

A 5-year Policy on the Governance and Management
of
Liberia's Country Code Top Level Domain (ccTLD)
2020 – 2025

Doc ID – LTA/IGS/ccTLD/Com-zdt/02-20
(Draft 7)



Inputs and comments should be sent to the below address:

support@lta.gov.lr

or alternatively to

dzotawontitus@gmail.com

February 21, 2020

Contents

Acknowledgements	4
DEFINITIONS	6
Message from the Minister	7
1.0 BACKGROUND	8
1.1 Dot LR – (.lr)	8
1.2 PURPOSE AND OBJECTIVE OF THIS DOCUMENT	9
1.2.1 PURPOSE.....	9
1.2.2 OBJECTIVE.....	9
1.3 EXPECTED OUTPUTS.....	9
1.4 EXPECTED OUTCOMES.....	9
1.5 RATIONALE FOR THE REVIEW OF THE MANAGEMENT OF .LR ccTLD.....	9
2.0 EXPERIENCE FROM OTHER COUNTRIES AND LESSONS FOR LIBERIA	10
2.1 INTERNATIONAL SCENARIO.....	10
2.2 UNITED STATES OF AMERICA (USA).....	10
2.3 CHINA.....	10
2.4 KENYA.....	11
2.5 MAURITIUS.....	11
2.6 COTE D’IVOIRE.....	11
3.0 LESSONS FOR LIBERIA	11
3.1 ISSUES CONSIDERED IN ADOPTING A MANAGEMENT STYLE.....	11
3.2 SITUATION ANALYSIS OF THE CURRENT STATE FOR LIBERIA.....	11
4.0 POLICY STATEMENT, OBJECTIVES AND STRATEGIES	12
4.1 POLICY STATEMENT.....	12
4.2 POLICY OBJECTIVE.....	12
4.3 STRATEGIES.....	12
4.4 RE-DELEGATION PRINCIPLES.....	13
5.0 INSTITUTIONAL FRAMEWORK	13
5.1 ADVISORY COMMITTEE:.....	13
5.2 ROLE OF THE .LR ADVISORY COMMITTEE.....	13
5.3 REGISTRY:.....	13
5.3.1 The following objectives shall guide Liberia’s ccTLD:.....	14
5.3.2 Functions of the Registry.....	14
5.4 MINISTRY OF POSTS & TELECOMMUNICATIONS.....	14
6.0 REGISTRANTS	15
7.0 REVENUES	15

7.1 FUNDS DISBURSEMENT REQUIREMENTS	15
7.2 TRANSPARENCY REQUIREMENTS	15
7.3 SUSTAINABILITY PLAN	15
8.0 CONCLUSION	15
REFERENCES	16
APPENDIX A	17
Proposed Technical Diagram of the .lr ccTLD Infrastructure	17
APPENDIX B	17
Some Second Level Domains for Different Users.....	17
APPENDIX C	19
Proposed Delegation Profile of .lr	19

Acknowledgements

The Ministry of Posts & Telecommunications (MoPT) recognizes the following individuals for their invaluable services for the formulation of this document:

- Deputy Minister Prosper K. Browne for coordinating the drafting process
- Members of the Board of Commissioners (Israel Akinsanya, Edwina Zackpah, Maria Harrison, Zotawon D. Titus and Ivan G. Brown) of the Liberia Telecommunications Authority under the leadership of Hon. Ivan G. Brown committed themselves to providing the necessary support;
- Honorable Maria Harrison, Commissioner of Engineering and Technology who in her previous capacity as Commissioner of the International Gateway Services, initiated the re-delegation process a few years ago;
- Honorable Zotawon D. Titus, Commissioner of International Gateway Services, Liberia Telecommunications Authority, for his supervisory role and demonstrated expertise in the formulation of this policy framework;
- Mrs. Mai B. Urey, Liberia's current ccTLD Administrator for collaborating with the Project Team and also for providing very useful guidance on the mechanics and the technical infrastructure critical to the re-delegation process;
- Mr. Kolubahzizi T. Howard, Director of Strategy at the Liberia Telecommunications for helping to align the policy with the strategic objective of the ICT sector and also for his editorial inputs;
- Ms. Sangai P. Moliwulo, the Technical Analyst who is the Project Lead and her team of dedicated staff, for incorporating lessons learned from other jurisdictions and also for coordinating the inputs from other stakeholders;
- Also worth recognizing are the respective roles of Civil Society Organizations, Non-Governmental Organizations, Internet Service Providers and the Mobile Network Operators for their invaluable contributions to the process;

Collectively, the various inputs received strengthened the policy in meeting the needs of diverse stakeholders, which have, in principle, added value to Liberia's ICT ecosystem substantially.

