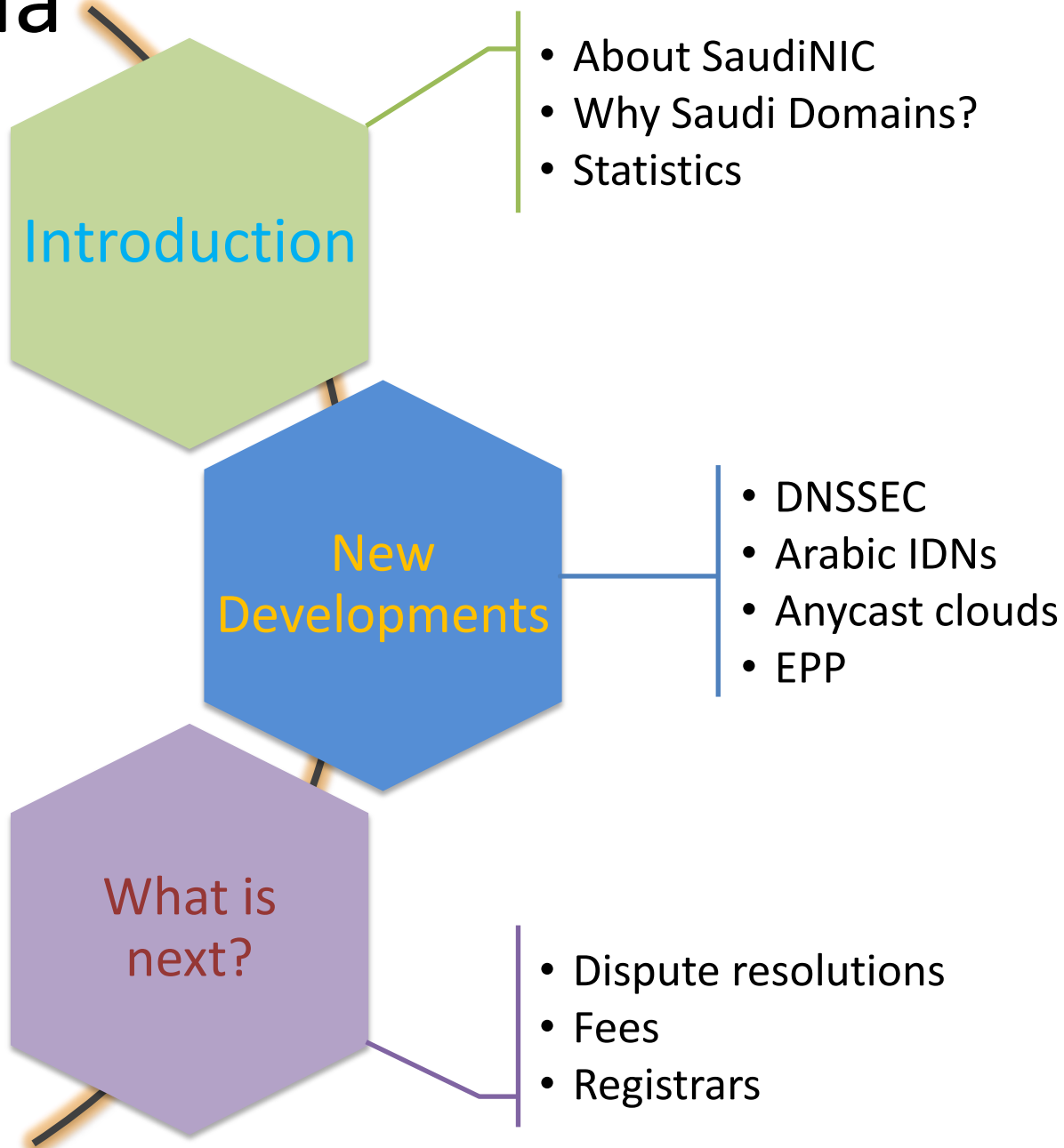




# SaudiNIC updates on The Saudi TLDs (.sa and السعودية.)

Raed Alfayez, SaudiNIC  
ICANN60, Abu Dhabi, Oct 2017

# Agenda



# Agenda

## Introduction

- About SaudiNIC
- Why Saudi Domains?
- Statistics

## New Developments

- DNSSEC
- Arabic IDNs
- Anycast clouds
- EPP

## What is next?

- Dispute resolutions
- Fees
- Registrars



# About SaudiNIC

- **Administering** the domain name space under:
  - (.sa) since 1995
  - (.السعودية) since 2010.
- Operated by a **semi-government** organization:
  - CITC (Communication and Information Technology Commission)
- Coordinating with **regional** and **international** bodies in order to present the local community needs
- Leading the local and regional communities efforts towards supporting **Arabic language** in Domain Names since **2001** (more than **15** years of experience)



