



**ECONOMIC AND SOCIAL  
COUNCIL**

Distr.  
LIMITED  
E/ESCWA/ICTD/2003/WG.2/8  
30 May 2003  
ORIGINAL: ENGLISH

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**Economic and Social Commission for Western Asia**

Expert Group Meeting on Promotion of Digital  
Arabic Content  
Beirut, 3-5 June 2003

UN ECONOMIC AND SOCIAL COMMISSION  
E/ESCWA/ICTD/2003/WG.2/8

03-0427-0103

**A REVIEW OF THE ARABIC DOMAIN NAMES INDUSTRY:  
PAST INITIATIVES, PRESENT STATUS AND  
FUTURE PERSPECTIVES**

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**A REVIEW OF THE ARABIC DOMAIN NAMES INDUSTRY:  
PAST INITIATIVES, PRESENT STATUS AND FUTURE PERSPECTIVES**

by

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## Executive Summary

In the review of the Arabic Domain Names Industry, the paper examines the past initiatives, present status, and future perspectives. In short, the paper discusses the issue of Arabization vis-à-vis the Internationalized Domain Names (IDNs).

The paper begins by examining the background to the topic including a very brief examination to what domain names are. Then the paper delves into the issue of multilingual name space, and principally the Asian experience in the field, and what Arabs can learn from it.

The next topic is a view of the current IDN status and the current DNS legal issues.

This is followed by the market needs and acceptance, including the rising role of the e-business and e-education, and the legal issues, such as jurisdiction.

The next section deals with the role of related International organizations (ICANN, WIPO, and MINC...) as the response by the international community.

The section before last deals with the policy and the technical coordination, raising questions on the authority framework and the primary approaches to the issue.

The paper concludes with a review of the whole picture, including the existing change and progress, and the issue of when the Arabic speaker can begin to use the IDN.

Attached to the paper is an article on cybersquatting by another AGIP colleague.

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## I. BACKGROUND

### A. DOMAIN NAMES

In the beginning, there was the (.com). That simple tag defined a whole decade, and the economic phenomena it encompassed.

And it was good, but only for a while.

Today that domain name issue has become different, perhaps a little complex for some. Once examined, however, it is rather simple and can be summarized.

Domain names consist of the following:

- (a) gTLDs (generic Top Level Domain Names): .com, .org, .net, .biz ...;
- (b) ccTLDs (country code Top Level Domain Names): .jo, .lb, .sa, ae ...;
- (c) SLDs (Second Level Domain Names): agip.com.

This is the structure as it is now but if we come to the main question, which is the arabization of Domain name. More specifically, is it Arabization of TLDs and/or SLDs?

The answer is that research on the topic has shown a need that both TLDs and SLDs should be in Arabic for more than one reason but mainly:

- (a) First, it is better to have the domain names in Arabic than starting Arabic then changing to English to add the (.com);
- (b) Second, in Arabic we write from right to left, so to continue the TLD in English will require changing the writing from left to right. Needless to say it is cumbersome.

### B. MULTILINGUAL NAME SPACE

Before examining the issue of Arabization further, let us look at the other experiences by other non-English speaking nations to use their own language in terms of Domain names. By learning from the other experiences, we Arabs would speed up the Arabization process. I will summarize the development of the idea of a multi-lingual Internet, and the developments that have occurred so far:

- (a) New Name Spaces extended from ASCII;
- (b) New Technology Originated from Asia Pacific 1998;
- (c) Testbed pioneered in Asia 1998/1999;
- (d) New Standards with Strong Asian Input in IETF processes 1999;
- (e) New Complexities of Languages and Scripts;
- (f) New Scenarios of TLDs – language TLDs? ccTLDs and gTLDs in other scripts?;
- (g) New Names – IDNs (International Domain Names) and Keywords;
- (h) New User communities of non-English speaking users;
- (i) New authority/expertise framework nascent – MINC-INFITT-CDNC- JDNA-etc 2000-2001.