ACRONYMS

ARP	Address Resolution Protocol
CCL	Cable Consortium of Liberia
ccTLD	Country Code Top Level Domain
DNS	Domain Name System
gTLD	Generic Top Level Domain
IANA	Internet Assigned Number Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information Communication Technology
IP	Internet Protocol
ISOC	Internet Society
ISP	Internet Service Provider
IT	Information Technology
IXP	Internet Exchange Point
.lr (Dot lr)	Liberia's country code Top Level Domain
LRREN	Liberian Research and Education Network
LTA	Liberia Telecommunications Authority
MOPT	Ministry of Posts & Telecommunications
MNOs	Mobile Network Operators
NGOs	Non-Governmental Organizations
TLDs	Top Level Domains

DEFINITIONS

Domain	Technical identifiers containing alphanumeric characters, used instead of Internet addresses indispensable for the communication through the Internet, due primarily to their easy-to-remember nature
WHOIS:	A database which contains registration information about any given domain name, including who registered it, when it was created and who to contact at that domain.
Registry	An entity which registers, maintains and manages records of domain names
Registrar	An entity responsible for adding, deleting or modifying information in the registry Database
Internet Community	A diverse society comprising of internet users, network operators, internet services, internet service providers, civil society, researchers, academic institution and the government, among others with interest in internet
Top Level Domain -	The suffix attached to Internet domain names such as the org
Country Code Top Level Domain	The two suffix letters attached to the domain name referring to a country such as the lr in www.Liberia.lr.
Generic Top Level Domain –	The non - country specific TLDs such as .com, .org, .net .biz, .edu.
GAC:	The Government Advisory Committee of ICANN which is comprised of appointed representatives of national governments. Its function is to advise the ICANN Board on matters of concern to governments.
Uniform Domain-Name Dispute-Resolution Policy –	An ICANN policy applied by registrars in the .aero, biz, .com, .coop, .info, .museum, .name, .net, and .org top-level domains to resolve disputes before a registrar can cancel, suspend, or transfer a domain name. It is also called UDRP.
IDN: Internationalized Domain Names –	standardizing and translating non-roman symbols and language so that it can be resolved by the existing domain name system.
Presence requirements and restrictions:	Many TLDs require registrants to meet certain conditions in order to be able to register a domain name. For example .us requires registrants to be U.S. citizens or residents;

Message from the Minister of Posts & Telecommunications

1.0 BACKGROUND

Reform in Liberia's ICT sector has largely been successful considering a number of indicators. The sector is generally liberalized with the Liberia Telecommunication Authority (LTA) as an independent regulatory body in place. Critical infrastructure such as international connectivity is based on open access principle. The Cable Consortium of Liberia (CCL), the vehicle through which Liberia connects to undersea fiber optic cable is accessible to all operators. The internet exchange point (IXP), another critical infrastructure also operates under the same open access principle with the Internet Society Chapter (ISOC) of Liberia as owner. The mobile telephony market is growing faster than the programs that are driven by the country code Top Level Domain (ccTLD) services.

Key constraints to the growth of the ccTLD services have been identified as inadequate infrastructure, limited content and high internet costs. These issues affect local content and contribute in some measures to Liberia not effectively making use of its digital space, the dot LR (.lr), in the global internet domain. Unlike the registration of the generic Top Level Domain (gTLD) such as .com or .org that is not restricted to geographic area in the domain name system (DNS), the registration for a ccTLD is often restricted to individuals or organizations located in the particular country or region. The more the users of a ccTLD the more that ccTLD becomes popular and visible in profiling that country on the Internet.

One of the few areas that needs additional reform in the ICT sector is the ccTLD. A multi-stakeholder approach and management policy that takes into account the interest of the wider internet community is now an imperative. The motivation is to adopt liberal and market friendly policies to meet the growing needs of potential users making strides to register large numbers of Internet domain names under Liberia's ccTLD. Underpinning the reform is our desire to align all activities of Liberia's ccTLD to be broadly consistent with global policy and procedures of domain registration. Countries that have reformed their ccTLD policies have succeeded in removing policies and procedures barriers, leading to a substantial increase in the maximum utilization of their domain services.

