هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

TELECOM SECTOR INDICATORS OF THE SULTANATE OF OMAN

(5-YEARS AT A GLANCE) 2013-2017

Competition and Market Research Department

TABLE OF CONTENT

Foreword

The third edition of the Telecom Sector Indicators Report of the Sultanate of Oman presents the status of telecom sector of the Sultanate of Oman for the preceding five years from 2013 to 2017. This edition is an update of the 2nd edition, which was published in 2015 covering 5 year period from 2010 to 2014.

It is, indeed, our pleasure to present this report at the time when the world is at the crossroad of another digital revolution that will accelerate changes to business, government and society. ICT development has been considered as enabler of other sectors of economy. A number of ICT related indicators are being used to determine and compare development of individual countries by UN agencies including ITU. The data on the status of telecom infrastructure forms an important input to the international reports on ICT development. Analysis shows an overall upward trend in the availability of communication services, driven by growth in broadband, with a growing predominance of mobile over fixed services.

TRA has been publishing major telecom Indicators regularly on quarterly basis to provide important information to the operators and other interested users and entities. The Five-Year Report, which has been compiled through long process of data collection, validation and analysis, will further improve and complement the available information for better understanding the sector and to avail abundant investment opportunities in the Sultanate. This report provides comprehensive overview of fixed, mobile, broadband, and international telecom markets.

Special thanks go to the telecom service providers who have contributed and assisted in the completion of this report. We look forward for their continuous support and contribution towards further improvement of future outlook of the Telecom Sector of Oman.

Dr. Hamad Bin Salem Al-Rawahi

Executive President

Disclaimer

The TRA has tried its best to ensure accuracy of the information provided in this report. However, TRA shall not be liable for any loss, damage, cost or expense whether direct, indirect, or consequential, incurred by, or arising by reasons of, any person using or relying on this information and whether caused by reason of any inaccuracy, error, omission or misinterpretation or otherwise.

The users of this information are advised to perform their own due-diligence to assess accuracy and relevance of the information and use it at their own responsibility.

I. TELECOM SECTOR CONTRIBUTION TO THE ECONOMY

I. Telecom Sector Contribution to the Economy – Introduction

The TRA regulates telecom licensees, which are Class I,II and III operating in the sector.

The contribution in terms of revenue, royalty, network and infrastructure investments cover only those of the licensees.

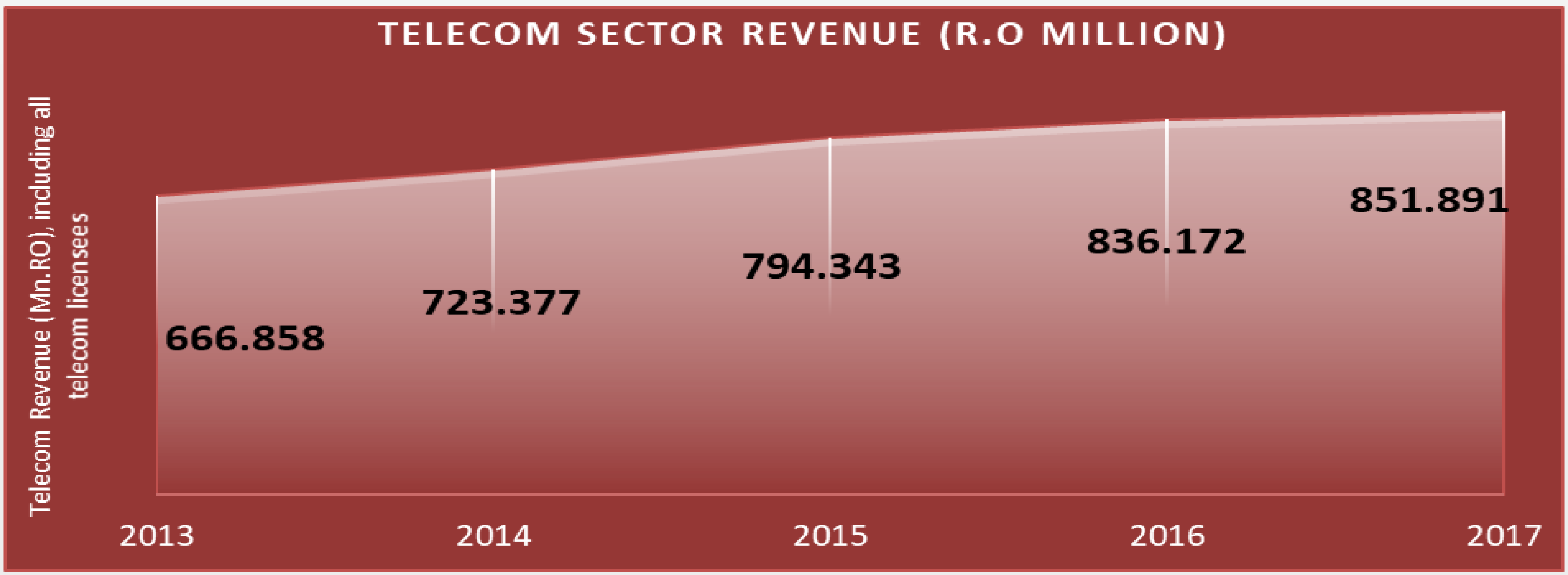
The other sector participants like telecom vendors, network and equipment providers, dealers, MoTC are not accounted for here in TRA reports.

The amount of applicable taxes is not accounted for in the contribution as it is not collected through TRA.

I. Telecom Sector Contribution to the Economy - Revenue

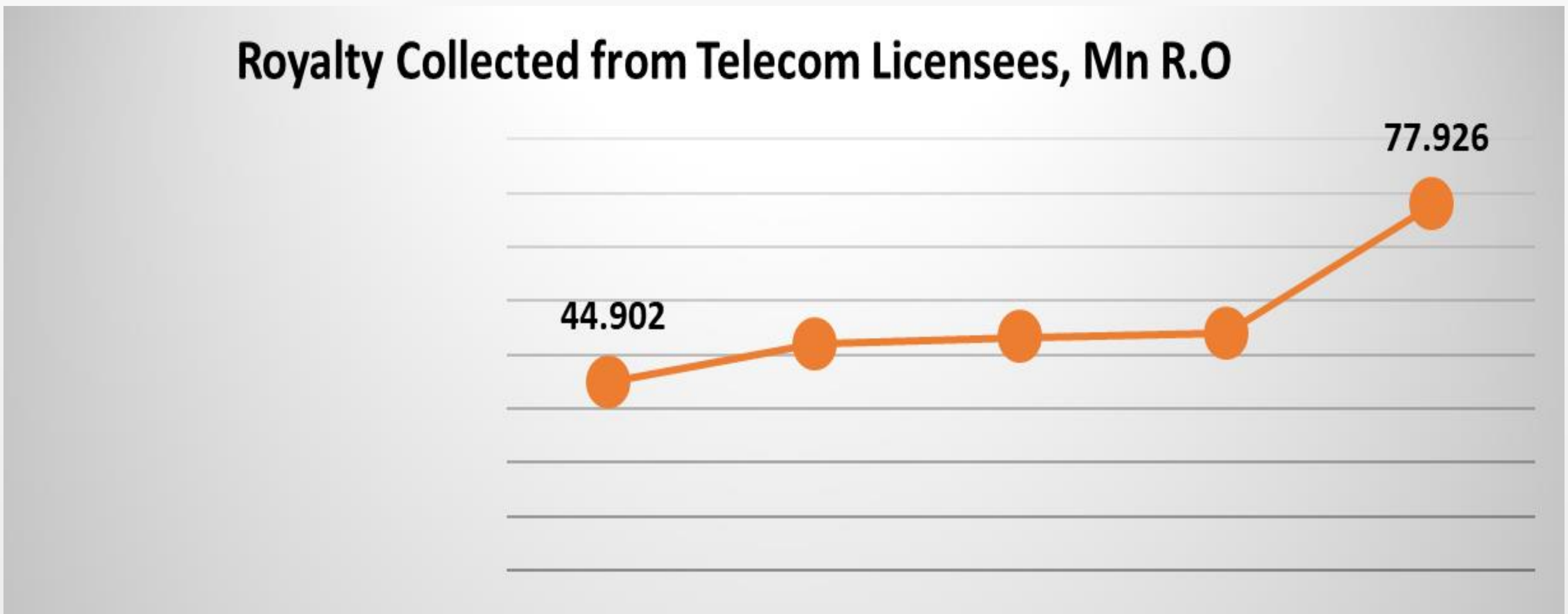
- The telecom sector revenue has registered a steady growth during the last 5 years (2013-2017) reaching R.O 851.891 million with the cumulative average growth rate (CAGR) of 6%.
- Out of the total telecom sector revenue in year 2017, 70.1% of the revenue was generated from mobile services, while 29.9% was from fixed services.

Telecom Sector Revenue by Segment	2013	2014	2015	2016	2017
% Contribution of Fixed	32.1%	32.6%	25.6%	28.2%	29.9%
% Contribution of Mobile	67.9%	67.4%	74.4%	71.8%	70.1%



I. Telecom Sector Contribution to the Economy - Royalty

- **In 2017, TRA collected total royalty of R.O 77.926 million, achieving 16% CAGR during the last 5 years from 2013-2017.**

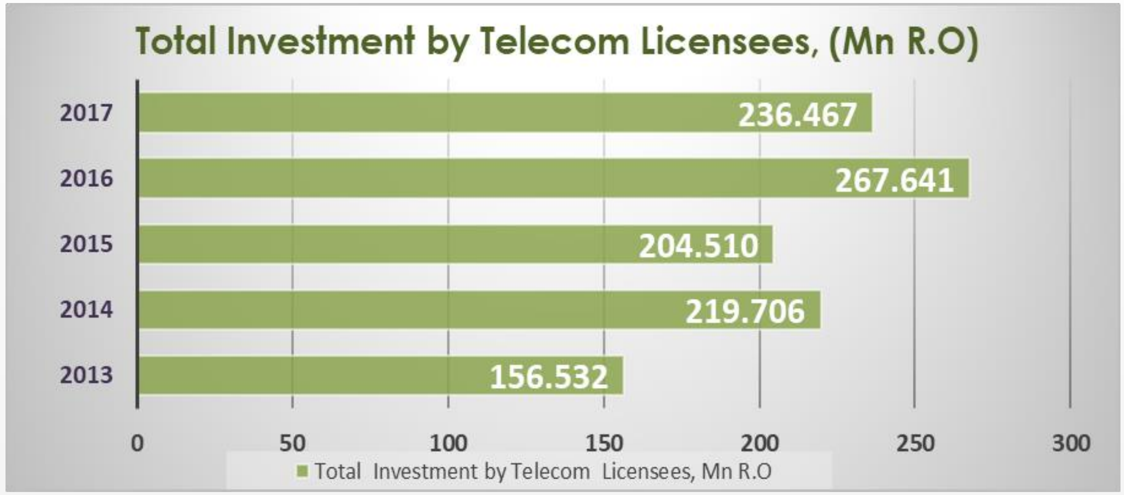


	2013	2014	2015	2016	2017
Royalty Collected from Telecom Licensees Mn R.O	44.902	51.910	53.222	53.930	77.926

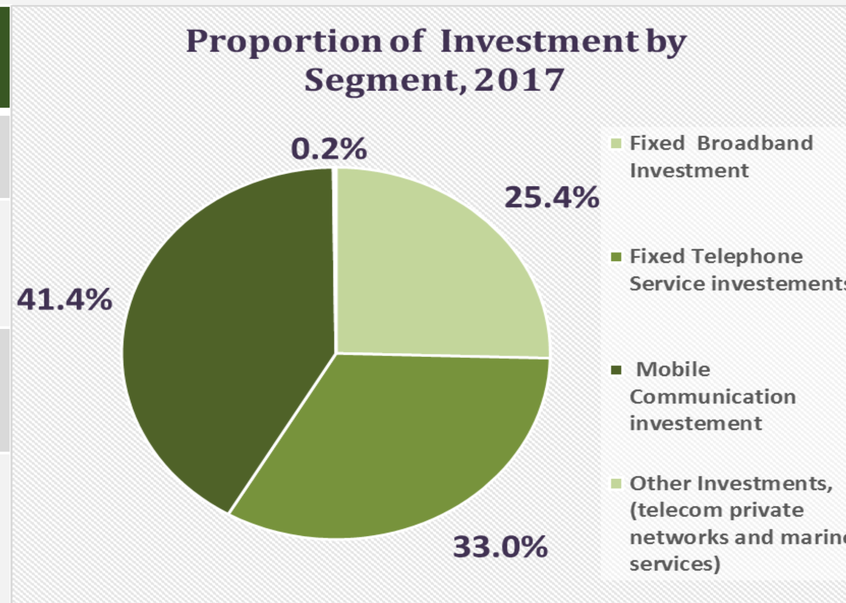
I. Telecom Sector Contribution to the Economy – Investment

During the reported period from 2013-2017, telecom service licensees invested R.O 236.467 million with CAGR of 13.3%:

- **41.4% in mobile services**
- **33.0% in fixed services**
- **25.4% in fixed broadband**
- **0.2% in other telecom services**



Telecom Service Investments[1]	2013	2014	2015	2016	2017
Fixed Broadband Investments	5.4%	8.4%	4.1%	16.5%	25.4%
Fixed Telephone Service Investments	25.4%	29.5%	26.7%	28.8%	33.0%
Mobile Communication Investments	69.2%	62.1%	69.2%	48.7%	41.4%
Others (telecom private networks and marine services)	-	-	-	6.0%	0.2%

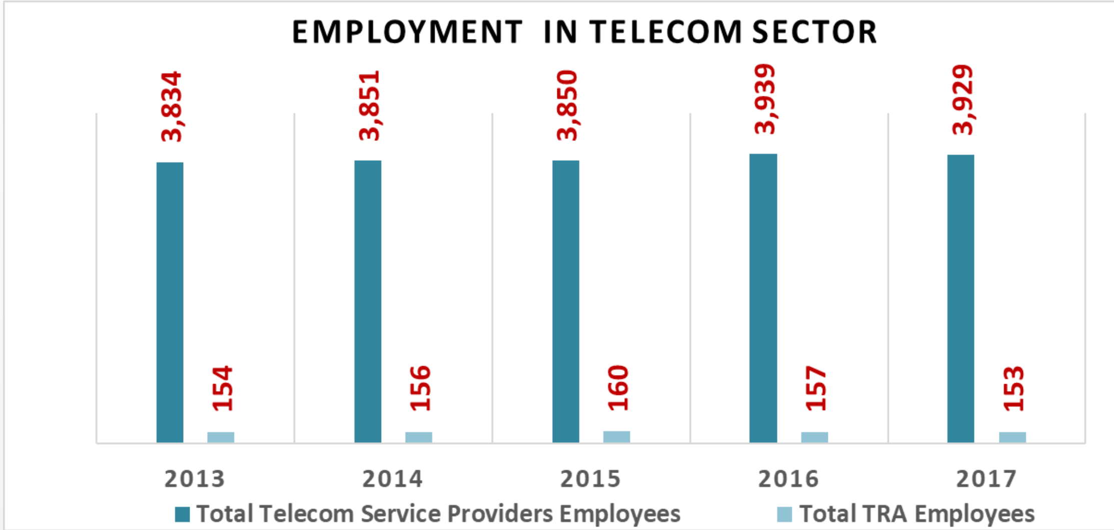


[1]The above figures relates to only Telecom Licensees

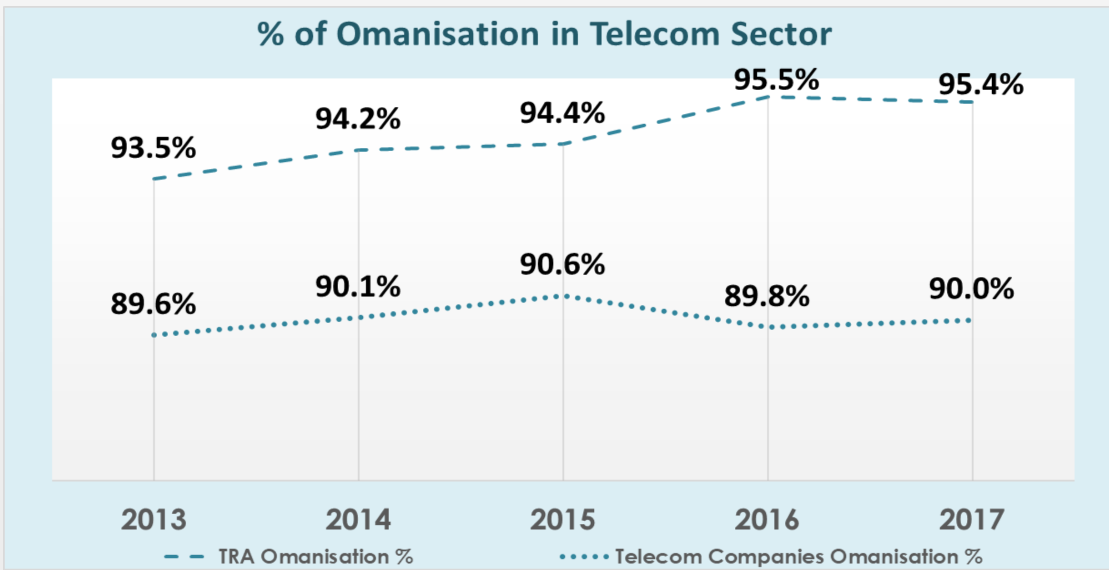
I. Telecom Sector Contribution to the Economy - Employment

By Year 2017, telecom sector contributed to the country's labor force by :

- 3,929 employees by telecom service providers; with 90% Omanisation.
- 153 employees by TRA; with 95% Omanisation.



Telecom Staff[1]	2017
Telecom Service Providers Employees Distribution:	
Male Staff	75.9%
Female Staff	24.1%
Omani Staff	90.1%
Expat Staff	9.9%



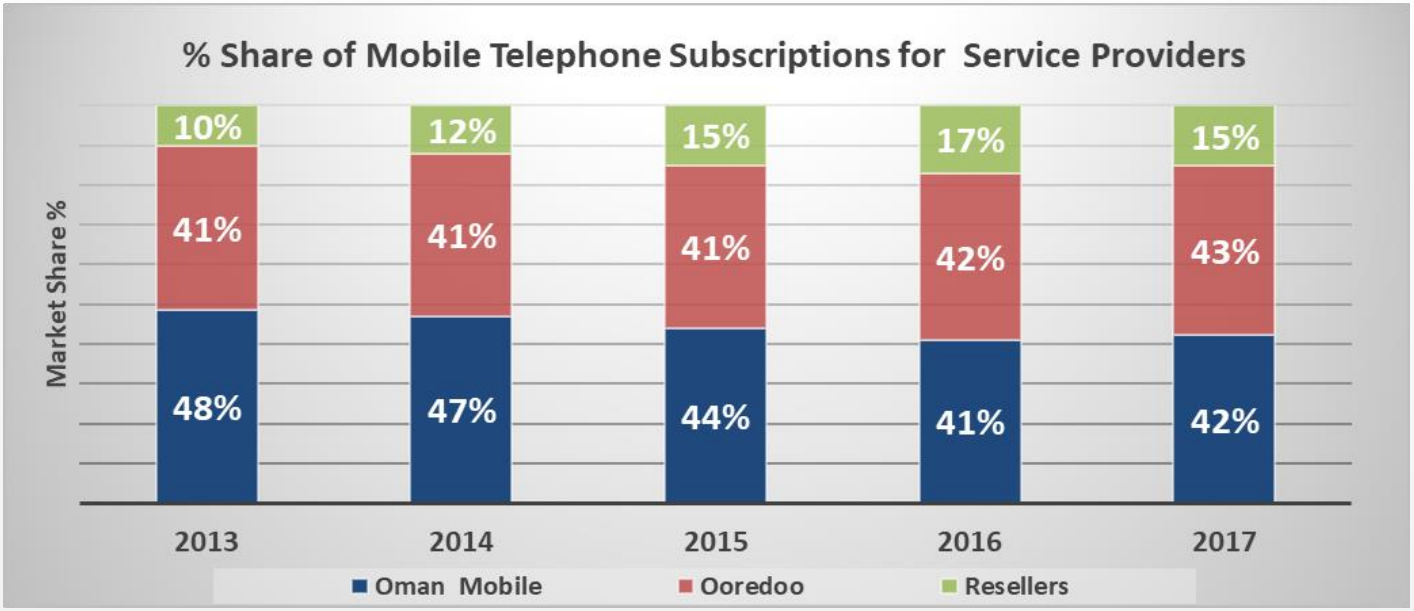
[1]The above figures relates to only Licensees & TRA

II. MOBILE TELECOM MARKET

II. Mobile Telecom Market – Evolution of Competition in the Mobile Market

- Omantel was issued the first mobile service provider (Class I) license in Oman in 2004.
- The competition in the mobile telecom market was introduced in 2005 issuing the 2nd Cellular Mobile License to the Omani Qatari Telecommunications Company (Ooredoo) in 2005.
- Competition was further enhanced in 2009 by issuing three mobile reseller licenses (Renna, Friendi and Mazoon).
- In year 2010 two more mobile reseller licenses were issued to Injaz Telecom and Samatel (Teo) further increasing competition in the mobile segment.
- The competition in mobile segment boosted penetration rates reaching 150% per 100 inhabitant.
- Some consolidation took place in the mobile segment and by end 2017, there remained two mobile operators (Omantel and Ooredoo), and two mobile resellers (Friendi and Renna) in the market with their respective market share of 85% and 15%.

