

# **Designing Broadband Mobile Auctions – Experiences from Pakistan**

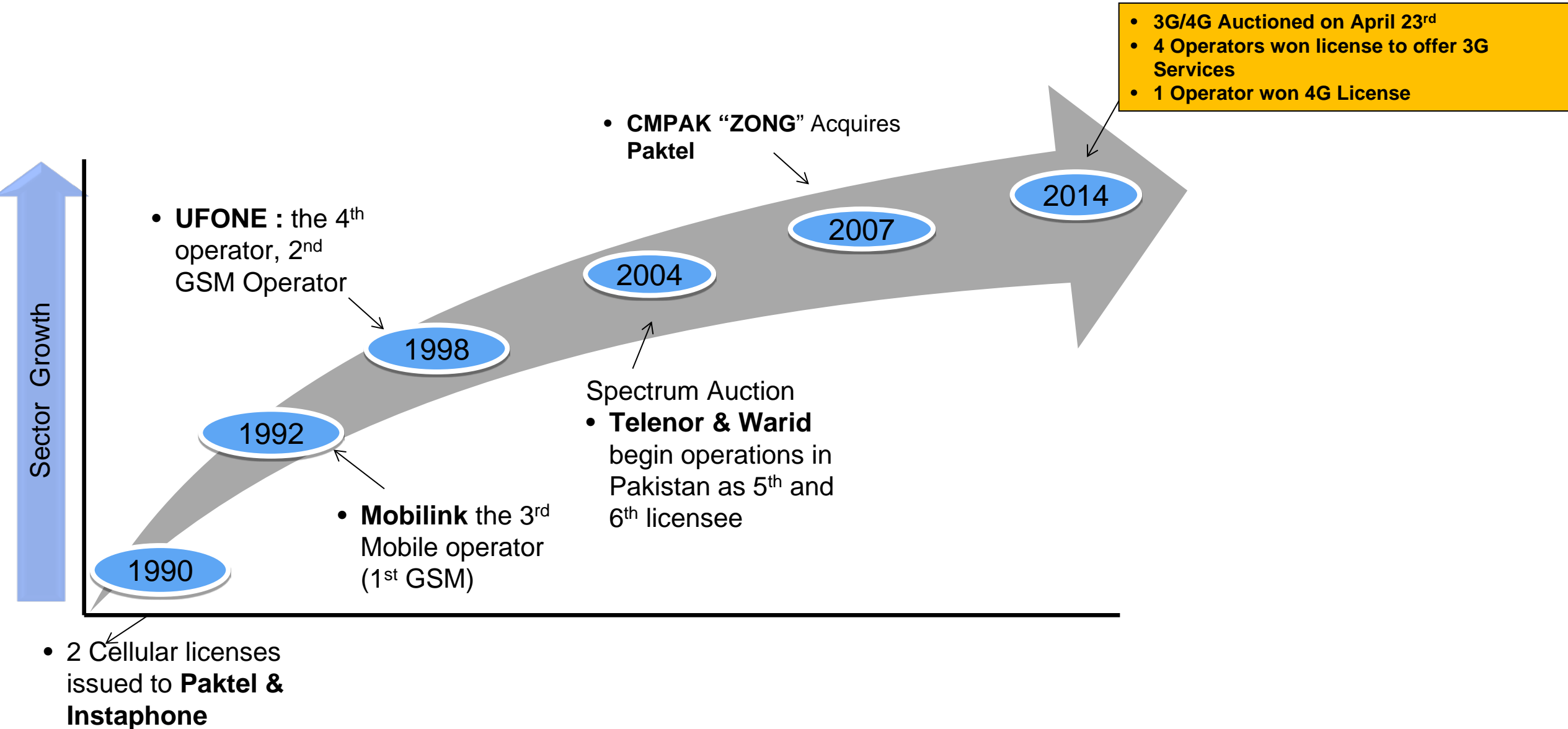
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# Background

- History of Cellular Wireless communication in Pakistan
- First Spectrum Auction for Cellular Mobile services in Pakistan: 2005
- Lessons learned from Auction in 2004
- Spectrum Auction for 3G and 4G services in Pakistan 2014
- Current Situation
- Lessons learned

