IPv6 Adoption in Saudi Arabia

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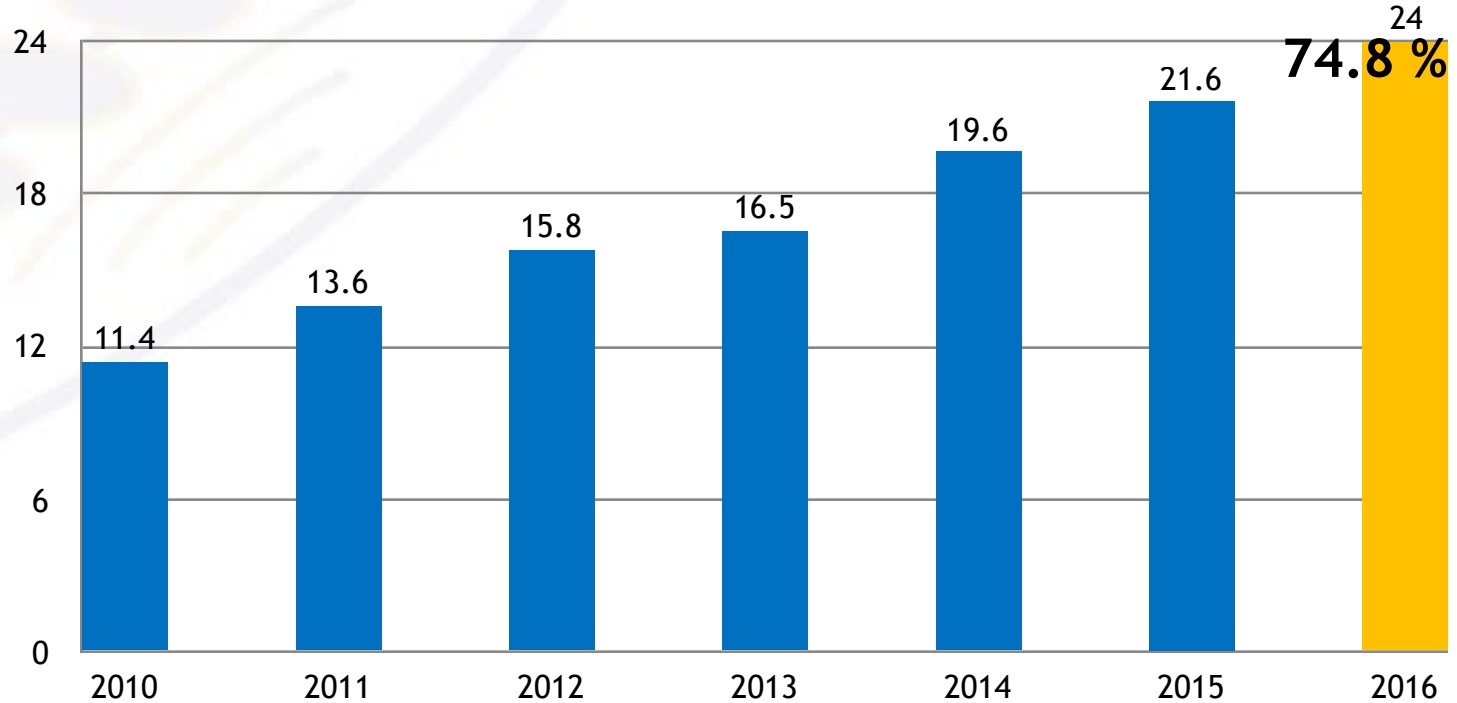September 2017

IPv6
Saudi Arabia
TASK FORCE

هيئـة الإتصـالات وتقـنية المعلومات
Communications and Information Technology Commission

www.citc.gov.sa

Agenda

- Background

- IPv6 National Strategy Objectives & Activities

- Outcome

- Moving forward

Background

KSA Internet Users (million)

Year	Users (million)
2010	11.4
2011	13.6
2012	15.8
2013	16.5
2014	19.6
2015	21.6
2016	24 (74.8 %)

Saudi Arabia IPv4 Allocations

9000000	8750080 8873012 8969216
6750000	7542272
	632652 6338048
4500000	4353536
	3099648 3430912
2250000	2189313
	1387008 1687552
	1003520
	270336 307200 348416 372992 482560 633088
0	