II. Mobile Telecom Market – Summary of Mobile Market



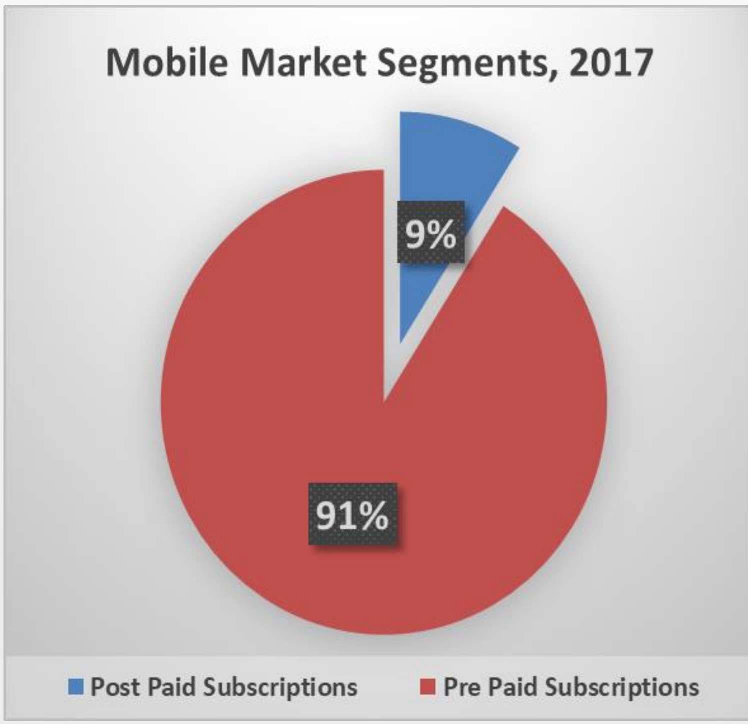
Mobile Indicators	2017
Total Mobile Subscriptions	6,943,910
Mobile Penetration Rate / Inhabitants [1]	152.3%
Mobile Revenue (Mn R.O)	597.059
Mobile Domestic Outgoing Voice minutes (Mn)	4,350
Average Monthly Revenue per Subscription , R.O	7.2
Service Providers	Omantel, Ooredoo, Friendi, Renna

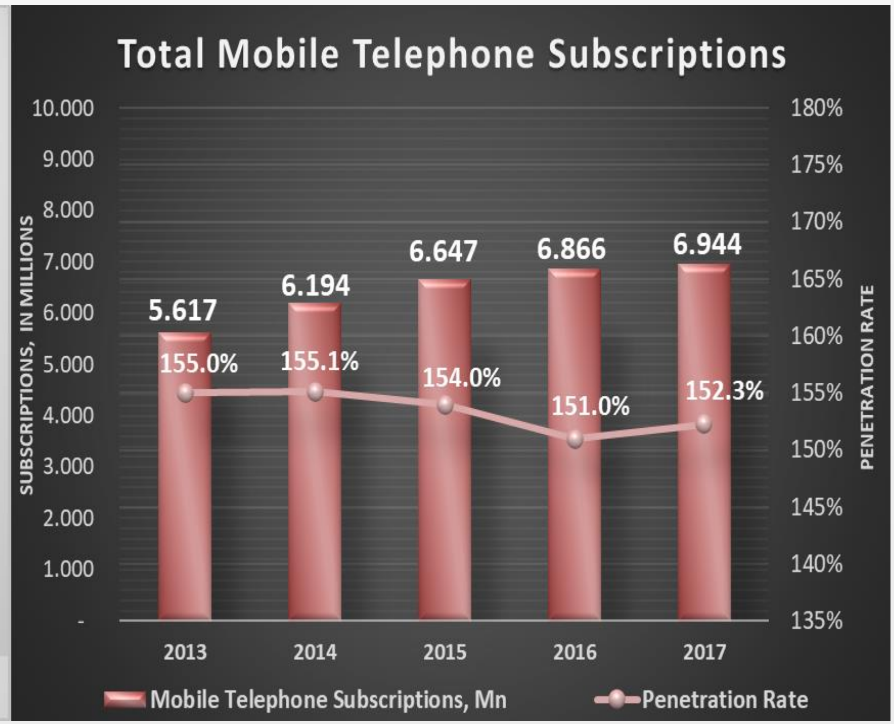
[1] The penetration rates are calculated based on the published population by the NCSI for each year. For 2017 Penetration, population taken is for the mid - year 2017: (4,559,963).

II. Mobile Telecom Market – Mobile Telephone Subscriptions

- During the last five years, the mobile telephone subscriptions accumulative average growth rate (CAGR) was 6%, reaching total of 6,943,910 subscriptions by end of year 2017.

- Mobile penetration rate per 100 inhabitant declined during the last 5 years from 155% in 2013 to 152.3% by end of 2017 due to the growth of population.

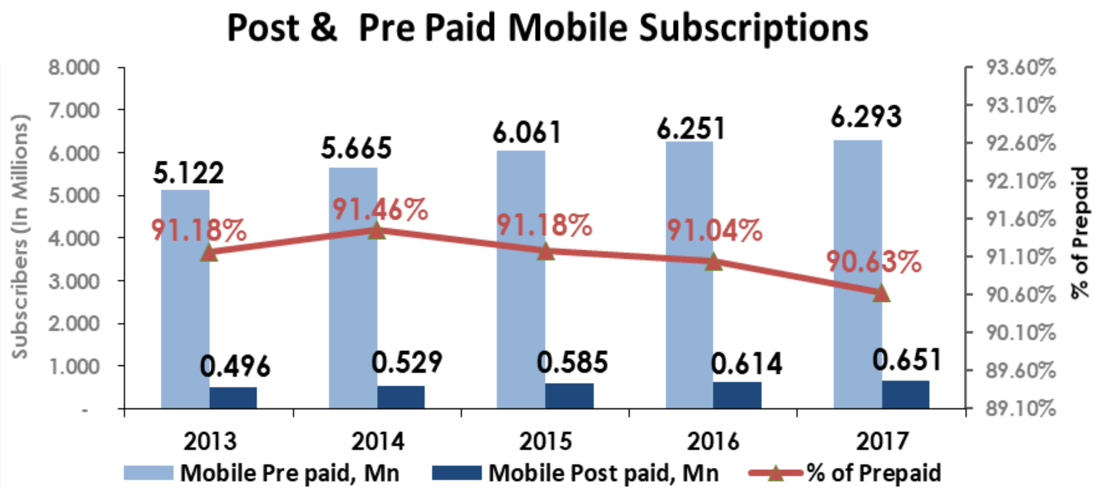


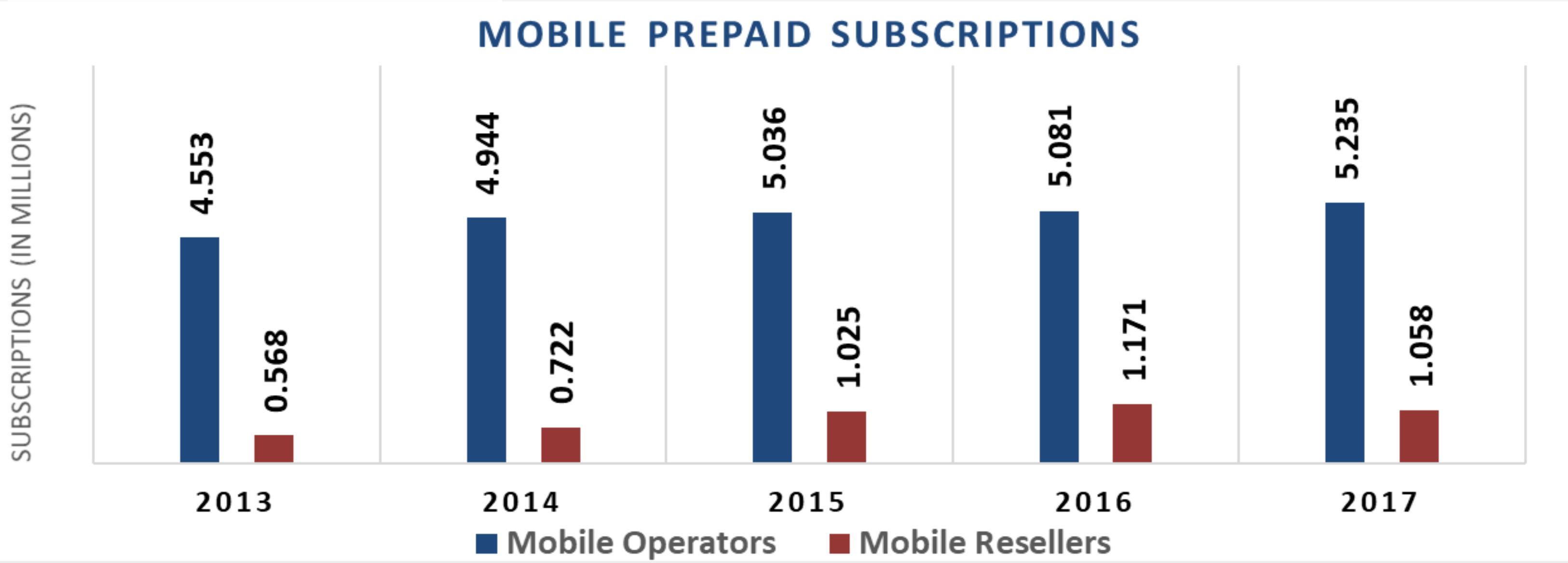


II. Mobile Telecom Market – Pre & Post Paid Mobile Telephone Subscriptions

During year 2017:

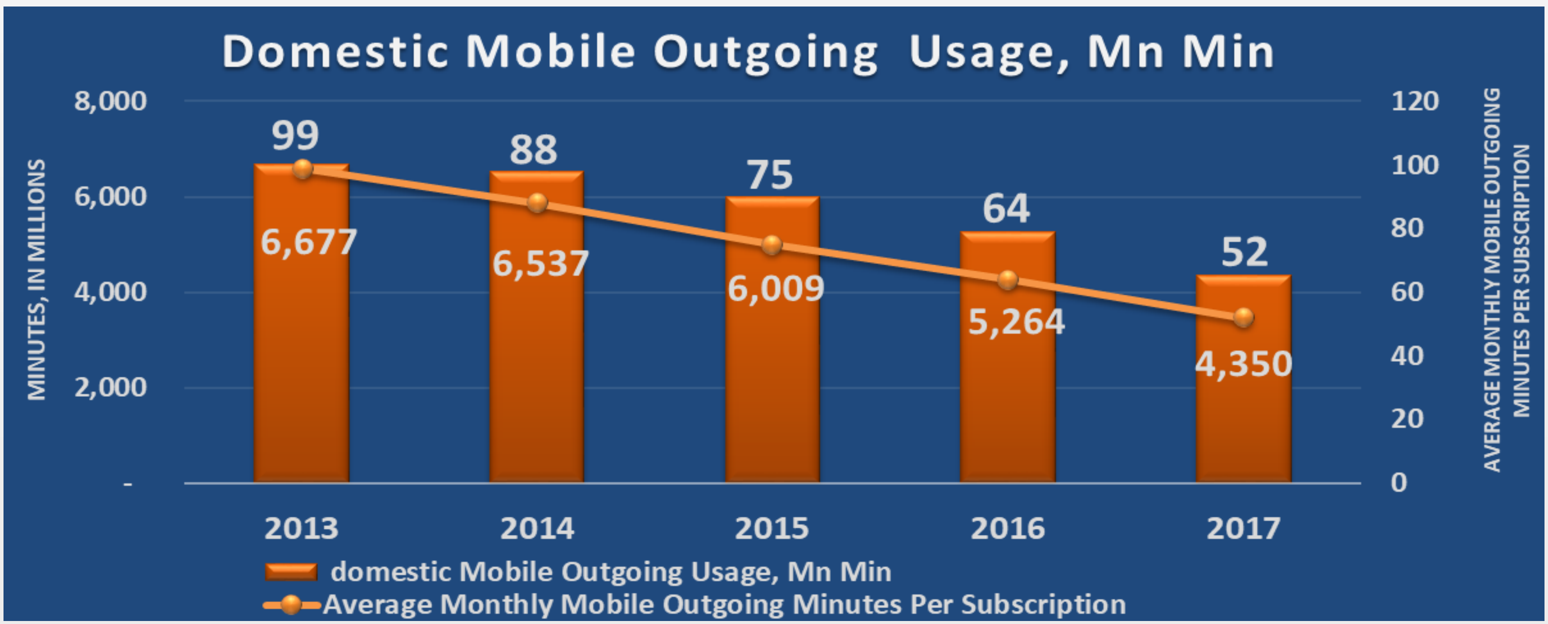
- Mobile postpaid subscriptions increased by 6%, while prepaid subscriptions increased by 0.7%.
- Mobile operators owned almost 83.2% of total mobile prepaid subscriptions; leaving 16.8% share to the mobile resellers.





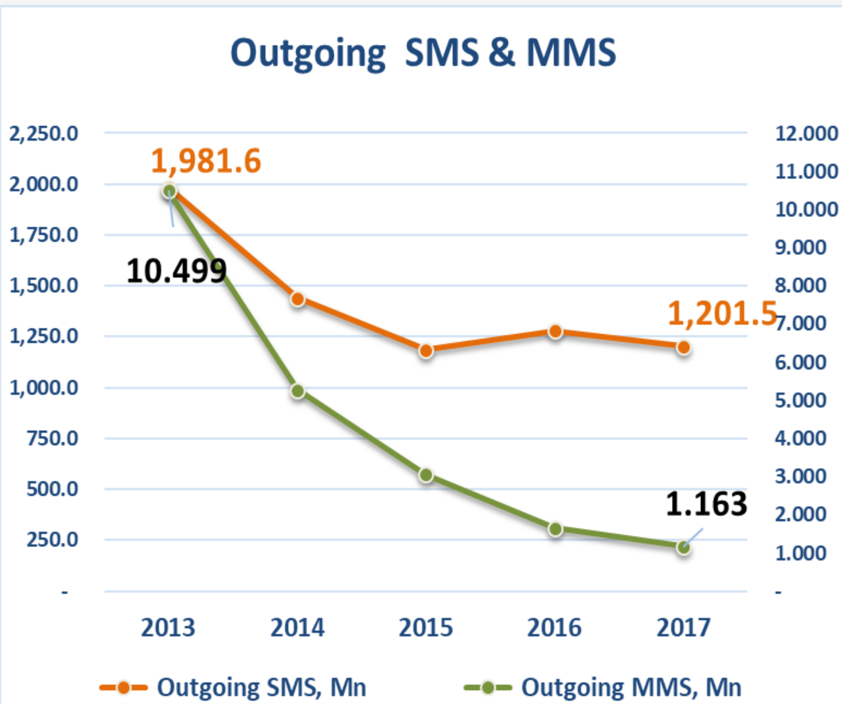
II. Mobile Telecom Market – Mobile Telephone Usage

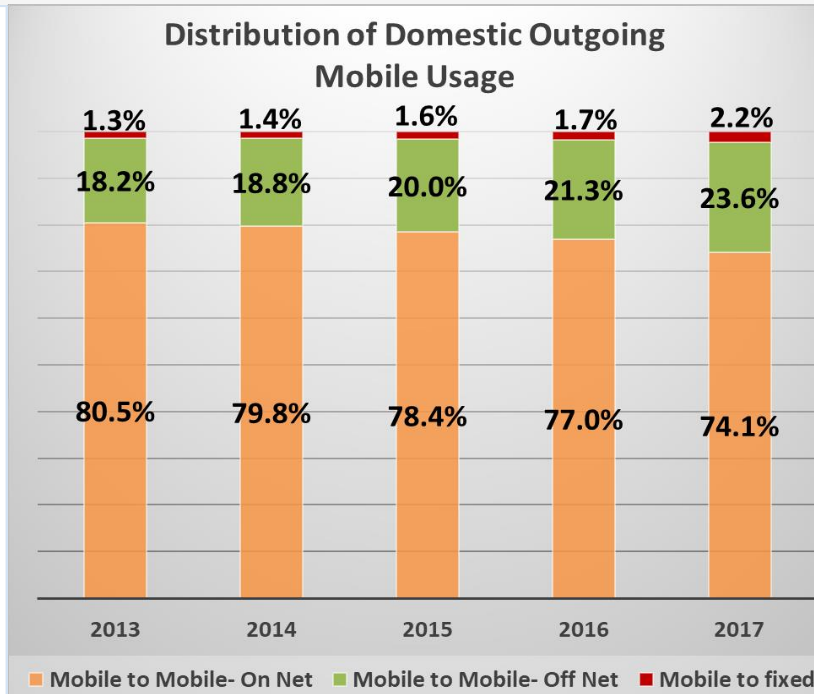
- Mobile domestic usage was continuously declining during the last 5 years. This is an international trend due to the rapid growth of Over-The-Top OTT applications (E.g: WhatsApp, and other popular calling and messaging apps).
- In the year 2017 alone, there was a 17% drop in total minutes of mobile domestic usage comparing with the previous year which resulted in 19% drop in average monthly usage per mobile subscription.



II. Mobile Telecom Market - Distribution of Mobile Telephone Domestic Usage

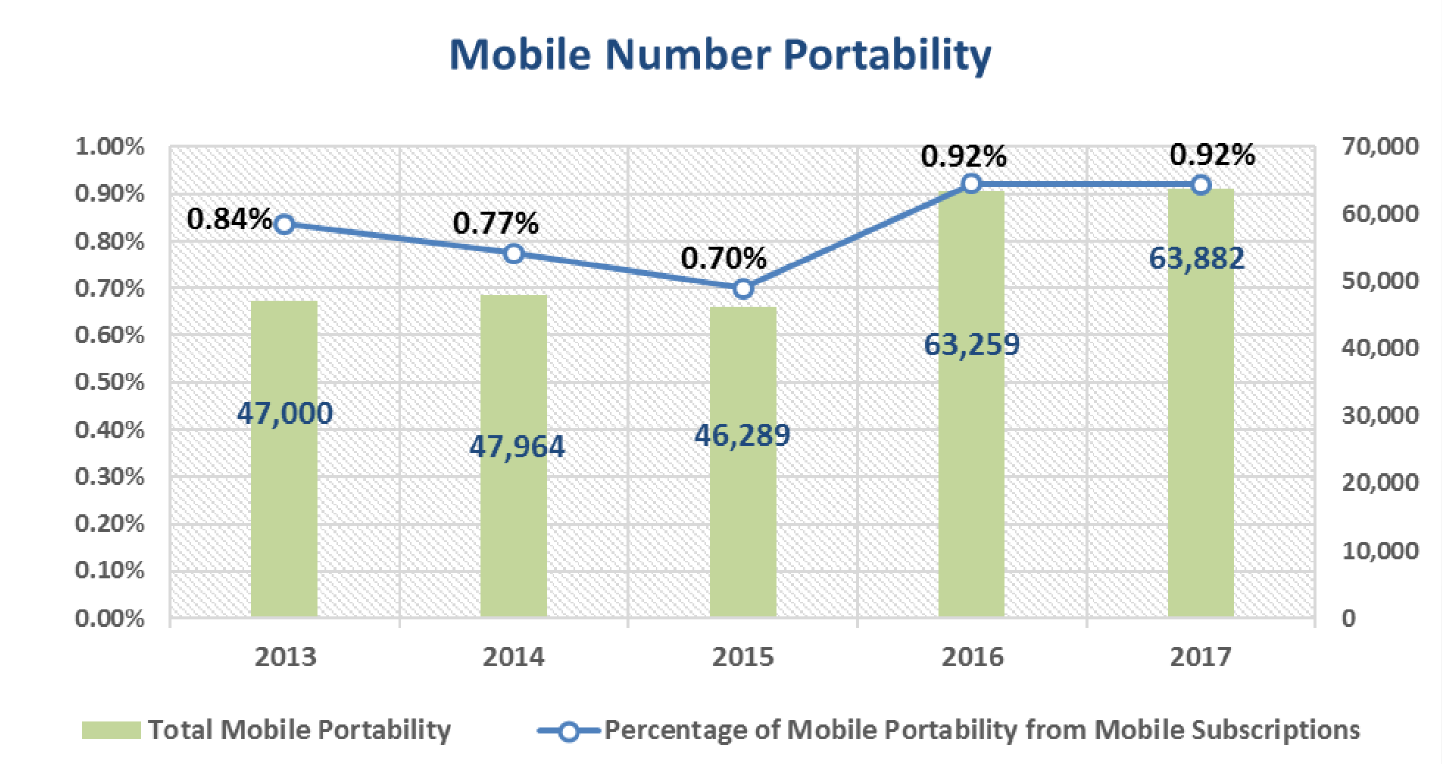
- The On-net calls share declined from 80.5% in 2013 to 74.1% in 2017.
- On the other hand, (Off- net) Usage increased during the same period. This appears to be the result of flat rate plans offered by Service Providers.
- In parallel to the overall trend in the Mobile Usage, the amount of text messages SMS & MMS used were shrinking over the last 5 years by 39% and 89% respectively mainly due to Over-The-Top (OTT) apps.