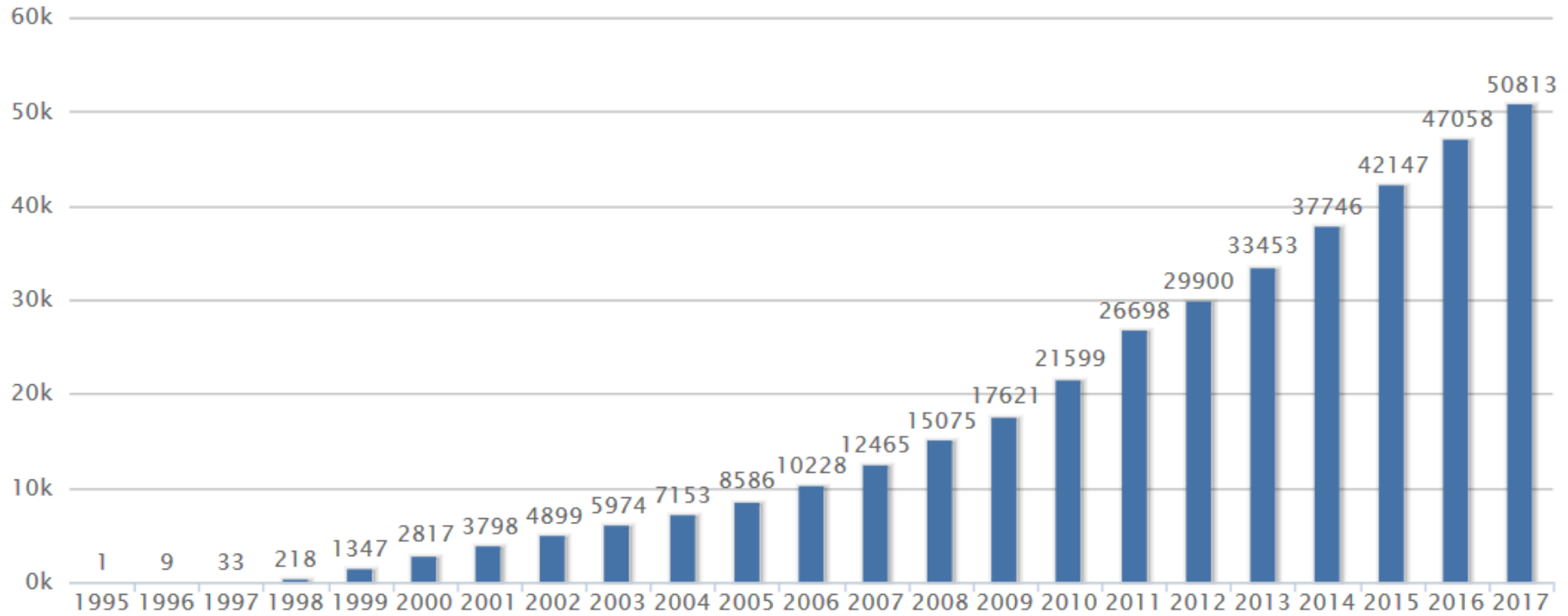
# Why Saudi Domains?

- The main trusted choice for our customers due to the verification of:
  - The **registrant's identity**
  - The **relationship** between the registrant and the domain
  - The **local Admin** (SMS)
- Make it durable:
  - Instant registration within **10 min** (if match our policies)
  - No **phishing**
  - Its **free**



