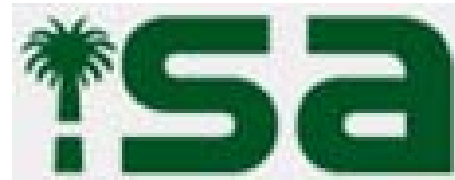


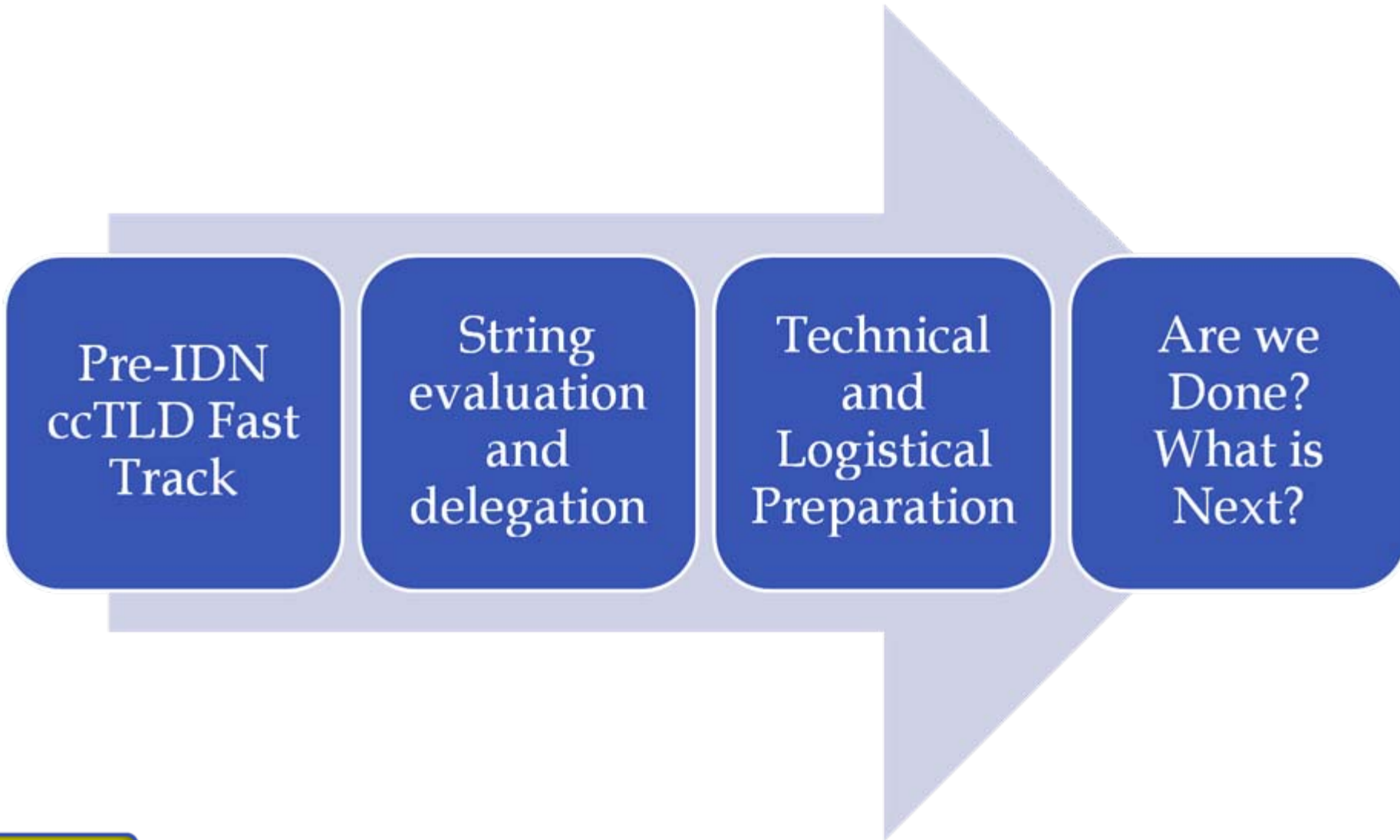
Launching IDN ccTLD

“السعودية”

Abdulaziz Al-Zoman
Director of SaudiNIC - CITC



Agenda



Pre-IDN
ccTLD Fast
Track

String
evaluation
and
delegation

Technical
and
Logistical
Preparation

Are we
Done?
What is
Next?



