



Joint UNESCO and ITU
Global Symposium on Promoting the Multilingual Internet



Global IDN Coordination: the MINC ICMC initiative

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Multilingual Internet Names Consortium (MINC)

Geneva, 9-11 May 2006



Multilingual Domain Names: Joint ITU / WIPO Symposium - Microsoft Internet Explorer

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Multilingual Domain Names: Joint ITU / WIPO Symposium
International Conference Center of Geneva (CICG)
December 6-7, 2001

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NEW! Now available: [ITU Briefing paper](#), [WIPO Briefing paper](#), [Symposium presentations](#), [Chairman's Day One remarks](#), [Information Note to the Press](#).

Overview



The [International Telecommunication Union \(ITU\)](#) and the [World Intellectual Property Organization \(WIPO\)](#) hosted a Joint Symposium on Multilingual Domain Names from 6-7 December 2001, at the International Conference Center of Geneva ([CICG](#)).

Day one of the Symposium was led by ITU and dealt with technology and policy issues. Day two was led by WIPO and dealt with intellectual property and dispute resolution issues.

[Español](#)

Objective

[Français](#)

As background, domain names, on which Internet mail and web addresses are based, currently use a restricted subset of Latin (ASCII) characters – even for countries that do not use Latin characters in their written language. While Internet content such as web pages have been internationalized and made available in many languages, it is only recently that there have been a number of initiatives to similarly internationalize the Internet's domain name system.

In association with the [Multilingual Internet Names Consortium](#)



The implementation of multilingual domain names raises a number of complex issues. Besides technical and interoperability issues, these include, *inter alia*, the appropriate administrative arrangements for multilingual domains and top level domains, competition policy and market access, intellectual property and dispute resolution.

A Bit of History



- o IDN is pretty old for an Internet technology
- o March-May 1998
- o Why did it take so long for an Internet innovation to reach the multilingual masses?



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Long *hard* Road to IDN



- o IDN concept mooted by Martin Duerst 1997/1998
- o IDN implementation and technologies first invented in 1998
- o IDN TLDs have been testbedded in one form or another since 1998 Asia Pacific IDN testbed.
- o IDN standards since 2003
- o IDN 2LDs have been deployed for several years.
- o Low uptake, implementation
- o But not TLDs ...