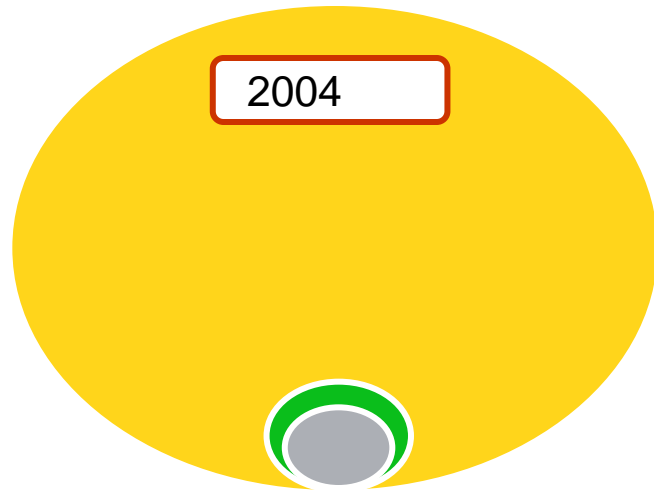
# History of Cellular Mobile Services in Pakistan



# First Spectrum Auction in Pakistan: 2004

- Total Spectrum offered was 2 lots with the following configuration:
  - Total Spectrum 13.6MHz x2
  - 4.8MHz x2 in 900MHz band and 8.8MHz x2 in 1800MHz band
  - Spectrum in 900MHz band was valued at 2.5 times the one in 1800MHz band
- Payment terms were 50% advance and rest in 10 years (later relaxed further)
- Auction winning price of USD 291 Million per lot. Total of USD 582 Million
- Telenor and Warid won the licenses

# Impact on Teledensity



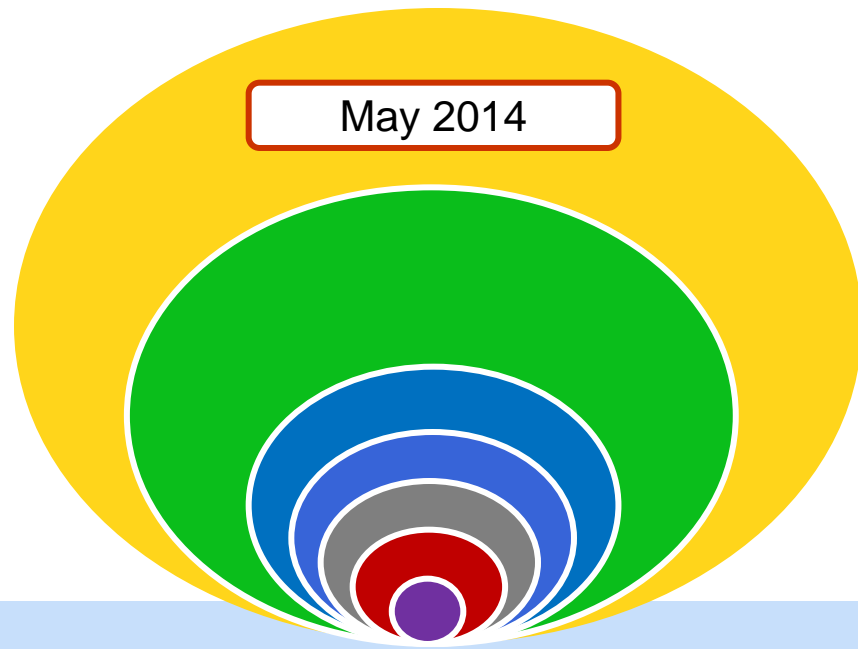
Total Population: 152.5 Million

Mobile Phone subscribers: 5 Million (3.3%)

Fixed Line subscribers: 4.5 Million (2.9%)

WLL subscribers: ---

Broadband subscribers: ---



Total Population: 190 Million

Mobile Phone subscribers: 140 Million (75%)

PC Internet Users: 19.8 Million (12%)

Mobile Internet Users: 15.7 Million (9%)

Broadband subscribers: 2.9 Million (1.6%)