About SaudiNIC

About SaudiNIC



- **SaudiNIC is a non-profit unit that is operated by Communication and Information Technology Commission (CITC) which is a semi-governmental entity.**
- **SaudiNIC administers the Saudi ccTLDs:**
 - .sa since 1995.
 - The new IDN ccTLD (السعودية.)
- **Leading the local community efforts towards supporting Arabic language in DNS**
 - Chairing both Steering and Technical Committees of the ADNPP



Pre-IDN ccTLD Fast Track

Pre-IDN ccTLD Fast Track Readiness



- In 28 Oct 2008, our response to ICANN survey regarding participation on the IDN ccTLD FT:

We are ready from day one!

Questions for Each Territory

Please read the page titled "Important Background Information" before completing this questionnaire

Respondent's Name: Abdulaziz H. Al-Zoman
Title: Director of SaudiNIC
Organization/Affiliation: Communication and Information Technology Commission
Mailing Address: P. O. Box 75606 Rivadh 11588, Saudi Arabia
Phone: +96612639233 Fax: +96612639228
Email Address: azoman@citic.gov.sa

1. Is your territory interested in obtaining an IDN ccTLD during the fast-track process?

Yes No

2. Do you know what the IDN ccTLD domain name(s) is/are likely to be?

Yes No

If yes, please specify the IDN ccTLD domain name(s) in your official language and in English.

String: السعودية Language: Arabic Script: Arabic

Unicode: u+0627 u+0644 u+0633 u+0639 u+0648 u+062F u+064A u+0629

Puny code: xn--mgberp4a5d4ar English Translation: saudia

3. If no, what official language(s) and script(s) would be used?

Language: _____ Script: _____

Language: _____ Script: _____

Language: _____ Script: _____

Could you estimate the timeframe within which your territory is likely to have concluded its preparation and be ready to participate in the fast-track process? (Use half year time blocks as a rough estimate.)

We are ready from day one!

Please check this box if you **do not** wish this information to be published on ICANN's website.

