

CITC Internet Projects For 2008

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Agenda

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- Introduction
- Recent Internet Development in SA
- National Internet Exchange Point (NIXP)
- IPv6 Task Force
- DNSSEC Pilot Project
- Arabic Domains
- Questions



Introduction: CITC Vision and Mission





"Universally available, high quality and affordable communications and information technology services"



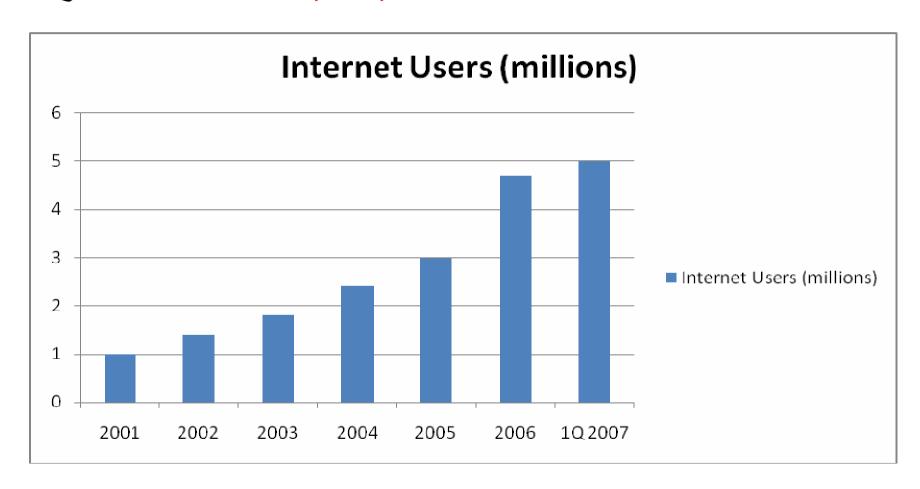
- Provide a fair, clear and transparent regulatory environment to promote competition, and safeguard public interest and stakeholder rights
- Enable universal availability of advanced ICT services at affordable prices and optimize utilization of scarce resources
- Increase ICT awareness and usage to enhance national efficiency and productivity
- Build and maintain a professional and motivated CITC team



Introduction: Internet Users



Q1-2007 about 5,000,000 Internet users in SA

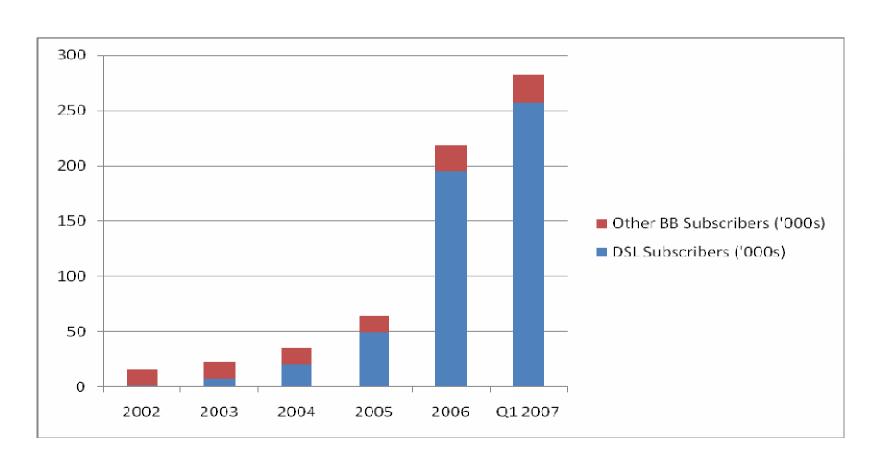




Introduction: Broadband Penetration



Q1-2007 about 257,000 DSL lines in SA





Recent Internet Development in SA



Part of CITC Responsibilities:

- Domain name services management (.sa ccTLD)
- National Internet content filtering
- Development and Promotion of Internet in Saudi Arabia

Some of CITC recent Activities

- IT strategy definition and identification of key initiatives
- The Internet Usage project
- The CERT-SA and SOC
- The anti-spam legal framework
- National Internet Exchange Point
- IPv6 Task Force
- DNSSEC Pilot Project
- Arabic Domain Names



National Internet Exchange Point (NIXP)



Objective

- Keeping local traffic locally in KSA (Security, Quality, Costs, etc.)
- Facilitating the inter-networking between Services Providers
 - Guidelines and standards for peering
 - Coordination between Service Providers

Methodology (Done)

- Analyze current Interconnection situation in KSA
- Consultation with DSP and stakeholders
- International Benchmark and Best Practices
- Gap Analysis
- Solutions and Plan

Implementation (A phase approach will be carried)

- Establishment of (National Peering Policy)
- Infrastructure set-up as National Internet eXchange Point to facilitate and expedite the adoption



IPv6 Task force



- Several IPv6 pilot project have been initiated in Saudi Arabia; since 2003
 - KACST, STC, ..others.
- The Goal is to initiate IPv6 Taskforce in Saudi Arabia
 - Facilitate the IPv6 adoption in Saudi Arabia by encouraging the deployment and raising the awareness

Methodology

- Studying the current status of the IPv6 worldwide development and the international IPv6 supportive bodies
- Develop approaches to facilitate adoption of IPv6 in Saudi Arabia
- Set Strategies toward moving Saudi Arabia to IPv6.
- Develop and Update policies, guidelines, procedures,
- Raise awareness and readiness to IPv6



DNSSEC Pilot Project



- DNSSEC is becoming more and more mature and becoming a best practice especially for ccTLD
 - CITC decided to launch a pilot project on DNSSEC in Saudi Arabia