In short, we are fast reaching a point where users for whom English is not their mother tongue exceed in numbers the English-speaking users. Asian countries, and in particular China (whose demographic presence includes Taiwan and Singapore as well many communities all over the globe) will be key players on the Internet. Naturally the language of the Internet, including domain names, will have to reflect the change. Although lagging behind regions like East Asia, there is equally an incredible increase in the numbers of Arab Internet users. Naturally, our language should be equally represented on the Internet.

### C. CURRENT STATUS

Let us look at the means by which the change will present itself:

- (a) IDN Technologies are now available;
- (b) Strong IDN demand is proven;
- (c) IDN Service providers are already present;
- (d) IETF IDN standards are ready;
- (e) New Processes are available, such as MINC, INFITT, JDNA, CDNC;
- (f) The mushrooming of new businesses and new opportunities and new services in keywords and above-DNS services.

### D. CURRENT DNS LEGAL ISSUES

Facing these changes are legal challenges that might impede or slow down the emergence of a multi-linguistic Internet, as well as domain names:

- (a) *Cybersquatting*: To hijack a domain name for another firm or person. (See Appendix written by a colleague in TAGIDomains.com – accredited domain name registrar);
- (b) *Famous Trademarks*: How to protect them from being used by unauthorized persons;
- (c) *Dispute Resolution Procedures*: Primarily today we have the Uniform Dispute Resolution Policy (UDRP), which was approved by ICANN to be referred to resolve conflicts on gTLDs domain names and some ccTLDs;
- (d) *Negotiation of New TLD, ccTLD Agreements*: ICANN is consistently examining new gTLDs like the latest (biz, info, name...) which were added in late 2001 besides the other sponsored top level domain names. In addition, some of the countries top-level domain names are negotiating a new agreement with ICANN, either to examine the economic feasibility or to use the same policy of the gTLDs;
- (e) *Internationalized DNS*: Having domain names available in more languages will require tighter dispute resolution policies, since it is expected that more legal issues will arise from translation and transliterations;
- (f) *First to File vs. Sunrise Clause*: Like the new gTLDs, when they were introduced there was a sunrise period for the trademark owners to protect their names. Will this be required when the International domain names are used? Or will the priority issue (first to file, first to register) become the standard?

**Figure 1. Authority Matrix in IDN**

Language	Script	Country/ Economy	Example
1	1	1	Greek
1	M	1	Japanese
1	1	M	Russian, Mongolian
M	1	M	Ascii, Han, Arabic
1	1	0	Tamil
1	M	M	Korean

The above figure shows an example of the different authorities for some languages, which affects the implementation usually. For example, The Arabic is the same script that is used in multiple languages (Arabic, Farsi, Urdu...) and used in multiple countries.

## II. MARKET NEEDS & ACCEPTANCE

### A. LINGUISTIC EXCLUSION

Non-English speaking masses are excluded out of Internet simply because a Large segment of world population cannot read Latin characters, the letters that make up that English language. In the Arab World alone, more than 90% are unable to read Latin characters.

### B. IDN TECHNOLOGY/SERVICE VENDORS MOVING FORWARD WITH PROPRIETARY SOFTWARE

To explain this better, let me give you an example from the Arab World. There were more than 3 Arabic language technology providers. To use any of them, the user needs to install a software on the PC to be able to read and use the program in English. In case the same Arabic domain name was reserved with two technology providers, each for different person; the website that will show in a user who type this domain, will be the website that is identified according to the software installed on the requester computer. If no software were installed then nothing will show at all.

### C. FRACTURING THE INTERNET

Alternative Root advocates are getting stronger: Which may results in fracturing the Internet.

### D. LOCAL IDN INITIATIVES

Country Authorities, such as those of Japan and Korea, among others are launching their own IDN's. (Note: however, that they all end with English letters (e.g. jp for Japan).

### E. THE RISING ROLE OF THE E-BUSINESS & E-EDUCATION

Ideally, Internationalized DNS will promote greater global Internet usage particularly for businesses in what is termed e-Business. However, if Domain Names remain scripted only in Latin characters, people are not literate in English will have no access to e-business. Naturally, this will harm everybody; developing

countries will keep trading in the regular way and be excluded from the e-Business sector. While developed countries whose products and services will be denied access to the non-English speaking customers.