# Statistics

## # of registered domain names

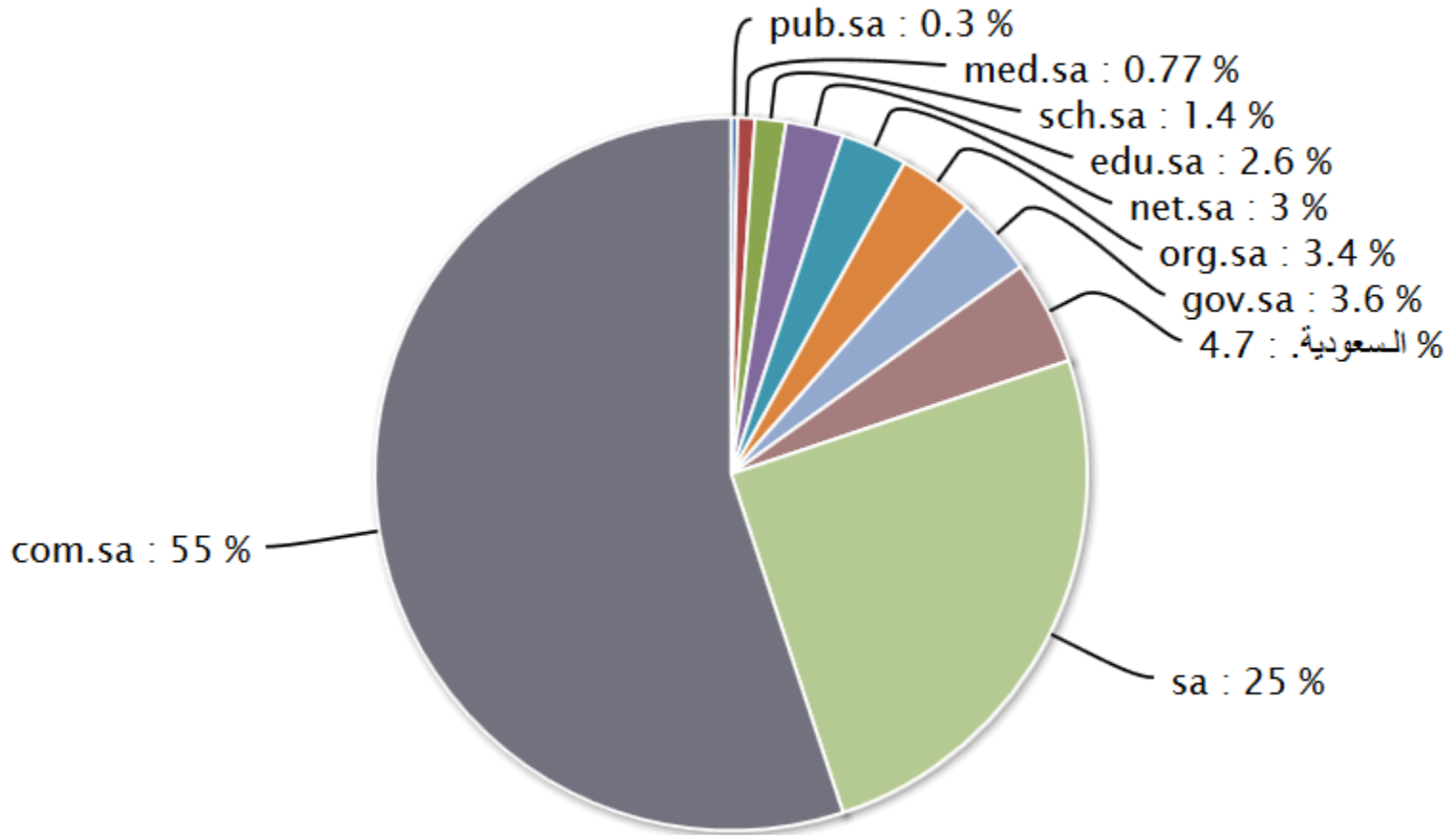


Up to 30 Sep 2017



# Statistics

## 2LD/3LD Domain Names Distribution %



Up to 30 Sep 2017

Registered domain names under

(.السعودية)