II. Mobile Telecom Market – Mobile Number Portability

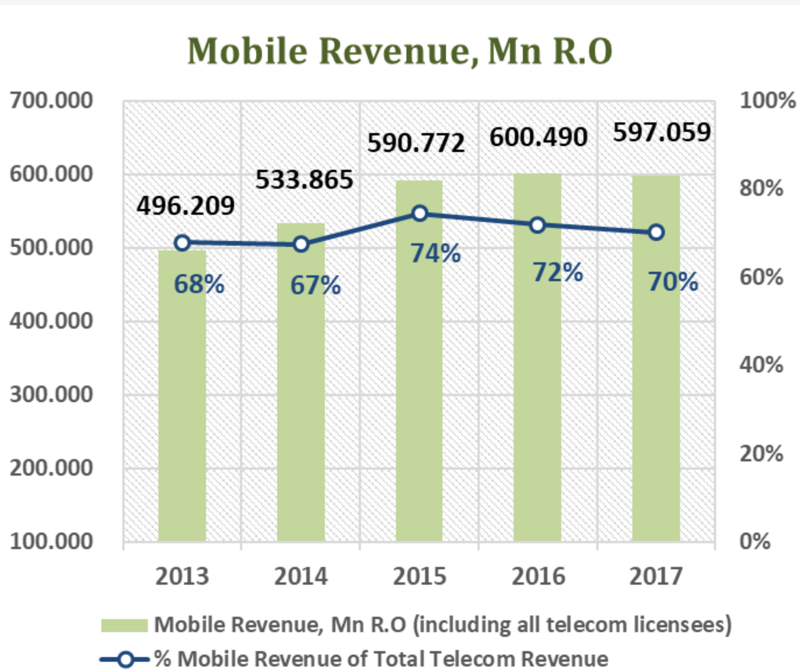
- Mobile users are able to maintain their original numbers while switching among service providers. During the 5 years period, the proportion of mobile numbers ported were between 0.7% to 0.9% .
- By the end of year 2017 total numbers ported stood at 63,882 mobile number.

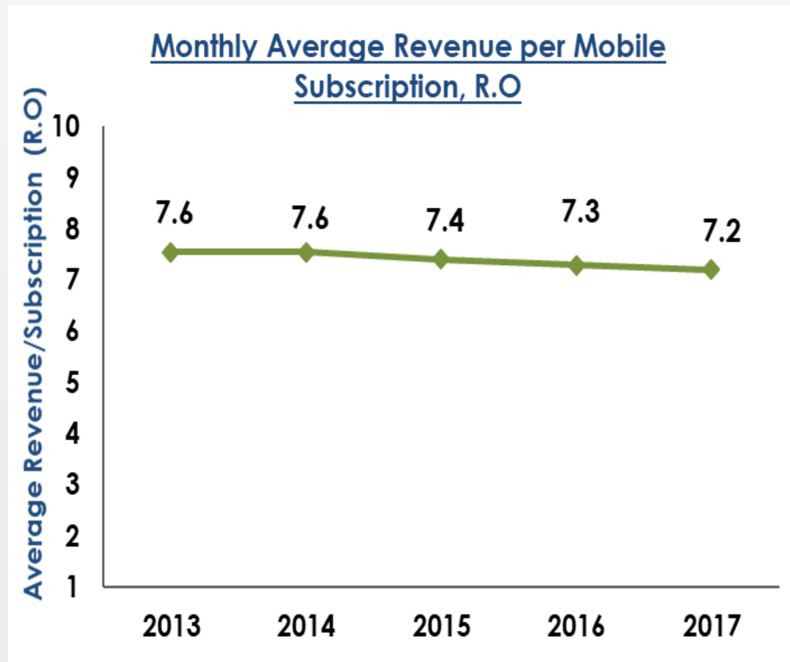


II. Mobile Telecom Market – Mobile Telephone Revenue

The revenue from the mobile segment has steadily grown, however, the monthly average revenue per subscription has slightly declined over the 5 years period.

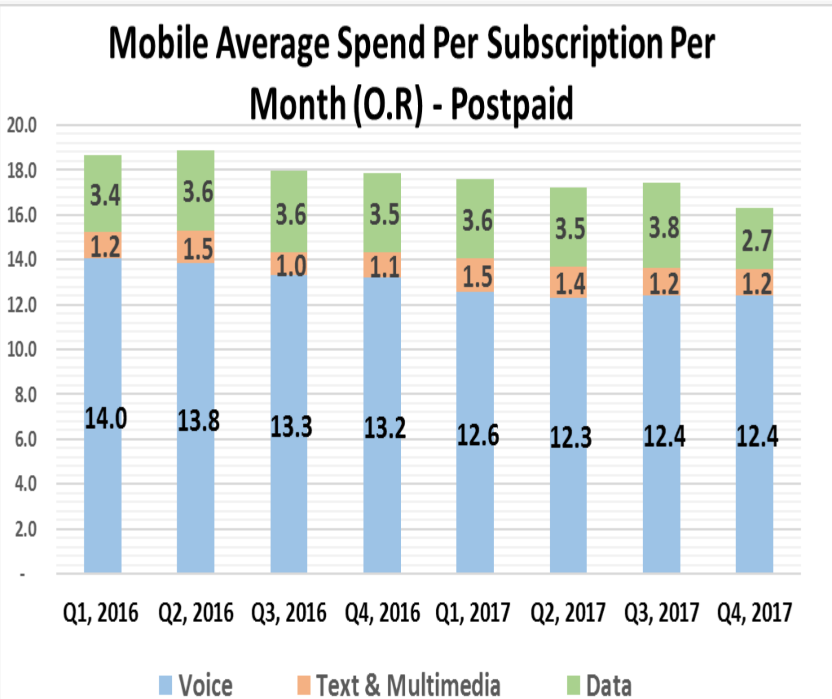
	2013	2014	2015	2016	2017
Mobile Revenue, Mn R.O (including all Telecom Licensees)	496.209	533.865	590.772	600.490	597.059
% Mobile Revenue of Total Telecom Revenue	68%	67%	74%	72%	70%
Mobile Average Monthly Revenue per Subscription, R.O	7.6	7.6	7.4	7.3	7.2

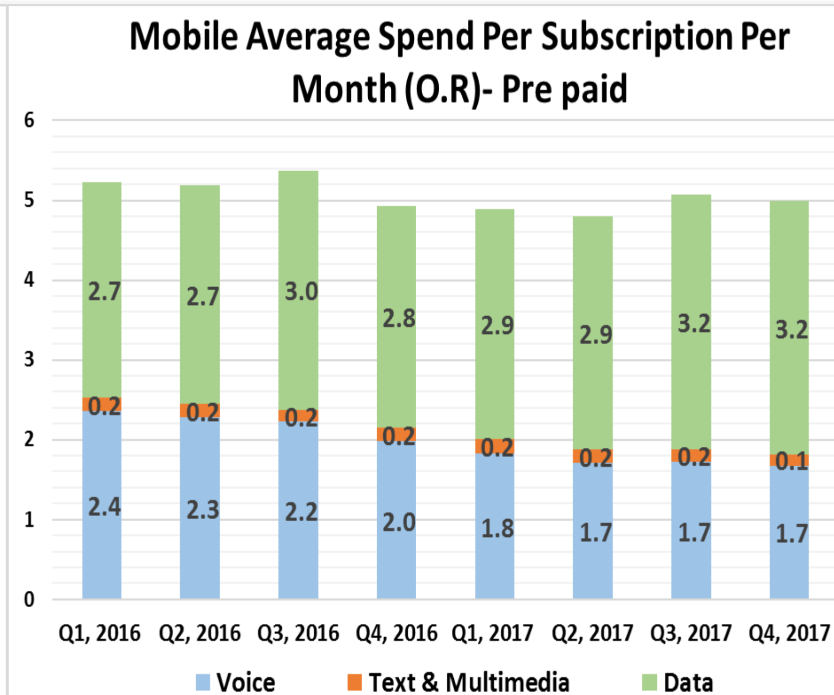




Comparing Q4,2017 to the same quarter in 2016:

- **Average spend of postpaid subscription (voice, text, data) dropped by 9%.**
- **Average spend of prepaid subscription (voice, text, data) increased by 1.2%.**
- **Prepaid subscription spend choice of voice, text and data changed from spending more on voice towards more on data.**
- **On the other hand, postpaid spend continued to be higher on voice than on data and text.**

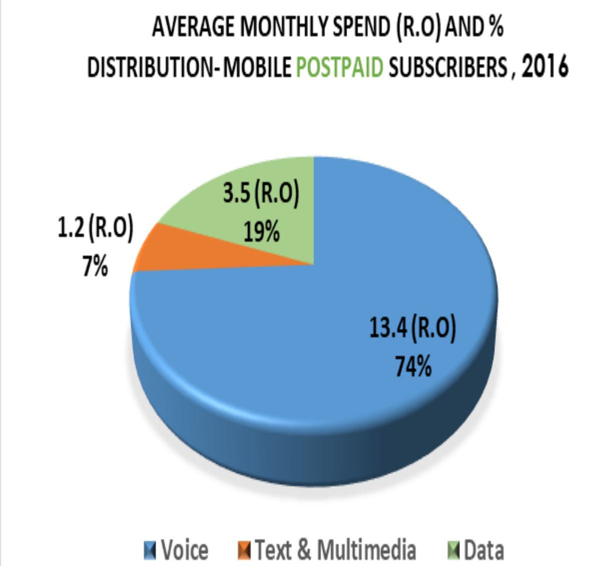


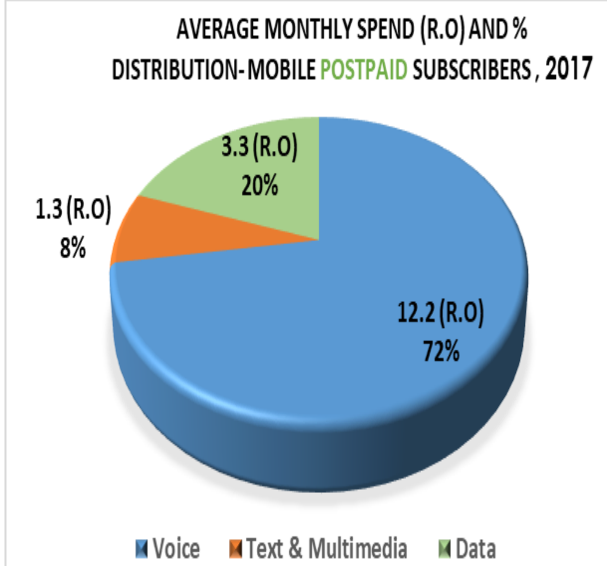


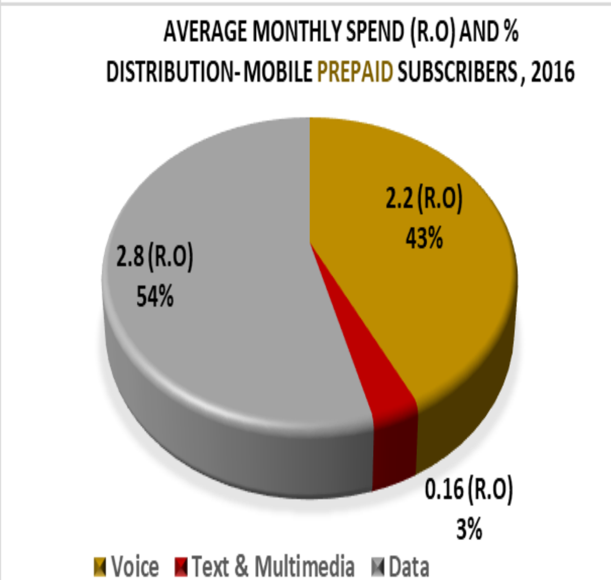
II. Mobile Telecom Market – Average Spend by Type of Mobile Subscription

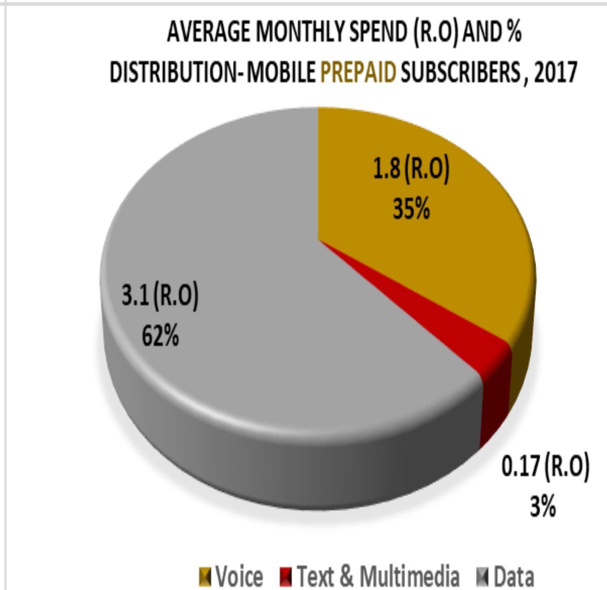
During year 2017:

- The highest spend from total mobile postpaid was on voice at 72% of the total spend .
- The highest spend on mobile prepaid was on data at 62% of the total spend.
- The portion of data spend became higher during year 2017 as compared to 2016 mainly for mobile prepaid Services – an increase of 8%.







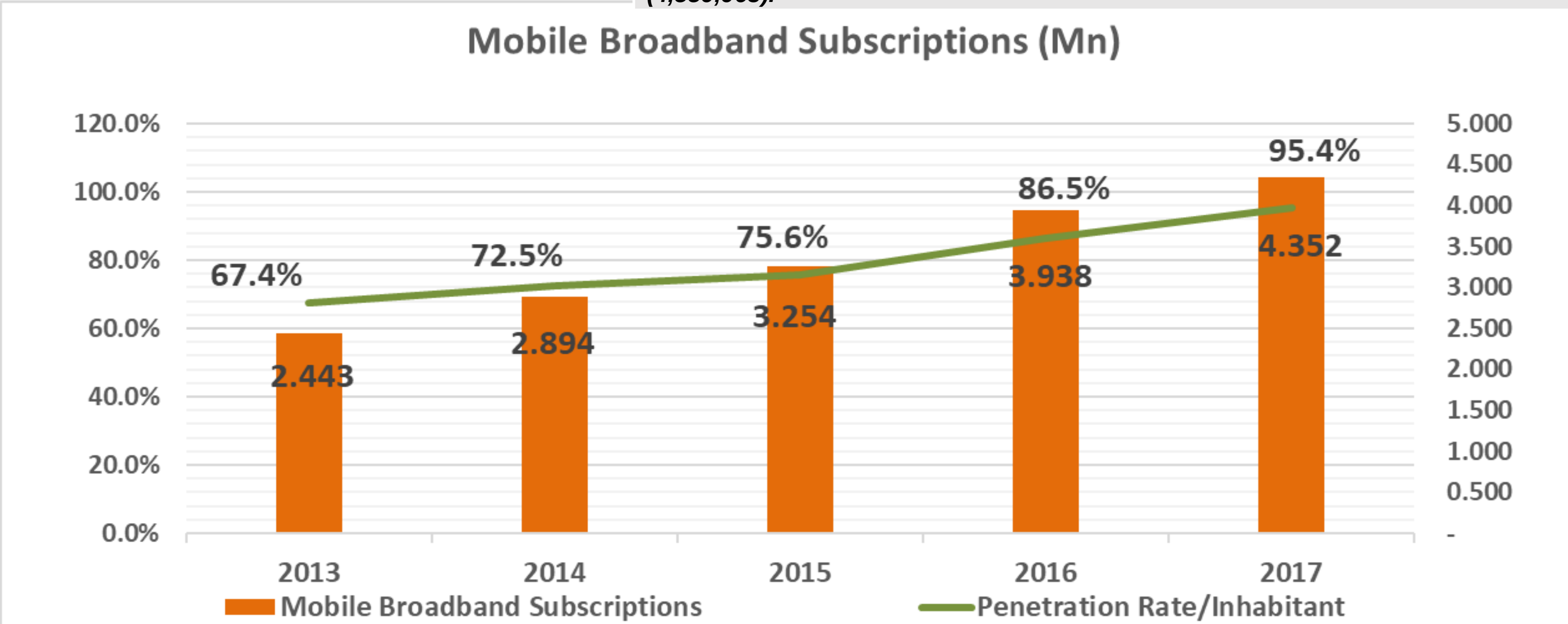


II. Mobile Telecom Market – Mobile Broadband Subscriptions

- Mobile broadband subscriptions CAGR was 16% during the last 5 years (2013-2017) reaching 4,351,583 subscriptions.
- The penetration rate reached to 95.4% per 100 inhabitant by year 2017.

Mobile Broadband as on 2017	
Subscriptions	4,351,583
Penetration Rate[1]	95.4%
Monthly Average Mobile Broadband Usage (GB) per Subscription	2.2
Average Monthly Revenue per Subscription (R.O)	5.0
Mobile Broadband Service Providers	Omantel, Ooredoo, Friendi, Renna

[1] For 2017 Penetration, population approved by NCSI is the mid - year 2017: (4,559,963).



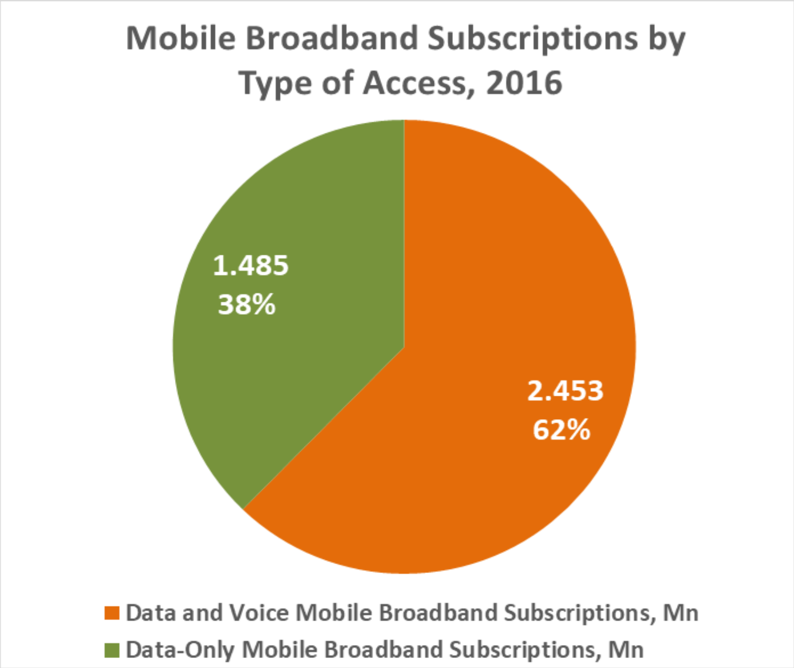
II. Mobile Telecom Market – Mobile Broadband Access by Type of subscription

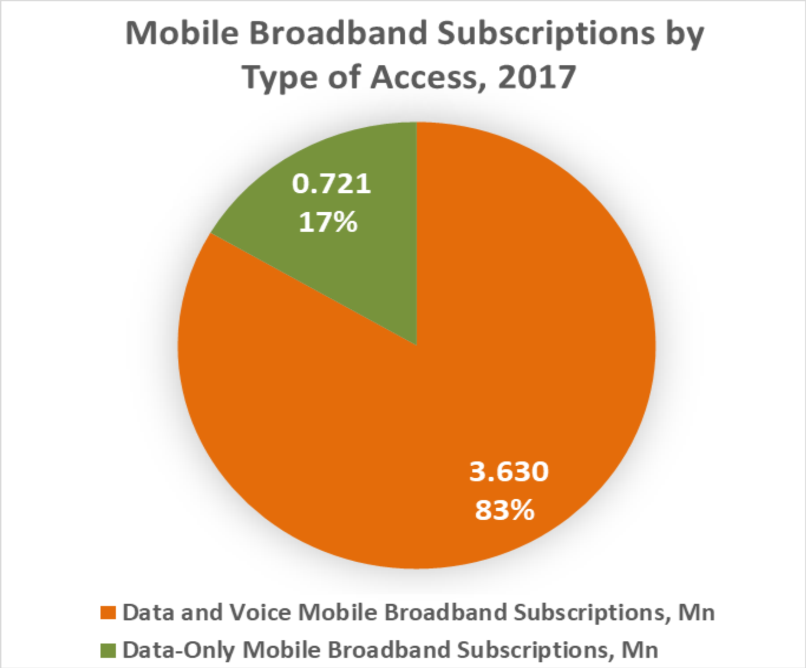
Mobile Subscriptions for Data & Voice Bundles include:

- Standard voice subscription with pay as you go data.
- Bundled voice and data subscriptions

Mobile Subscriptions for Data-Only include:

- 3G dongle/modem subscriptions
- Add-on data plan
- Pre paid data only plan using wireless modem.