1.1 Dot LR – (.lr)

Liberia's Country Code Top-Level Domain is represented by .lr. A ccTLD is represented by a two-letter code specifically designated for a particular country, sovereign state or autonomous territory for use to service their community. Top-level domains (TLDs) are the highest level of the domain name system (DNS). DNS is the internet's directory service.

Making up the final part of an internet address, the last two letters representing ccTLDs are referred to as domain endings. The function of these endings is to help simplify the classification process of all registered addresses in the DNS. To this end, Internet Corporation for Assigned Names and Numbers (ICANN) assigns country-specific top-level domains, or ccTLDs (country code TLDs), which are then managed by their respective countries.

1.2 PURPOSE AND OBJECTIVE OF THIS DOCUMENT

1.2.1 PURPOSE

The purpose of this policy is:

- A. To create the space for primary stakeholders to play active role in the administration of Liberia's country code Top Level Domain (ccTLD), and;
- B. To develop and adopt guidelines for the administration of the ccTLD

1.2.2 OBJECTIVE

The major objective of this policy is to liberalize the management of .lr Country Code Top Level Domain Name and develop a management framework that will ensure transparency and greater accountability towards the Internet community of Liberia and the rest of the Global Internet Community.

1.3 EXPECTED OUTPUTS

The key outputs of the policy are:

- A. Establishing a multi-stakeholder ownership
- B. A ccTLD administration framework
- C. Awareness on re-delegation and transition to a new .lr administration
- D. Representation of Liberia's Internet Community at local and international fora

1.4 EXPECTED OUTCOMES

- A. Promotion of the utilization of .lr name space
- B. A Secure ccTLD
- C. Re-alignment of Liberia's ccTLD with its counterparts and related programs;
- D. Improved online service delivery programs
- E. Facilitation of content creation
- F. Contribution to job creation and skill development programs

1.5 RATIONALE FOR THE REVIEW OF THE MANAGEMENT OF .LR ccTLD

Our top level domain is currently administered by a privately-owned company, Data Technology. Data Technology is owned by Mrs. Mai Urey. It is one of the pioneer entities credited for bringing internet services to Liberia. At the time when the domain names were assigned, many countries did not have the structures or the organizations in place to manage their own domain names and Data Tech took on the responsibility to administer Liberia's ccTLD. As an administrator, Mai Urey has been working with Mr. Randy Bush who has volunteered his services as the Technical Contact for the administration of our ccTLD.

Mr. Randy Bush is based in the United States of America. ICANN has been working with both Mrs. Urey and Mr. Bush over the years.

While the current management team has done relatively well in managing Liberia’s ccTLD with no incident of abuse, the dynamics in the industry have changed. To ensure that Liberia makes maximum use of its designated internet space, a forward looking policy cutting across ownership critical. Once put in place, such a policy will help with the proliferation of domain name services for all Liberia residents, government entities, academia, public service organizations and businesses to make use of their Liberian identity in the Internet space with a unique domain name. Hence, the rationale to review for change in the management approach will enable us to achieve the following:

- A. Establish a multi-stakeholder ownership structure
- B. Establish mechanism to ensure responsive and accountable services
- C. Adopt a transparent and inclusive procedures for the use of the ccTLD
- D. Manage the domain name to promote the utilization of the .lr name space

2.0 EXPERIENCE FROM OTHER COUNTRIES AND LESSONS FOR LIBERIA

2.1 INTERNATIONAL SCENARIO

There are many different models for structuring domain administration in various parts of the world as summarized below:

- A. Regulatory authority
- B. Internet Society
- C. Government ministry or organ
- D. Not for Profit Organization (Government with private sector)
- E. Non-Governmental Organization (NGO)
- F. Commercially operating private company
- G. Academic/research institution
- H. Telecommunications operator

Many countries have adopted liberal and market friendly policies to manage Internet domain names under their country code. The common strategy among those countries is that they broadly align their approach consistent with global policy and procedures of domain registration. The following countries adopted different approaches:

2.2 UNITED STATES OF AMERICA (USA)

In the United States, the Government through the Department of Commerce delegates the technical and operational responsibilities in managing its ccTLD to a private not for profit company. However, it delegates the US internet community, which is its advisory body to exercise the policy, procedures and governance functions.

2.3 CHINA

The government created an NGO to manage the ccTLD, the China Internet Network Information Center (CNNIC) under the Ministry of Information and Industry (MII). However, the Chinese Academy of Sciences manages the technical and administrative issues.