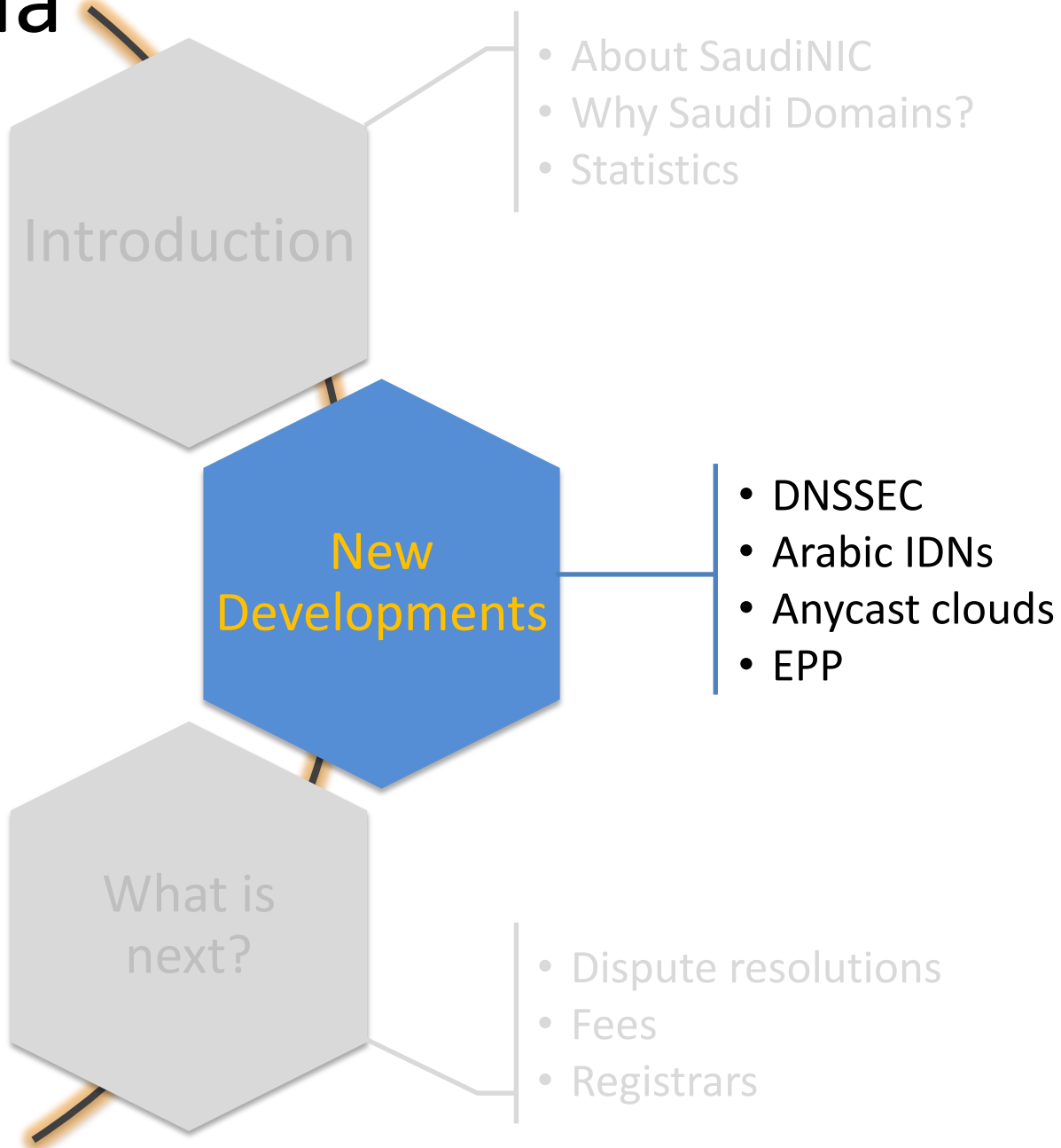
**2,361 \***

- **416** Variants
  - within the Arabic language only (other languages are not yet available!)
  - Average domain length 13
    - (min 2 , max 47)
  - % of spelling mistakes = 9% Domains
  - % of spelling mistakes = 78% Variants
  - \*: Up to 30 Sep 2017

