IPv6 Adoption Journey

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cst.gov.sa

Agenda

- Why IPv6

- IPv6 Journey in Saudi Arabia

- Outcomes & The Way Forward

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Agenda

Why IPv6

IPv6 Journey in Saudi Arabia

Outcomes & The Way Forward

Importance of IPv6

Why IPv6 ?

- Exhaustion of IPv4 Addresses (~4.3 Billion IP Addresses)

- The Right Solution to Avoid Workarounds (~3.4x10^38 IP Addresses)

- Enabler for Emerging Technologies (Internet of Things)

- Efficient Addressing and Routing (Simplified Header, SLAAC)

- Support of New Features (Flow Label, Extension Headers)

- Improving Quality of Experience (Avoidance of CGNAT/NAT)

- Native Support to Security Features (E2E IPsec, AH and ESP Headers)

Agenda

Why IPv6

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IPv6 Journey in Saudi Arabia

National Strategy Objectives

To be prepared for the IPv4 depletion to **ensure business continuity**.

Plan **a smooth adoption** for IPv6 to minimize risks.

Raise overall IPv6 **awareness nationwide** in the public and private sectors.

IPv6 Adoption Phases

Phase I: Focus on Service Providers

Phase II: Focus on Enterprises

Phase III: Focus on End Users

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IPv6 Journey in Saudi Arabia

Phase I:
Focus on Service Providers

Establishment of "**IPv6 Task Force**" and launching its website

Building **IPv6 Lab**

Readiness of **SP Core Networks & National Services**

Phase II:
Focus on Enterprises

Stimulating demands by conducting 4 Pilot Projects

Publishing IPv6 deployment Guidelines

Partnering with the Academic sector for capacity building

Phase III:
Focus on End Users

Enabling/upgrading home CPEs

Enabling mobile network/devices

Targets & Progress Reporting

Continuous Capacity Building (20+ Training Programs / 500+ Participants)

Community Effort (Task Force / Service Providers / Manufacturers / Academia / RIPE NCC / IPv6 Forum)

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IPv6 Journey in Saudi Arabia

Phase I:
Focus on Service Providers

- Establishment of "IPv6 Task Force" and launching its website
- Building IPv6 Lab and tunnel broker
- Readiness of SP Core Networks & National Services

Phase II:
Focus on Enterprises

- Stimulating demands by conducting **4 Pilot Projects**
- Publishing **IPv6 Deployment Guidelines**
- Partnering with the Academic sector for **capacity building**

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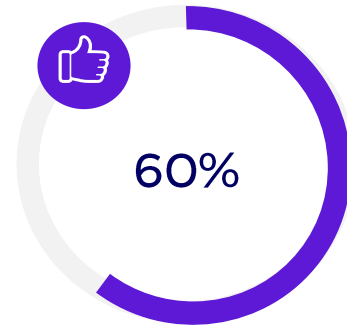**Continuous Capacity Building (20+ Training Programs / 500+ Participants)**

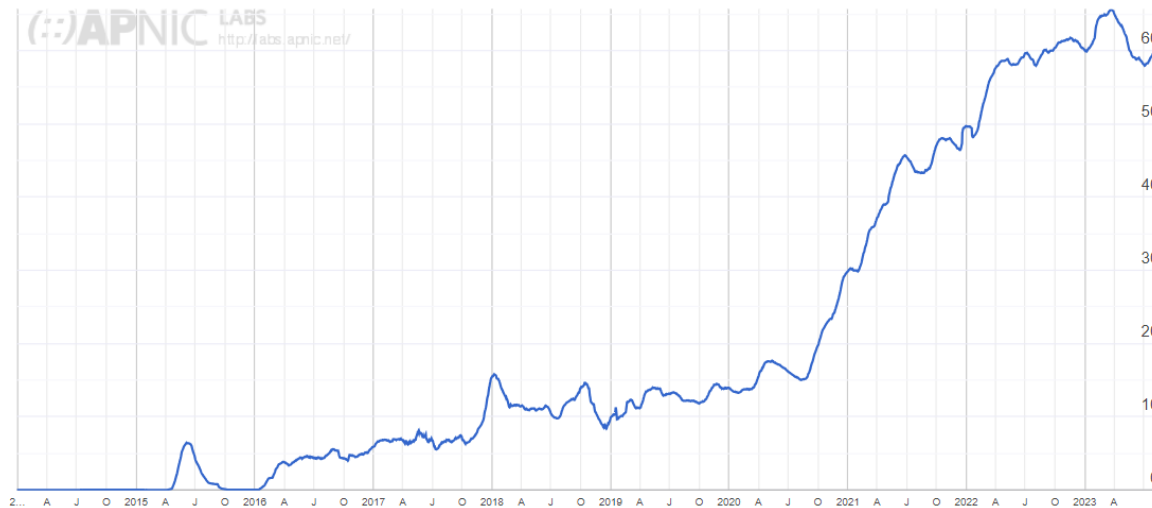**Community Effort (Task Force / Service Providers / Manufacturers / Academia / RIPE NCC / IPv6 Forum)**

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Outcomes

IPv6 Adoption Rate and Rank for Saudi Arabia

60%

Among Top 10 Countries

APNIC Google

Source: APNIC IPv6 Stats

The Way Forward

The Way Forward

Continue Enabling IPv6 for End Users (Mobile, FTTH and FWA)

Mandate Enabling IPv6 for Government Entities and Services

IPv6 Targets & Adoption Progress Reporting

Glad to share the experience !

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Communications, Space &
Technology Commission

Thank You