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Q2 2017
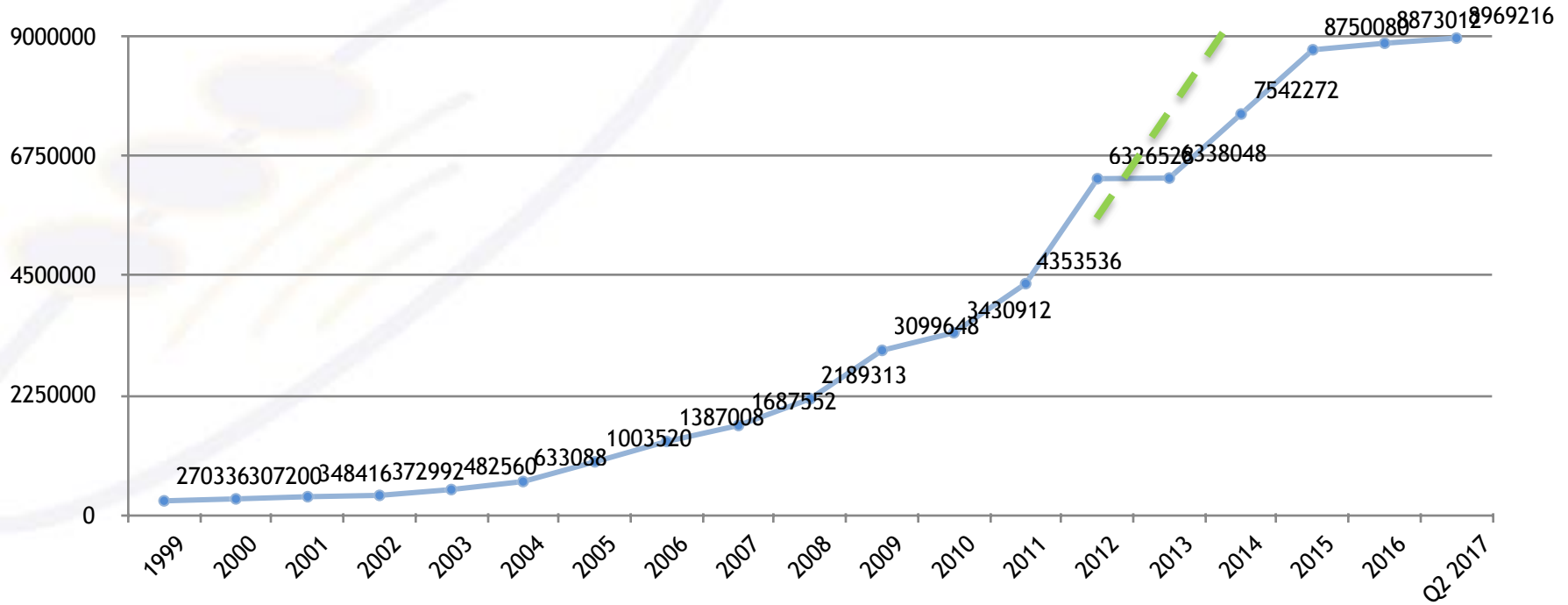
8.9 Million IPv4 Addresses	86.96% Advertised	0.423 IPv4 Address Per Internet User

IPv6 National Strategy Objectives & Activities

Strategy Objectives

... ntry

... ... business continuity and continued growth of the internet in Saudi Arabia

- Smooth adaption of IPv6 by key stakeholders to minimize risks

- Raise overall IPv6 awareness nationwide by approaching stakeholders of both the public and private sectors

Community driven

Collaborative effort

Government Agencies
Service Providers
Vendors
Major Banks
Universities

RIPE
Menog
IPv6 Forum
ITU
GCC

National and International participation

Phase I: 2007 - 2012

Focus on Service Providers

Identify countries IPv6 best practices

Establishment of Task Force

Some Service Providers started to provide IPv6 connectivity to their corporate customers.

International & regional cooperation (ITU, GCC, RIPE, MENOG, etc.)

CITC built IPv6 Lab and tunnel broker

Core national services readiness (Saudi ccTLD and filtering services)

Trainings and conferences

IPv6 website

Strategy Tracks

Infrastructure

- IPv6 Addressing

- IPv6 Commercial Support for Nation Wide Infrastructure

- .SA ccTLD IPv6 Compliance

- IPv6 Compliant Internet Filtering

- IPv6 Lab

Awareness

- IPv6 Task Force

- Outreach Activities

- International Cooperation

- IPv6 Training

- IPv6 Compliant Procurement

Focus on Enterprise/ Education

Conducting 4 Pilot Projects on Enterprise Scale

IPv6 deployment Guidelines and Procedures

Update IPv6 website and add Arabic version

Some Service Providers started to provide IPv6 to home consumers.