2.4 KENYA

The Kenya ccTLD has been re-delegated from the internet community to an NGO with the regulator over-ruling any policy inconsistent with the ccTLD objectives.

2.5 MAURITIUS

Internet Management Committee has been set up to provide policy direction for new registry within the country. An NGO model is now overseeing the ccTLD in Mauritius.

2.6 COTE D'IVOIRE

In 2001, Prof. Suleymani acquired trusteeship of Cote D'Ivoire ccTLD, the .ci. While his intentions were good, his regime did not adequately address the needs of the local internet community and in 2012, the local internet community supported the need to transfer the trusteeship of .ci from Prof Suleymani to ARTCI, Cote D'Ivoire's ICT regulatory authority. Today ARTCI exercises trusteeship of .ci, consistent with ICANN policies

3.0 LESSONS FOR LIBERIA

3.1 ISSUES CONSIDERED IN ADOPTING A MANAGEMENT STYLE

Reforming the management of the ccTLD shall lead to greater benefits and convenience, similar to how Cote D'Ivoire is taking advantage of the benefits of their reforms. To achieve this goal, the following issues shall be strongly considered:

- A. Multi-stakeholder ownership
- B. Secure infrastructure
- C. Clear and simple policy and management framework of ccTLD
- D. Compliance with ICANN re-delegation process for ccTLD of Liberia

3.2 SITUATION ANALYSIS OF THE CURRENT STATE FOR LIBERIA

Liberia's ccTLD or the .lr is not popular among domain names both in Liberia and in the internet space. Second level domains such as .gov.lr and .edu.lr cannot be conveniently registered. People who manage to register them find the services less than satisfactory. In comparison with countries such as Ghana and Nigeria, most services under our ccTLD are comparatively slower with key constraints being management issues and infrastructure. Content and the relatively high cost are issues but can be remedied once the core constraints – management and infrastructure issues- are addressed. Besides, the dynamics in the industry has changed in favor of the following:

- A. Local community participation in policy development and procedure
- B. Adopting basic guidelines and clear policy on domain management
- C. Improving visibility of ccTLD on the worldwide web
- D. Making ccTLD affordable, leading to its popular local use
- E. Escalating redress mechanism to address complaints from stakeholders
- F. Establishing Accredited Registrar
- G. Supporting the sustainable development of national infrastructures

4.0 POLICY STATEMENT, OBJECTIVES AND STRATEGIES

4.1 POLICY STATEMENT

The Government of Liberia believes that the ccTLD is a national resource and therefore belongs to the people. The goal of this policy is to create the conditions for the use of ccTLD to benefit the society generally.

The policy therefore seeks to:

- A. Create liberal, efficient and market friendly processes and a distributed organizational structure to facilitate the operation and use of .lr in support of inclusive, national sustainable socioeconomic development.
- B. Establish guidelines to ensure a smooth re-delegation of .lr ccTLD from current status to a multi-stakeholder ownership framework.
- C. Provide for the adoption of a multi-stakeholder approach in managing the .lr ccTLD services with representatives from a not-for-profit company, the Ministry of Posts & Telecommunications (MoPT), the Liberia Telecommunications Authority (LTA), internet service providers, the NGO/ civil society community, consumers, infrastructure providers, academia, Mobile Network Operators (MNOs) and the business community.

4.2 POLICY OBJECTIVE

This policy hinges on the following objectives:

- A. To ensure that a multi-stakeholder ownership structure is established
- B. To ensure a responsive and accountable management framework
- C. To ensure that open and transparent procedures are adopted
- D. To make .lr more efficient and functional
- E. To popularize the use of the .lr name space

4.3 STRATEGIES

- A. Adopt a management framework for .lr ccTLD in responding to the needs of the local and global Internet community in a sustainable way
- B. Involve all stakeholders to take ownership of the ccTLD of Liberia
- C. Provide guidelines and requirements that are simple, clear and accessible for all users consistent with ICANN practices for the use of domain.
- D. Create a management structure and define the roles and responsibilities of the following:
 - a) Stakeholder Advisory Committee
 - b) Registry
 - c) Accredited Registrars and
 - d) Registrants
- E. Establish a Fee Regime to address registration and annual fees on .lr domain
- F. Set technical requirements for the .lr Registry
- G. Put in place rules for Dispute Resolution