Pre-IDN ccTLD Fast Track

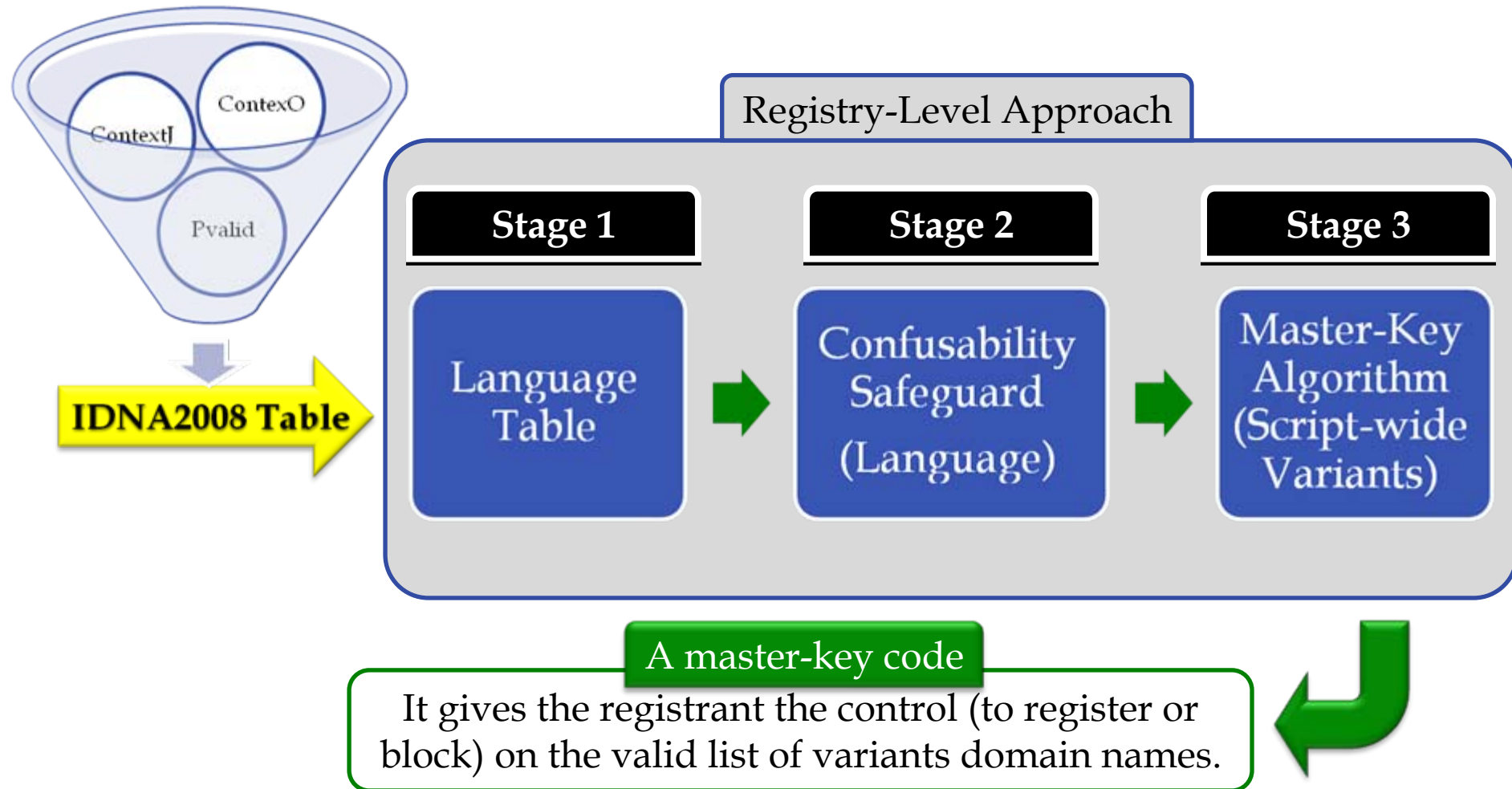
What has been done ?



- **Led and helped building Pan-Arab cooperation**
 - Arab Team for Domain Names and Internet Affairs (Under the Arab League)
 - Arabic Domain Name Pilot Project (2005-2009)
- **Resolved most language linguistic issues**
- **Built local technical capabilities (~ 10 years)**
 - Lead the local and regional technical ADN development
 - Chairing both Steering and Technical Committees of the ADNPP
 - Gained experience and knowledge of using Arabic domain names
 - Built the local awareness about Arabic domain names.
 - Developed some tools required for Arabic domain names and DNS.
 - Developed a technical solution addressing Arabic Script Variants
 - Developed some guideline policies.
- **Shared all the above with the Internet community.**

