



Case Study from Pakistan: IMT Spectrum Auction

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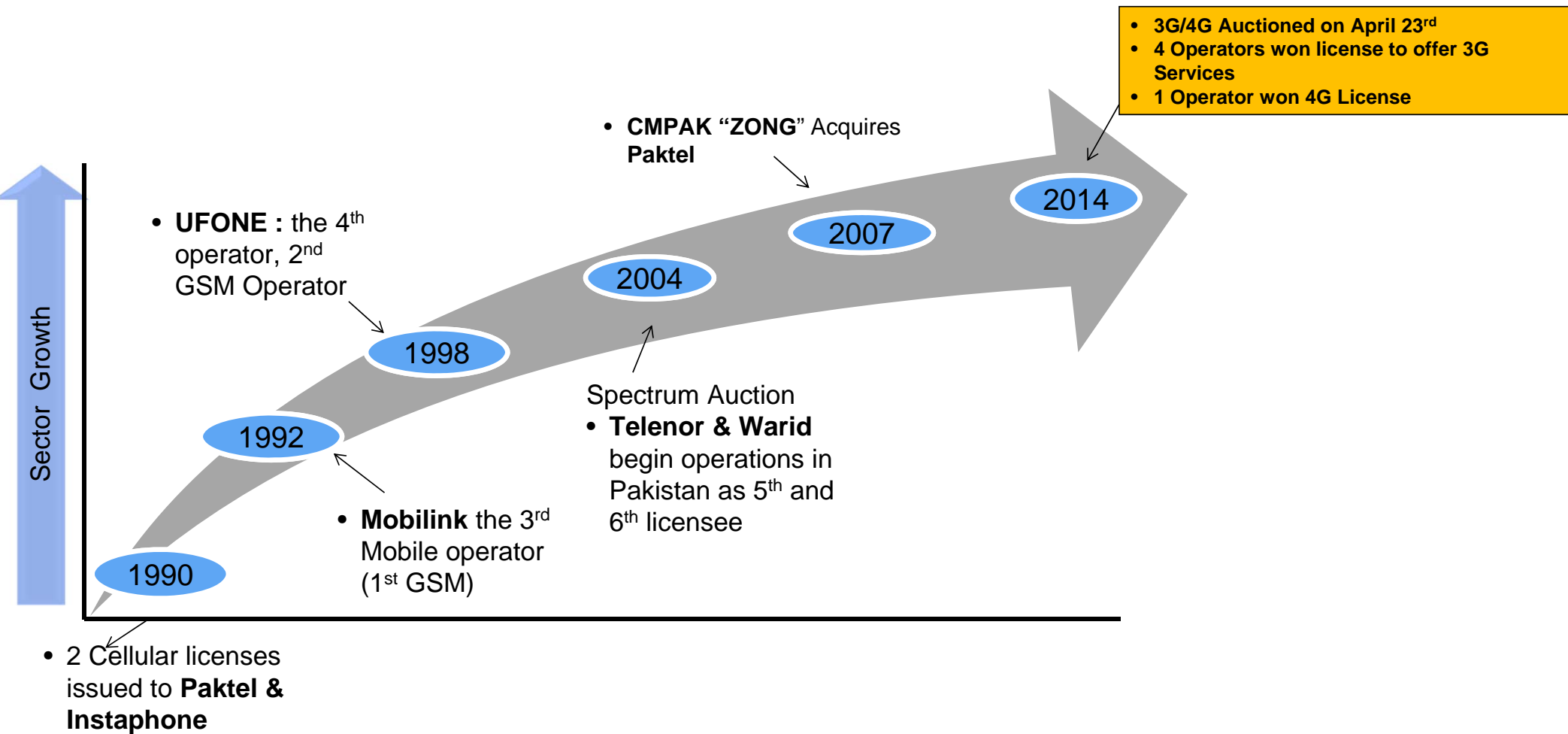
Overview of the Presentation

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

Spectrum Auction

- Auction has become the most popular technique to allocate spectrum
 - Single criterion: More transparent
 - No human judgment involved
 - Awarded to those who value it the most
- Issues:
 - High expectation in terms of upfront money
 - Media hype
 - Involvement of the Courts, Civil Society, Politicians