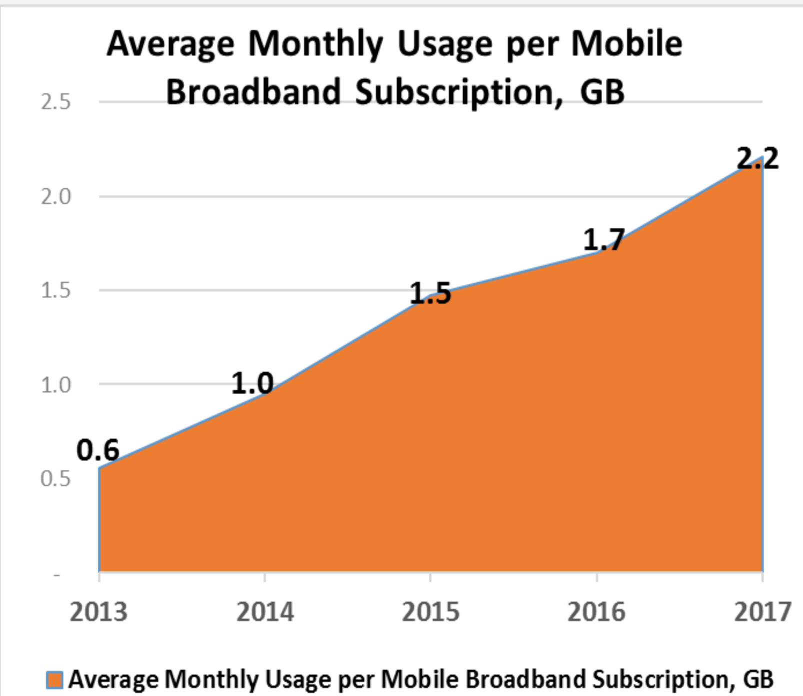


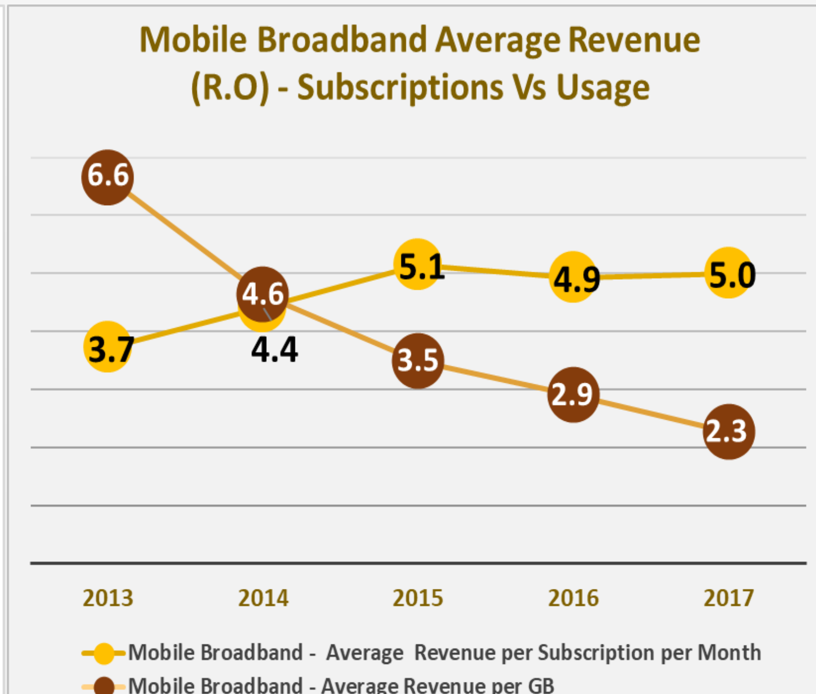


II. Mobile Telecom Market – Mobile Broadband Usage & Revenue

For the period 2013-2017:

- **Mobil broadband usage continued to grow gradually during the 5 years period reaching average of 2.2 GB per subscription per month, which is higher by 30% in 2017 compared to 2016.**
- **The average revenue per month from mobile broadband subscriptions increased by 34% during the last five years from R.O 3.700 to R.O 5.000**
- **The average revenue per GB for mobile broadband continued to decline during the same period reaching R.O 2.300 by end of 2017**



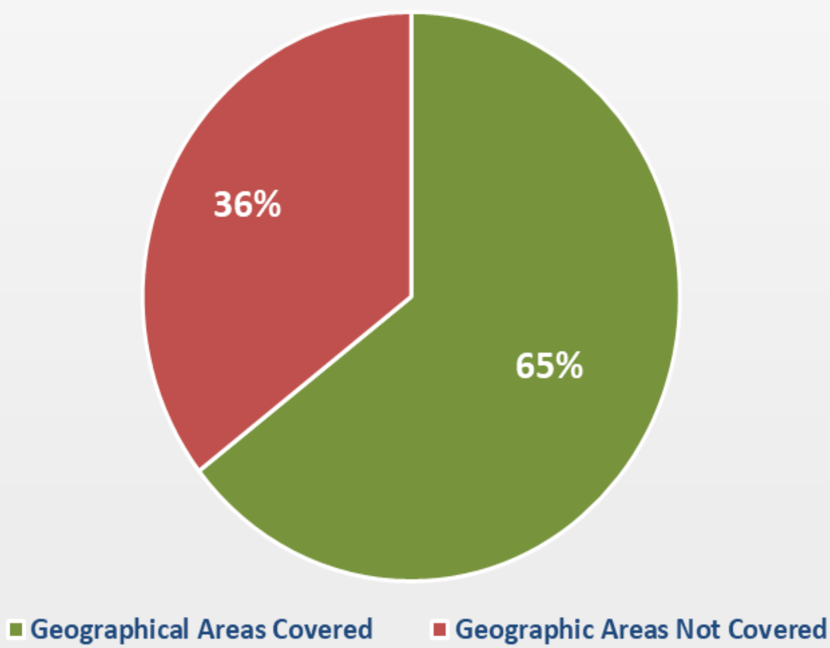


II. Mobile Telecom Market – Mobile Coverage

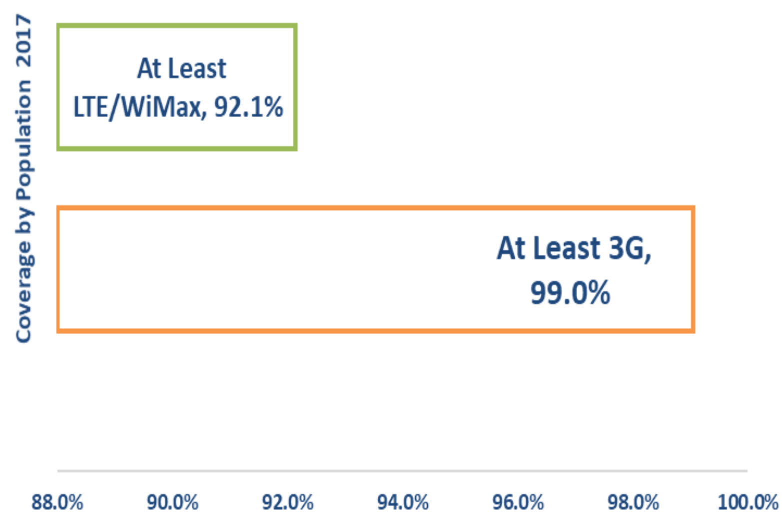
By end of 2017:

- 99% of the population was covered with at least 3G mobile network.
- 65% of total land area is covered with mobile services.

Mobile Coverage by Geographical Area ,2017



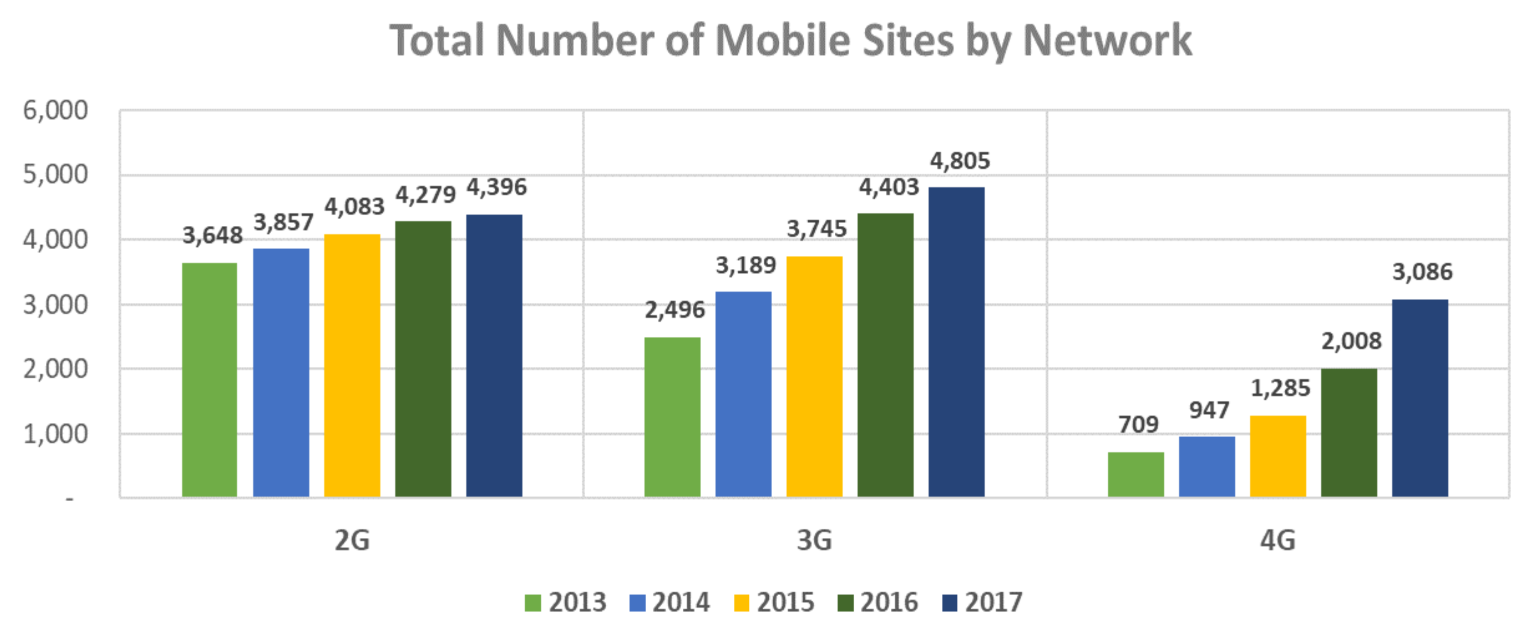
Mobile Broadband Network Coverage By Population, 2017



II. Mobile Telecom Market – Mobile Network Sites

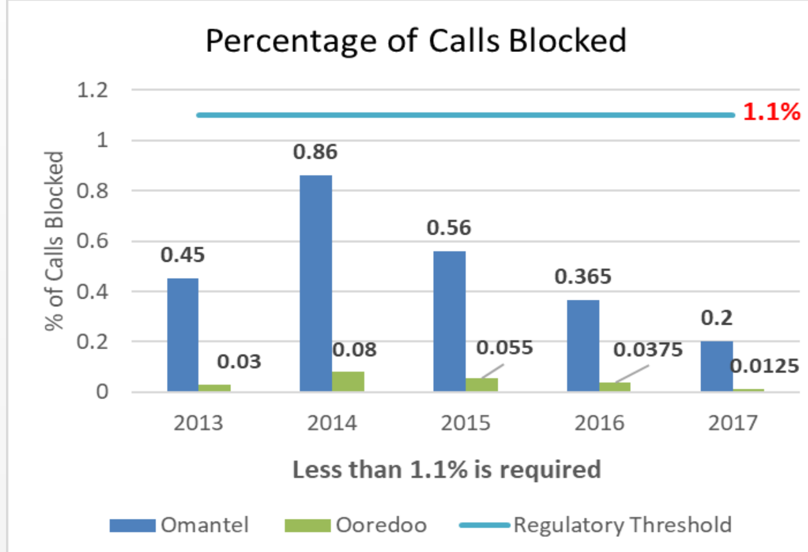
During the 5 years period, the Number of Mobile Sites increased by:

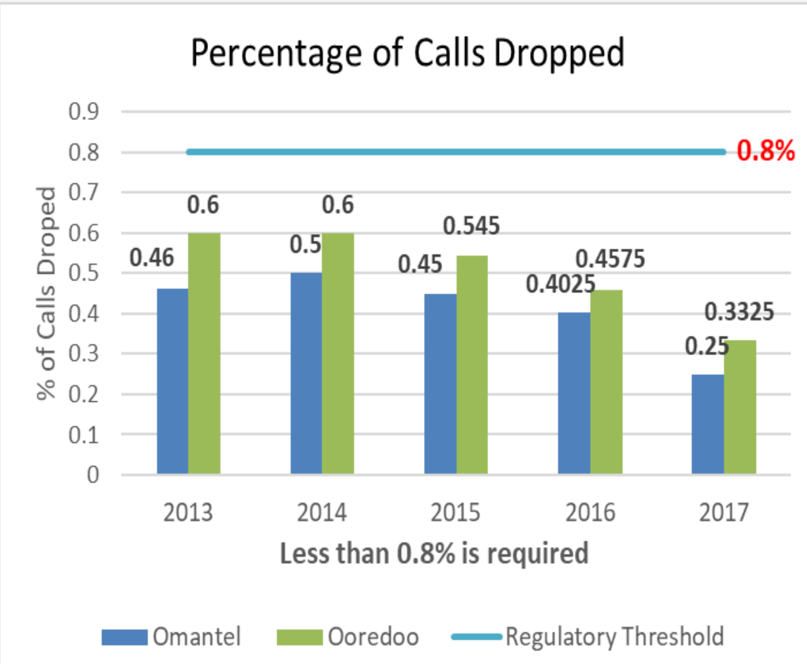
- **21% in 2G mobile sites reaching total of 4,396 sites**
- **93% in 3G mobile sites reaching total of 4,805 sites**
- **335% in 4G mobile sites reaching total of 3,086 sites**

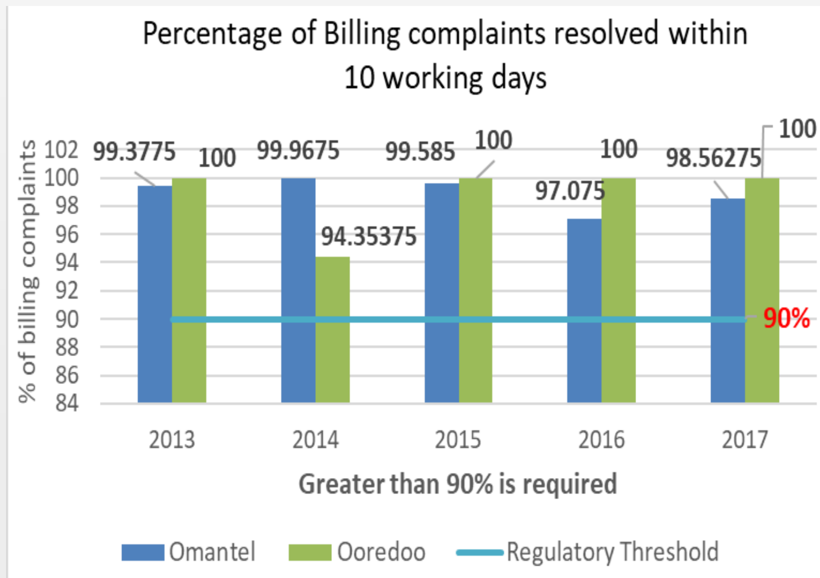


II. Mobile Telecom Market – Quality of Service

As reported by mobile operators, both Omantel and Ooredoo achieved the required KPIs in terms of percentage of calls dropped, call blocked and billing complains resolved within 10 working days over the 5 year period.







QoS indicators as per Service Providers reports.

III. FIXED TELECOM MARKET

III. Fixed Telecom Market –Evolution of Competition in the Fixed Market

Omantel continued to be the only service provider in the Fixed Telecom Market until 2010.

Competition in the Fixed Telecom Market was introduced in 2010 when Ooredoo started operating as the 2nd licensee for the fixed services.

In order to enhance the fixed broadband services, the government established Oman Broadband Company (OBC) in 2014 to provide passive infrastructure for fixed broadband services.

The competition in fixed broadband services was further enhanced when Class I license was awarded to Awasr in 2016 which is currently providing only FTTH based fixed broadband services.

Competition in the Fixed Telecom Market during the last 5 years resulted in 45% growth of fixed telephone subscriptions, and 121.4% growth of fixed internet subscriptions.

By 2017, the segment achieved 87% penetration rate per 100 household for fixed telephone subscriptions, and 60% per 100 household for fixed internet subscriptions.

III. Fixed Telecom Market – Summary of Fixed Market

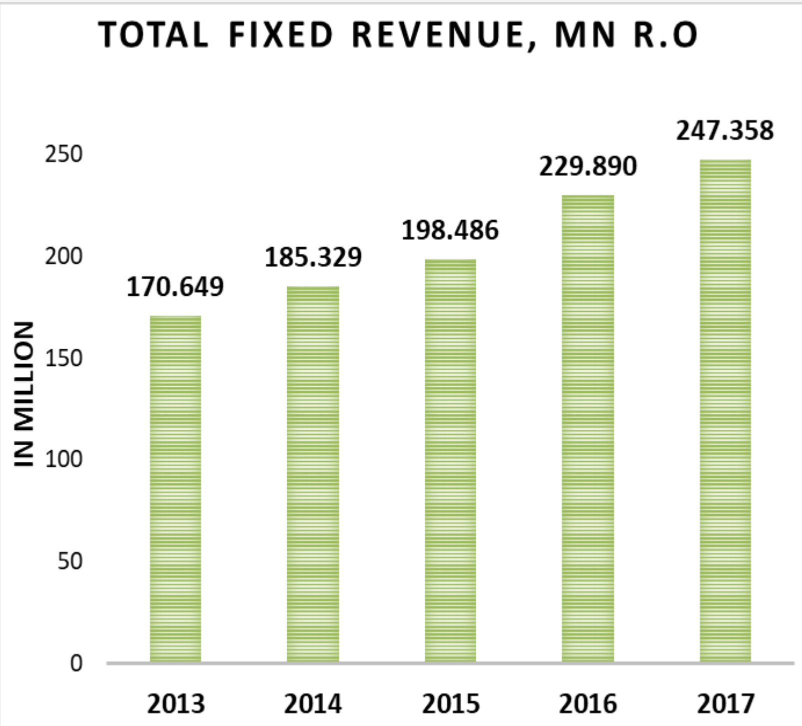
By year 2017, Fixed Market:

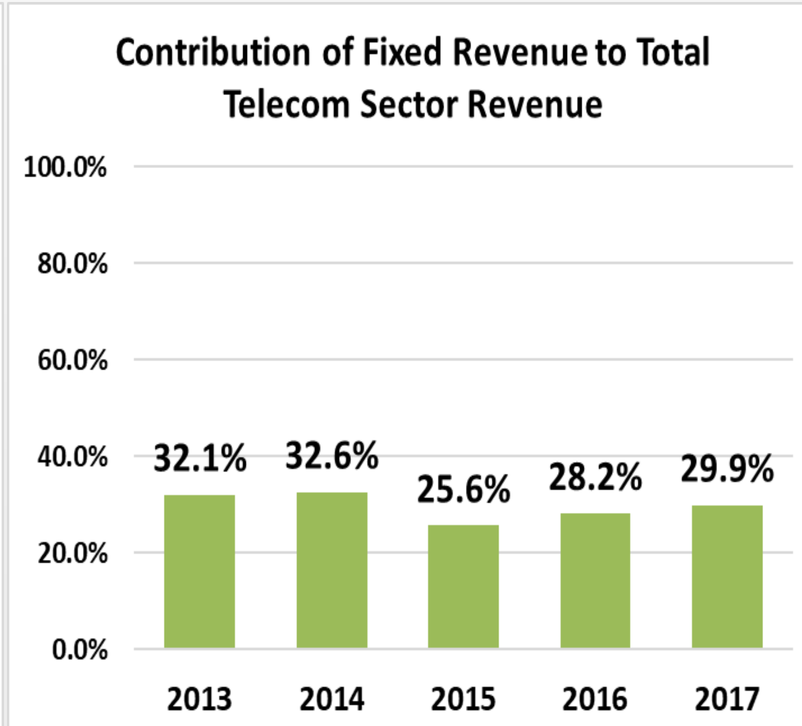
- **Achieved penetration rate per 100 inhabitant of 11.2% for fixed telephony and 7.7% for fixed internet subscription.**
- **Achieved penetration rates per 100 household of 87% for fixed telephony and 60.1% for internet subscriptions.**
- **Generated total revenue of R.O 247.358 million.**

Fixed Indicators	2017
Total Fixed Telephone Subscriptions	509,756
Fixed Telephone Penetration Rate / Inhabitant	11.2%
Fixed Telephone Penetration Rate / Household	87%
Total Fixed Internet Subscriptions	351,335
Fixed Internet Penetration Rate / Inhabitant	7.7%
Fixed Internet Penetration Rate / Household	60.1%
Total Fixed Revenue	247.358 Mn R.O
Fixed Service Providers	Omantel, Ooredoo, Awasr

III. Fixed Telecom Market – Fixed Telecom (Telephone lines & Internet) Revenue

- Total revenue from all fixed services continued to grow gradually, reaching R.O 247.358 million in 2017 which was 7.6% higher than total of 2016.
- By 2017, fixed market contributed around 30% to the total telecom revenue.