Pre-IDN ccTLD Fast Track

Developed a Registry-level Approach



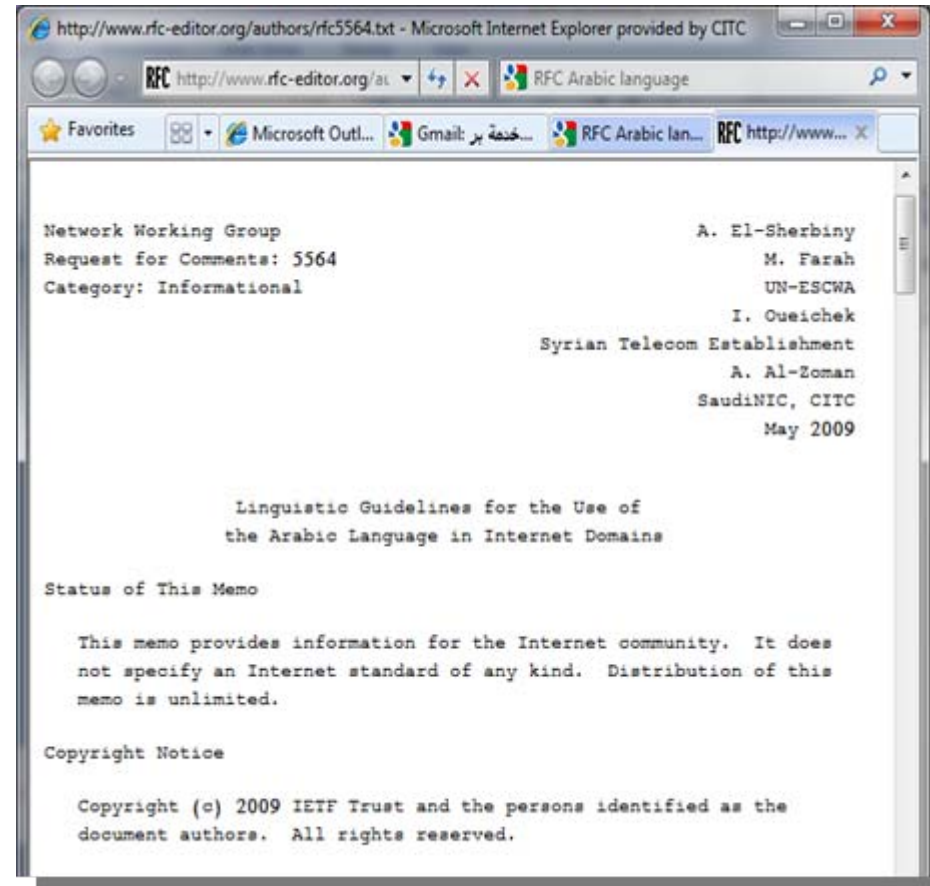
Pre-IDN ccTLD Fast Track

Developed a Registry-level Approach



Stage 1 Defining Language Table

- We led and helped publishing a reference document that lists all supported code points that will be used in Arabic domain names.
- FRC 5564: Linguistic Guidelines for the Use of the Arabic Language in Internet Domains
 - Letters: From (ا) to (ي)
 - Numbers: (0) to (9) & (٠) to (٩)
 - Others: Hyphen (-) & Dot(.)
- This will help in solving the following issues:
 - Valid Unicode Codepoints
 - Non-spacing Marks
 - Combining Marks
 - ZWNJ/ZWJ
 - Digit (partial)



www.rfc-editor.org/authors/rfc5564.txt

Pre-IDN ccTLD Fast Track

Developed a Registry-level Approach



Stage 2

Confusability Safeguard

- Provide a phishing protection layer (Emlaa Key Algorithm) to handle issues like:

- Characters that have many shapes (ي ي) (ه ه) (أ آ آ آ):

أحمد & احمد

- Similarities between Letter HEH (ه) and Number Five (٥):

بريده & بریده

- Similarities between Letter ALEF(ا) and Number one (١)

رائد & رائد

- Digit mixing

٢٠١٠ مؤتمر 1٠ مؤتمر ٢٠

Pre-IDN ccTLD Fast Track

Developed a Registry-level Approach



Stage 3 Handling Script-wide Variants

- SaudiNIC developed an algorithm (Master Key Algorithm) that can be used at the registry level.
- It will safely allow users to register a domain name using the allowed characters (from the language table) and at the same time protect the possible variants in other languages (Arabic, Farsi, Urdu ..etc)
- Transparent to end users

