Proposal for the Implementation of Internationalized TLDs

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1. The Need for Internationalized Domain Names and Email Addresses

Preface

The Internet has become an essential part of the lives of many. The ability to communicate with others, within seconds, anywhere in the world, at no cost, using Email, has been the first killer application. The numerous applications that followed, from searching for information about anything you can imagine, to online news, to real-time financial data, to online chats, to online banking, to matchmaking, to playing music, to merchandise trading, to shopping, to booking hotels or flights or a restaurant's table or theatre tickets, to VoIP communication, to gambling, to distance learning, and so on and on, have changed the world's economics, but moreover – changed the way many of us live and run our businesses.

The Internet started in English and started in the United States. But it has long since become a network serving people from all around the world, from different nationalities, speaking different languages. Today, more than 60% of the Internet users are non-English speaking users.

Many of the PC applications were developed in languages other than English by international companies that understood the economic potential of entering new markets, and other were developed by local companies of the different countries speaking different languages.

At the same time local web-sites in non-English speaking countries are usually developed in the local language. Today, the browsing experience in every country is different from that in other countries – each country has its own popular web-sites in its own language.

Nevertheless, worldwide there are many billions of people who currently do not use the Internet and cannot enjoy the spectrum of applications and economical benefits the Internet has to offer. There are different barriers for those that do not use the Internet – one of the key ones is certainly the mandatory need to use English domain names and English Email addresses to get started on the Internet.

Breaching the language barrier

The common computer screen of a non-English speaking user today would usually present applications in his or her own language. From the operating system, to the word-processing application, to the browser – all buttons, directories and markers would appear in the local language. Yet there are still two crucial elements that are still only in English – the domain names and Email addresses.

The fact that domain names and Email addresses are only available in English creates a practical and sometimes a psychological barrier for people who are literally non-English speaking – meaning people that have no knowledge or little knowledge of English.

Many times these people are those coming from the lower income group of their countries. Therefore as the Internet has become an important source for information, knowledge, and economic opportunities, the internal wealth distributions of these populations between those who can use the Internet and those who cannot – continues to grow daily.

The idea of developing Internationalized Domain Names (IDNs) was based on the principle of eliminating this last language barrier. By implementing internationalized

domain names, <u>the Internet will become more accessible</u> and will allow a simple and easy use in the native language of each country. As a result, <u>more people</u> will be able to enjoy the Internet experience and be exposed to the variety of opportunities it offers.

At the same time it is clear that the use of IDNs will not be limited to only those who cannot speak English. Non-English speaking users that do have knowledge of English would also feel more comfortable by using domain names in their own language and thus be able to retain their cultural roots against the continuing onslaught of English. Moreover, it is expected that companies, web-sites owners and others would prefer to advertise their web-sites using their IDNs, due to two important reasons:

1) IDNs are easier to remember (for those speaking the language).
2) Words and names in the local language are usually more comprehensible in their local language presentation (used in the IDN), than in their converted presentation to English (which is sometimes awkward or distorted).

Another important consideration is that the full implementation of IDNs will allow the introduction of **Internationalized Email Addresses** (IEAs). The need and advantages of IEAs is similar to those mentioned about IDNs. Since Email is the most common Internet application used, it is clear that the implementation of IEAs as a result of the implementation of IDNs would be a significant change for those populations that have no or little knowledge of English. Further, current Non-English speaking users that do have knowledge of English would probably add an IEA to provide to others that speak their language. It is only logical that a person will want to be identified by his or her own native language, and would definitely prefer to be addressed by that same native language without any awkward or distorted presentation of his or her name.

The Right for Cultural Expression
While implementation of IDNs will make the Internet more accessible to many, there is another significant reason for implementing it – the basic right of every nation and every culture to express freely.

Language is the most common and basic form of cultural expression. Since the Internet is one of the most significant media today, it is a major means of cultural expression. The absence of IDNs prevents the free and full expression of different cultures on the Internet.