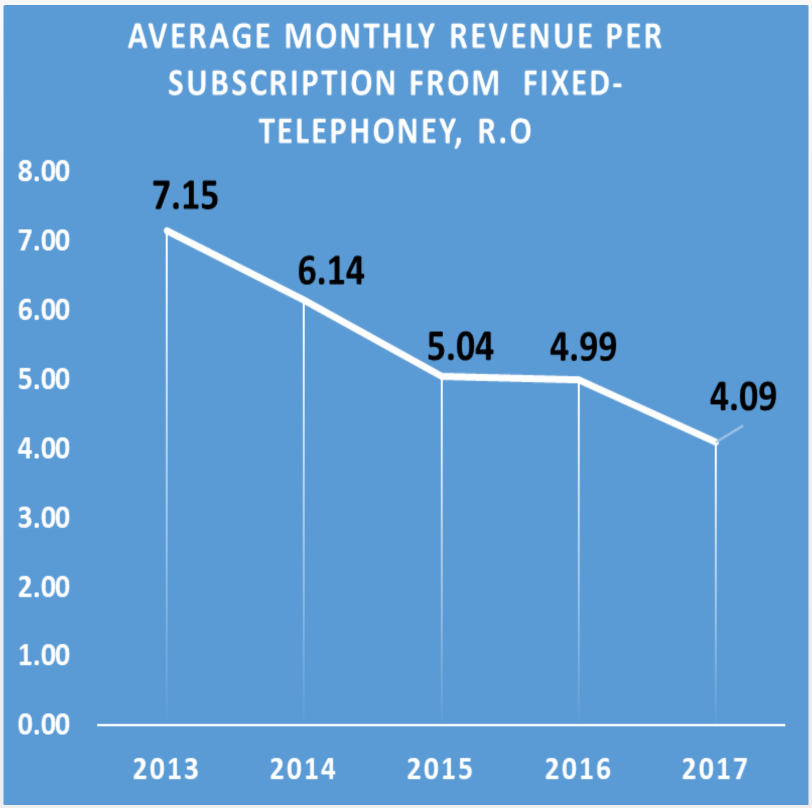


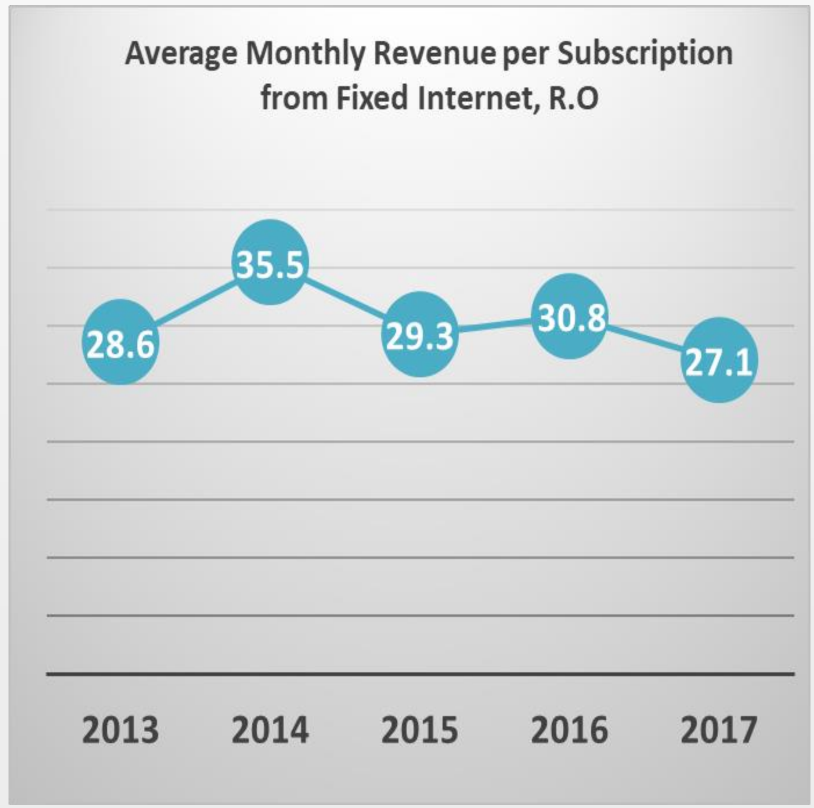


III. Fixed Telecom Market – Average Monthly Revenue Per Subscription

By end of 2017, Average Revenue per Subscription per month :

- **Reached R.O 4.090 for fixed telephony, showing continuous drop during the 5 years period.**
- **Reached R.O 27.100 for fixed internet, showing 12% drop compared to 2016.**
- **These figures also represent average monthly spend per subscription.**

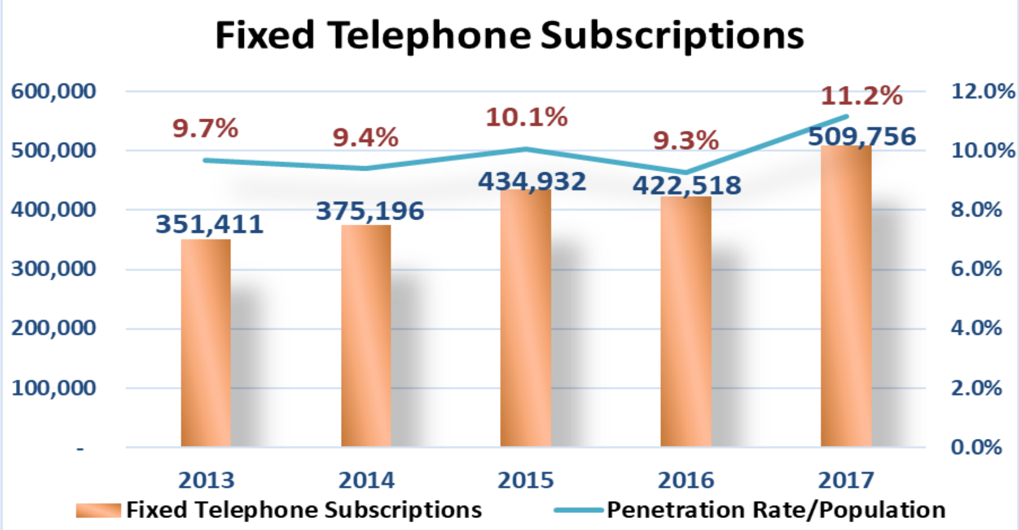


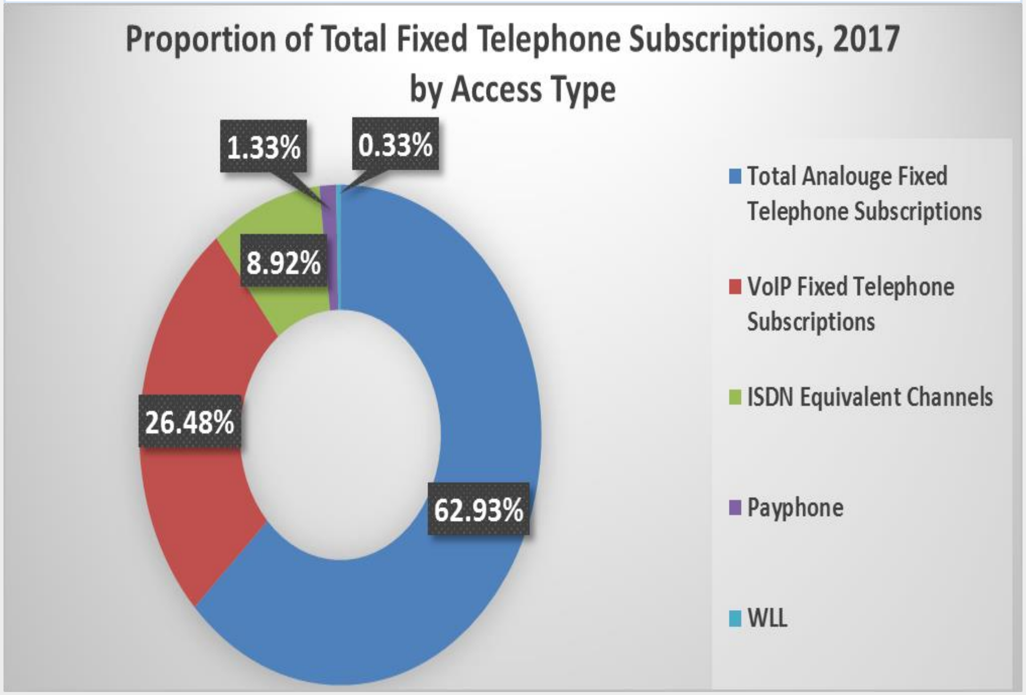


III. Fixed Telecom Market – Fixed Telephone Subscriptions

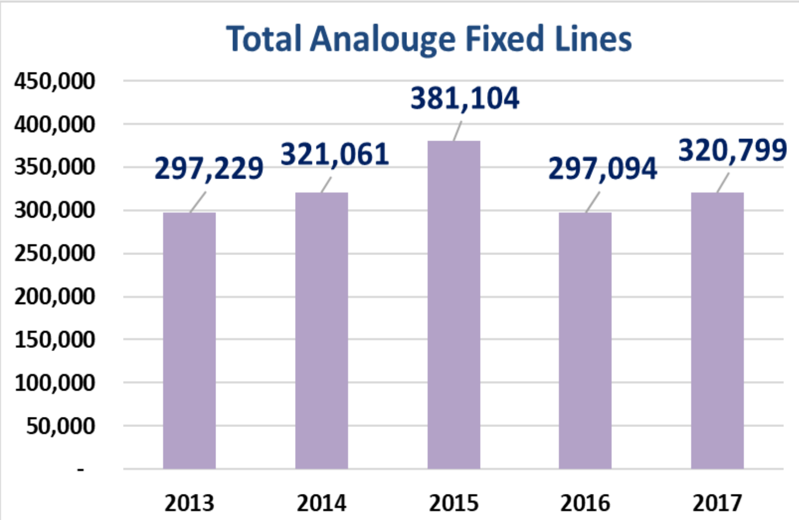
The year 2017 ended with:

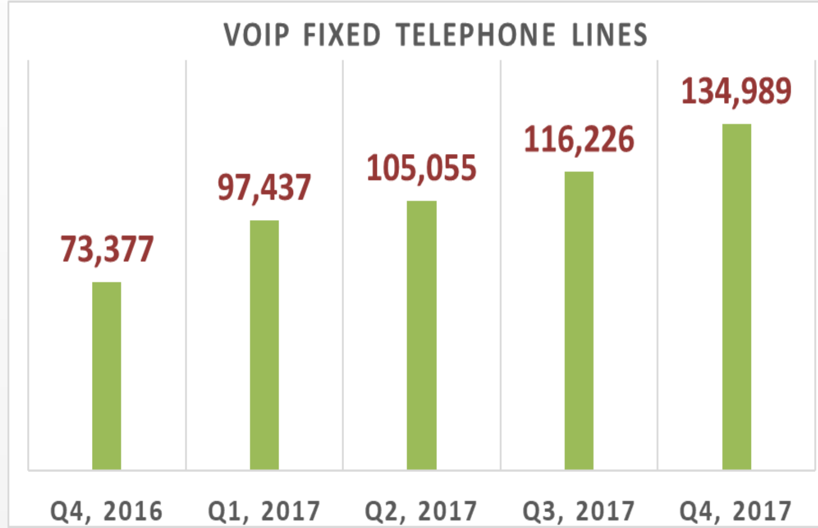
- 509,756 subscriptions of fixed telephone registering 10% CAGR during the last 5 years.
- Penetration per 100 inhabitant of 11.2% compared to 9.3% in 2016.
- 62.93% analogue and 26.48% VoIP lines of total fixed telephone subscriptions.

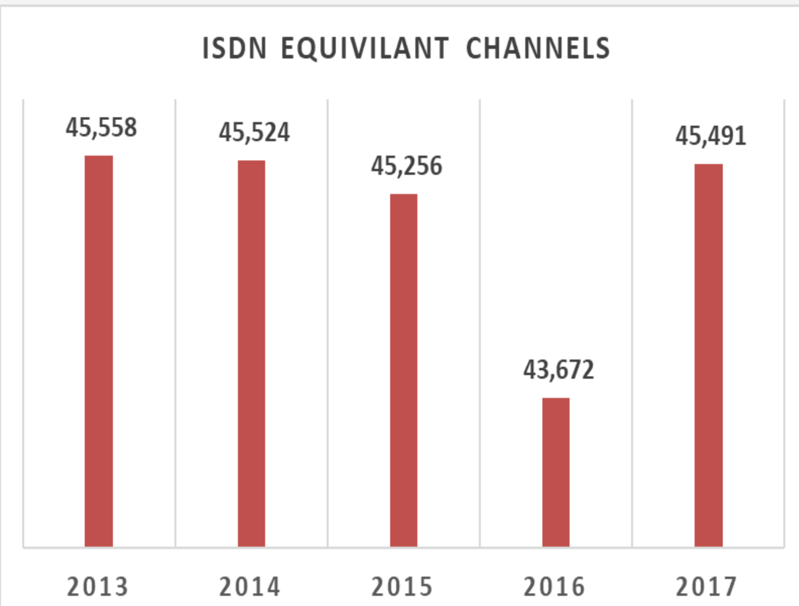


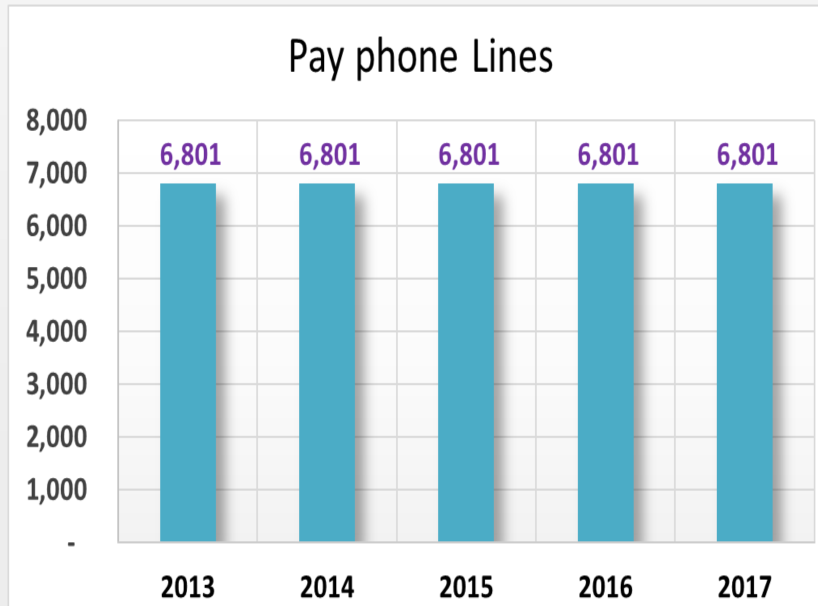


III. Fixed Telecom Market – Fixed Telephone Subscriptions by Access Type





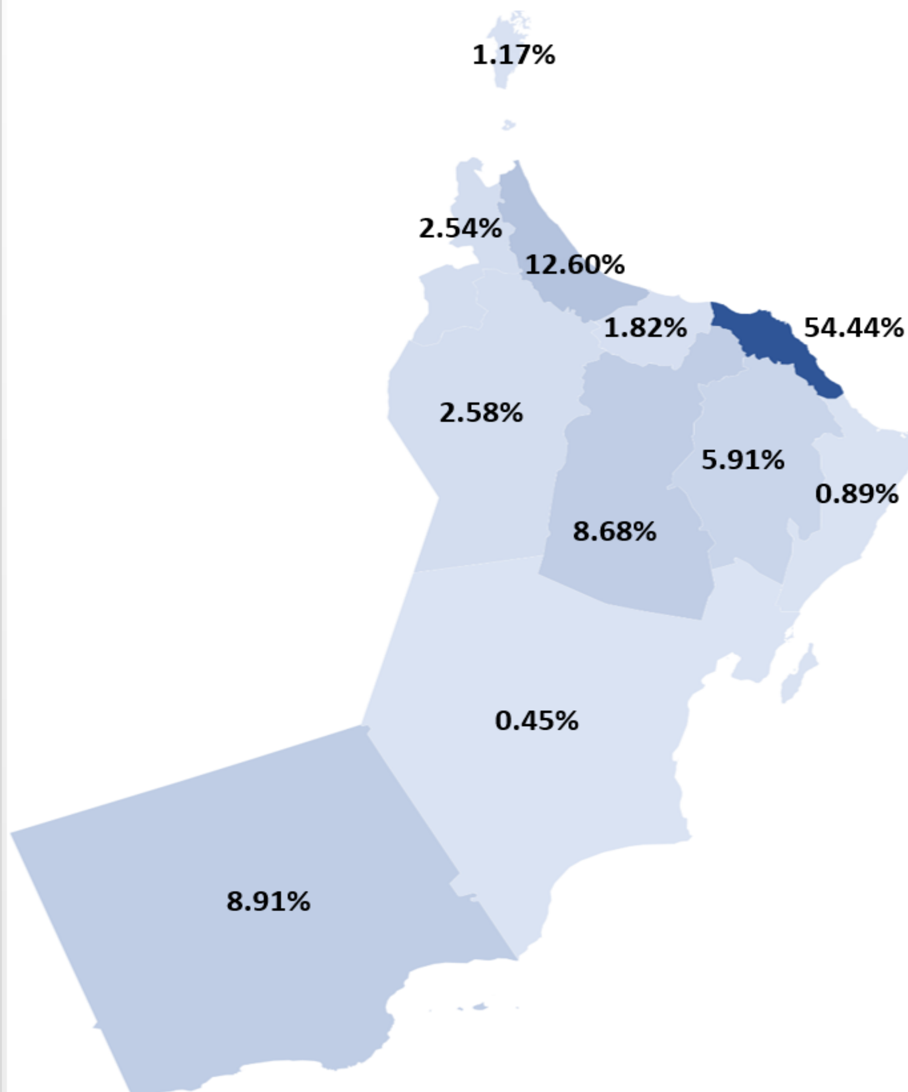




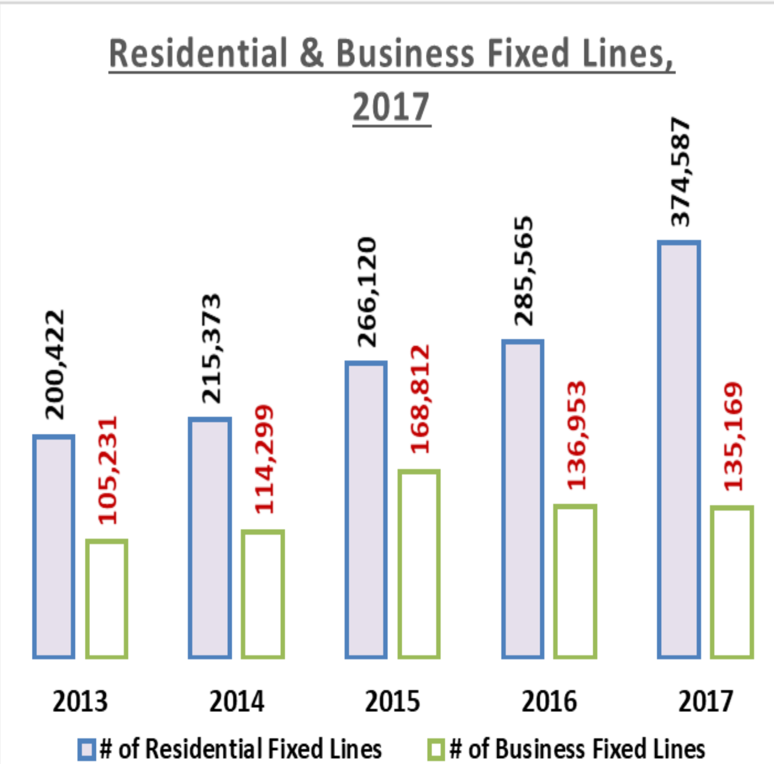
III. Fixed Telecom Market – Fixed Telephone Subscriptions By Governorate