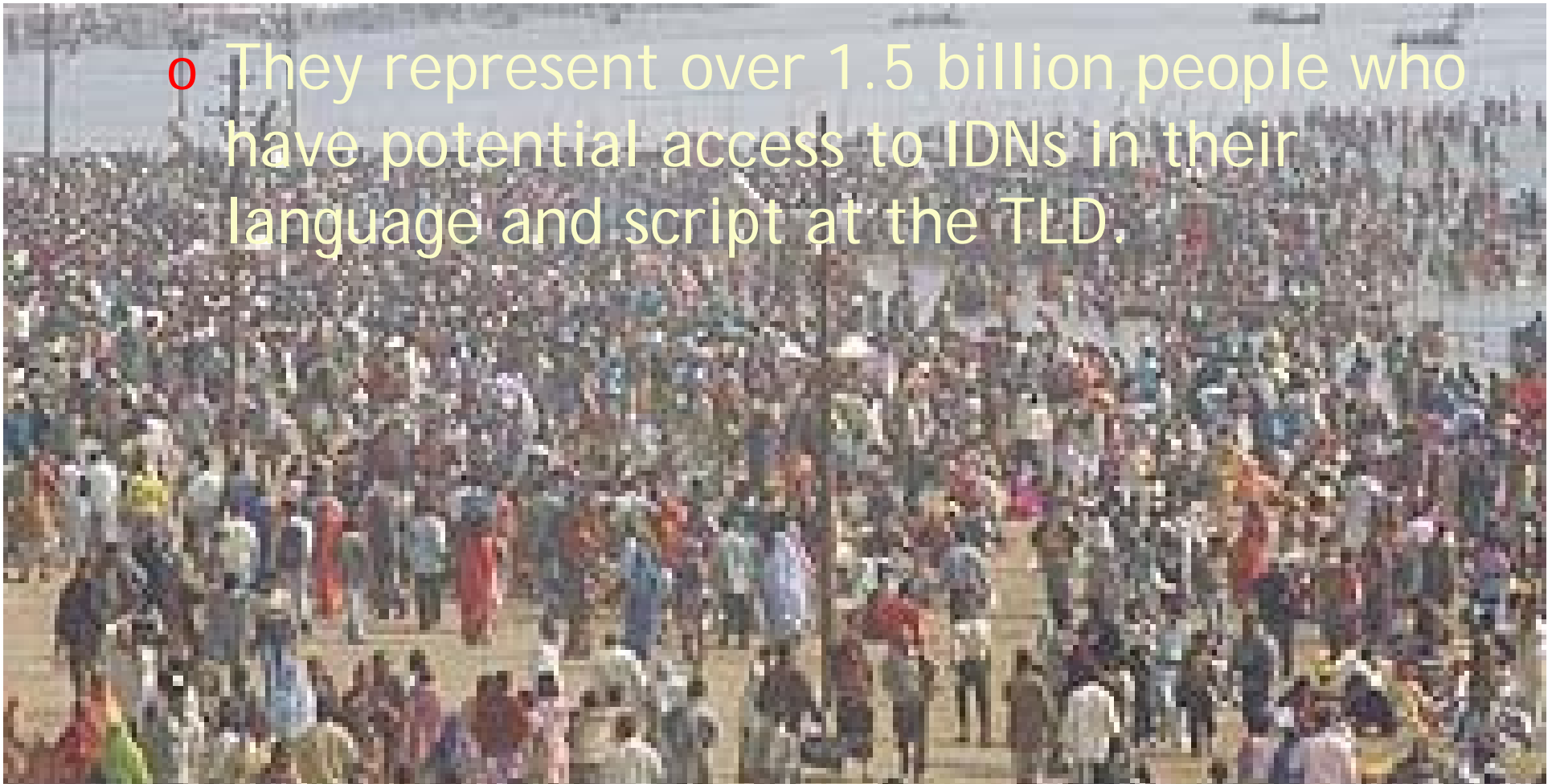


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IDN TLD Deployments



- o Approximately 30 countries have in one form or another pursued IDN TLDs in testbeds or other.
- o They represent over 1.5 billion people who have potential access to IDNs in their language and script at the TLD.





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China Chinese TLD - 1 Billion people



1. Since March 2006, China has openly announced that they have publicly testbedded Chinese Simplified Script TLDs for at least three domains and clarified they have testbedded it since 2003.
2. These TLDs include
 1. *.gongsi (.com)* 公司
 2. *.wangluo (.net)* 网络
 3. *.zhongguo (.china)* 中国
3. Tens of Thousands of names at 2LDs for these TLDs have been issued.
4. They map to ASCII TLDs in *.cn* where appropriate.

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IDN TLD Deployment other places



- Other CJK countries have also deployed their TLDs e.g. Korea, Japan.
- Approx 100M people
- Gulf Cooperation Council has TLDs deployed for 21 GCC countries since 2005 under the Arabic Domain Names TaskForce project
- Approx 200M people

<http://wiki.minc.org/index.php/MINCCoordinationTable>





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Internet Fragmentation is here



- o Cannot hide from the impending Internet Fragmentation if these activities continue uncoordinated
- o Cannot hide from the reality that the Internet will break interoperability at the DNS level if these activities proliferate without a platform or forum to report their implementations

Picking up the pieces



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- o Cannot hide from the possibility that major disputes and their dispute resolution will become intractable once IDN TLD namespace gets overloaded with more than one identical IDN label mapping to IP addresses from competing entities.



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Urgent need for coordination



- To avoid these dangerous sequelae, we can either announce to the jurisdictions to refrain and withdraw from their “testing”
- More likely, like Network Address Translation (NAT) where there are zero entry barriers, most of these groups will be driven “underground” in their “testing”.
- More Intranet islands of non-interoperable IDN TLDs will emerge.
- First is to survey and construct a list of all known and reported TLD implementations and their working resolvers.





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MINC IDN TLD Database



- o Over 30 entries
- o Over 20 country TLD listed and other “generic” IDN TLDs.
- o About 10 DNS servers worldwide have the capability of resolving these IDN TLDs.
- o Only a handful currently have the capability of resolving all of these entries.

- o Building a more universal root?





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Forum for such IDN TLD operators / "testers"



- o MINC is organising a series of meetings to provide access for these TLD operators known and unknown to global coordination
- o First concluded meeting 8th May 2006 - MINC Meeting on IDN Coordination, Geneva (hosted by ITU TSB)
- o One in Middle East
- o One in Asian region
- o One in Eastern Europe
- o Hopefully more will come out rather than stay underground.

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- Concurrently, MINC is setting up an International Coordination Mechanism Council of IDN TLD deployers
- Since we cannot control what they are doing in their own jurisdiction, we can at least construct the processes for recognition of these deployers.
- Currently most of them are government agencies and govt-associated companies.
- Exchange of Letters to keep deployments up to date
- Keep for negotiations any existing collisions or homographic/homoglyphic lookalikes
- Provide a mechanism of “delegation”, “licensing” or “enfranchising” them

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- o Membership registration
- o Exchange of Letters, or Memo of Understanding to mutually recognise all who have been acknowledged by the other groups
- o Access to IDN TLD kits for safe and standard deployments.
- o Seats available for each regional or national groups to occupy.

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ICMC outcomes



- o No two members who are interested in .implementation using the same IDN namespace
- o Encourage very high uptime DNS servers providing universal resolution of such IDN TLDs.
- o Keep an up-to-date Unified table of MINC Coordination
- o Encourage those implementing IDN TLDs in their own way will migrate to an international open deployment platform that expands interoperability and end-user requirements.
- o Discussion on IPR issues, and shared registries or outsourced.

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The IDN TLD authorities



- o Submission of information to MINC
- o Which IDN TLDs unicode tables deployed?
- o How many organisations already deployed?
- o Which DNS servers resolve what kind of TLDs
- o How many 2LDs sold already?
- o Dispute resolution if a particular labels is overloaded
- o Peculiar linguistics problems at display, or at the level of input mechanisms.



IDN for the world



- Why did it take so long for an Internet innovation to reach the multilingual masses?
- Central Control vs Open Free Market Competition
- “Protectionist” Barriers of Incumbents vs Enfranchisement
- Power vs Empowerment
- Domination vs Open Level Playing field
- Has driven the multilingual world into this mess!

- o Aims to hold together the vast national resources to push for

A Multilingual Internet



Location: <http://ที่เซสมินต.พาณิชย์.ไทย>

For Everyone, Everywhere

- o Coordination council to agree or disagree on new applications for TLD deployment
- o Anyone can join MINC ICMC.
Email: sec05@minc.org