4.4 RE-DELEGATION PRINCIPLES

The re-delegation process of .lr ccTLD shall take into account core requirements under the ICANN re-delegation principles, to include:

- A. Operating the ccTLD in the interest of the relevant local community and the global Internet community
- B. Conforming to relevant domestic laws and regulations, and international laws and conventions.
- C. Ensuring that ccTLD is operated in line with public trust and interest
- D. Ensuring that all relevant DNS data are transferred to a designated replacement
- E. Ensuring the efficient and effective dispute resolution
- F. Demonstrating commitment to abide by ICANN policies

5.0 INSTITUTIONAL FRAMEWORK

5.1 ADVISORY COMMITTEE:

The .LR Advisory Committee shall comprise one representative from each of the following;

- A. Ministry of Posts & Telecommunications, Chair;
- B. Liberia Telecommunications Authority (LTA), Secretary to the Board;
- C. Mrs. Mai B. Urey, Permanent Member;
- D. ISOC-Liberia Chapter, Member
- E. All Mobile Network Operators (MNOs), Members;
- F. The Liberia Chamber of Commerce, Member
- G. Internet Service Providers (ISPs)
- H. Liberia Research and Education Network (LREN), the Tertiary ISP, representing institutions of higher learning
- I. Civil society with focus on internet governance activities

5.2 ROLE OF THE .LR ADVISORY COMMITTEE

THE Advisory Committee shall have the following responsibilities:

- A. Set policy objectives to guide the technical, administrative and operational management of the .lr, as well as provide oversight on same;
- B. Approve its operational plans (budgets, strategic plans/business plans)
- C. Approve rules, regulation and procedures regarding the use of .lr
- D. Receive and consider inputs from the Technical Committee

5.3 REGISTRY:

The Registry shall be an independent unit operating within the Liberia Telecommunications Authority. The Registry shall make recommendations to the Advisory Committee on matters that are technical in nature. Such advice could be provided voluntarily or could be requested by the Advisory Committee.

The Registry shall include a Manager, a Supervisor, Engineers and a few specialized staff from the LTA who shall be seconded to manage the Registry until such time when it is deemed appropriate to recruit additional staff.

The Registry shall ensure the uniqueness of registered domains to avoid contestation. It shall also ensure fair distribution of domains on a first come first serve basis. It shall technically maintain delegated level (TLD) and be responsible for DNS server administration. It shall also formulate rules regarding eligibility criteria to register domains, establish parameters of cost and grace period for renewal of subscription. It shall communicate to Registrants any notification of changes, validation of contact information and address other issues that might be raised by the Registrants.

5.3.1 The following objectives shall guide Liberia's ccTLD:

1. Domain name markets shall be competitive.
2. Domain registrations shall be first come, first served.
3. Domain registration shall be on a level playing field
4. Registrant data should be public
5. Policy on domain registration shall be determined by open multi-stakeholder processes

The Registry shall set criteria for accreditation and accredit Registrars.

5.3.2 Functions of the Registry

The Registry shall have the following key functions:

- A. Carry out the day to day technical management of the .lr domain name space in accordance with the guidelines issued by the ccTLD Advisory Committee;
- B. Comply with international best practice in the administration of the .lr domain name space;
- C. Serve as Liberia's ccTLD Manager as well as its Technical and Administrative Contacts
- D. Accredit Domain Name Registrars in accordance with set guidelines;
- E. Monitor the operations of registrars to ensure that they abide by the governing regulations and guidelines; and
- F. Advise the Advisory Committee to facilitate its work.

5.4 MINISTRY OF POSTS & TELECOMMUNICATIONS

The Ministry of Posts & Telecommunications, as a member of the Advisory Committee, will present the case for re-delegation of lr ccTLD to ICANN. The Ministry will also facilitate a conducive policy, legal and regulatory environment for the smooth operation of .lr

6.0 REGISTRANTS

Registrants are key stakeholders in the internet community and policies, guidelines and rules formulated under the ccTLD shall seek to also address their interest.

7.0 REVENUES

Funds generated under the ccTLD programs shall be applied to the following:

- A. Invest in the necessary infrastructure to support ccTLD programs and services
- B. Update ccTLD application software periodically
- C. Pay Liberia's membership dues and obligations to membership organizations
- D. Facilitate staff participation in study groups on ccTLD activities
- E. Fund the operational and program expenses of the ccTLD

7.1 FUNDS DISBURSEMENT REQUIREMENTS

The Registry shall be signatories to the ccTLD accounts which shall be held in banks in Liberia that the Advisory Committee shall designate. Funds shall be disbursed in line with relevant public laws and in support of the programs of the Registry.

