



# Internet Eco System Afghanistan

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Date: 26/04/2017





# Learning overview

- History of Internet in Afghanistan
- Digital communication infrastructure in Afghanistan
- What organization is involved in the Internet industry in Afghanistan?
- Telecom and Internet sectors of Afghanistan
- International organizations support to Afghanistan so far





# History of Internet in Afghanistan

- <u>1898:</u> One to one wired telephone network in Afghanistan was connected to the presidential Place.
- 1908: That one line network was replaced by a small telephone exchange with the capacity of 25 lines
- 1920: British made telegraph machine was installed in Kabul, which was operational until 1932
- 1928: Afghanistan became a member of the International Telegraph Union (ITU) in April 12, 1928, ITU was established in 1865 was renamed as International Telecommunications Union in 1932
- 1979: Afghanistan became a member of APT (Asia-Pacific Telecommunity) since 1979.
- 2001: First official Internet was used in 2001.





# Digital communication infrastructure in Afghanistan

#### Copper wired

Spread all over the country for telephones

#### Fiber optics

Afghanistan has one ring of OFC through out the country which is 70% completed

#### Satellite communication

Afghanistan uses rental satellite system of other countries such as of Pakistan, China and others for its communications

#### Wireless communication

Afghanistan uses WiMax, Microwave, 2G, 3G and other mobile and wireless services





# Regulatory bodies

- Afghanistan has a regulatory body for the Internet and telecommunication system of the country by the name of <u>ATRA</u> (Afghanistan Telecom Regulatory Authority)
- ATRA comes under the Ministry of Communication and IT and has a board of directors lead by the chairman of ATRA.
- ATRA has TDF funding system for the development of telecom sector in Afghanistan which includes ISPs, Mobile operators and others
- Ministry of Culture and Information is the monitoring body for the electronic media and print media in the country.







## **Business entities**

#### **Telephone operators**

Afghan telecom

#### **Mobile Operators**

- 1. Salaam Telecom
- 2. AWCC
- 3. Roshan
- 4. Etisalat
- 5. MTN











### **Business entities**

#### **ISP (Internet Service Providers)**

Afghanistan has about 65 ISPs operating in the country since 2001.

Afghanistan tried to have its own satellite back in 2014-15 but it was failed.

We are still having rental satellite communication system in the country.









#### KEY INDICATORS[1]

#	INDICATOR	DETAILS
1	Tele-Density per 100 inhabitants ( Mobile + CDMA + Fixed)	72/100 <sup>[2]</sup>
2	Service Coverage by Population (Mobile + Fixed + CDMA)	88%
3	Total Number of Mobile Subscribers	19,490,035
4	Total Number of Fixed Line Subscribers	91,575
5	Total Number of CDMA Subscribers	169,691
6	Total Number of Telecom base stations	5,119
7	Total Number of Internet subscribers	3 Million (estimated)
8	Total Number of Second Level (ccSLD) .af Domains	6,525
8	Total number of Licensed ISPs	51 (2 Wi-Max)
10	Total Investment in the Sector	2,016,890,044 (US\$)





# Digital addressing system in Afghanistan

- Afghanistan is still using IPv4 for addressing and plans are there to use IPv6.
- MCIT has the authority to deal with the addresses
- Afghanistan is not having and IXP
- Afghanistan's IP addresses are still facing many authentication issues and our addresses are still used for attacks as black holes.





# International organization's support

- Afghanistan has been supported by the international organization such as ICANN, APNIC, APtLD, IGF, APSIG, and others
- They have accepted a handful number of applicants as fellows since 2006
- Afghanistan is now initiating the steps such as AfSIG and others and soon we are expecting the SANOG, APNIC and other conferences to be held in Afghanistan.





# International organization's need to do for Afghanistan



# The wise minds will always be full of doubts

There is no such thing as "STUPID QUESTION"