

# REGISTRATION OF NIGERIAN TLD : PRESENT STATUS AND FUTURE DEVELOPMENT

**Registration of Nigerian TLD: Present status and future developments**

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## Introduction

This paper intends to describe the present Nigerian Top Level Domain (TLD) management (.NG). The sub-domain delegation rules, the domain name structure adopted and the present status of registered domains are described.

The paper concludes by putting in evidence some aspects that need to be defined, taking into account the future expansion of Internet in Nigeria. The raised points need to be subject of discussion by interested parts running Internet services and users.

## The RINAF project in Nigeria

Nigeria was involved in the UNESCO/IIP Regional Informatics Network for Africa (RINAF) project acting as a Regional RINAF node for Central Africa. The aim of the project is to bring basic Internet services to a number of African countries, to create a group of technicians specialized in the African network services management and to increase the awareness on the importance of data network services in Africa. The project is technically coordinated by the IAT (formerly CNUCE) Institute of the Italian National Research Council. The National Center for Technology Management (NACETEM) located at the Obafemi Awolowo University in Ile-Ife, has been designated as RINAF node and Prof. A. Sanni, Executive Director of NACETEM was appointed as RINAF Country Coordinator for Nigeria.

According to the national implementation plan submitted by NACETEM, RINAF has provided the hardware and software requested, it has carried out a regional training course for system operators in Ile-Ife and it has supported the participation of Nigerian expert and technicians to several networking events. Furthermore, the first UUCP protocol e-mail link (dial-up link) in Nigeria has been activated between NACETEM and CNUCE to load and download e-mail messages.

After an experimental phase of the established link the Nigerian Top

Level domain .NG was registered at the Internic, in March 1995. The only registered domain by that time was yaba.edu.ng and since then the TLD .NG is managed by the IAT Institute.

\section{The delegation rules of the Nigerian domain name structure}

The domain structure adopted is hierarchical only by organization type and/or geographical location, and not by inter-organization relationships or by network service provider. The second level domains are generic categories as follows:

\subsection{.NG Domain implementation}

\begin{enumerate}

\item All educational institutions

\begin {itemize}

\item EDU.ng

\end{itemize}

\item All commercial entities

\begin {itemize}

\item COM.ng

\end{itemize}

\item Governmental agencies or offices

\begin {itemize}

\item GOV.ng

\end{itemize}

\item Network service providers

\begin {itemize}

\item NET.ng

\end{itemize}

\item Regional organizations, private individual companies

\begin {itemize}

\item REGION.ng

\end{itemize}

\item Miscellaneous for organizations that do not fit any where else

\begin {itemize}

\item ORG.ng (e.g. Non-governmental organizations)  
\end{itemize}

\end{enumerate}

\subsection{Sub---domain registration policy}

The domain registration policy for Nigeria is to register acronyms of organizations and companies under the above sub domains. As a rule, there must always be a legal entity to which the domain is clearly attributable. A 'legal entity' is e.g. a registered company, a widely recognized organization club, a private individual company, etc. and are registered directly under the above sub domains like acronym.edu.ng (e.g. yaba.EDU.ng).

Every registered domain should have Administrative and Technical contacts.

\begin{description}

\item[Administrative Contact]

is the person who can speak on behalf of the organization that registers the domain, even if the organization is an individual company. This person should be able to answer non-technical questions about the organization's plans for using the name and procedures for establishing sub-domains. See RFC 1032 for more detail on Administrative Contacts.

\item[Technical Contact]

is the person who maintains the Domain's Primary Name Server, resolver software, and database files. This person keeps the Name Server running and interacts with technical people in other Domains to solve problems that affect the Domain. The Internet Service Provider (ISP) often performs this role.

\end{description}

Our policy is to give the same opportunity to all organizations to administer its own domain avoiding the monopoly policy.

All requests for registering sub domains under .ng should be submitted under compilation of all the parts of the attached application form, which should then be sent to the Technical Contact of the registration authority together with the attached assumption of responsibility, which must be printed on a headed paper of the organization, properly signed by the responsible of the organization acting also as Administrative Contact "admin-c:" and stamps of the organization.