7.2 TRANSPARENCY REQUIREMENTS

The Registry shall establish a website and update it regularly to keep the public informed about its activities and programs. It shall provide periodic reports to the Advisory Committee. The Advisory Committee shall commission audits of the Registry on an annual basis to ensure that its objectives are achieved.

7.3 SUSTAINABILITY PLAN

LTA shall fund the start-up activities of the Registry. The Registry shall also seek additional funding from other sources. The Registry will raise funds through domain registration fees as determined by the Advisory Committee from time to time. The Advisory Committee will work with existing Administrator to ensure a smooth re-delegation process.

8.0 CONCLUSION

Liberia's Country Code Top level Domain, ccTLD, is a scarce national resource. It therefore belongs to the people. As one of the evolving platforms that can present the image of the nation, we have adopted collaborative approach to ensure a smooth transition. All stakeholders concerned will engage the current administrator in a strategic way to ensure that the recommended checklist from ICANN is adhered to. Our objective in re-delegating of our ccTLD is to help improve the availability of the .lr domain, increase access to the services and drive growth in its overall utilization, using a multi-stakeholder ownership approach.

The management framework of our ccTLD transfers trusteeship to the Advisory Committee and makes use of the Liberia Telecommunications Authority as the Registry. It is tailored to ensure full compliance with one of the recommended approaches of ICAAN. Indicators are established to ensure conformity with best practice characterized by commitment to uphold ICANN requirements for the good of the society.

REFERENCES

Geist, M 2004, Governments and Country-Code Top Level Domains: A Global Survey, Canada Research Chair in Internet and E-commerce Law University of Ottawa, Faculty of Law Technology Counsel, Osler, Hoskin & Harcourt LLP

GOL 2010, Government of Liberia, National Telecommunication and ICT Policy, Ministry of Post & Telecommunication, Monrovia, Liberia

Government of India 2013, Internationalized Domain Names (IDNs) - .IN Domain Registry Policy Framework & Implementation, Government of India Ministry of Communications & Information Technology Department of Electronics & Information Technology

ICANN 2016, User Documentation on Delegating and Re-delegating a Country-Code Top-Level Domain (ccTLD), CCTLD-del/redel-UI, Los Angeles, USA

ICANN-2016, International Corporation for Assigned Names and Numbers, ccTLD Guidelines

ICANN-2017, International Corporation for Assigned Names and Numbers, Annual Report, 1 July 2017-30 June 2018, One world, One Internet, Los Angeles, USA

ITU 2008, International Telecommunications Union, Policy Business, Technical and Operational consideration for the Management of a country code Top Level Domain (ccTLD), ITU-D-ICT Application and Cybersecurity Division, ITU place des Nations, Geneva

Kleinwächter, W 2010, The Internet Domain Name Registration Process: From the Registrant to ICANN, Project on Cybercrime, funded by Romania, Estonia, Monaco, Microsoft, McAfee and the Council of Europe, Economic Crime Division Directorate General of Human Rights and Legal Affairs Council of Europe Strasbourg, France

LTA 2015, Liberia Telecommunication Authority, Strategic Plan, Goal No.- Monrovia, Liberia

LTA 2019, Liberia Telecommunication Authority, Department of International Gateway Services Strategic Plan, Goal Number Two, Popularizing the Use of Liberia's ccTLD, Monrovia, Liberia

OECD 2006, The Organization for Economic Cooperation and Development, Evolution in the Management of Country Code Top-Level Domain Names (ccTLDs), Working Party on Telecommunication and Information Services Policies, Directorate for Science, Technology and Industry Committee for Information, Computer And Communications Policy (CIPP)