History of Cellular Mobile Services in Pakistan



First Spectrum Auction in Pakistan: 2004

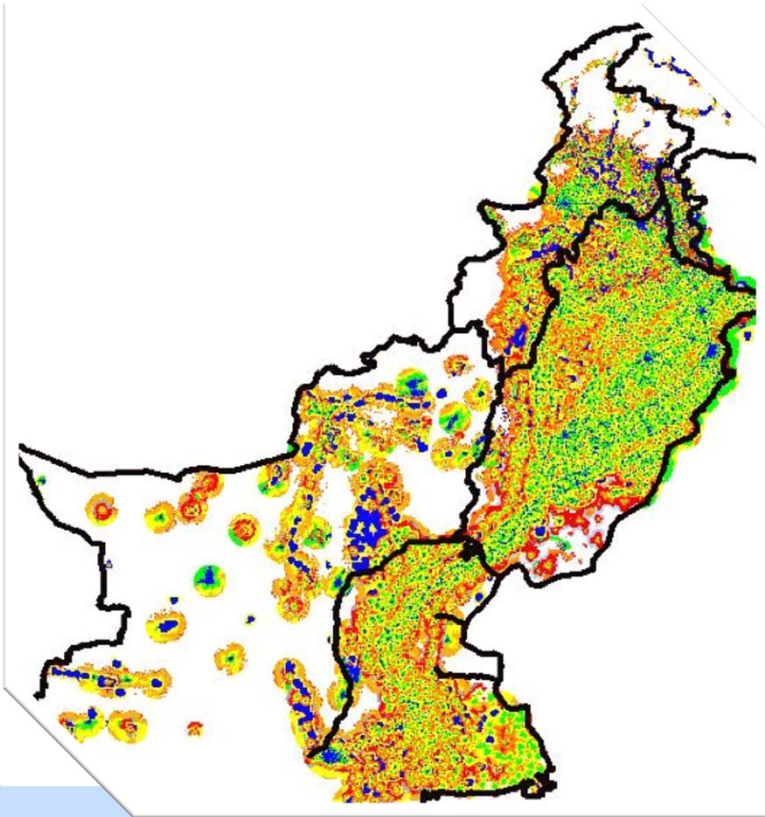
- Total Spectrum offered was 2 lots with the following configuration:
 - Total Spectrum 2X13.6MHz
 - 2X4.8MHz in 900MHz band and 2X 8.8MHz in 1800MHz band
- Existing Operators were to pay the same amount upon expiry of license with spectrum normalization except for Instaphone, who were only offered 2x7.38MHz in the 850 MHz band

First Spectrum Auction in Pakistan: 2004

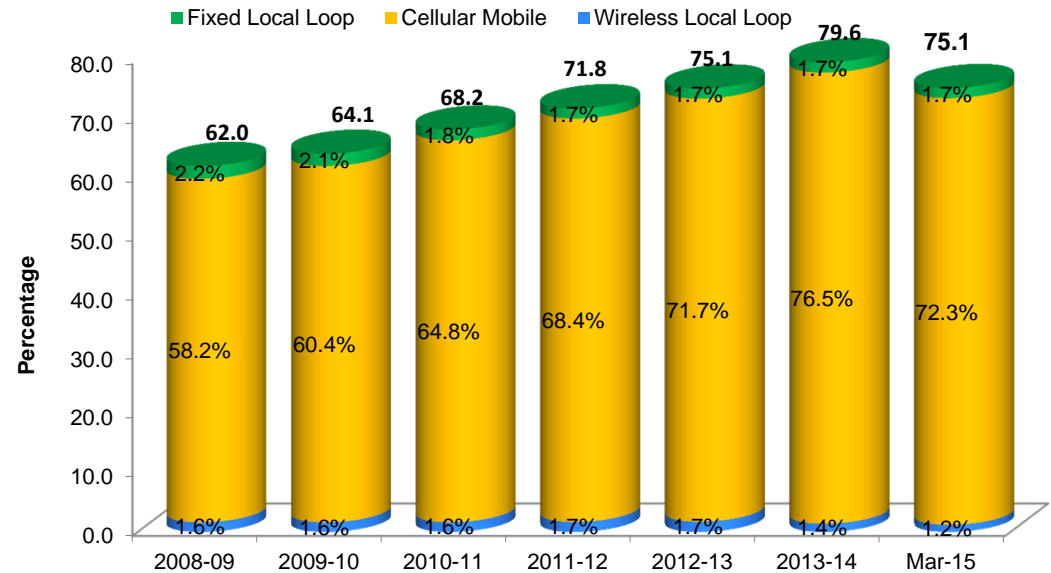
- Payment terms were 50% advance and rest in 10 years (later relaxed further)
- Infrastructure sharing was encouraged but not enforced
- Teledensity was very low (less than 10%) at that time
- Auction for new players only
- Auction winning price of USD 291 Million per lot. Total of USD 582 Million
- Telenor and Warid won the licenses (The winner could not pay, Warid matched the highest bid).