	# domains	occurrence
ا	1787	4332
ي	1329	1944
-	934	1795
ة	772	1304
ك	659	757
ه	261	302
أ	186	194
إ	87	87
ى	44	46
آ	18	18



# Agenda

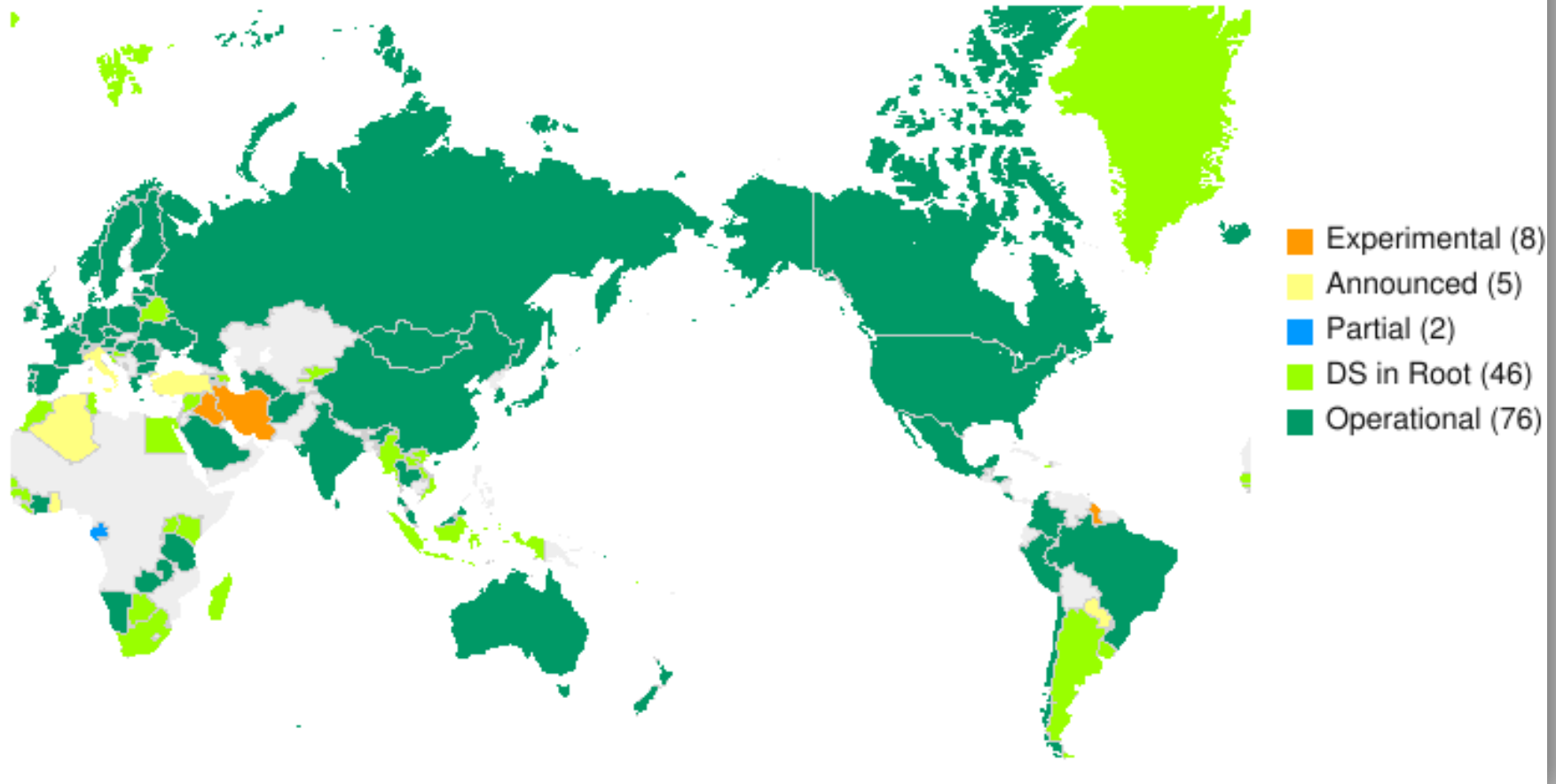


- The **1<sup>st</sup> Registry** in the region to **deploy and open** DNSSEC for the registrants
  - Pilot under “السعودية.” since **14 June 2016**
  - Officially under “.sa” & “السعودية.” since **22 June 2017**
- Many **awareness sessions**:
  - 3 days training workshop (14-16 Oct 2015)
    - 25 participant
  - 2 days training workshop (7-8 May 2017)
    - 41 participant
  - 1 day public event (9 May 2017)
    - 120 participant



# DNSSEC

ccTLD DNSSEC Status on 2017-08-07



New  
Developments

# DNSSEC

## Key generation Ceremony



**SaudiNIC DNSSEC CEREMONY SCRIPT**

Roles	Abbreviations
SM SaudiNIC Manager	SMC Saudi Network Information Center
DSS DNSSEC Specialist	GUI Graphical User Interface
SA System Administrator	ISM Internet Security Module
WI Witness 1,2	SKR Key Signing Key
	DSK Zone Signing Key
	DS Delegation Signature
	TEB Tamper Evident Bag

**Participants**

Title	Full Name	Signature
SM	Ranaid AlFayez	[Signature]
DSS	Abdullah AlShammari	[Signature]
SA	Ahmed AlKhalifa	[Signature]
WI	Abdulaziz H. Al-Zaman	[Signature]
WI	Nasser S. Al-Hijab	[Signature]
WI	Anas Assiri	[Signature]
SM	Ibrahim Al-Darab	[Signature]
WI	Ali Alshahrani	[Signature]
WI	Majed S. Alomran	[Signature]
WI	Faisal S. Alayadi	[Signature]
WI	Hasham Al-Hamad	[Signature]
DSS	Solib Alqatib	[Signature]
DSS	Fahad Alshahrani	[Signature]
SM	Sulaiman Mirdal	[Signature]