The fact that the domain name is a basic key of the Internet currently results in ludicrous situations in local cultures where English has to be used by non-English speakers in many media contexts – advertisement, signs, TV shows, business cards, company papers, etc. – with all presented material in local languages with the sole exception of the domain name or email address being in English.

The importance of the Internet has also led many companies to use English letters as their names and brands instead of their country's local language, in order to correspond and relate with the company's domain name.

All of these developments are seen by many as a kind of a cultural enforcement of English over the local language and culture. Although using English as the language for domain names was certainly not done for that purpose – the continuing resistance of implementing IDN would be viewed as such.

2. The Ultimate solution – IDN.IDN

Some may say that everything mentioned above in this paper already been solved with the hybrid IDN/English domain names that have already been introduced – Internationalized Domain Names with English letter TLDs, which have already been implemented in different TLDs (including .com, .net, and others).

But the fact is this implementation is not a sufficient solution in many cases. Although for some languages (such as French or German) which use the Roman characters that are used in English the English TLD may suffice, for other languages – such as

Chinese, Japanese, Korean, Arabic, Hebrew – that use totally different characters the situation is far from ideal. In these cases, a partial solution, where the domain name is in the native language and the TLD is in English, is not sufficient and does not resolve the problems mentioned previously. In addition to the fact that this partial solution does not eliminate the language barrier, and does not allow a full and free cultural expression, there are some other limitations.

For example, the Hebrew language has a special attribute that creates a significant problem for a solution such as the IDN.EnglishTLD that was introduced in the .com/.net gTLDs: **the Hebrew language is written right to left**.

While the IDN.EnglishTLD is awkward in its essence and in its presentation and suffers from the problem of the need for shifting languages, in Hebrew the direction of typing is also changed. In Hebrew, this makes the partial solution not only awkward but practically unfeasible. Therefore in the case of the Hebrew language the IDN.IDN solution would definitely be preferable (a Hebrew language domain name will for example be of the format "דומיין.קום", where the "קום." is the IDN TLD).

3. <u>The Technology</u>

The technology for IDN.IDN has been available for several years. It has been implemented locally or tested by different parties in different countries. It is now clear that the technology allows the implementation of IDNs with Internationalized TLDs (iTLDs) without any danger to the stability of the Internet. In addition it is highly likely the use of IDN.IDN will progress as a complementary additional solution where new IDN.IDN domain names intended for those speaking the native language will be purchased by many current web-site owners who would probably use both their IDN.IDN domains and their English domain simultaneously to keep their current English-typing user-base while attracting new native language-typing users.

The standards and RFCs published by the IETF on the matter should be the guidelines for IDN.IDN implementation.

For an implementation of IDN.IDN to be complete and practical – the iTLD would have to be added to the root. Otherwise we would again be left with a partial implementation.

4. The Preferred Implementation Process

We believe that a viable multilingual solution for the Internet community can be accomplished by ICANN's coordination between different deployments in different countries performed by either sovereign bodies or private enterprises.

The use of a language can take place by people in different countries around the world, even if most of the speakers of that language are located in a certain country. Thus an implementation that is accessible and that resolves anywhere in the world should be pursued. At the same time, the policy making for domain names in a certain language should be left to the local parties to be resolved, with some limited international coordination.

In order to promote competition, while maintaining the Internet's stability, the preferred process for implementing IDNs is the nomination of an iTLD registry for each language by ICANN, in a similar process to the nomination of a gTLD registry. The registry should be allowed to implement any iTLD in the language it is operating that is either parallel in meaning to an existing English gTLD or something selected by local parties to be more meaningful/useful in the native language context.. Once the iTLD registry is operative the iTLDs it implements should be added to the root just like any other TLDs.

Preference should be given to local parties that have already implemented IDN solutions in their countries, and that have the technical capability to run an IDN registry.