Access to basic telephony

Wide-spread coverage of cellular mobile services in provinces of Pakistan



Teledensity in Pakistan



- Most people in Pakistan have access to basic voice telephony, mostly using mobile phones
- Moving into an age where mobile use is about more than circuit switched voice and SMS

Issues with Spectrum Auction 2004 and WLL Auction PCS band

- Although Licenses were technology neutral, Spectrum allocated was most feasible for GSM
- Spectrum auction in **the 2100 MHz was to happen within 3 years**
- Part (20 MHz) of the Uplink of the so called 3G band was auctioned to WLL services based on CDMA2000
- To be more specific 1880-1990 MHz (UL) / 1960-1980 MHz (DL) auctioned for WLL

Causes of delay in the auction of the 3G spectrum

- State owned incumbent was privatized. Management control and 26% shares sold to Etisalat. One condition of the sale was that no new license would be issued till March 2013
- Government wanted new players also. Existing players were not ready till 2009.
- First policy directive issued in December 2011. However, despite three attempts the auction could not happen due to conflicts of all sorts.

Spectrum Auction 2014

- After the Supreme Courts intervention auction process started
- Initial Government Policy Directive was issued on 7th 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
 - Auction Committee (AC) for supervising headed by the Finance Minister was notified

Spectrum Auction 2014

- Value Partners Management Consulting Limited was selected on 23rd November 2013 from among five shortlisted applicants
- Realizing that we were already late in 3G, PTA and the Consultant proposed an additional 20 MHz of Spectrum in the 1800 MHz for 4G LTE services
- After initial reluctance the AC agreed with the following conditions:
 - Spectrum in the 1800 MHz can be allocated only if an operator wins 10 MHz of spectrum in 1800 MHz
 - Spectrum in the 850 MHz be added and kept for new entrant only

Efforts to Bring in a new operator

- Following operators showed varying degree of interest:
 - Turk cell
 - Saudi Telecom
 - Ooredoo Qatar
 - TIC Iran

Efforts to Bring in a new operator Contd

- Main reason for not participating in the auction according to Turk Cell

Our teams have thoroughly reviewed the Information Memorandum as well as the valuable information and insight they have gathered during their meetings with the esteemed PTA officials in Islamabad.

We are genuinely impressed with both the growth potential Pakistani telecom market presents and the meticulous approach you have assumed in managing the tender process.

Our investment policy, devised in accordance with **our existing and future capital commitments, does not leave room for a late market entry** opportunity especially in a massive and already competitive telecom market such as the one in Pakistan.

Key Features of the IM

- Base Price was kept at **the highest level of valuation** of spectrum:
 - USD 295 Million for 10 MHz in 2100 MHz
 - 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.
- 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
- Second Stage was based on SMRA

Revisions in the IM

- Lots of consultation with all the stakeholders
- 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 LTE were relaxed
- Spectrum allocation in 1800 MHz was to be adjacent to the current allocation