المنطق	أحرف المنطق	المفتاح	المنطق
المنطقات من لغة واحدة ومتماثلة 2			
G31A,G29B,G36B,G9C	(U+0645)(U+0643)(U+064A)(U+0629)	مكية.مثال	مكية.مثال
G31A,G29B,G36B,G9C	(U+0645)(U+06A9)(U+06CC)(U+0629)	مكية.مثال	مكية.مثال
المنطقات من لغة واحدة ومتشابهة 1			
G31A,G29B,G36B,G9C	(U+0645)(U+06A9)(U+06CC)(U+06C3)	مكية.مثال	مكية.مثال
المنطقات من عدة لغات ومتماثلة 2			
G31A,G29B,G36B,G9C	(U+0645)(U+06A9)(U+064A)(U+0629)	مكية.مثال	مكية.مثال
G31A,G29B,G36B,G9C	(U+0645)(U+0643)(U+06CC)(U+0629)	مكية.مثال	مكية.مثال
المنطقات من عدة لغات ومتشابهة 23			
G31A,G29B,G36B,G9C	(U+0645)(U+06AA)(U+064A)(U+0629)	مكية.مثال	مكية.مثال
G31A,G29B,G36B,G9C	(U+0645)(U+0643)(U+067B)(U+0629)	مكية.مثال	مكية.مثال
G31A,G29B,G36B,G9C	(U+0645)(U+0643)(U+06D0)(U+0629)	مكية.مثال	مكية.مثال



String Evaluation and Delegation

String Evaluation and Delegation



16 Nov 2009

ICANN opened IDN ccTLD FT Process

16 Nov 2009

Applying to fast track process

20 Jan 2010

ICANN Approved the String

6 May 2010

IANA added xn--mgberp4a5d4ar to the root servers

22 Apr 2010

IANA Approved the Delegation

24 Jan 2010

Applying for delegation

السعودية

String Evaluation and Delegation

Notes and Comments



- **In general the string evolution process was straight forward process, while the delegation process was a surprise to us.**
 - It might be worth to integrate them together (at least for the paper work .. and more coordination between ICANN & IANA become visible)
- **The communication experience during the delegation process was not as expected:**
 - no updates unless we ask (many times).
 - most responses look like that they are machine generated emails.
 - delegation was done by surprise ... “Hey your delegation was done yesterday “



Technical and Logistical Preparation

Technical and Logistical Preparation Policy Development Process



- Drafting and approval of registration regulations followed SaudiNIC PDP

	Issue Identification	Prioritization	Initial Report	Public Consultation	Recommendations	Final Report	Final Approval
CITC Board	Identify issues						Approve policy
CITC-MC	Identify issues	Direct prioritization		Approve consultation process	Review draft policy report and provide input	Endorse final policy report and request Board approval	
SaudiNIC	Prepare the list of issues and their scope	Prioritize issues	Prepare an initial report/ study	Prepare consultation documents and reports	Prepare draft policy report	Prepare final policy report	Implement approved policies
Stakeholders	Identify issues			Submit comments			
Public	Identify issues			Submit comments			

Technical and Logistical Preparation Published Regulations and Guidelines



Arabic Domain Name Registration Regulation for Saudi ccTLD (السعودية)

Version 1.0 Saturday 25-04-1431 H (10/04/2010)

1. Definitions

The terms and expressions defined in the Telecommunication Act and in its Bylaws shall have the same meaning in this regulation. In addition, the terms and expressions set out in this regulation shall have the following meanings assigned to each of them:

- SaudNIC:** Saudi Network Information Center at CITC is the registration authority for the Saudi ccTLDs. SaudNIC is responsible for providing Registration Services for the Saudi ccTLDs, as well as formulating and implementing policies procedures with regard to the Saudi ccTLDs and managing and operating their registries.
- Registration Services:** Services provided by SaudNIC related to the registration of a domain name, including but not limited to registration, modification, renewal, suspension, deletion or transfer of a domain name.
- Service Request:** An online form, available on the SaudNIC's website, used to request Registration Services. This includes actions taken by a Registrant on a password-protected site.
- Registrant:** A natural person or a legal entity that requested, or will request, directly or through a third party registration services, including the current holder of a domain name.
- Administrative Contact:** A natural person, based in Saudi Arabia, who is designated by the Registrant in the Service Request. The Administrative Contact shall be authorized to represent the registrant at SaudNIC and CITC for matters related to all domain name issues, including acquiring and obtaining registration services, responding to domain name objections, and coordinating any financial matters. The Registrant must provide and maintain a valid and complete Administrative Contact's information, including a correct, valid and functional e-mail address.
- Domain Name:** refers to one or both of the standard two representations of an Arabic domain name:
 - a) The Arabic representation: composed of two Arabic labels separated by a dot (e.g. حرفي.السعودية), where (حرفي) is always the first level from the left; or
 - b) The ASCII representation: composed of two ASCII labels separated by