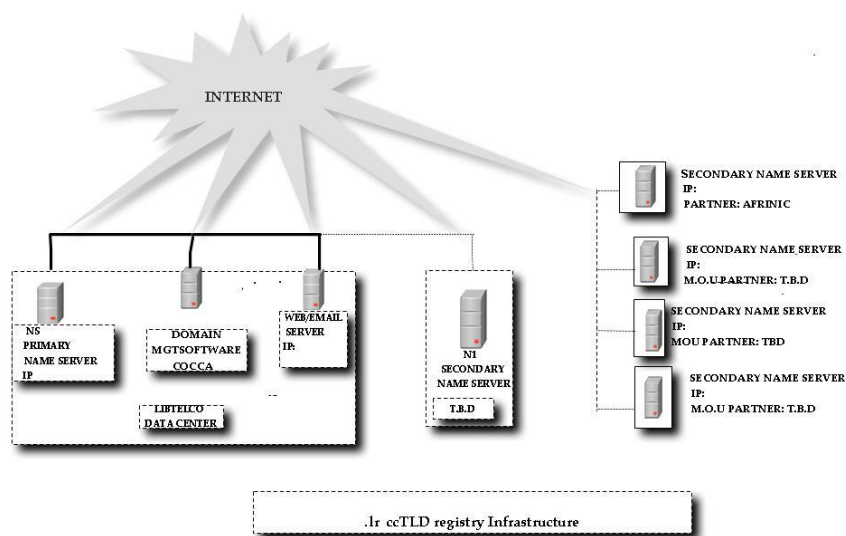
Sauliūnasm D 2014, Latest Developments in the Regulation of ccTLDs: Comparative Analysis of <.LT>, <.SK> AND <.KZ>, JURISPRUDENCE, Volume 21, No 2, pp. 555–577

TRR 2014, Telecommunication and Radio Regulator, A Further Consultation Paper on Vanuatu Domain Name Management and Administration Regulation, Inviting public comment and input, Port Vila, Vanuatu

APPENDIX A

Proposed Technical Diagram of the .Ir ccTLD Infrastructure

The .Ir ccTLD Registry will be hosted on one (1) primary server and also on several secondary servers. The Primary Server will be in-country while the secondary servers that will help to eliminate single point of failure to the .Ir ccTLD Registry will be in different geographic locations and on different gateways. Below is the proposed architecture for the .Ir ccTLD Registry



APPENDIX B

Some Second Level Domains for Different Users

One critical objective of this Policy Framework is to provide safe internet platform for Liberian internet community at an affordable cost. The other objective is to raise Liberia's profile on the World Wide Web. The assumption is when many stakeholders make use of the national digital space with Liberia's unique identity, it will lead to creating more content on the internet that are Liberian specific. Now is time to provide additional information for different internet users who have need for different second level domains. The information below will enable registrars to help their clients (registrants) on the specific second level domains.

1. .com.Ir domains – for Liberian companies and businesses
2. .org.Ir – for Liberian non-profit organizations (NGOs, CSO, etc.).
3. .edu.Ir – for Liberian academic institutions of higher learning-
4. .gov.Ir – for MACs and Government Organizations

5. .biz.lr – for Liberian Business Owners
6. .mil.lr – for Liberian Armed Forces (Military)
7. .sch.lr – for Liberian schools other than institutions of higher learning
8. .ent.lr – for Liberian entertainment bodies
9. .int.lr – for other Liberian institutions
10. .hotel.lr – for Liberian hotels
11. .art.lr – for Liberian art industry

Other Second Level Domains are:

- A. .agr.lr
- B. .asso.lr
- C. .city.lr
- D. .firm.lr
- E. .info.lr
- F. .job.lr
- G. .law.lr
- H. .med.lr
- I. .mus.lr
- J. .name.lr
- K. .net.lr
- L. .news.lr
- M. .ngo.lr
- N. .press.lr
- O. .sports.lr
- P. .tv.lr

APPENDIX C

Proposed Delegation Profile of .lr

(Liberia Country-code top-level domain)

This proposed delegation profile of Liberia's ccTLD is patterned after the Ivorian approach where the Registry is situated within the regulatory authority. Like in Cote D'ivoire, LTA shall serve as the Administrative and Technical Contacts of Liberia's ccTLD.

ccTLD Manager

Liberia Telecommunications Authority

Administrative Contact

Administrative Manager

Liberia Telecommunications Authority

Email: support@lta.gov.lr

Voice: +231

Fax

Technical Contact

Technical Manager

Liberia Telecommunications Authority

Email: support@lta.gov.lr

Voice: +231

Fax

Name Servers

Proposed Server Locations

IP Addresses

Primary Server: Libtelco Data Center

XXXXXXXXXXXX

Secondary Server: ns-lr,Afrinic.net

XXXXXXXXXXXX

Secondary Server: TBA

XXXXXXXXXXXX

Secondary Server: TBA

XXXXXXXXXXXX

Registry Information:

URL for registration services

WHOIS Server: whois.....