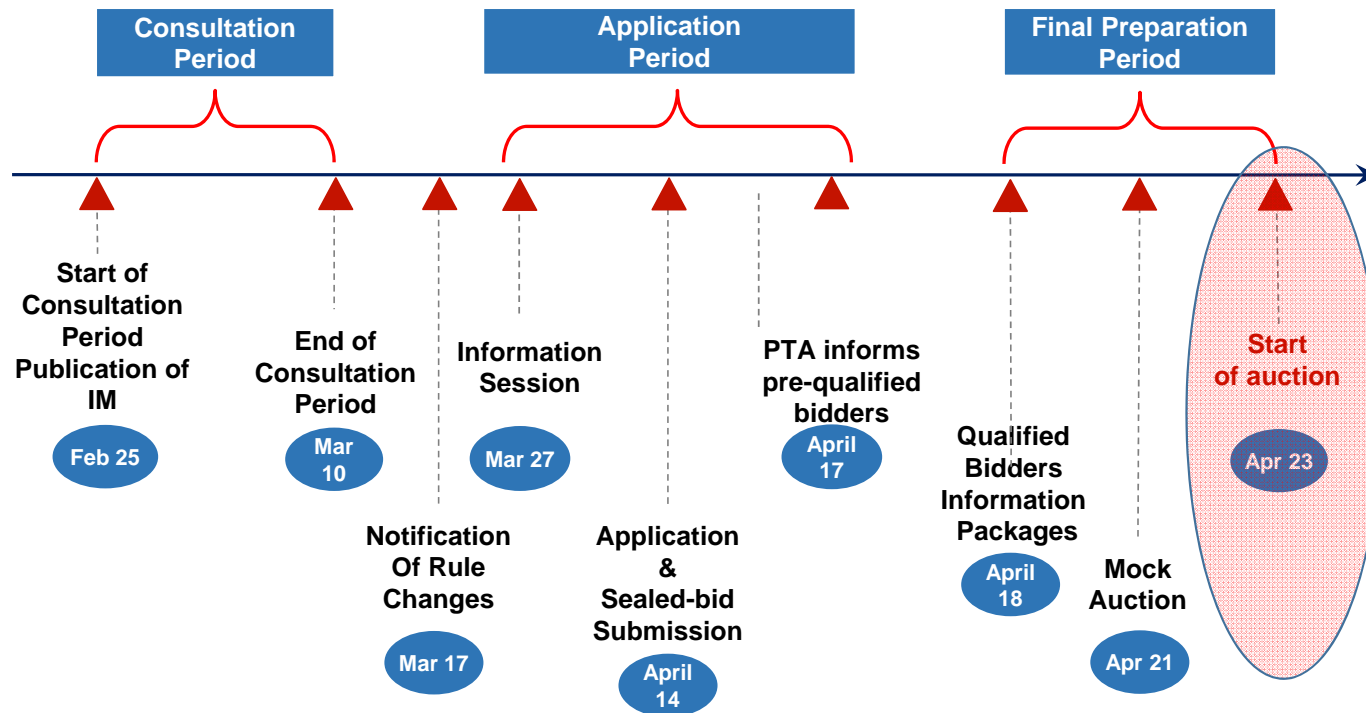
Result of the sealed bid stage (14th April 2014)

- 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

Result of the sealed bid stage (14th April 2014)

- 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 USD 210 Million/10 MHz
- Lot size was chosen to be 10 + 5 +5 +10 MHz in the 2100 MHz band

Project Time Lines



Result of the Auction (23rd 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 showcased 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

Issue Faced and Approach Adopted

- Due to three failures, no one believed it could happen
- Continuous Media Focus and at times misreporting
- Issues raised by different standing committees
- Entire focus was on upfront money
- Imposition of 10% Advance Tax
- Remedial Measures:
 - Extensive Consultations
 - Media Engagement
 - Frequent Appearance in the Supreme Court of Pakistan
 - Meetings with Politicians from different parties

Immediate Post Auction Situation and Award of Licenses

- Continuous Media engagement before and after the auction
- Help and advice was also sought from Advisory groups, knowledgeable individuals
- License Award Ceremony: 22nd May 2014. Celebrated the World Telecom Day on the same date
- Prime Minister was the Chief Guest. Ambassadors from many countries attended the ceremony
- All the operators have started commercial mobile broadband services (HSPA+ and HSPA+ DC, LTE)
- Petition in the Islamabad High Court was swiftly dismissed