Regulation for Opening Arabic Domain Name Registration, under the IDN ccTLD (السعودية)

Version 2.0 Saturday 25-04-1431 H (10-04-2010)

1. Definitions

The terms and expressions defined in the Telecommunication Act and in its Bylaws as well as in the Regulation for Arabic Domain Name Registration under the IDN ccTLD (السعودية) shall have the same meaning in this regulation. In addition, the terms and expressions set out in this regulation shall have the following meanings assigned to them:

- This Regulation:** This Regulation that regulates the opening of the Arabic Domain name registration under the IDN ccTLD (السعودية).
- SaudNIC:** Saudi Network Information Center at CITC is the registration authority for the Saudi ccTLDs. SaudNIC is responsible for providing Registration Services for the Saudi ccTLDs, as well as formulating and implementing policies procedures with regard to the Saudi ccTLDs and managing and operating their registries.
- Swallow Phase:** The period extending from 10:00 AM on Monday the 17th of JumadaII 1431 H (13th of May 2010 G), to 10:00 AM on Monday the 30th of Rajab 1431 H (12th July 2010 G), during which SaudNIC shall accept applications for registration of Arabic domain names from Qualified Registrants.
- Lead-in Phase:** The phase when SaudNIC shall begin accepting applications for registration of Arabic domain names from members of the general public. The Lead-in phase starts from 10:00 AM on Monday the 18th Shavval 1431 H (7th September 2010 G).
- Qualified registrant:** An entity or individual who has a registered trade name or mark with Ministry of Trade and Industry in Saudi Arabia, including all governmental or semi-governmental authorities and organizations.
- ADN:** The Arabic Domain Name Registration under the IDN ccTLD (السعودية), which is published on SaudNIC's website.

Saudi Domain Names Objection Rules and Procedures

Version 2.0 Saturday 25-04-1431 H (10/04/2010)

1. Definitions

The terms and expressions defined in the Telecommunication Act, its bylaws and the Regulations for Saudi Domain Name Registration shall have the same meaning in this document. In addition, the words and expressions set hereunder in this document shall have the meanings assigned below:

- This Document:** This Saudi Domain Names Objection Rules and Procedures, including any future approved amendments or additions.
- SaudNIC:** Saudi Network Information Center at CITC is the registration authority for the Saudi ccTLDs. SaudNIC is responsible for providing Registration Services for the Saudi ccTLDs, as well as formulating and implementing policies procedures with regard to the Saudi ccTLDs and managing and operating their registries.
- Decision:** any decision issued by SaudNIC related to the registration services.
- Saudi domain names:** domain names registered under the Saudi ccTLDs, and managed by SaudNIC.
- Objecting parties:** include both the objector and defendant (each of which is referred to as party).

2. The Scope of this Document

- This document sets the rules and procedures governs the objections on Saudi domain names.
- CITC jurisdiction to implement this Document is limited to the objections in connection with followings:

Main Registration Regulation

Regulation for Opening ADN Registration

Objection Rules and Procedures

Procedures Governing Reserved Names Under Saudi Domain Names

Version 1.0 Date 10/5/1431 H (24/4/2010)

1. Scope of procedures

This document establishes procedures for creating a list of reserved names under Saudi domain names, and a mechanism for managing this list.