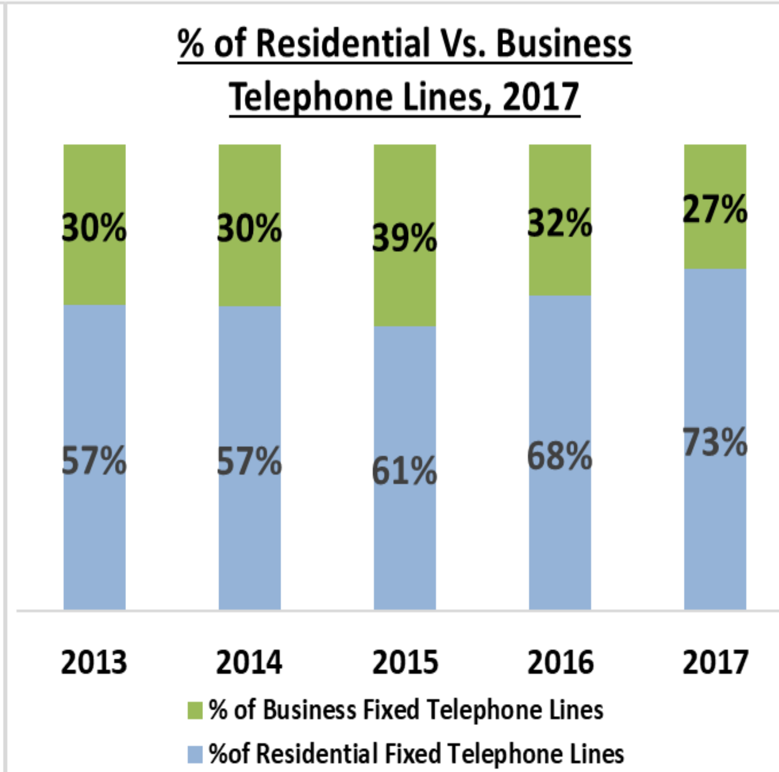
- Out of the total fixed telephone subscriptions, Muscat Governorate had the highest percentage of subscriptions (including residential and business) with 54.44%, followed by Al Batinah North with 12.6%.
- Musandam, Al Batinah South, Al Wusta and Ash Sharqiyah South had a small percentage of fixed telephone subscriptions in the country.
- Al-Wusta had the lowest share of subscriptions with 0.45% of fixed telephone subscriptions.

Percentage of Fixed Telephone Subscriptions by Governorate, 2017



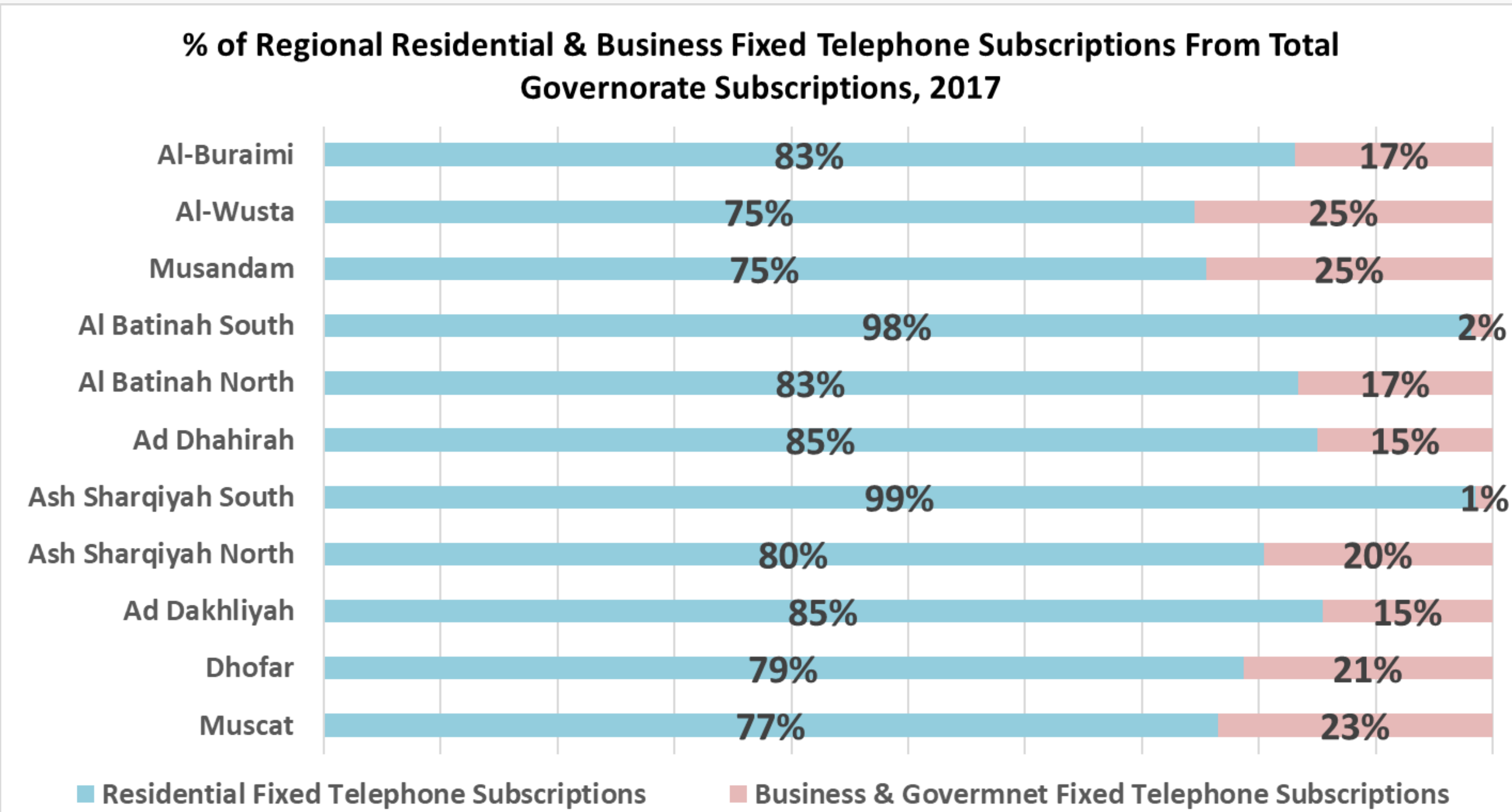
- **The number of residential fixed telephone subscriptions increased during year 2017 by 31% from 2016, reaching 374,587 subscriptions.**
- **On the other hand, the number of business fixed telephone subscriptions declined by 1% during 2017, reaching 135,169 subscriptions at the end of 2017.**





III. Fixed Telecom Market – Residential Vs Business Fixed Telephone Subscriptions- by Governorate

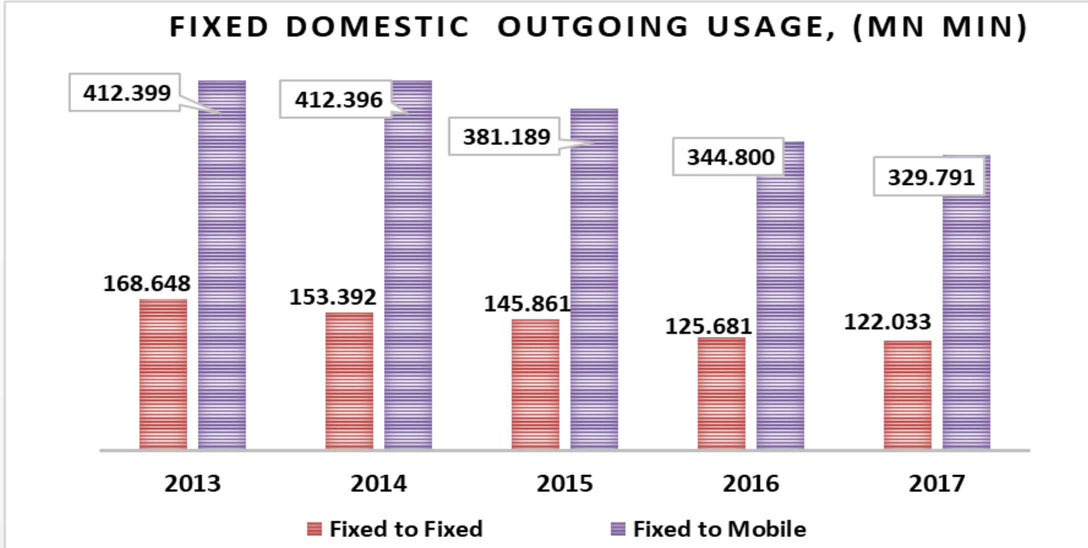
- More than 75% lines are residential in each governorate and remaining are for business & government.

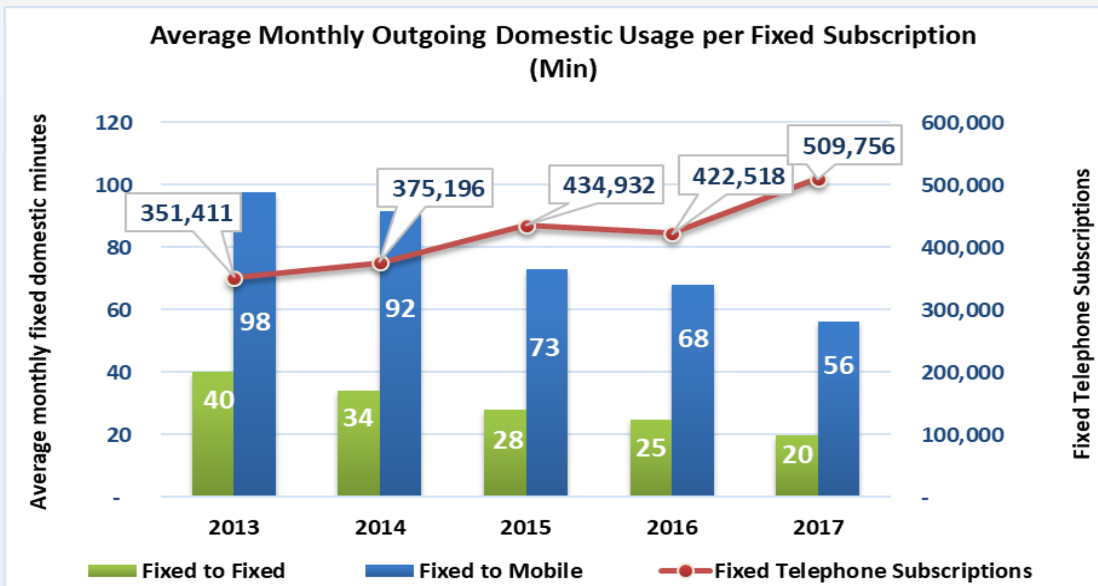


III. Fixed Telecom Market – Fixed Telephone Usage

During the last 5 years:

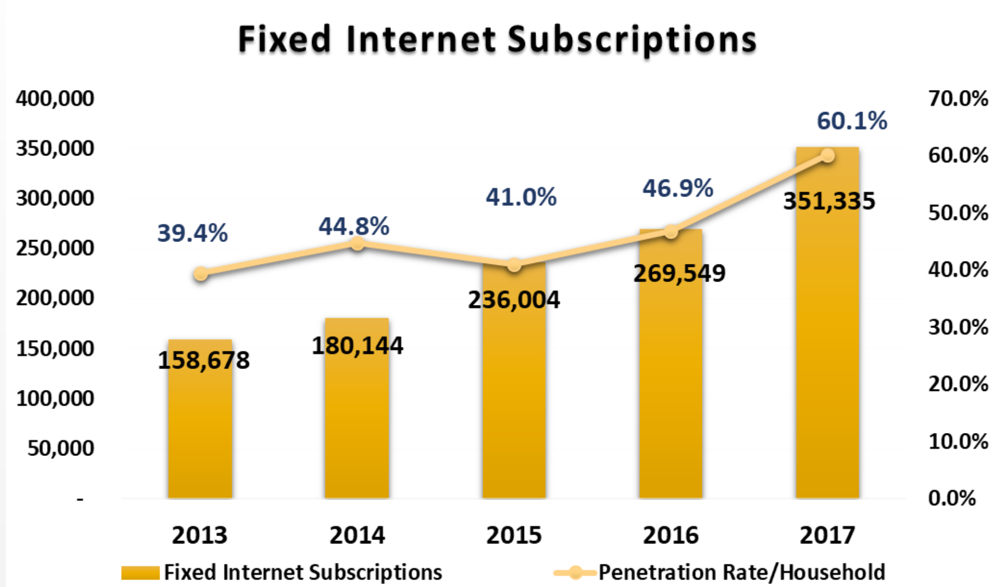
- There has been gradual drop in the fixed domestic minutes during the last five years reaching to 329.791 million minutes by end of 2017.
- On average, fixed subscriptions utilization was 56 minutes per month for calls from fixed-to-mobile, and 20 minutes from fixed-to-fixed during 2017.





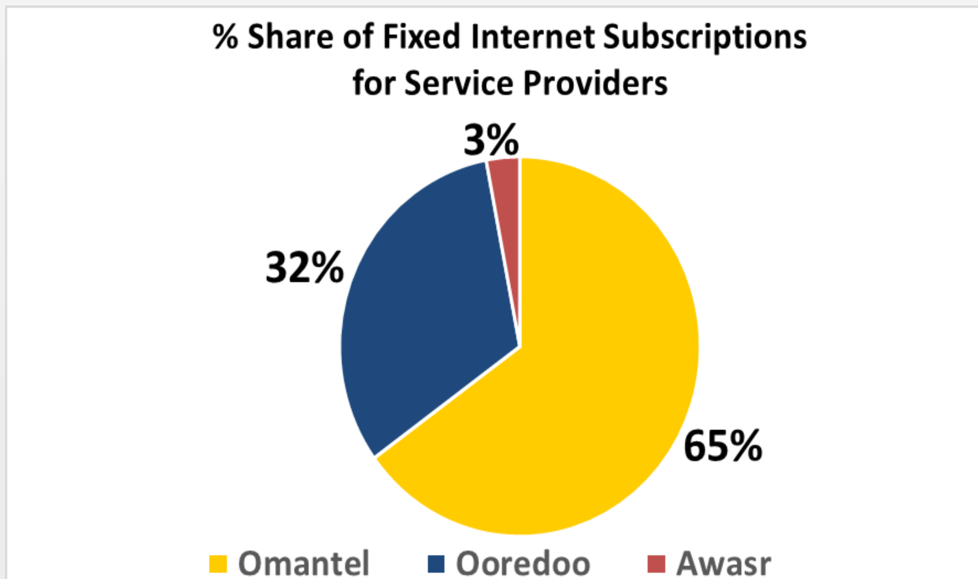
III. Fixed Telecom Market – Fixed Internet Subscriptions (Narrowband & Broadband)

- By year 2017 the fixed internet subscriptions reached to 351,335, showing a CAGR of 22.3%. Fixed internet penetration per household also increased by 13.2% during the year 2017.
- By end of 2017, Omantel's share was 65% while Ooredoo and Awasr had 32% and 3% respectively.



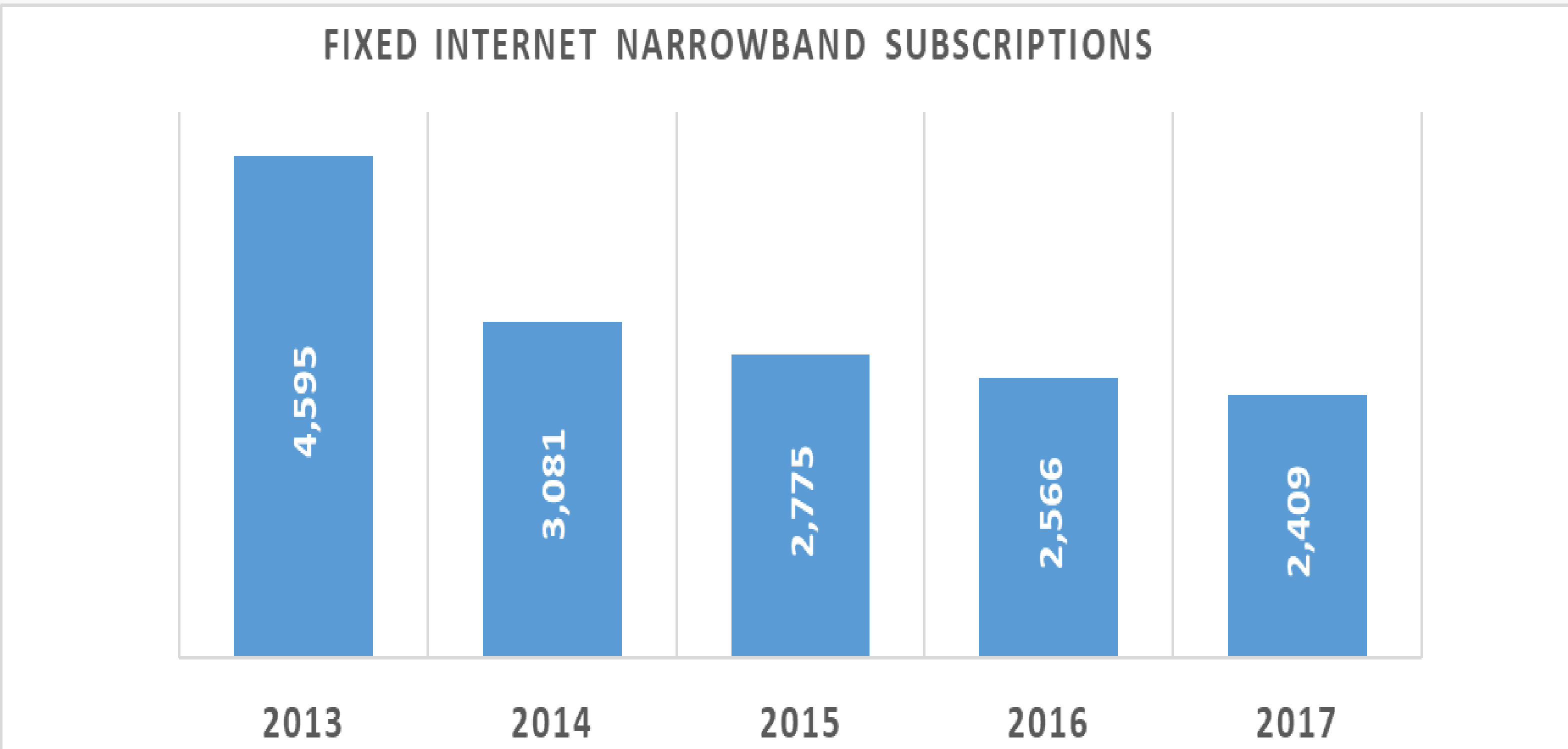
Fixed Internet Subscriptions as on 2017	
Fixed Narrowband Subscriptions	2,409
Fixed Broadband Subscriptions	348,926
Total Fixed Internet Subscriptions	351,335
Penetration Rate Per Household[1]	60.1%
Monthly Average Revenue per Subscription, R.O	27.1

[1] For 2017 Penetration, Household approved by NCSI is the mid - year 2017: (584,762).