SaudiNIC DNSSEC ceremony script



# DNSSEC

## Workshop and public events





New  
Developments

# DNSSEC

## Workshop and public events





# Arabic IDNs

- Published our **Language table** in IANA with the new XML format (RFC 7940)
  - <https://www.iana.org/domains/idn-tables/tables/xn--mgberp4a5d4ar ar 2.xml>
- Published “**SaudiNIC’s Best Practices in Supporting and Managing Arabic Domain Names**”
  - <http://nic.sa/docs/SaudiNIC-BP-Supporting%20and%20Managing%20Arabic%20Domain%20Names%20-%2020170815.pdf>
- Participate in the Task Force on Arabic Script IDNs(**TF-AIDN**) on these topics:
  - 2<sup>nd</sup> level LGR for the Arabic script
  - Universal acceptance for Arabic domains

New  
Developments

# Arabic IDNs

```
- <lgr>
- <meta>
  <version>2</version>
  <date>2016-06-05</date>
  <language>ar</language>
  <scope type="domain">xn--mgberp4a5d4ar</scope>
- <description type="text/plain">
  This document provides the IDN (Internationalized Domain Names) Language Table and guideline rules to be used for writing and registering Arabic Domain names the recommendations outlined in the RFC 5564: "Linguistic Guidelines for the Use of the Arabic Language in Internet Domains", that can be found in the following URL (azoman[at]citic.gov.sa) , Saudi Network Information Center Raed Al-Fayez (rfayez[at]citic.gov.sa) , Saudi Network Information Center Abdulrahman I. AL-Ghadir (aghadir[at]citic.gov.sa)
</description>
<validity-start>2014-12-07</validity-start>
<validity-end>2020-12-07</validity-end>
<unicode-version>6.3.0</unicode-version>
- <references>
  <reference id="0">The Unicode Standard, Version 6.3.0</reference>
- <reference id="1">
  RFC 5564: "Linguistic Guidelines for the Use of the Arabic Language in Internet Domains", http://tools.ietf.org/html/rfc5564
</reference>
- <reference id="2">
  Guideline Rules for writing Arabic IDNs under the IDN ccTLD (السعودية), http://nic.net.sa/docs/Guidelines\_for\_writing\_Arabic\_IDNs\_under\_the\_IDN\_ccTLD\_V1.2-en.pdf
</reference>
</references>
</meta>
- <data>
  <char cp="0621" ref="0 1 2"/>
- <char cp="0622" ref="0 1 2">
  <var cp="0623" type="allocate" when="arabic-final-right-join" comment="Language variant"/>
  <var cp="0623" type="allocate" when="arabic-isolated-right-join" comment="Language variant"/>
  <var cp="0625" type="allocate" when="arabic-final-right-join" comment="Language variant"/>
  <var cp="0625" type="allocate" when="arabic-isolated-right-join" comment="Language variant"/>
  <var cp="0627" type="activate" when="arabic-final-right-join" comment="Language variant"/>
  <var cp="0627" type="activate" when="arabic-isolated-right-join" comment="Language variant"/>
  <var cp="0671" type="block" when="arabic-final-right-join" comment="Typo variant"/>
  <var cp="0671" type="block" when="arabic-isolated-right-join" comment="Typo variant"/>
  <var cp="0672" type="block" when="arabic-final-right-join" comment="Typo variant"/>
  <var cp="0672" type="block" when="arabic-isolated-right-join" comment="Typo variant"/>
  <var cp="0675" type="block" when="arabic-final-right-join" comment="Typo variant"/>
```



## SaudiNIC's Best Practices

# Supporting and Managing Arabic Domain Names

August 2017, Ver. 1.0

The intention of this best practice document is to share SaudiNIC's experiences and practices in supporting and managing Arabic domain names.