2. Definitions

The terms and expressions defined in the Telecommunication Act, its bylaws and the Regulations for Saudi Domain Name Registration shall have the same meaning in this document. In addition, the words and expressions set hereunder in this document shall have the meanings assigned below:

- Domain name:** a word or phrase used to access Internet services, rather than the numerical address.
- Reserved name:** a word or phrase that is prohibited to be used in Saudi domain names, according to the criteria set in these procedures.
- The List:** a list of reserved names prepared under these procedures.

3. List of Reserved names

- SaudNIC establish the List that includes reserved names in the following categories:
 - Geographical: such as names of cities, governorates, regions and countries.
 - Absolute numbers and letters: This includes any one letter or any group of 5 digits or less.
 - Confusing: words or terms that include critical text such as (سعودية, Saudi), or (بانك, بنك) etc.
 - Religious: It includes names of religions and sects, sacred places, names and attributes of Allah and the names of the prophets and apostles.
 - Inappropriate: It includes words and terms that present an attack on the religion, homeland, or other persons, or they offend public decency.

واعد إرشادية لصياغة أسماء النطاقات العربية ضمن النطاق العربي (السعودية)

الإصدار 1.0 - التاريخ 10/5/1431 هـ الموافق 24/4/2010 م

مقدمة:

تعنى هذه الوثيقة بتحديد الوفاق المسموح استخدامها عند تسجيل أسماء نطاقات عربية ضمن النطاق العربي السعودي (السعودية). أيضا تضع هذه الوثيقة جملة من الإرشادات والقواعد تساعد على كتابة أسماء النطاقات العربية بشكل صحيح تجنباً إلى الاعتبارات الموضوعية التي تمس اللغة أو الحروف العربي. يكون للمنصنحات والتغيير المعرفة إلى إتاحة تسجيل أسماء النطاقات العربية نفس المعنى المحدد لها إلى تلكم الثلاثة عند استخدامها هنا في هذه الوثيقة وبالحرص والمنصنحات التالية:

- اسم نطاق:** يطلق على أي من الصيغتين القياسية أو مقلدها المستخدمة لتسجيل أسماء النطاقات باللغة العربية طبقاً للمواصفات القياسية الدولية الخاصة بأسماء النطاقات الدولية بحيث تكون:
 - الصيغة الأولى باللغة العربية: وهي عبارة عن اسم مكون من مقطعين عربيين مقصود.

Criteria to Demonstrate Reasonable Relationship between a Domain Name and a Registrant

Version 1.0 Date 05/20/1431 AH 04/05/2010

Introduction:

- Applying the text of paragraph (7/3) of the regulation of domain name registration in Saudi Arabia, which requires that the domain name should have some reasonable relationship to the Registrant. This document shows some criteria to demonstrate this relationship, without prejudice to the terms and conditions mentioned in the registration regulations.
- Criteria identified in this document are guidelines that are made available to help the registrant to select a domain name to be registered. They are not binding on SaudNIC, and they do not give the Registrant any rights to preserve the domain name or infringement on the rights of others.

Criteria:

- The label should be an exact match of the registrant's name**
An "exact match" is where the label of a requested domain name matches one or more of the words comprising the name used by the registrant to establish their eligibility. The words must be used in the same order as they appear in the name. Furthermore, it should represent the name without confusion. It should not match a full name of other entity or a generic word.

Procedures Governing Reserved Names

Guideline for writing ADNs

Criteria to Demonstrate Reasonable Relationship between a Domain Name and a Registrant