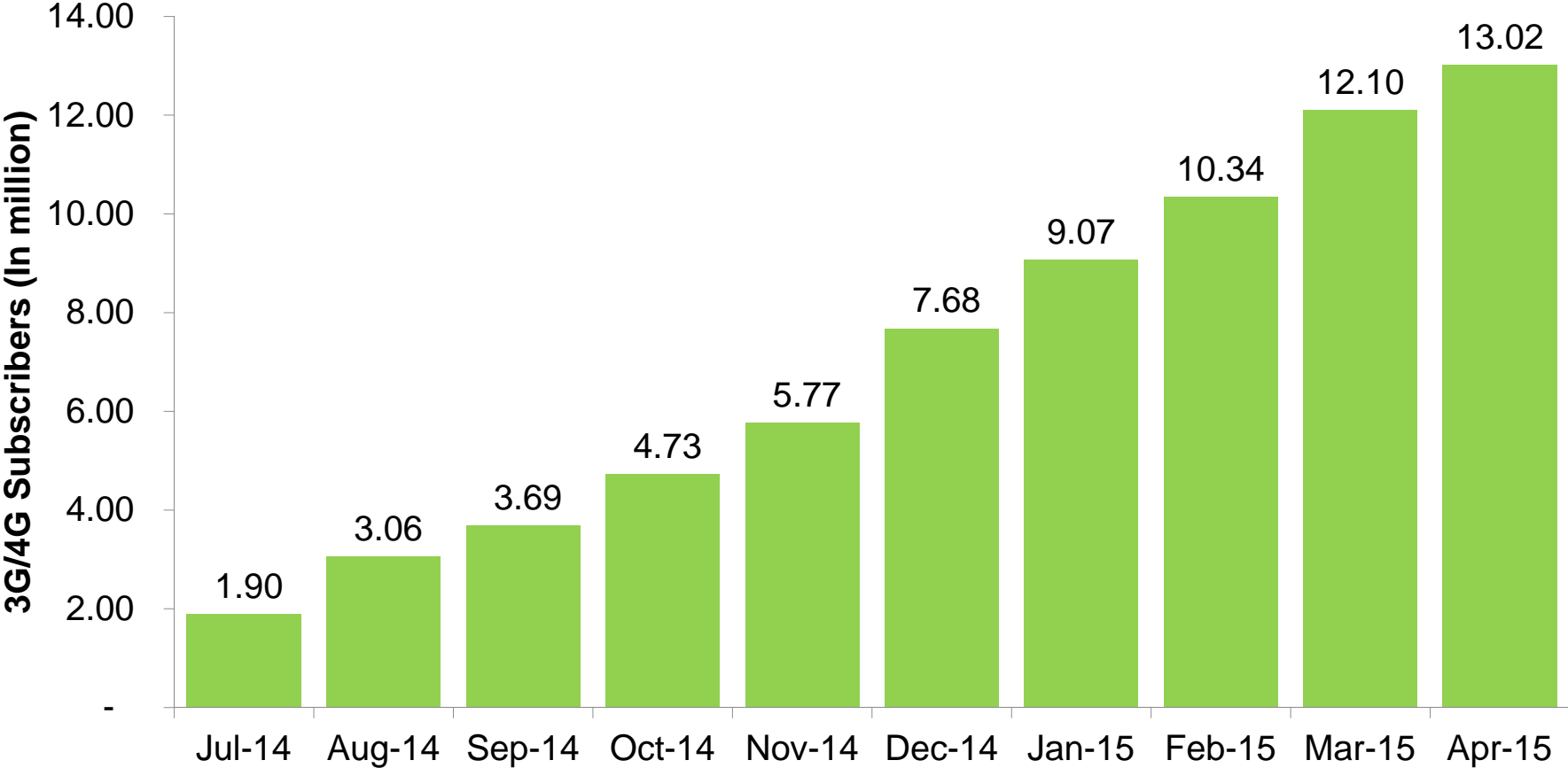




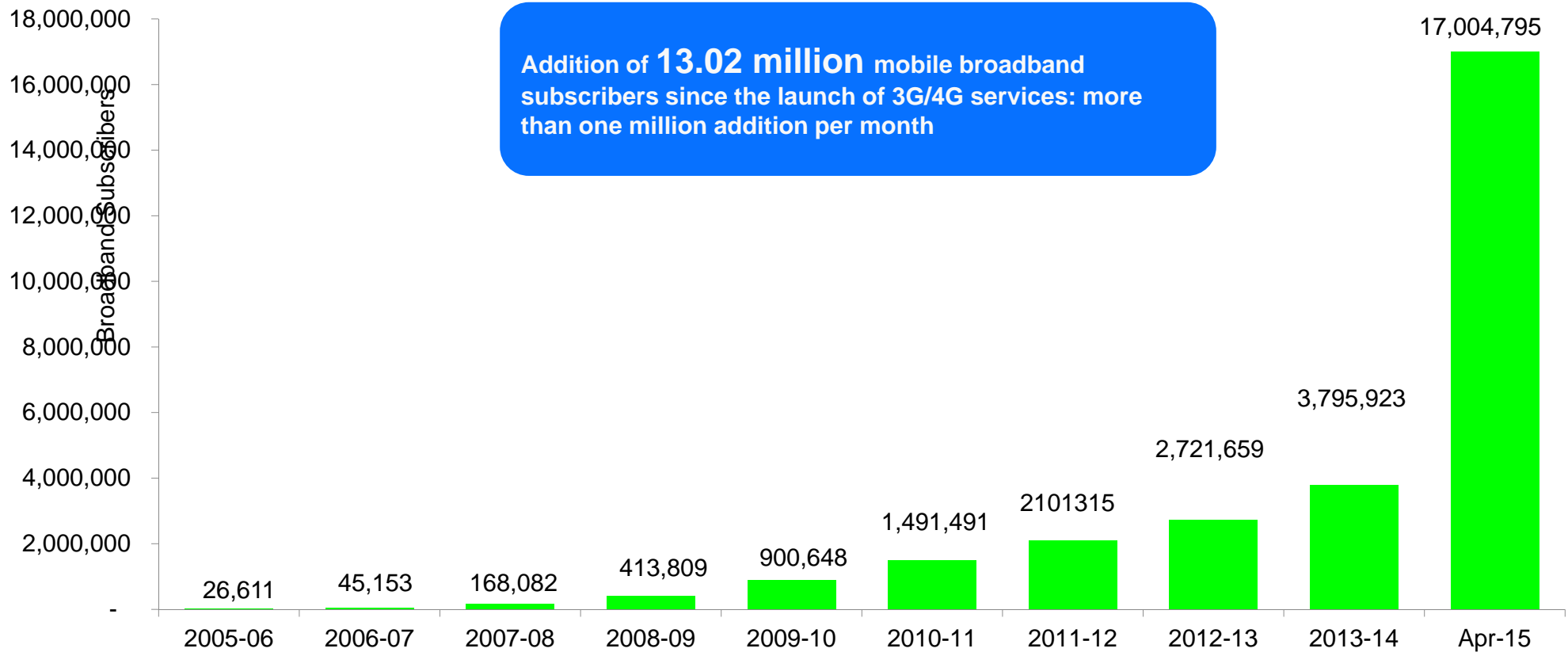
MBB comparison with other countries (December 2014)

Country	MBB Penetration	Growth Rate	SIM Penetration	Auction
Pakistan	7%	592.86%	74%	2014
Bangladesh	6%	232.26%	76%	2013 (3G)
India	11%	46.06%	74%	2011
Indonesia	34%	46.76%	122%	2006 (3G)