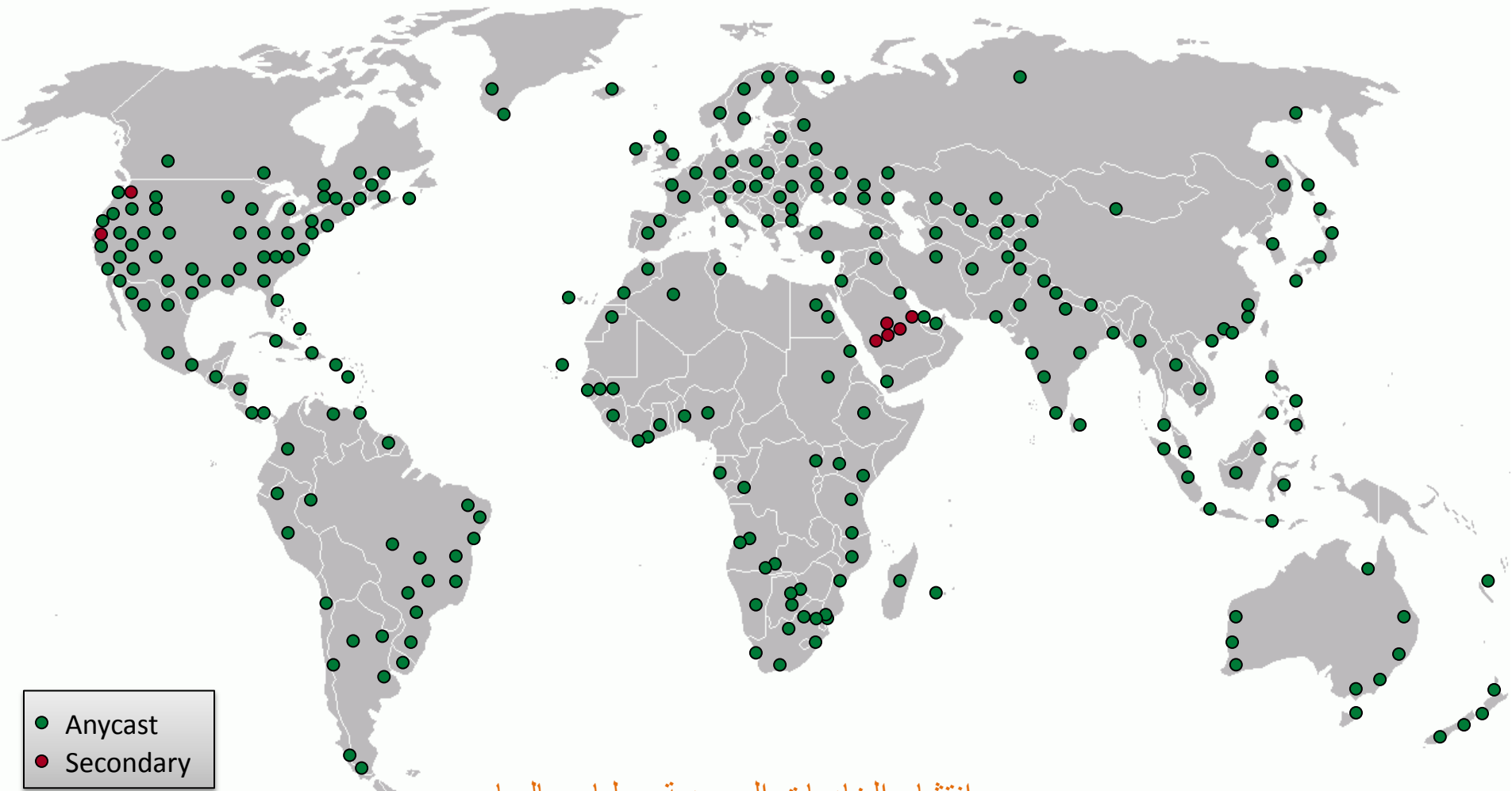


# Anycast Clouds

- Increasing the **footprint** for our secondary servers (**Locally** and **globally**):
  - **7** Secondary servers in **5** in **Saudi Arabia** (3 cities) and **2** outside Saudi Arabia
  - **200+** anycast servers with **2** different providers around the world
  - All have IPV4 & IPv6 & DNSsec