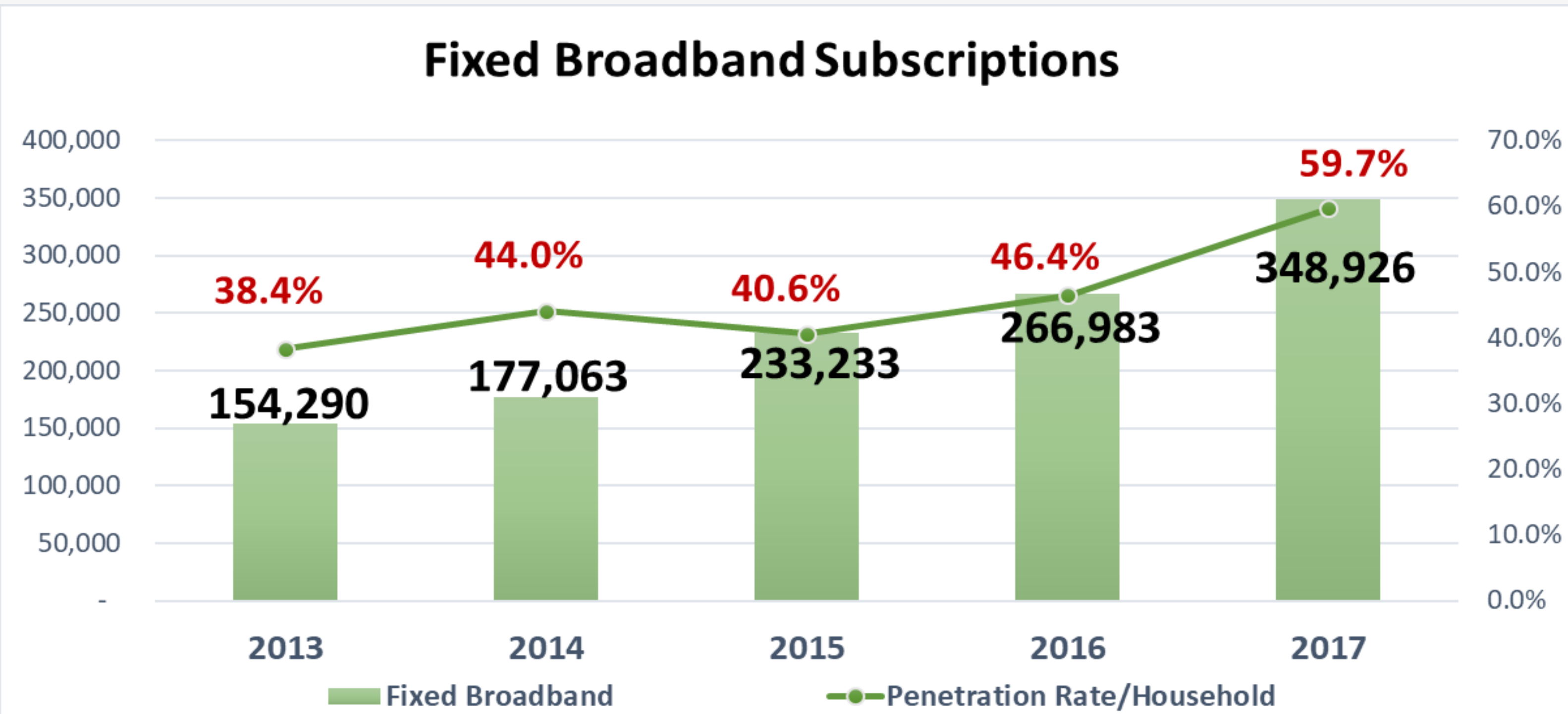
III. Fixed Telecom Market – Fixed Narrowband Subscriptions

- **As per ITU definition, fixed narrowband subscriptions represent subscriptions with limited speed of less than 256 kbit/s.**
- **Narrowband is declining, in line with the general trend, reaching to only 2,409 subscriptions at the end of 2017.**



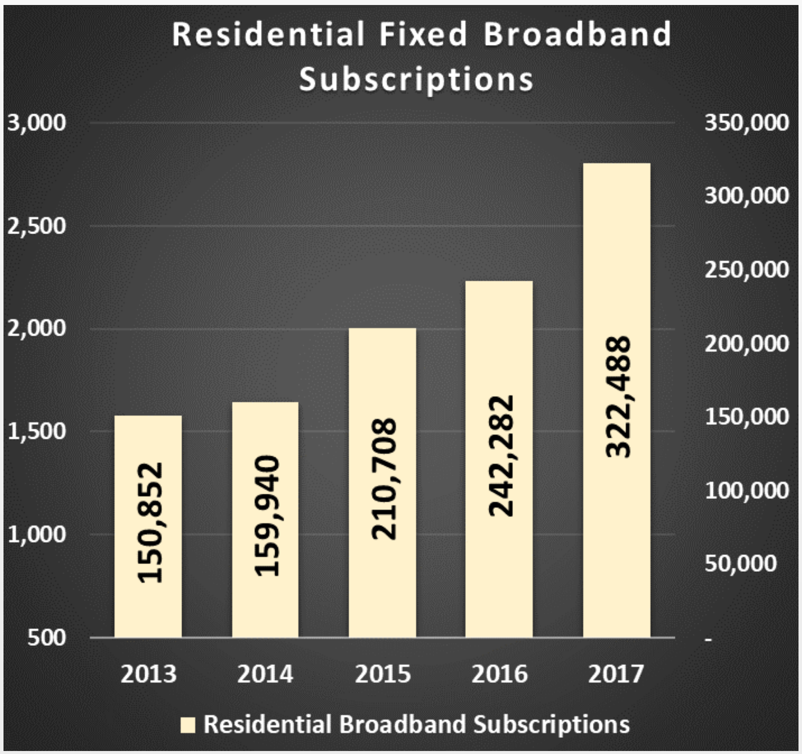
III. Fixed Telecom Market – Fixed Broadband Subscriptions (FBB)

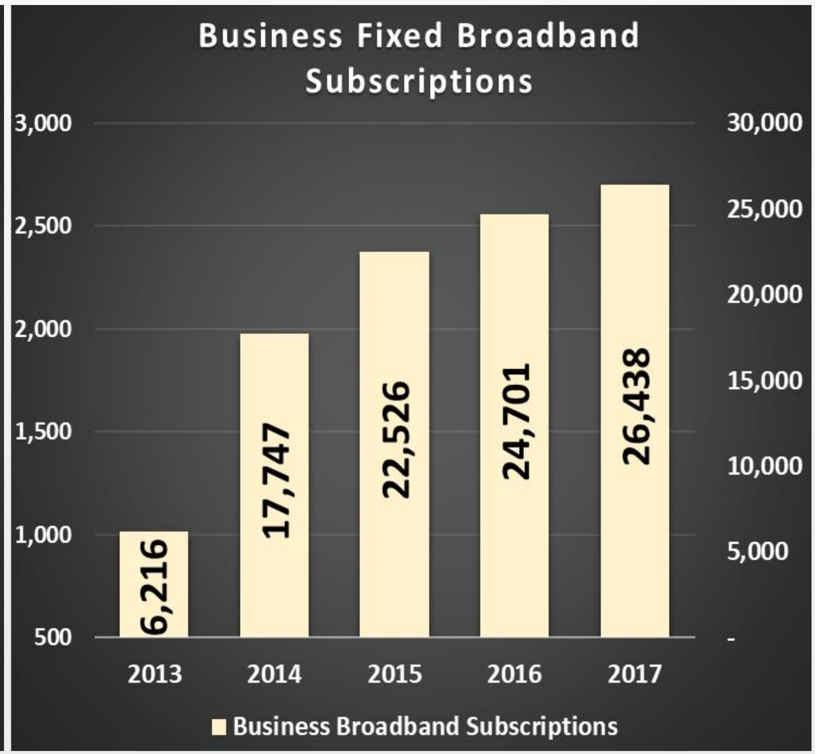
- There were 348,926 fixed broadband subscriptions by the end of 2017 with penetration rate of 59.7% per household,
- Total fixed broadband subscription showed CAGR of 22.9% during the reported 5 years due to the increased availability of infrastructure being provided by OBC and increased competition.
- The subscription and penetration growth was recorded 31% and 13% respectively.



III. Fixed Telecom Market – Residential Vs Business FBB

- 92% of the total fixed broadband subscriptions were residential in 2017.
- Residential FBB subscriptions grew 33% over the previous year,
- Business FBB subscriptions increased by 7% in 2017.

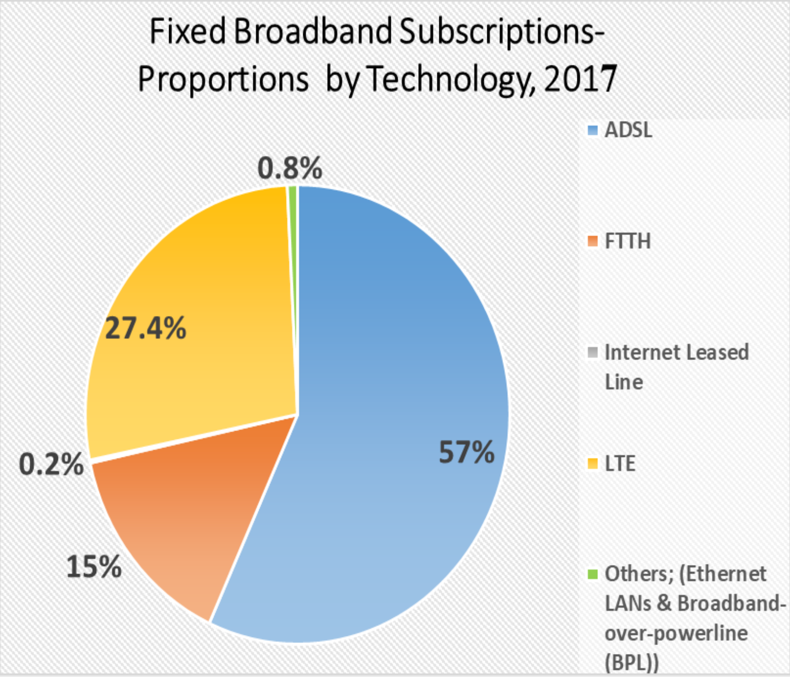


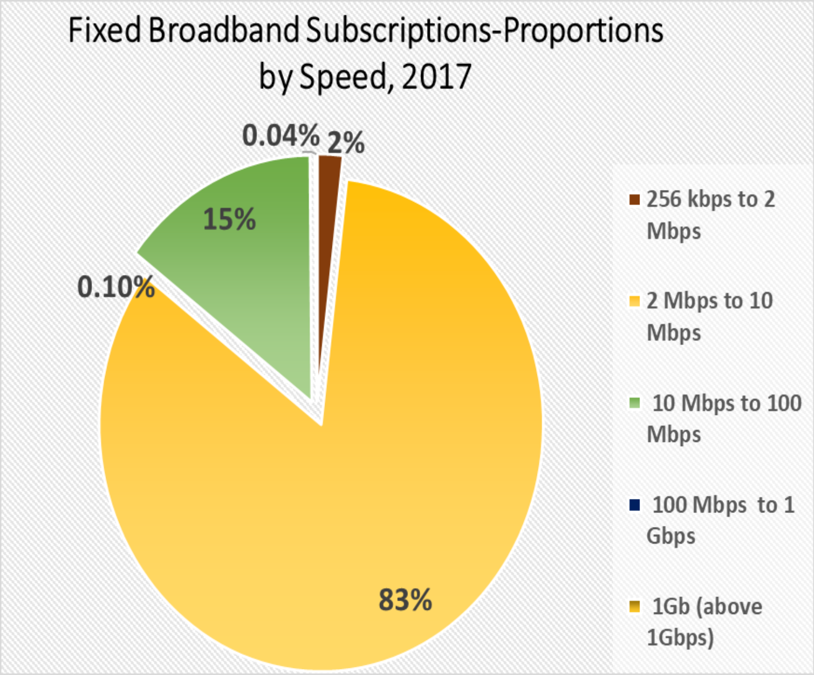


III. Fixed Telecom Market – FBB Subscriptions by Speed and Technology

In year 2017:

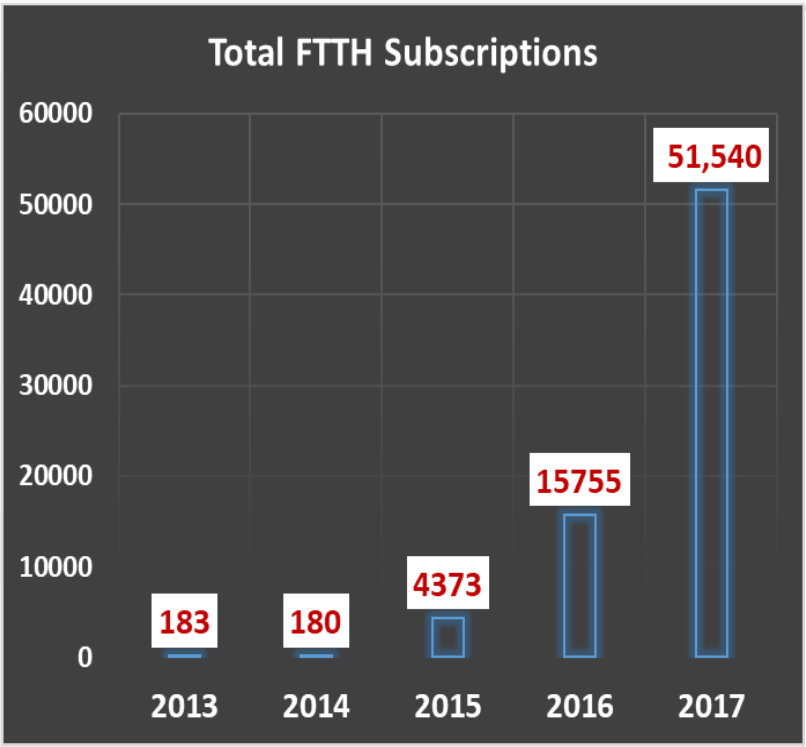
- **FBB subscriptions with 2 Mbps to 10 Mbps represented 83%of total fixed broadband subscriptions.**
- **Out of total FBB subscriptions, 57% were connected on ADSL, whereas 27.4% and 15% were on LTE and FTTH respectively.**

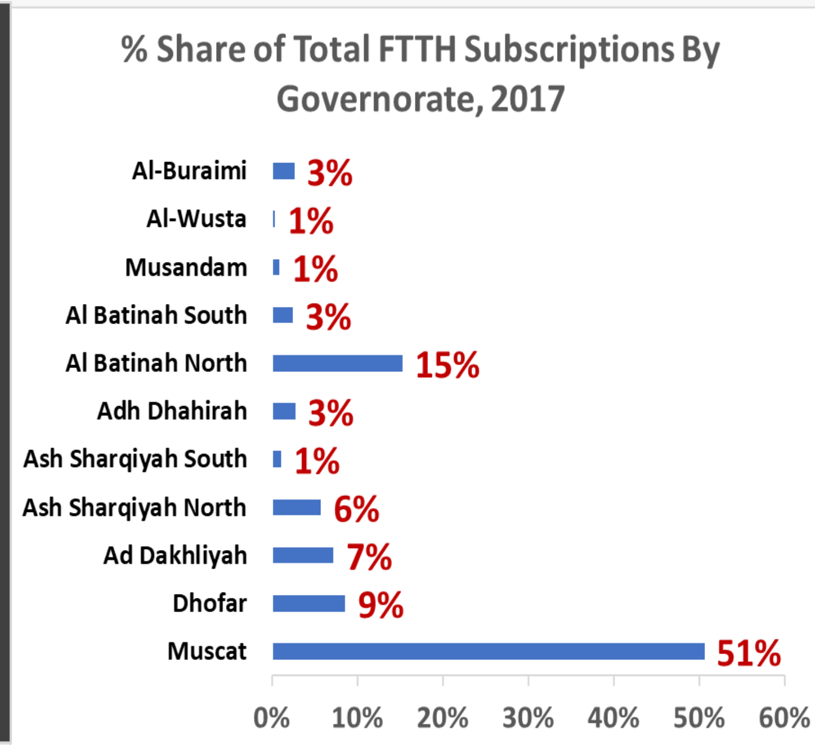




III. Fixed Telecom Market – Fixed Broadband-FTTH Subscriptions

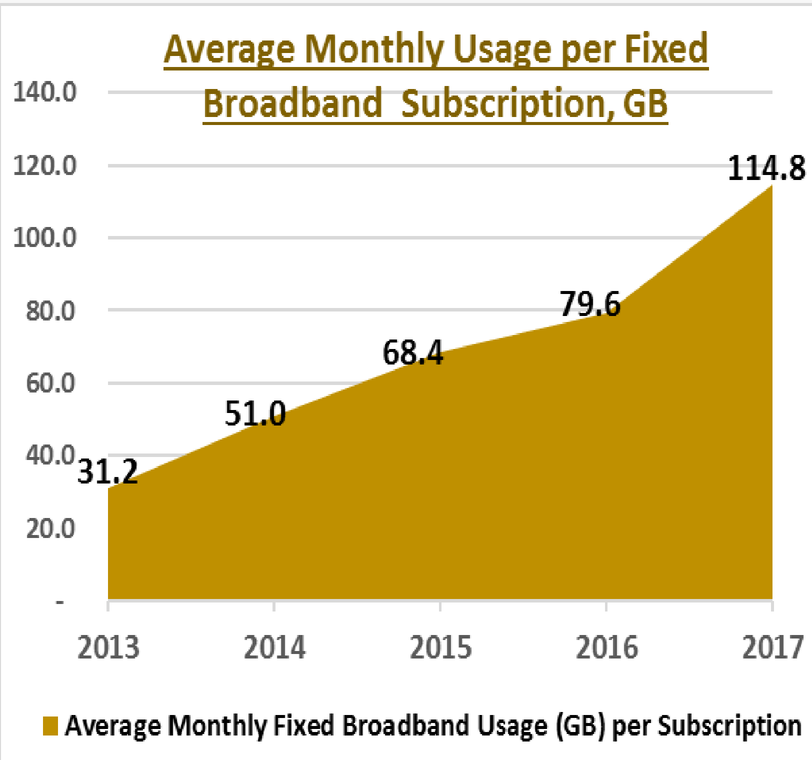
- During the year 2017, a total of 35,785 new FTTH subscriptions were added,
- FTTH subscriptions touched a total mark of 51,540.
- 51% of FTTH were connected in Muscat Governorate, followed by Al Batinah North with 15%.