Technical and Logistical Preparation

Technical



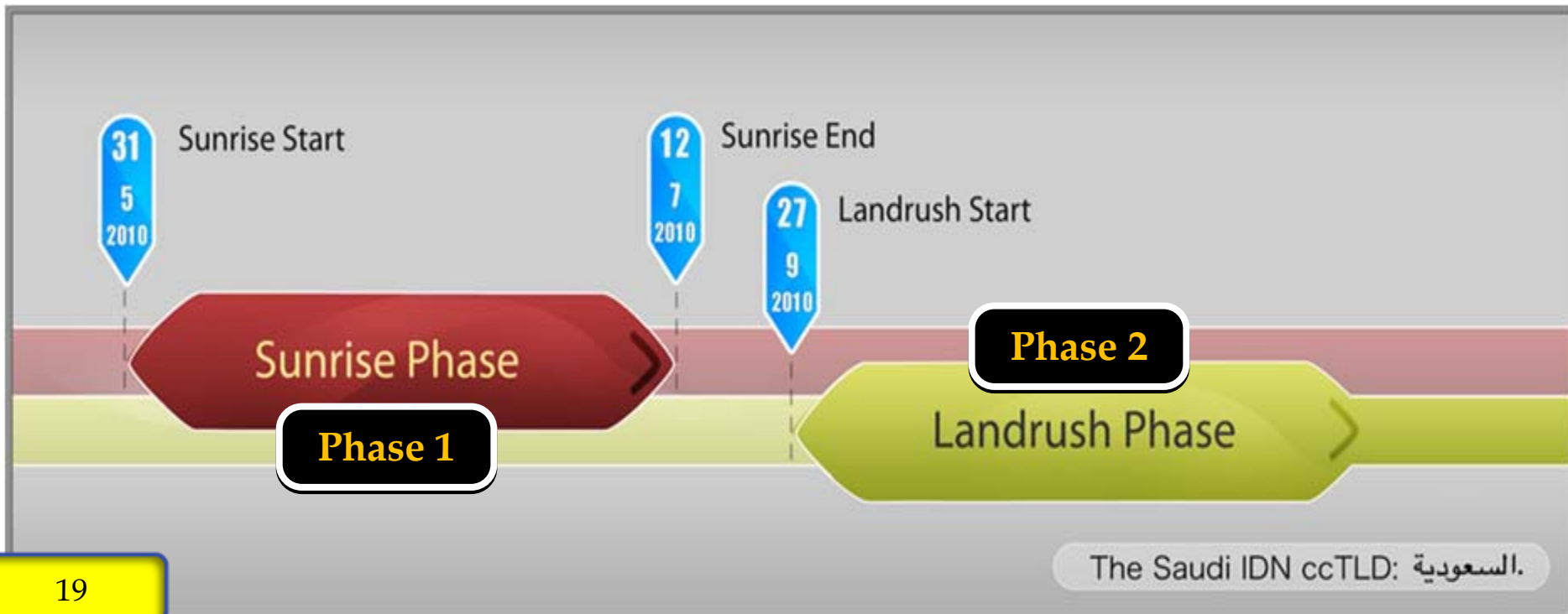
- **Rebuilt (in-house) the registration system to support**
 - Arabic IDN
 - IPv6
- **Increased Connection BW and installed new servers**
- **Implemented Anycast and IPv6 on our DNS servers**
- ...

Technical and Logistical Preparation

Opening Registration Plan



- We announced our Registration Plan (2 phases) on
 - 15 April 2010
- We launched Saudi Arabic domain names on
 - 6 May 2010





Are we Done? ... What is Next?

IDN is NOT Accomplished If TLD variants are not SUPPORTED



Visit our website:
Makkah.sa

مكة السعودية
قم بزيارة:



There is a need to enable TLD Variants
Delegating IDN variants to our clients can not happen without getting the TLD variants.



مكة السعودية ك (0643)



مكة السعودية ي (06A9)

IDN Support in Applications



- **TLD variants are a must-have!**
- **IDN support in any users applications:**
 - email, chat, search engines, ...
- **User friendly applications:**
 - Display the (U-Label) to the user (NO A-label display)
 - Handel Right to Left correctly ... better readability of the address bar
 - Recognize IDN (U-Label) as a hyperlink
 - Transparent to the user (discouraging the A-label display)
 - Converting “spaces” to Dashes



Thank you

شكرا

U+0634 U+06A9 U+0631 U+0627

شكرا

U+0634 U+0643 U+0631 U+0627

G35B G44M G32F G22I