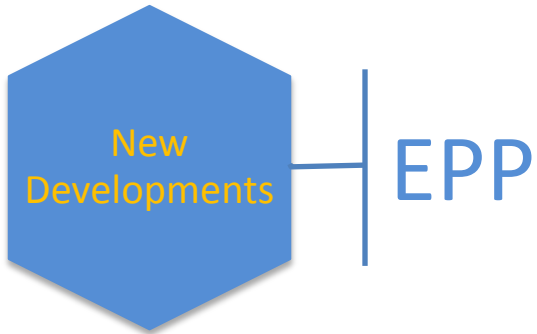


# Anycast Clouds



انتشار الخادمت السعودية محليا وعالميا

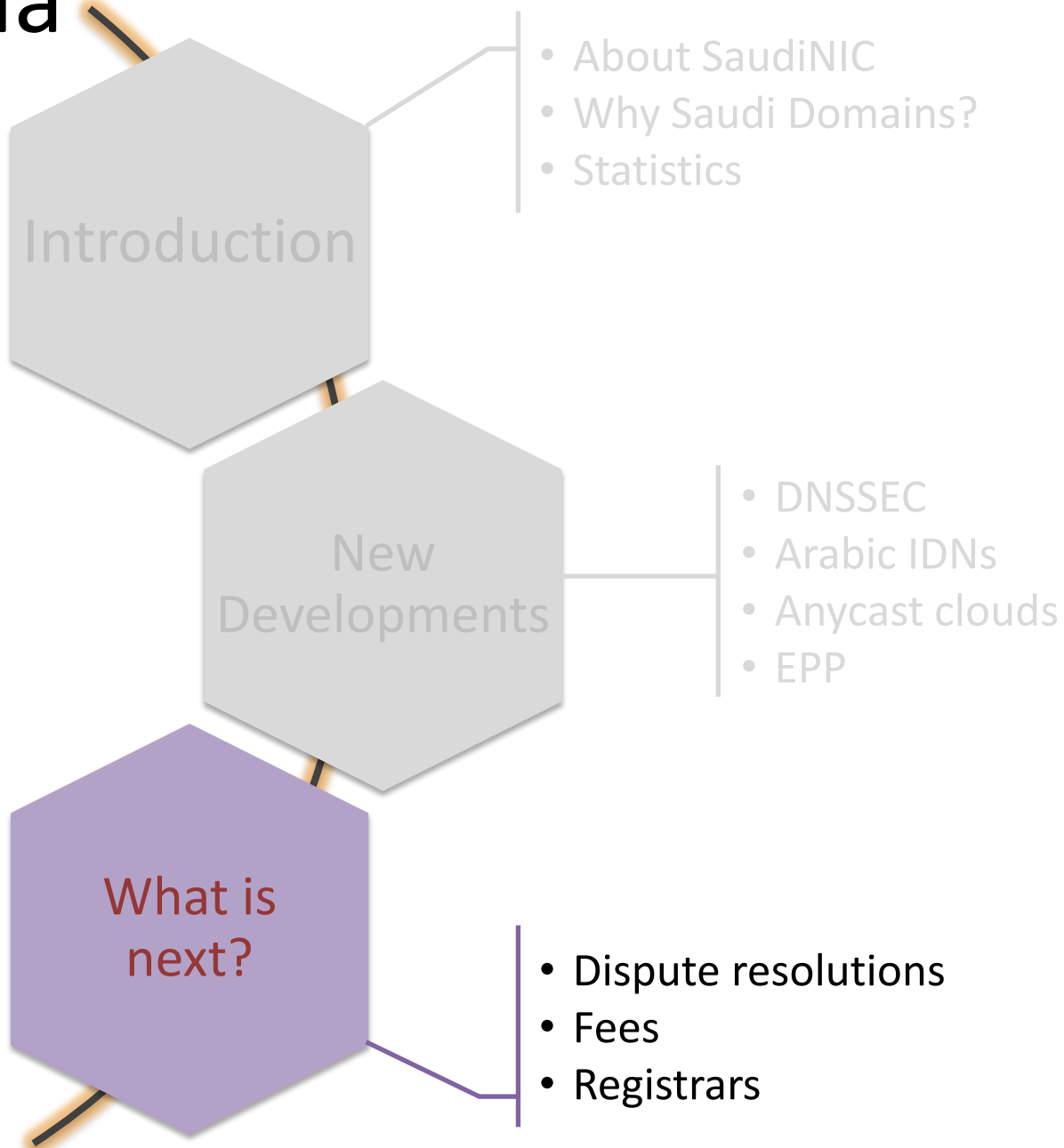
Saudi ccTLDs DNS servers around the world



- Developed an **in-house EPP** system:
  - Compatible with the EPP`s RFC
  - It is **open source** and developed by **Saudi engineers**
  - Each server can handle up to **100 trans/sec**
  - Full support of **Arabic Domains** and its variants:
    - Master Key Algorithm & Variant Filters
    - Language tables in IANA`s new XML format
  - Easy to add **new extensions** and **business needs**
  - Dedicated **web interface** for Registry and Registrants
  - .. and many other features (e.g. DNSSEC)



# Agenda





## What is Next?

- Updating the regulations to allow SaudiNIC:
  - To have **alternative dispute resolution** process
  - To introduce **fees**
  - To accredit and license **Registrars**

***Thank you***

**شكرًا**

للمزيد من المعلومات يمكنكم زيارة:

For more information you can visit:



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[www.nic.sa](http://www.nic.sa)

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