In addition, the sole use of English will harm non-English academics and researchers. It seems unjust that an Arab who wants to use the Internet for research must know English, or otherwise be denied access to all the e-education material available on the Internet.

## F. LEGAL ISSUES

### 1. *Same letters, different languages*

There is still little discussion on how nations such as the Arab countries, Iran, Pakistan use the same Arabic letters but in different languages will deal with the DNS issue.

### 2. *Sunrise Provisions for ccTLDs*

Equally important is the resolution of the issue of Coordination of Sunrise Provisions for ccTLDs.

### 3. *Jurisdiction*

It is vital to review and perhaps untangle the "Jurisdiction" issues that at sometimes plague the DNS debate and development, primarily the issue of national Laws v. global consistency.

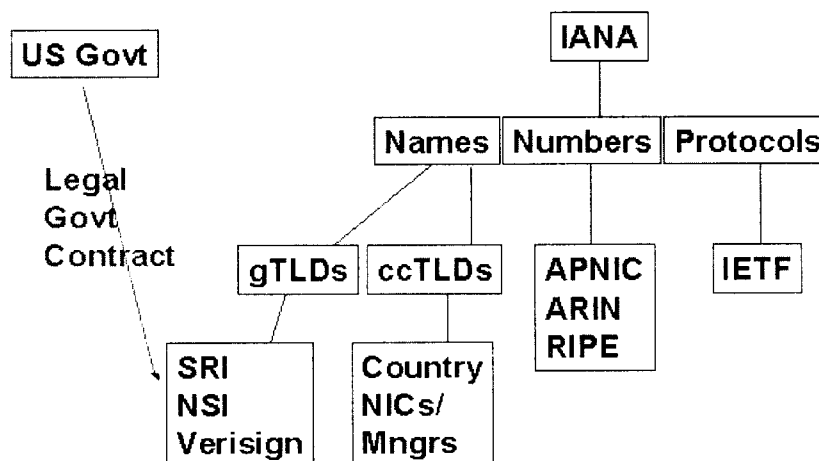
## III. ROLE OF RELATED ORGANIZATIONS

### A. ICANN

The US Department of Commerce initiated the creation of a private body bound by contract to the US Government. The IANA was the original authority. 1998 the Internet Corporation for Assigned Names and Numbers (ICANN) has emerged as the leading organization for domain names.

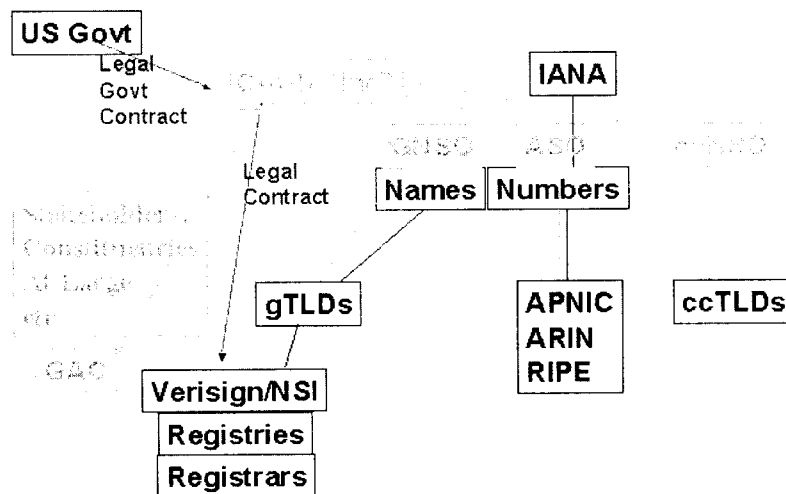
Today, ICANN is in charge of the "Root" and it coordinates the Insertion of TLDs in the Root. Further, it delegates authority to gTLDs and ccTLDs. The figures below help us understand the Framework of authority by elaborating on the change from US-IANA to ICANN.

**Figure 2. Framework of Authority-I**





**Figure 3. Framework of Authority-II**



### B. WIPO

Another primary player is the World Intellectual Property Organization (WIPO). Its role concerns the monitoring the commitment of the member states' to the obligations set out by the Uniform Dispute Resolution Policy (UDRP) Guidelines.