At preset the administrative and technical contacts of the Nigerian TLD (.NG) are:

```
\begin{verbatim}
```

Administrative Contact Iyabo Odusote <[iyabo@yabatech.edu.ng](mailto:iyabo@yabatech.edu.ng)>

Technical Contact Abraham Gebrehiwot <[abraham@afro.cnuce.cnr.it](mailto:abraham@afro.cnuce.cnr.it)>

Fax: +39-50-904052

Tel: +39-50-593336

```
\end{verbatim}
```

```
\begin {itemize}
```

\item currently, the Nigerian registration procedure doesn't foresee any reservation policy for domain names under the .NG Top Level Domain.

\item domain names can be allocated only to organizations located in or having a subsidiary in Nigeria. For this reason, it is not allowed to a foreign company to have a domain name under the Nigerian TLD (.NG). Nonetheless it is possible for a foreign or international service provider to register a domain name for a Nigerian customer.

\item each organization can be provided with at most one domain name under the Nigerian TLD (.NG).

\item no fee is applied for registering a domain name under the Nigerian TLD (.NG), neither to the service provider (acting as requester), nor to his customer (the organization to which the domain name will be assigned).

```
\end{itemize}
```

```
\section{Present domains registered, technical details and database}
```

All domains presently registered at the Nigerian Registration Authority are shown in Appendix II. While Appendix III contains the data of the people involved in the registered domains. It is possible to consult the online whois database of the registered domains and the contact persons that are acting as administrative, technical, zone contacts, postmaster, ... installed at the afro.cnuce.cnr.it machine using the following format:

```
\begin{verbatim}
```

```
whois -h afro.cnuce.cnr.it sub.domain.ng
```

```
\end{verbatim}
```

All the first level domains are registered and maintained in Pisa Italy.

#### \section{Request of registration of a new domain}

The steps to follow when asking the Nigerian Registration Authority to register a new domain under the Nigerian TLD (.NG) are the following:

#### \begin{enumerate}

\item fill in the application form containing all the relevant information needed to register a new domain (name of the new domain, authoritative name-servers for that domain, technical and administrative contacts and so on).

A template of this letter is attached in appendix I. Lines starting with \# are comments and should be removed before sending the application form. The domain and person objects should be separated by an empty line. Every new domain registration request should be sent on separate e-mail.

The form has to be sent via e-mail to Abraham Gebrehiwot ([abraham@afro.cnuce.cnr.it](mailto:abraham@afro.cnuce.cnr.it)) from the person tagged as zone-c in the module (i.e. the maintainer of the primary name-server for the new domain).

\item Send particular letter, called "assumption of responsibility" in which the Nigeria company or Nigerian subsidiary declares its need of registering the new Nigerian domain and accepts some clauses and rules strictly tied with this type of procedure.

A template of this letter is attached in appendix I.

Note that:

The letter must be printed on the Nigerian company headed paper and filled in each part. It has to be appropriately signed by the administrative contact (tagged as the admin-c in the application form) who has to reside in Nigeria. The role hold in the company by the admin-c should be clearly typed under his signature.

The letter has to be sent (via fax or via snail mail) to:

\begin{verbatim}  
Abraham Gebrehiwot  
C/o IAT Institute

Via S. Maria 36  
56100, Pisa  
fax: +39-50-904052  
Italy

\end{verbatim}

\end{enumerate}

\section{Questions about the administration of the Nigerian TLD .NG}

\begin{enumerate}

\item At present the management of the Nigerian TLD (.NG) is maintained in Pisa Italy. How long should Pisa keep on playing the role of the Registration Authority?

Nigerian Internet Group (NIG) has communicated through a fax letter that the Federal Government of Nigeria through the Nigerian Communications Commission licensed the NIG as a TLD administrator for Nigeria (i.e. NIG is the budding National Network Information Center, NIC). I only have copy of the fax sent from the NIG.

\item We need to define a Naming Authority that should be the one to establish the rules and the procedures on which the Registration Authority should base its registration policy furthermore:

\item Who should cover the role of the Naming Authority, I think of a group of people, a mixture of University professors and technician are good candidates to be part of the Naming Authority?