Some Enterprises started to provide their services through IPv6

CITC IPv6 Lab Enhancement

Trainings and conferences

Phase II: 2013 - 2016

Pilots Projects:

IPv6 enablement for internet facing services: DNS Website, Mail, etc.

Government

Private Enterprises

Education

Enterprise

Guidelines Development Methodology

Research Studies & Benchmark

Development of draft version

Apply & Learn

Development of final version

Implementation phases

Initiation & Planning

Need Assessment

Design

Deployment

Operation & Monitoring

Activities

- 17 Task Force meetings hosted be the taskforce members
- IPv6 Training
  - IPv6 Training by CITC (three sessions)
  - IPv6 Road Show was organized **10** times. Thanks to MENOG and RIPE
- IPv6 Conferences
  - Three IPv6 National Conferences were organized (2009, 2011 and 2015)

Outcome

KSA ASes Announcing IPv6 Prefixes

KSA	21 %
Middle East	12 %
RIPE region	26 %
Worldwide	23 %

KSA IPv6 Prefixes

2008	2
Q2 2017	76

This graph shows the percentage of networks (ASes) that announce an IPv6 prefix for a specified list of countries or groups of countries
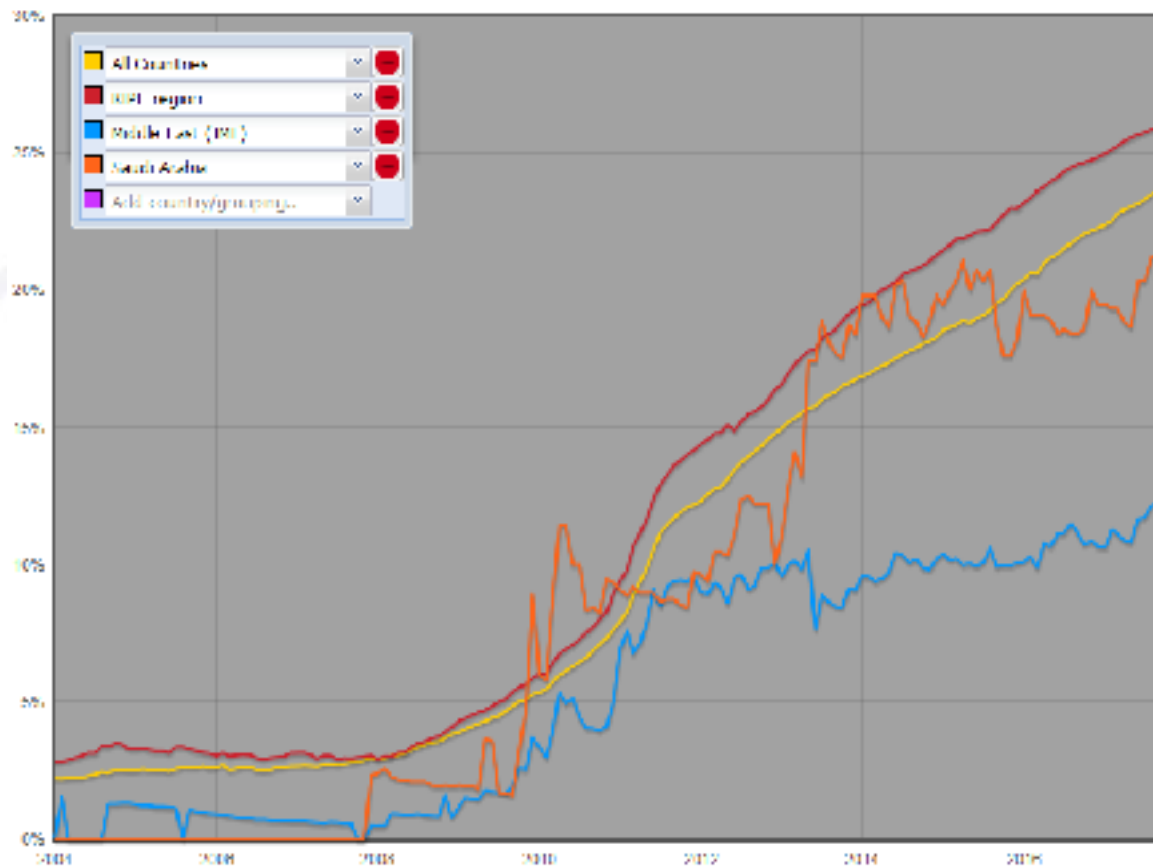
Internet Core Readiness

