to certify that every installation does not pose hazard to the environment as well as to the security of people in the given area
2. LCAA permit to certify that owners of towers are in compliance with flight safety measures
3. LTA field report that investigates and certifies that co-location is not possible
4. Regulatory provision that obliges owners of towers to be willing to facilitate co-location at a standard rate that will apply to any other operator seeking to co-locate
5. Final site inspection is made to ascertain that these and other conditions are met prior to commissioning the tower for use
6. Maximum time allowed to replace a malfunction light either caused by lightning or other such conditions

LTA shall therefore ensure that infrastructure such as towers are not arbitrarily constructed. It shall make it mandatory that not more than one tower is constructed in a particular location,

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

defining such location by a reasonable radius and indicating conditions that warrant exception.



This cluster of towers is typical of scenes on 'Tower Hill' on the Monrovia-RIA highway which is a few miles away from Monrovia where co-location as a regulatory imperative was certainly not considered.

The objective of such regulatory action is to facilitate infrastructure sharing amongst different operators, making sure that no operator shall create unfavorable conditions to the detriment of other operator(s). This policy shall equally spare our landscape of unwanted towers.

Accountability and Enforceability

The LTA shall remain accountable to the Government and people of Liberia on how it implements this and other policy directives. It shall apply a variety of regulatory tools including tower installation criteria and levying of fines against violators.

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

These regulatory tools shall also include license revocation. It shall keep the Ministry of Posts & Telecommunications abreast of its strategies in implementing this policy by regularly briefing the Office of the Minister regarding developments in the sector.

Conclusion

Sky-protruding towers that lack warning light threaten flight security. It also threatens other users of national airspace. Beside the arbitrary construction of towers implies a lack of strategic sector development that can lead to other consequences in terms of creating an enabling environment.

The Ministry of Posts & Telecommunications believes that the inaction of institutions that have statutory responsible to create an enabling environment for the good of the society can lead to unintended consequences at the expense of the nation. Conscious of this responsibility, the Ministry has advanced the policy objective that makes **Tower Safety and Co-location** a critical priority. Arguably, regulation on tower safety shall address cross cutting issues such as plane safety, environmental protection and human security. A multi-dimensional approach that incorporates standards from LCAA, EPA and other such bodies will be critical to realizing this policy objective. LTA shall therefore ensure that national standard regarding the development of infrastructure including the construction of towers is supportive of public safety, environmental integrity, economic sustainability and other related laws. In this way, this policy directive shall contribute to making the difference in Liberia's public sector reform.

Establishing Tower Safety Measures and Co-location Imperatives (TSMACI)

Definitions

Airspace - The atmosphere that is directly above a country's territory.

Beacon – A particular device used on towers to provide guidance for other users of the airspace

Co-location – The sharing of physical communication infrastructure by operators to lower operation and consumers costs and reduce the unnecessary construction of such infrastructure

Collaboration – An act of working with other stakeholders in solving a common problem

Policy – An authoritative response to a public issue or problem arising from crucial moments of choice

Policy Agenda– the outcome of determining a particular problem that commands government's attention from a host of other problems

Risk- A probability or threat of a damage, injury, liability, loss, or other negative occurrence that is caused by external or internal vulnerabilities, and that may be neutralized through preemptive action. <<http://www.businessdictionary.com/definition/risk.html#ixzz2AgphEwNl>>.

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