\item Which should be the exact role of the Registration Authority? When can the Registration Authority refuse to register a domain name?

\item should define the geographic domain structures (Province, States, Cities, ...) under NG?

\item How should they fit into the domain structures, ex. should Individual companies fit into this?

\item Which names could be assigned and which once should be reserved? At present no names are reserved ex. a company may request to register lagos.ng.

\item The Naming Authority should be responsible in defining the structure being based on the official lists of Province, States, Cities, .... We need to be able to define the whole structure of the following type:

```
\begin{verbatim}
(root)
|
+-----+-----+
|||
us ng it
|
-----+-----+-----+-----+-----+
|||||
lagos org com edu net gov
||
+-----+-----+ +---+-----+
|||||
dept1 mbxpriv acme host2 pluto
\end{verbatim}
```

\item Who can register a domain name under .NG?

\item When should we reject a registration request?

\item Could ISP register more than one domain name?

\item How should we manage a withdrawal of a domain name? For how long should we maintain that domain reserved?

\item What are the conditions to define network service providers and what privileges should they have? E-mail, full Internet, Web pages, ...

\item Should we consider differently, Companies, NGOs, Associations, ....? Individuals should be allowed restricted privileges?

\item How should we manage a dispute?

\item Could we assign network names? ftp www telnet web, .... directly under the the generic second level domains?

\item Could the Registration Authority take of a registered domain in case

the maintainer of that domain is not respecting the rules?

\item The registration procedures should be formalized taking into account the future expansion of the Internet in Nigeria.

\item It is necessary to providing a web site with the complete information developed on all the above aspects.

\end{enumerate}

\section{CONCLUSION}

As indicated in appendix IV the domain registration request is increasing very fast. It is necessary to redefine in details; the domain name structure, the Naming Authority, the Registration Authority and the procedures to be followed by the Registration Authority immediately. Any delay in this actions may have consequence in the future development and use of the Internet in Nigeria.

\section{References}

\begin{enumerate}

\item L. Abba, A. Gebrehiwot, A. Lazzaroni, S. Trumpy,: {\em The RINAF project: organization,} Workshop on Eletronic Networks for African Universities, 15--17 D1993 Accra, Ghana.

\item L. Abba, A. Gebrehiwot, A. Lazzaroni, S. Trumpy,: {\em Status and objectives of the RINAF project,} African Regional Symposium on Telematics for Development, 3--7 April 1995 Addis Abeba, Ethiopia.

\end{enumerate}

\end{document}

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formato postscript  
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%!PS-Adobe-2.0