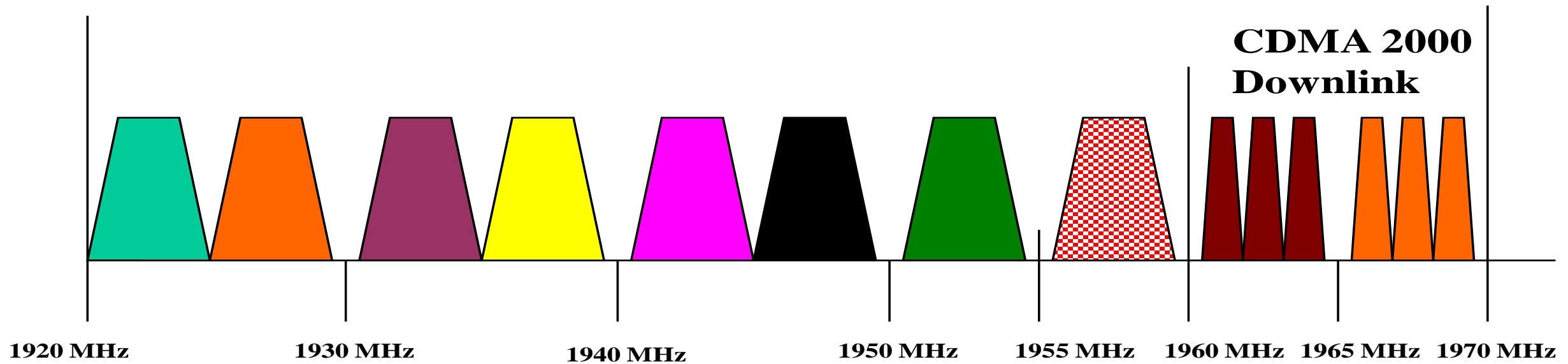
Fixed Line subscribers: 3.0 Million (1.7%)

WLL subscribers: 3.35 Million (1.9%)

# Lessons Learned from Spectrum Auction 2004

- Although Licenses were technology neutral, Spectrum allocated was most feasible for GSM
- Spectrum auction in the 2100 MHz was to happen in 3 years time
- Part (20 MHz) of the Uplink was allocated to WLL services based on CDMA2000
- Payment terms according to Finance were not good enough
- **All of the above combined along with procedural violations and PTCL's sales purchase agreement resulted in delay of 3G spectrum auction**

# 3G SPECTRUM PLAN (UPLINK)



# Spectrum Auction 2014

- Initial Government Policy Directive was issued on 7<sup>th</sup> October 2013. Salient features were as follows:
  - Spectrum to be auctioned was 30 MHz in 2100 MHz only
  - Consultant was to be hired
  - Payment terms were 100% advance or 50% advance with the rest in 5 years
  - Policy directive was subject to review based on the consultant's feedback from PTA and consultants
- Value Partners Management Consulting Limited was selected on 23<sup>rd</sup> November 2013 from among five shortlisted applicants
- First Draft of the Information Memorandum (IM) was published on 25<sup>th</sup> February 2014 after consultation with all the stakeholders and after revised Policy directive



## Key Features of the IM

- Realizing that we were already late in 3G, 20 MHz of Spectrum in the 1800 MHz was added for 4G LTE services beside the 30 MHz in 2100 MHz. Some spectrum in the 850 MHz was kept for new entrant.
- Base Price was kept at the highest level of valuation of spectrum and was USD 295 Million for 10 MHz in 2100 MHz and USD 210 Million in the 1800 MHz
- The spectrum cap in 2100MHz was 15MHz and 10 MHz in the 1800 MHz band
- License duration was kept at 15 years
- Payment terms were 100% advance or 50% advance with the rest in 5 years with interest

## Key Features of the IM Contd.

- In order to be eligible for 10 MHz in the 1800 MHz, the condition was that the bidder had to win at least 10 MHz in 2100 MHz
- Auction methodology was two stage SMRA. The first stage was based on sealed bid with the bidders showing interest and submitting 15% of the base price for at least 10 MHz in 2100MHz band.
- A two stage SMRA process was chosen as the auction methodology
- The first stage was the sealed bid stage
- Second stage was via the internet