Saudi Arabia: 84.07%
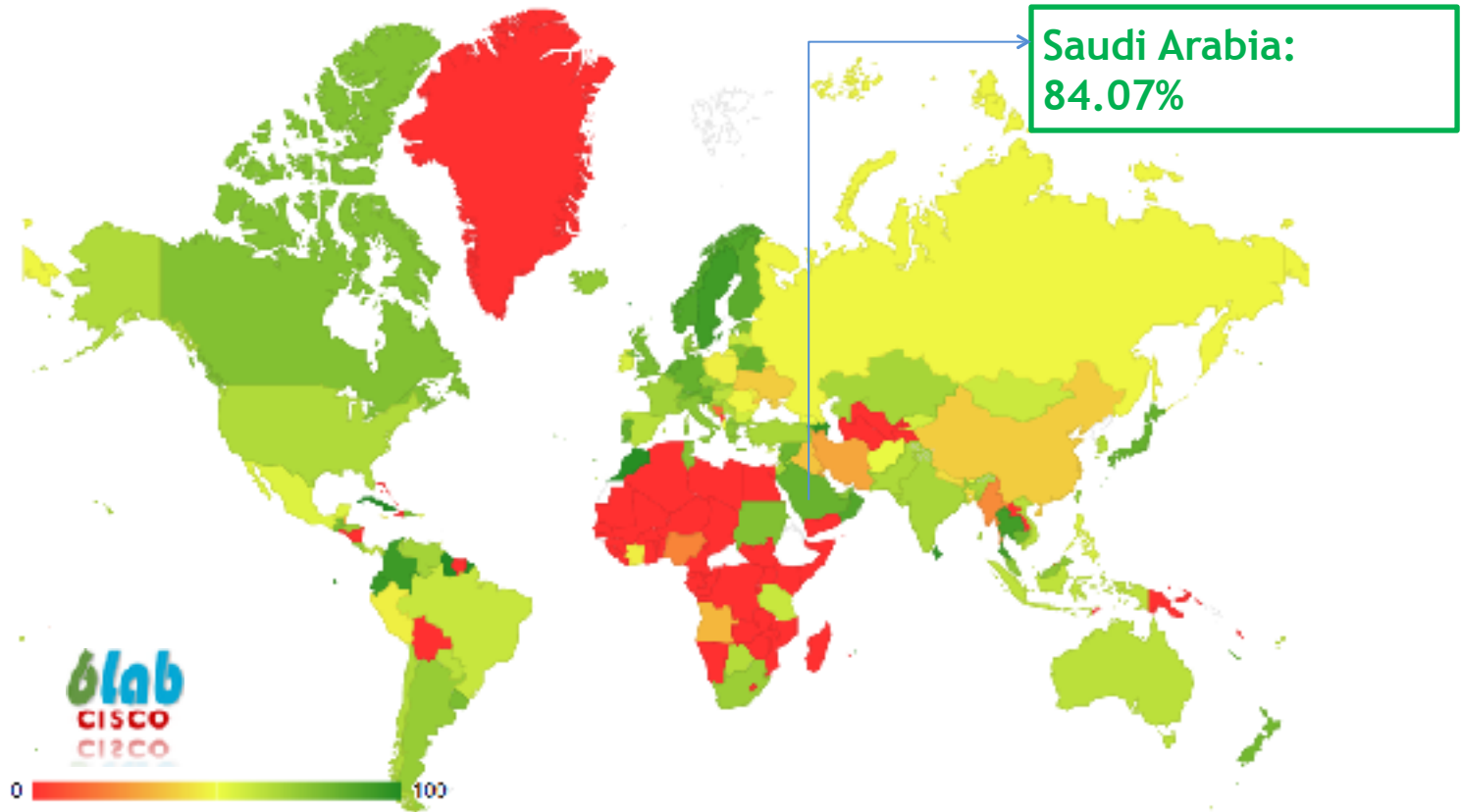
IPv6 Users	
2008	0 %
2017 September	**6.1 %**