Furthermore WIPO spells out the ccTLD best practices guidelines, which are a voluntary set of guidelines intended to assist administrators of ccTLDs in the management of intellectual property in their domains, with a particular focus on dispute prevention and resolution.

Lastly, WIPO introduced the Second Internet Domain Name Process report (July 2001), which is a Letter of request of 19 States endorsed by all WIPO Member States

### C. MINC

The Multilingual Internet Names Consortium is a non-profit, non-governmental, international organization. It focuses on the promotion of multilingualization of Internet names, including Internet domain names and keywords, internationalization of Internet names standards and protocols, technical coordination and liaison with other international bodies. It has more than 40 organizational and individual members from all continents of the world, from industry, academia, research, government, investors and international organizations.

### D. RESPONSE FOR THE INTERNATIONALIZATION OF DNS

The response for the initiatives calling for the internationalization of DNS has been met with favorable response as summarized in the points below:

- (a) IETF Internationalized Domain Name IDN Working Group end 1999/2000;
- (b) ICANN IDN Committee mid 2001;
- (c) Names Council/DNSO (now GNSO) IDN WG 2001;
- (d) ITU-WIPO-MINC meeting on multilingual domain names – late 2001;
- (e) MINC-CDNC meeting;
- (f) MINC official support of JDNC;

- (g) MINC-INFITT MoU;
- (h) Arabic WG of MINC ongoing efforts, and formation of AINC (work done in the linguistic issues, while other tracks stood still);
- (i) IETF Standard 2003.

#### IV. POLICY & TECHNICAL COORDINATION

##### A. QUESTIONS ON THE AUTHORITY FRAMEWORK

Upon Review of the Authority Framework a Number of Questions are Raised:

- (a) Is any change required of existing framework of authority?
- (b) Can existing framework be extended to include the new multilingual namespace?
- (c) Can the existing stakeholder base be extended to the new multilingual stakeholders?
- (d) Can the gTLD/ccTLD ICANN authority structure work for the new multilingual multiscrypt IDN namespaces?
- (e) Does the Arabic need something different?

##### B. APPROACHES

Primarily there exist three primary approaches, which will be clarified by the figures:

- (a) Conservative Central-Control Approach;
- (b) Revolutionary Liberal Free-Market Approach;
- (c) The Middle Ground.

The following figures will clarify the three approaches:

**Figure 4. Conservative Central-Control Approach**

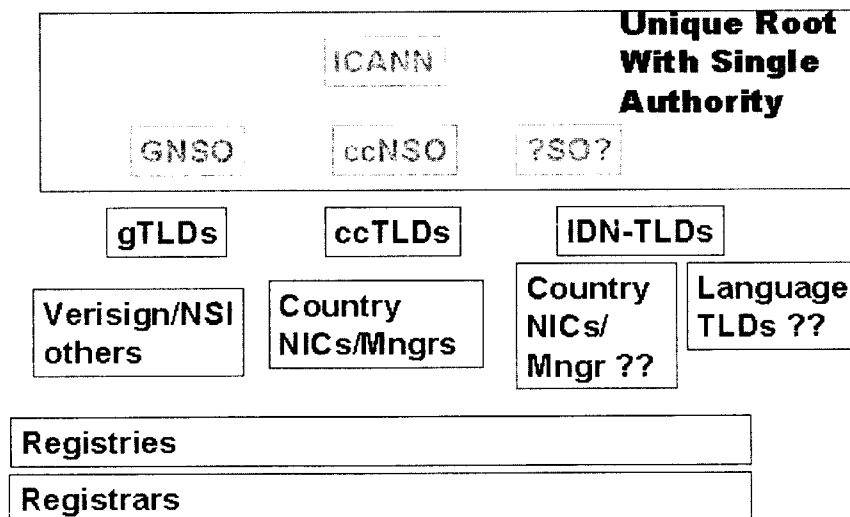


Figure 5. Revolutionary Liberal Free-Market Approach

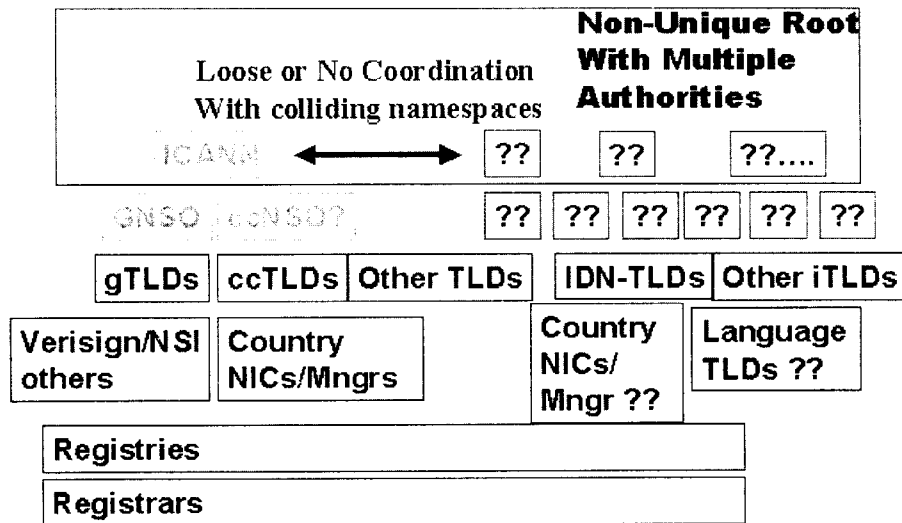
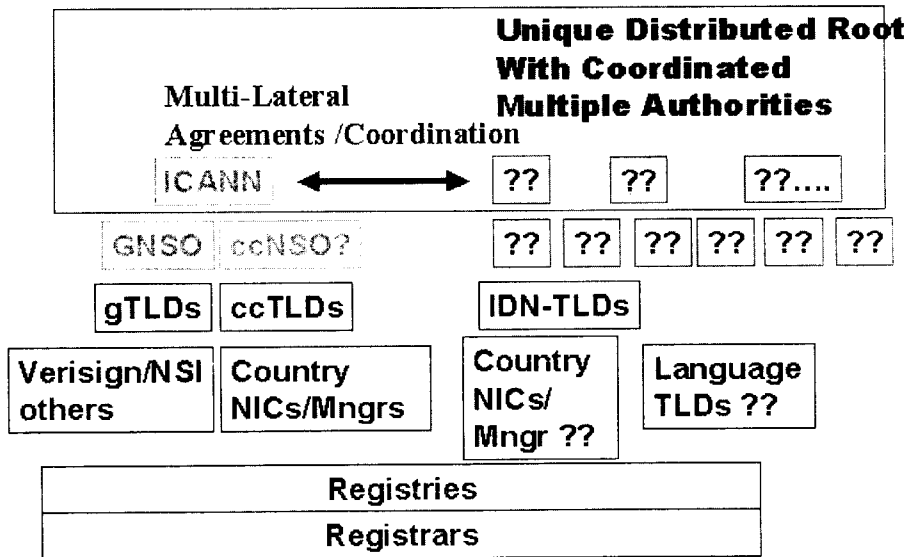


Figure 6. The Middle Ground



C. EXAMPLES OF MULTILINGUAL TESTBEDS

- (a) Verisign and partner companies setting up multilingual.com services testbed;
- (b) JPNIC, KRNIC launching production level testbeds for japanese.jp and korean.kr;
- (c) CNNIC, TWNIC, HKNIC, MONIC for Chinese.cn etc in progress.

V. THE WHOLE PICTURE

A. REVIEW OF PAST, PRESENT & FUTURE: CHANGE AND PROGRESS

- (a) No Commercial Interest and Technically impossible and unimplementable before 1998;
- (b) No Demand and No Standard before 1999;
- (c) In 1999 overwhelming response and demand emerged, resulting in IETF IDN WG & 2003

Standard;

- (d) No specialized organization, but by 2000 MINC was established;
- (e) No Language Support, but by 2000/1, there emerged CDNC, INFITT, AINC, JDNA;
- (f) No Authority, but by 2001, there emerged ICANN IDN Committee, NC IDN WG;
- (g) No Fair, Equitable, Proactive, Responsive Authority Structure to address the complexity of languages: a clear Challenge for the future.