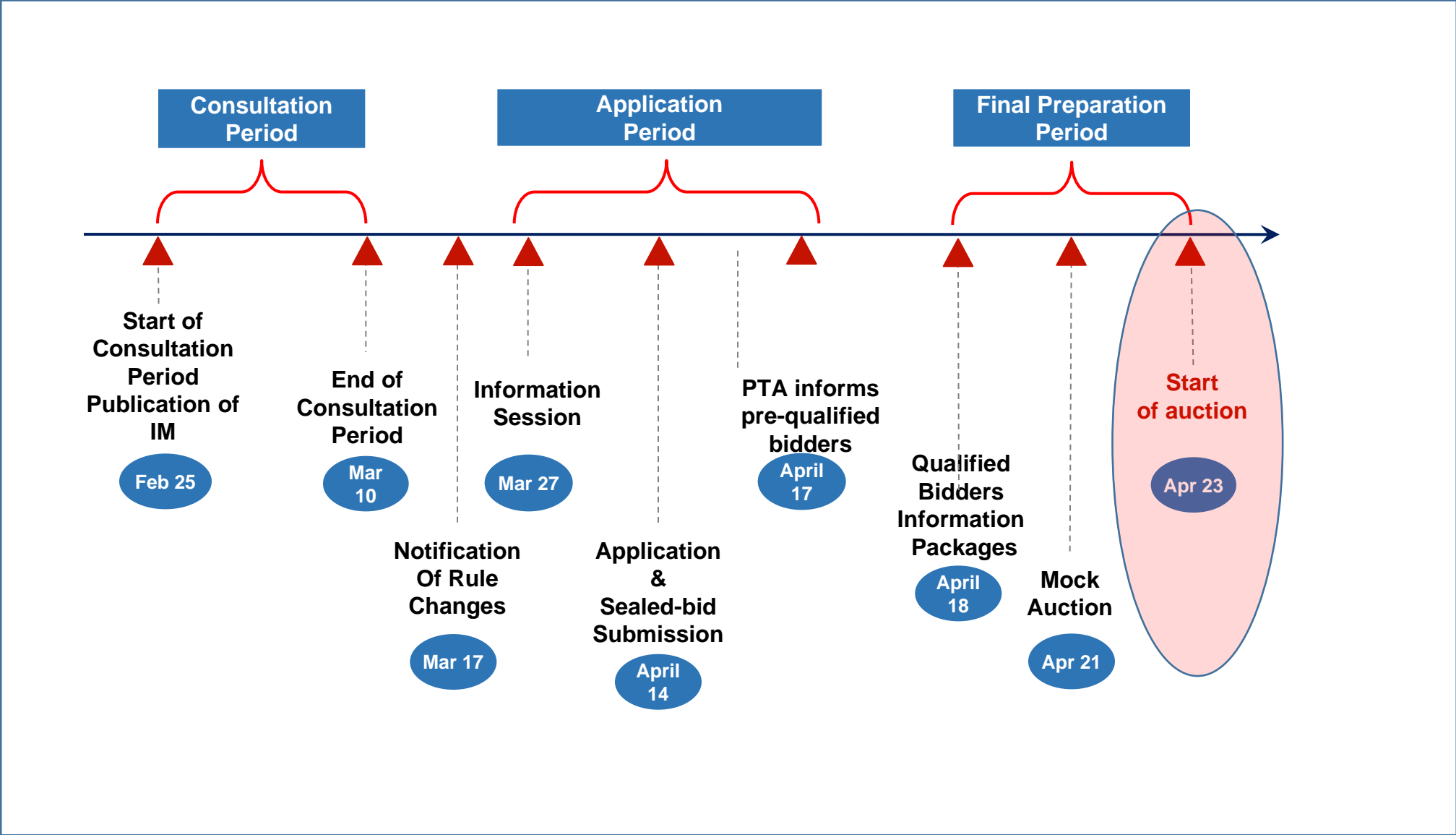
# Revisions in the IM

- No new spectrum to be auctioned in the next 18 months
- Operators could pay the spectrum fee in local currency also
- Roll Out obligations for 4G were relaxed and winners could use the 1800 MHz spectrum in the interim period for 2G also
- Spectrum allocation in 1800 MHz was to be adjacent to the current allocation
- Auction date was extended by 3 weeks

# Result of the sealed bid stage (14<sup>th</sup> April 2014)

- Four out of five Operators submitted sealed bids with as follows:
  - Ufone: 15 MHz in 2100 MHz and 10 MHz in 1800 MHz
  - Zong: 10 MHz in 2100 MHz and 10 MHz in 1800 MHz
  - Mobilink: 10 MHz in 2100 MHz
  - Telenor: 10 MHz in 2100 MHz
- Demand in 2100MHz was 45MHz against a supply of 30 MHz
- Demand in 1800 MHz 20 MHz which was equal to the supply
- Auction was to happen only in 2100MHz
- Winner of 10 MHz in 2100 MHz was to be allocated 10 MHz in 1800 MHz at the base price
- Lot size was chosen to be 10 + 5 +5 +10 MHz in the 2100 MHz band

# Project Time Lines: How the project was run to a successful Auction Day



## Result of the Auction (23<sup>rd</sup> April 2014)

- All four Operators who submitted the sealed bids won spectrum as follows:
  - Zong: 10 MHz in 2100 MHz and 10 MHz in 1800 MHz
  - Mobilink: 10 MHz in 2100 MHz
  - Telenor: 05 MHz in 2100 MHz
  - Ufone: 05 MHz in 2100 MHz
- Auction was conducted online, lasted for one day and was broadcasted live
- Operators were already allowed to have a trial setup since February and show cased their network performance at the auction venue setup for the media and other interested parties
- Total upfront amount raised was USD 1.22 Billion including Advance Tax.
- Total upfront amount received: USD 1.07 Billion