Moving Forward…

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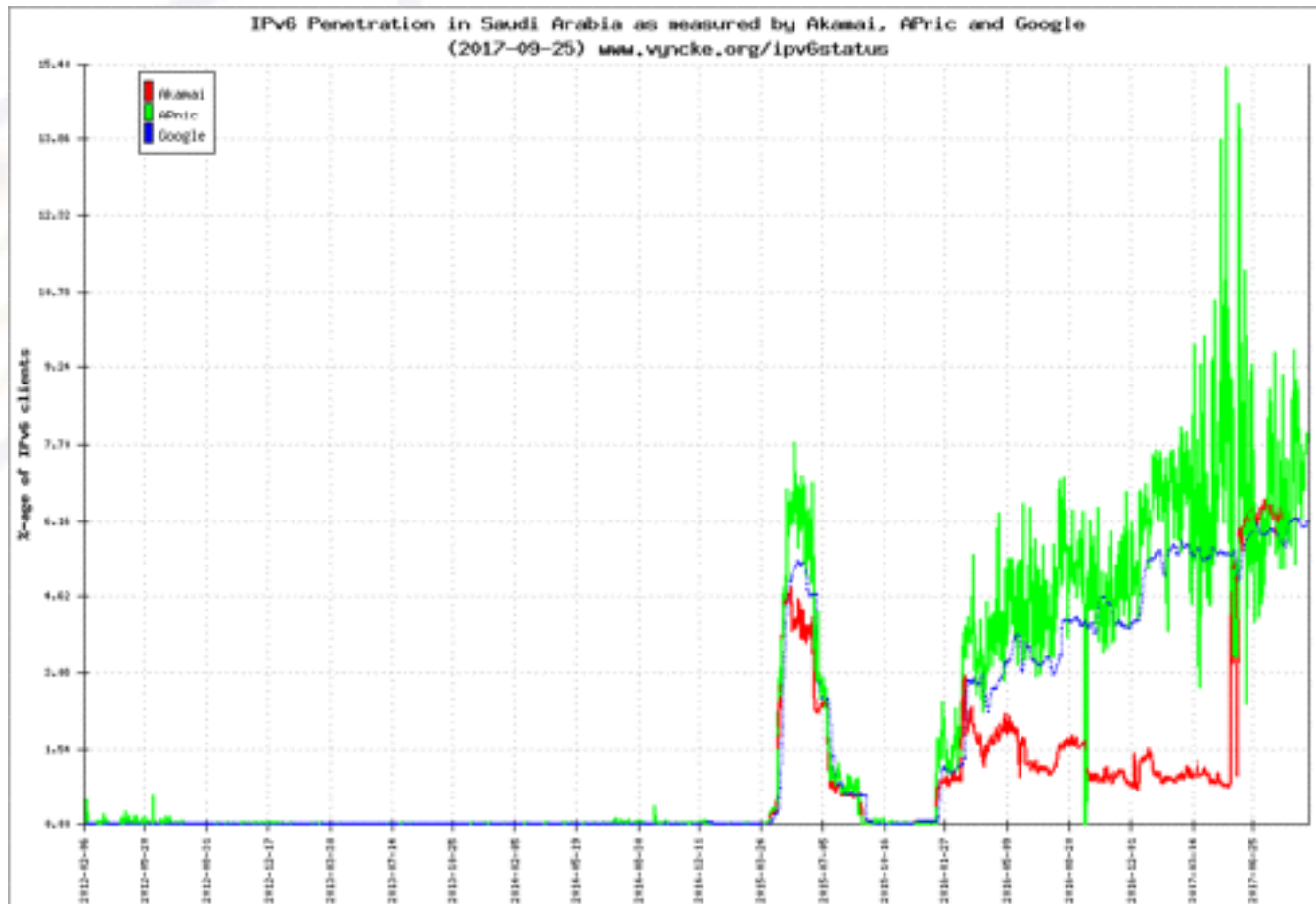
We are working on:

- Continue capacity building and collaboration

- Following up with the service providers about their IPv6 deployment.

- Utilizing the collaboration forum to improve the internet ecosystem in Saud Arabia

  - IoT, Cloud, QoE

- IPv6 + Emerging internet topics

Visit the Taskforce website for more info

www.IPv6.sa