B. WHEN CAN THE ARABIC SPEAKER BEGIN TO USE IDN?

- (a) Once the standards are defined;
- (b) Once authority and responsibility are devolved;
- (c) Once the coordination process is deployed;
- (d) Once the new IDN TLDs are delimited and delegated;
- (e) More work, mostly political, is certainly needed;
- (f) More coordination and effort is required from International Organizations:
  - (i) ICANN needs to define more the details;
  - (ii) MINC needs to coordinate the different aspects and move faster in the Interoperability testing;
  - (iii) WIPO needs to help in the legal issues;
  - (iv) UN-ESCWA needs to hold forums to exchange knowledge (such as this one) and maybe forming a task force to follow-up and coordinate with the stakeholders.

## Annex I

### **CYBERSQUATTING: PROBLEMS AND SOLUTIONS**

Since the days before even language was even invented, there were thieves intent on taking what is not rightfully theirs. Not much has changed since then, except that as our lives evolve, so do the means on thievery. The question we might ask ourselves is what could people steal from you through the Internet? Well, to be specific, everything including your name.

This phenomenon is called Cybersquatting, which is the registering of a domain name for malicious purposes, such as slander or blackmail. It is an outright criminal and ethical act. Although Cybersquatting can occur to your domain name before you register it, it can also occur to a registered domain name that is already registered.

Cybersquatting is done in four main ways:

(a) *The Pirate Cybersquatter*: The aim is to steal your online customers by a rival business by setting up a website using a variation on your name. Whether stealing your clientele or merely causing confusion, the Pirate can cause a lot of damage to your business;

(b) *The (I-Hate-You) Cybersquatter*: The main aim here is slander and the perpetrator is usually a former, or even current, peeved employee. His motive is hate directed against your company and/or its staff. This cybersquatter will spread lies, and might even expose your trade secrets. Although it is impossible to prevent the setting up of such a website, certain measures could ensure that his domain name is far away as possible from your own, thereby lessen the damage to your business and reputation;

(d) *The (your- company-sucks) cybersquatter*: Similar to, but less malicious than, the (I-Hate-You) variety. This is usually a customer-based website that criticizes your products/services. While it is hardly a pleasant experience, most companies ignore, and some even use the criticism to improve their performance;

(e) *The (Hostage Taker) cybersquatter*: Perhaps the most malignant form of cybersquatting. The Hostage taker will register a variation/variations on your domain name and then seeks to sell it back to you at a high ransom. In most cases, companies tend to pay thousands of dollars to recover their hostage websites.

So how can you combat cybersquatting? Well, it is not the easiest thing to do. In most countries, there are no laws protecting your business from cybersquatting, and thus it might be easier to simply buy off the cyber property that the squatter occupies. Even if there are laws, again it is going to cost you both lots of time and lots of money to fight or to arbitrate a case. In other words, once cybersquatting occurs then you should be prepared for a protracted battle.

The solution is simple though. Pre-empt the cybersquatter by registering as many variations on your own domain name as possible.

(a) *(.com) is not enough*: Today there are many variations other than .com. So register .net, .org, .biz, and any other variation you think a cybersquatter might abuse;

(b) *(Dash) the cybersquatter's plans away*: Don't settle for the (yourbusiness.com) variation. Register also the hyphenated (your-business.com);

(c) *Pluralize your name*: Register your domain name in both its singular and plural forms;

(d) *Misspell your name*: With so many non-English speakers using the Internet, misspelling is very common. Cybersquatters will take advantage of this. So register all possible misspellings before they do;

(e) *Even (yourcompanysucks.com) belongs to you*: Again, pre-empt and outsmart the cybersquatters by registering the (sucks) variation before they do.

This might seem excessive and maybe even expensive. When you consider, however, the costs of legal actions or the ransoms that you'll have to pay, \$15-\$35 per domain name is cheap. Assign one of your staff to run a checklist on both the already registered cybersquatters, and the potential domain names (see list above) they might abuse. As an old Arab proverb goes, "No right is lost, if claimant is determined." (Tagidomains.com)j