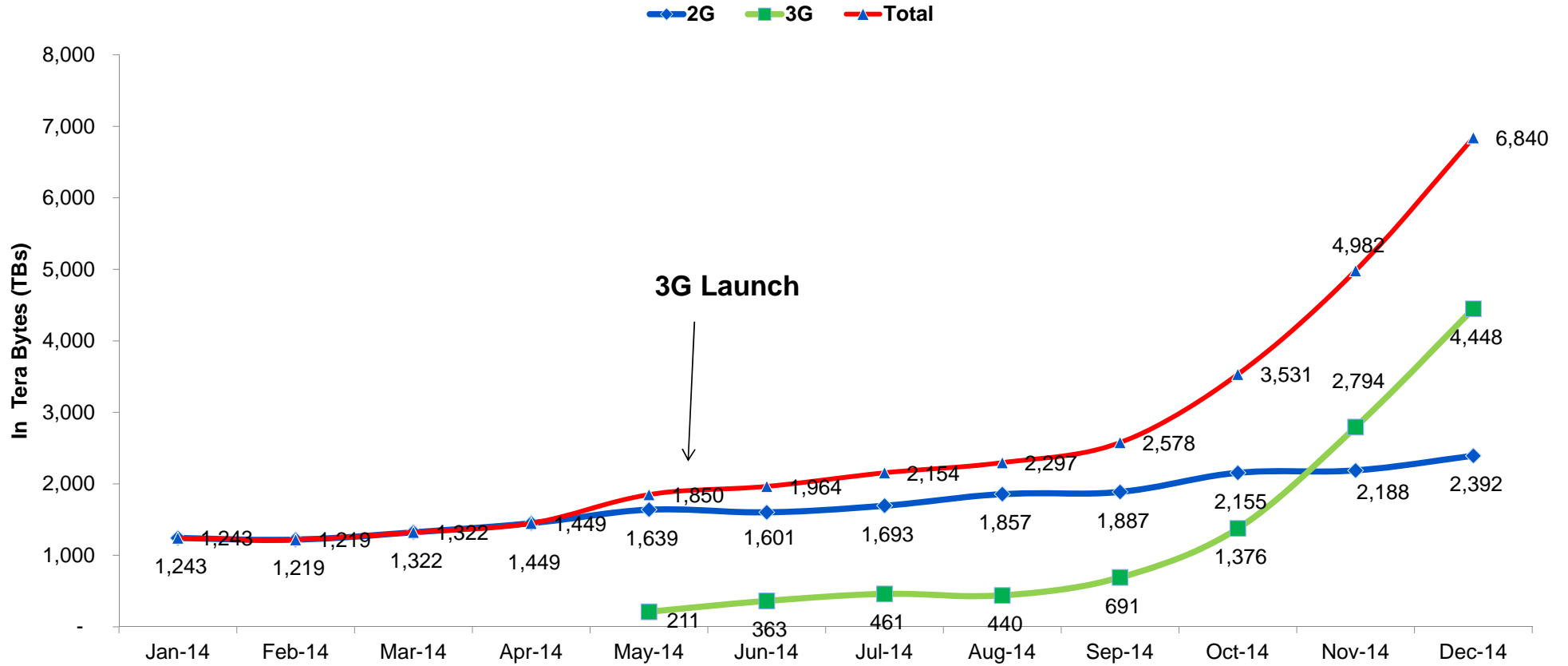
Exponential monthly growth in 3G/4G subscribers



In Pakistan: Outstanding growth in MBB after spectrum auction



Cellular Data Trends in Pakistan





20TH GLOBAL MOBILE AWARDS

The Spectrum for Mobile Broadband Award 2015 is presented to

THE GOVERNMENT OF THE ISLAMIC REPUBLIC OF PAKISTAN

This award recognises the government that demonstrates the most transparent and stable long-term spectrum policy roadmap.

3 MARCH 2015

Anne Bouverot

Anne Bouverot, Director General, GSMA

 **MINISTERIAL
PROGRAMME**

Lessons Learned

- Sealed Bid Stage turned out to be a very good idea
- Continuous Media engagement had a positive impact
- Communication and dissemination of information on the web sites, to the courts, media and all stake holders saved us from many problems during and after the auction
- Help and advice of independent Advisory groups, knowledgeable individuals was of great help
- Good working with all relevant ministries and departments. No egos. Taking stand on important issues ONLY

Lessons Learned Contd.

- 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
- Team Work (Within PTA, MoIT, MoF)

Lessons Learned Contd.

- Spectrum Auction should be held as and when needed without much hype
- After all it is just leasing of spectrum for 15 or 20 years. Why waste 8 years just thinking about it
- Developed countries have allocated far more spectrum for IMT than developing countries and are reaping the benefit of doing so
- Benefit of MBB are far greater than the upfront money
- Great value of timely decisions



Thank You

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