# Results of Spectrum Auction 2014



3G/4G Operator

- ZONG won both 3G and 4G spectrum



3G Operator

- Mobilink won 10 MHz in 2100 band



3G Operator

- Ufone reduced their sealed bid demand & won 5 MHz only in 2100



3G Operator

- Telenor reduced demand from sealed bid & won 5 MHz in 2100

Government got a total of USD 1.22 Billion from the auction

10 MHz in 1800 and 7.38 MHz in 850 MHz still remain with Government for possible next auction

# Post Auction Situation and Award of Licenses

- Continuous Media engagement
- Petition in the Islamabad High Court was swiftly dismissed
- License Award date: 21<sup>st</sup> May 2014
- License Award Ceremony: 22<sup>nd</sup> May 2014. Celebrated the World Telecom Day on the same date
- Prime Minister was the Chief Guest
- All the winners started commercial HSPA+ and HSPA+ DC have started after offering free services during the trial period and sometime thereafter
- Trial of LTE has started. Commercial deployment expected in August/September 2014.









Packages Details For

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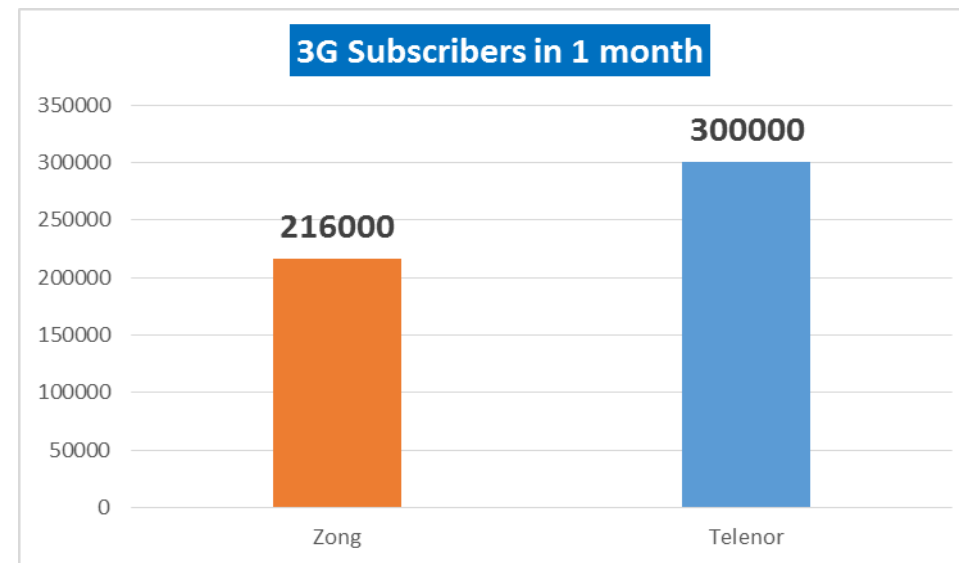
We got 3G for U

# Telecom Sector Pakistan : A shift from 2G towards 3G and 4G LTE services

## Key Cellular Mobile Indicators

- Cellular Subscribers (as of March 2014): 140 million (SIM connections based on 90 days active)
- Cellular Teledensity (as of March 2014): 74.9%
- Annual Cellular Revenues (FY2012-13): Rs. 311 billion
- A subscriber holds 2.6 SIMs on average
- Market is mainly prepaid oriented (~98%)
- Smartphone penetration is about 15%
- Spectrum Auction 2014 has brought **3G & LTE** technology in the country
- **4 Operators** offering 3G commercial services
- 4G LTE commercial services expected in August/September 2014

## Conclusion



- A strong uptake in 3G subscription is seen within 1 month of commercial launch  
*(2 operator data available)*
- As roll out expands, uptake is expected to increase

# Lessons Learned

- Sealed Bid Stage turned out to be a very good idea. No major surprise on the auction day
- Continuous Media engagement had a positive impact
- Communication and dissemination of information to courts, media and all stake holders saved us from many problems after the auction
- Good working with all relevant ministries and departments. No egos. Taking stand on important issues ONLY.
- Selection of good team from within the organization strengthened by local and foreign consultants
- Continuous dialogue and meetings with potential bidders
- Transparency of the process and information availability on the web site
- Believing in oneself, team work, not working for personal glory or credit. Credit part will come when mission is accomplished and even if not enough credit is given, should not care.



Thank You

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