%%Creator: dvipsk 5.58f Copyright 1986, 1994 Radical Eye Software

%%Title: tld.policy.ng.dvi

%%Pages: 7

%%PageOrder: Ascend

%%BoundingBox: 0 0 612 792

%%DocumentPaperSizes: Letter

%%EndComments

%DVIPSCommandLine: dvips tld.policy.ng.dvi -o tld.policy.ng.ps

%DVIPSParameters: dpi=600, comments removed

%DVIPSSource: TeX output 1999.01.18:1840



```

%%BeginProcSet: tex.pro
/TeXDict 250 dict def TeXDict begin /N{def}def /B{bind def}N /S{exch}N
/X{S N}B /TR{translate}N /isls false N /vsize 11 72 mul N /hsize 8.5 72
mul N /landplus90{false}def /@rigin{isls{[0 landplus90{1 -1}{-1 1}
ifelse 0 0 0]concat}if 72 Resolution div 72 VResolution div neg scale
isls{landplus90{VResolution 72 div vsize mul 0 exch}{Resolution -72 div
hsize mul 0}ifelse TR}if Resolution VResolution vsize -72 div 1 add mul
TR[matrix currentmatrix{dup dup round sub abs 0.00001 lt{round}if}
forall round exch round exch]setmatrix}N /@landscape{/isls true N}B
/@manualfeed{statusdict /manualfeed true put}B /@copies{/#copies X}B
/FMat[1 0 0 -1 0 0]N /FBB[0 0 0 0]N /nn 0 N /IE 0 N /ctr 0 N /df-tail{
/nn 8 dict N nn begin /FontType 3 N /FontMatrix fntrx N /FontBBox FBB N
string /base X array /BitMaps X /BuildChar{CharBuilder}N /Encoding IE N
end dup{/foo setfont}2 array copy cvx N load 0 nn put /ctr 0 N}]B /df{
/sf 1 N /fntrx FMat N df-tail}B /dfs{div /sf X /fntrx[sf 0 0 sf neg 0 0]
N df-tail}B /E{pop nn dup definefont setfont}B /ch-width{ch-data dup
length 5 sub get}B /ch-height{ch-data dup length 4 sub get}B /ch-xoff{
128 ch-data dup length 3 sub get sub}B /ch-yoff{ch-data dup length 2 sub
get 127 sub}B /ch-dx{ch-data dup length 1 sub get}B /ch-image{ch-data
dup type /stringtype ne{ctr get /ctr ctr 1 add N}if}B /id 0 N /rw 0 N
/rc 0 N /gp 0 N /cp 0 N /G 0 N /sf 0 N /CharBuilder{save 3 1 roll S dup
/base get 2 index get S /BitMaps get S get /ch-data X pop /ctr 0 N ch-dx
0 ch-xoff ch-yoff ch-height sub ch-xoff ch-width add ch-yoff
setcachedevice ch-width ch-height true[1 0 0 -1 -.1 ch-xoff sub ch-yoff
.1 sub]{ch-image}imagemask restore}B /D{/cc X dup type /stringtype ne{}}
if nn /base get cc ctr put nn /BitMaps get S ctr S sf 1 ne{dup dup
length 1 sub dup 2 index S get sf div put}if put /ctr ctr 1 add N}B /I{
cc 1 add D}B /bop{userdict /bop-hook known{bop-hook}if /SI save N @rigin
0 0 moveto /V matrix currentmatrix dup 1 get dup mul exch 0 get dup mul
add .99 lt{/QV}{/RV}ifelse load def pop pop}N /eop{SI restore userdict
/eop-hook known{eop-hook}if showpage}N /@start{userdict /start-hook
known{start-hook}if pop /VResolution X /Resolution X 1000 div /DVImag X
/IE 256 array N 0 1 255{IE S 1 string dup 0 3 index put cvn put}for
65781.76 div /vsize X 65781.76 div /hsize X}N /p{show}N /RMat[1 0 0 -1 0
0]N /BDot 260 string N /rulex 0 N /ruley 0 N /v{/ruley X /rulex X V}B /V
{}B /RV statusdict begin /product where{pop product dup length 7 ge{0 7
getinterval dup(Display)eq exch 0 4 getinterval(NeXT)eq or}{pop false}
ifelse}{false}ifelse end{{gsave TR -.1 .1 TR 1 1 scale rulex ruley false
RMat{BDot}imagemask grestore}}{{gsave TR -.1 .1 TR rulex ruley scale 1 1
false RMat{BDot}imagemask grestore}}ifelse B /QV{/gsave newpath transform
round exch round exch itransform moveto rulex 0 rlineto 0 ruley neg
rlineto rulex neg 0 rlineto fill grestore}B /a{moveto}B /delta 0 N /tail
{dup /delta X 0 rmoveto}B /M{S p delta add tail}B /b{S p tail}B /c{-4 M}
B /d{-3 M}B /e{-2 M}B /f{-1 M}B /g{0 M}B /h{1 M}B /i{2 M}B /j{3 M}B /k{
4 M}B /w{0 rmoveto}B /l{p -4 w}B /m{p -3 w}B /n{p -2 w}B /o{p -1 w}B /q{
p 1 w}B /r{p 2 w}B /s{p 3 w}B /t{p 4 w}B /x{0 S rmoveto}B /y{3 2 roll p

```

```
a}B /bos{/SS save N}B /eos{SS restore}B end
%%EndProcSet
TeXDict begin 40258431 52099146 1000 600 600 (tld.policy.ng.dvi)
@start /Fa 28 123
```