Goal

 Evaluating means to improve the reliability of the DNS infrastructure in SA, and to keep up to date with international developments with regards to DNSSEC

Methodology

- Assessment of the international status quo of DNSsec development
- Assisting CITC in incorporating DNSsec in its SaudiNic (.sa) DNS system and it's implementation
- Implementation of the required infrastructure for piloting DNSsec and setup a test-bed system for evaluating DNSsec
- Development of a key management policy and procedure, based on/extending the current CITC domain name administration procedures



Arabic domains: Introduction



- Current ASCII-based domain names are incapable of representing Arabic characters
- Difficulty to reach Arabic sites using English DNs (pronunciation & spelling problems)
- Full Arabic domain names will encourage Arab users to widely use the Internet
- Less than 10% who can speak
 English in the Arab world

Arabic News paper صحيفة الشرق الأوسط www.al-sharqalawsat.com www.asharqalawsat.com www.asharq-alaowsat.com www.elsharkelaosat.com



E-government Site پستر

www.yasser.gov.sa www.yaser.gov.sa www.yasir.gov.sa www.yassir.gov.sa

...





Arabic domains: Solution Levels



1 Linguistic issues

To define the accepted Arabic character set to be used for writing Arabic domain names

- 2 Arabic TLDs
- (3) Technical solutions

(4) Arabic root servers

To define the top-level domains of the Arabic domain name tree structure (i.e., Arabic gTLDs, and ccTLDs)

IETF, MINC, ...

ICANN/IANA, MINC, ITU, ...



Arabic domains: What have been done



- Conduct number of consultations and scientific researches about Arabic domain names.
- Perform local testing on Arabic domains (موقع .com.sa)
- Participated in establishing number of pilot projects for supporting ADN:
 - Gulf pilot project 2004 (under gulf council countries)
 - Arab pilot project 2005 (under the Arab league)
- Develop many tools and systems that supports Arabic domain names
 - Browser plug-in "Arabic.Arabic"
 - Registry system
 - IDN/ADN converter and many other tools
- Participated in many conferences and events and share our experience in ADN.
- Participated in the new ICANN Arabic example.test domains (مثال إختبار)



Arabic domains: ADNPP (1)



- Arabic domain Name pilot Project: is a test bed for Arabic domain names (ADN) in the Arab world.
- This will allow all Arab countries to early experience the use of Arabic domain names
 - identify their needs
 - agree on standards
 - locate possible problems
 - and develop required tools and policies
- The project is not commercial and had been initiated by a non profit organizations and will continue as a test bed until the recognition of Arabic TLDs by concerned international bodies
- There are two committees for the project: technical and steering committee" (both headed by CITC).

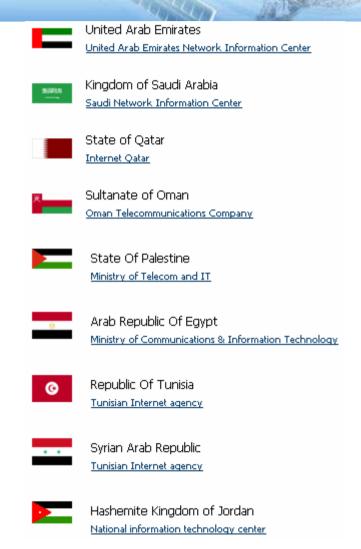


Arabic domains: ADNPP (2)



Participated Countries:

- United Arab Emirates
- Saudi Arabia
- Qatar
- Oman
- Palestine
- Egypt
- Tunisia
- Syria
- Jordan
- **–** ...
- It is open for any Arabic country (ccTLD admin)





Arabic domains: "Arabic.Arabic" Plug-in (1) 🕹



• Problem:

- Phase 1 of the pilot project requires participation from ISPs to join the pilot project in order for their users to reach Arabic domain!
- This limits in expanding reaching any user on the internet

Goal: Enable Arabic users to reach Arabic domains:

- Independently from the ISP
- Independently from any service/connection type.

The solution:

- Develop a browser plug-in that enable the user reaching Arabic domain names in easy and smart way.
- The plug-in should convert any Arabic domain name to a real & reachable domain name registered in the current DNS (e.g. xn--?????.adn.sa).
- It is approved by ADNPP (2007).



Arabic domains: "Arabic.Arabic" Plug-in (2)



Version is 1.1

- Supports Windows OS (2000, XP)
- Works with IE 6
- Auto update checking.
- Support the IDN punycode converting (IDNA)
- Interacts only with Arabic domain names (participant counties)
- Support the ADNPP non-plugin solution (old way)
- Change the Arabic domain name to real domain:
 xn--4gbrim.adn.sa ← موقع.السعودية

Version is 1.2 :

- Windows OS (2000, XP, Vista)
- Works with IE6 & IE7

Version is 1.3.beta (FireFox & IE) :

- Support most OS (Windows ,Linux)
- Support IE7 & Firefox
- Recognize spaces in domain names
- Add the default country to the domain name





Examples: IE6





Examples: IE7











For more information

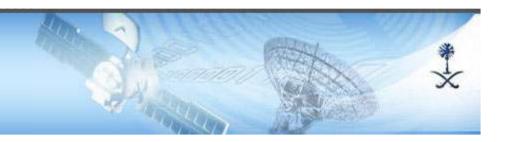


CITC

- www.citc.gov.sa
- هيئة-الاتصالات السعودية -
- Internet in Saudi Arabia:
 - www.internet.gov.sa
 - الإنترنت السعودية –
- Saudi Network Information Center:
 - www.nic.net.sa
 - مركز -التسجيل السعودية —
- Arabic domain name pilot project:
 - www.arabic-domains.org



Thanks



أي أسئلة؟

Questions?