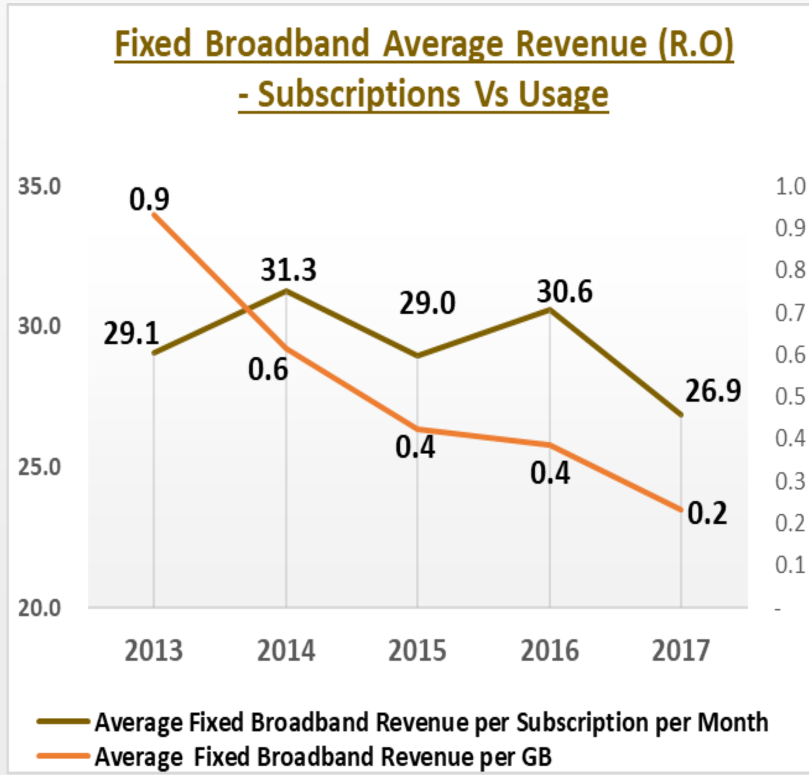




III. Fixed Telecom Market – Fixed Broadband Usage (GB)

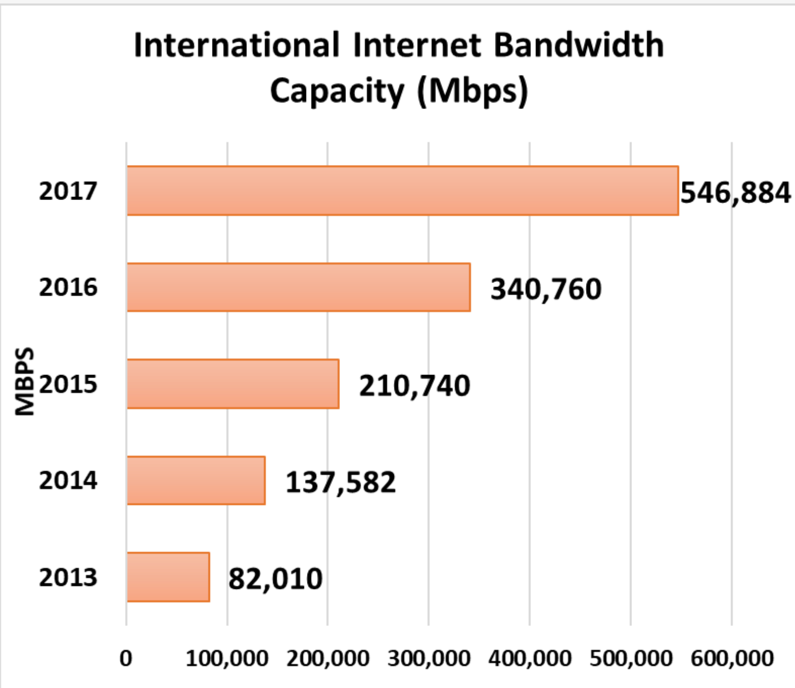
- Average monthly volume of FBB utilization reached to 114.8 GB per subscription during year 2017 which is 3.6 times higher than 2013.
- During 2017, FBB average revenue per subscription dropped from R.O 30.6 to R.O 26.9. Similarly average revenue per GB also dropped from R.O 0.4 to R.O 0.2 per GB.

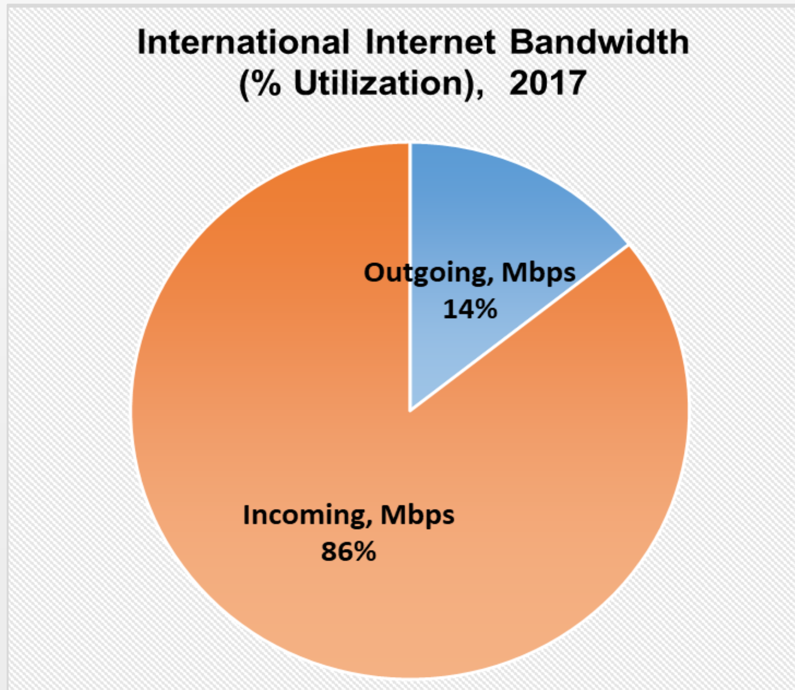




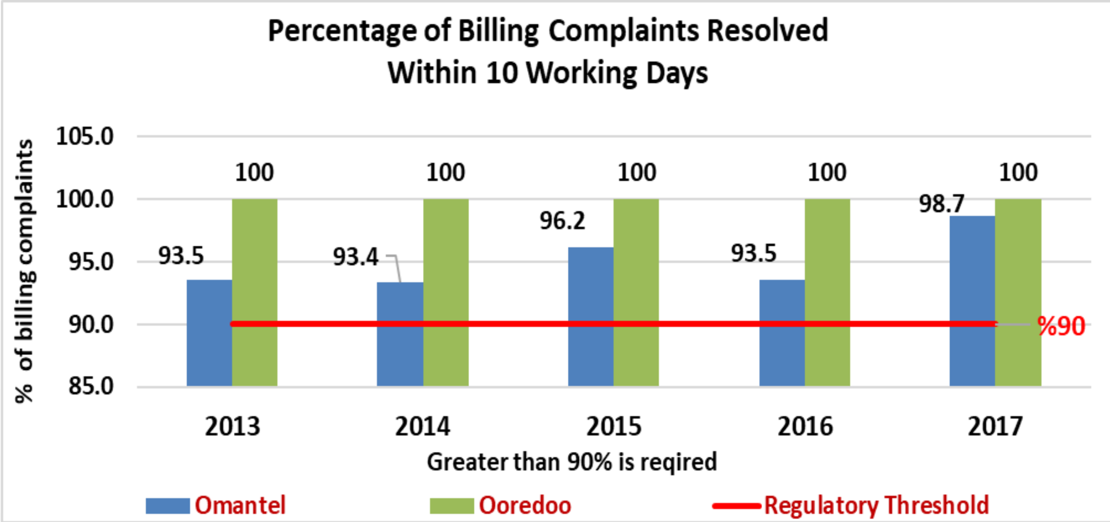
III. Fixed Telecom Market – International Internet Bandwidth (Mbps)

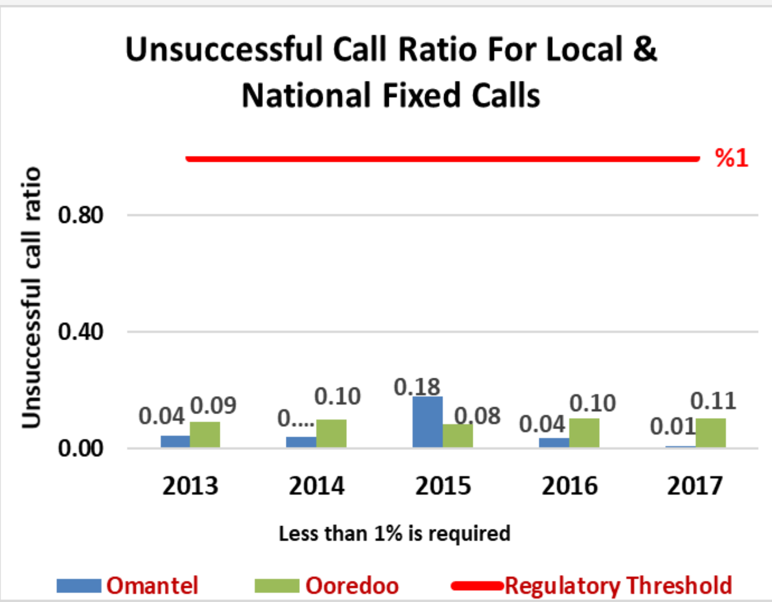
- Total international internet bandwidth capacity in 2017 increased to 564,884 Mbps showing 60% increase from 2016.
- By end of 2017, the percentage utilization of international internet bandwidth was 14% for outgoing and 86% for incoming.

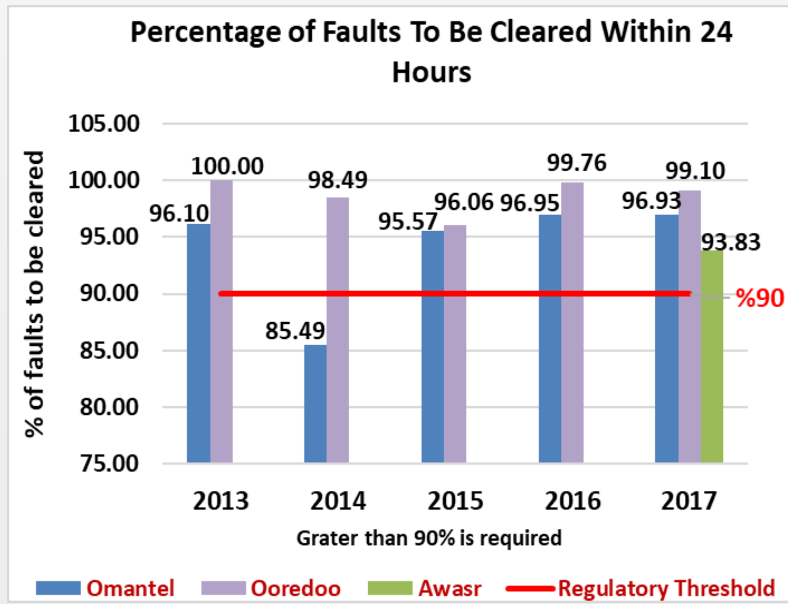




III. Fixed Telecom Market – Quality of Service







QoS indicators as per Service Providers reports.

IV. INTERNATIONAL TELECOM MARKET

IV. International Telecom Market – Evolution of Competition in International Market

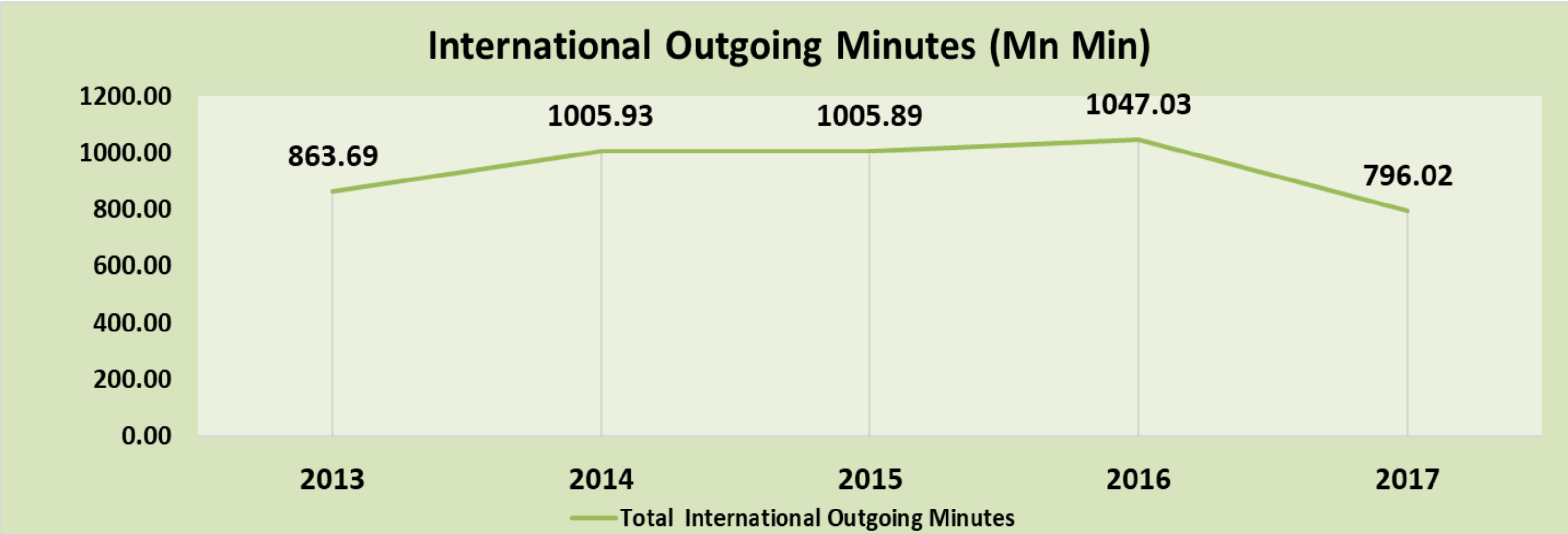
Till year 2011, only Omantel and Ooredoo were the providers of International Telephone Service.

In 2012, the 3rd IGW licensee (TeO) launched their international services enhancing competition in the international telephone services. In 2013, competition was further enhanced when TeO introduced International Calling Cards service.

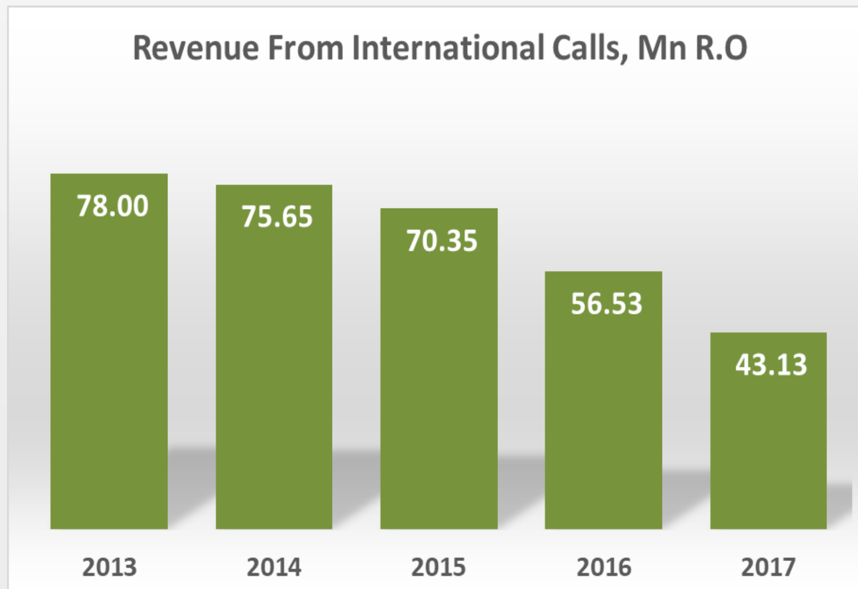
Connect Arabia International (CAI) joined the international market and launched its international gateway during year 2013. They are currently engaged in only International Incoming traffic.

Despite having 4 International Gateways in operation, incoming and outgoing international traffic experienced decline in 2017.

IV. International Telecom Market – Total Outgoing Minutes and Revenue

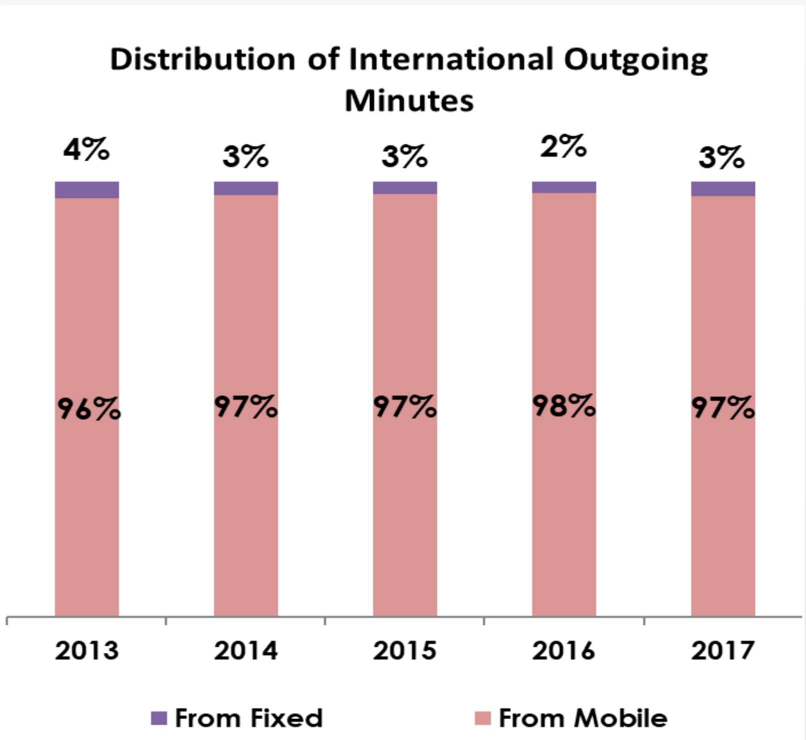


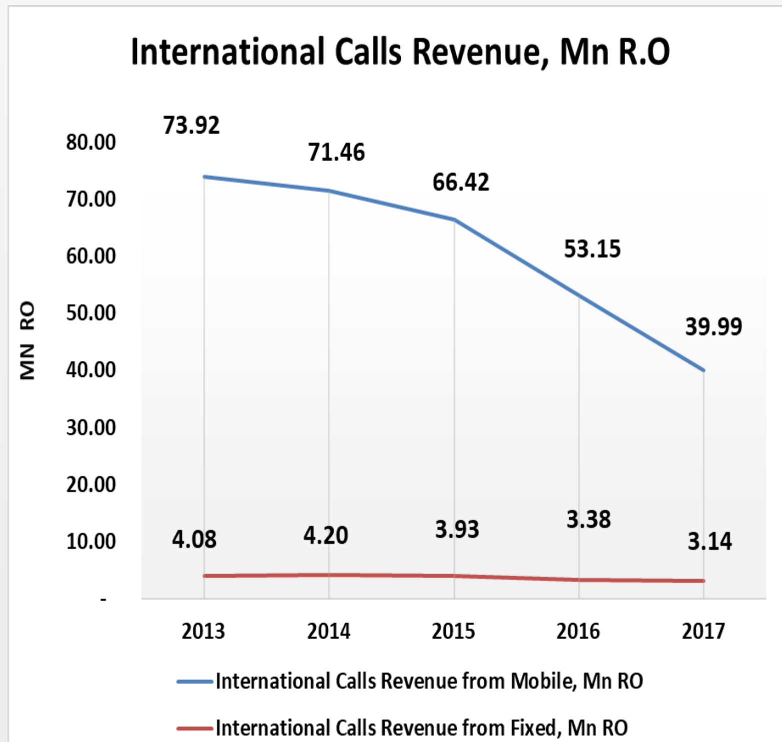
- **The year 2017 registered 796.02 million outgoing minutes, which generated total revenue of R.O 43.13 million.**
- **Both minutes and revenue from outgoing international calls dropped by 24% during year 2017 as compared to year 2016.**



IV. International Telecom Market – Outgoing Minutes and Revenue (Fixed & Mobile)

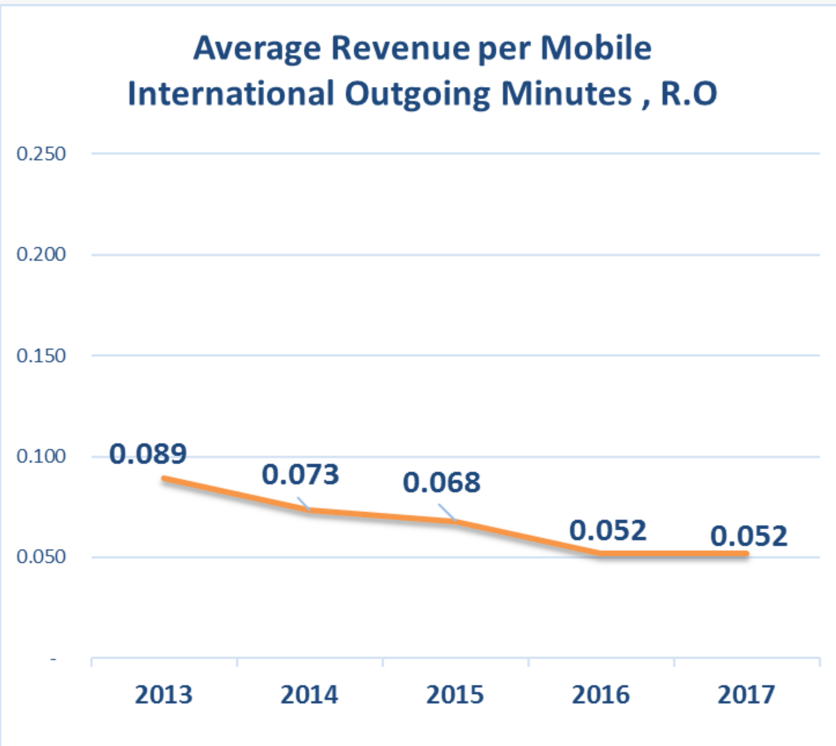
- **During year 2017, total outgoing minutes originated on mobile represented 97% of total outgoing minutes fetching total revenue of R.O 39.990 million.**
- **The remaining 3% of total outgoing minutes were originated on fixed which generated R.O 3.140 million.**

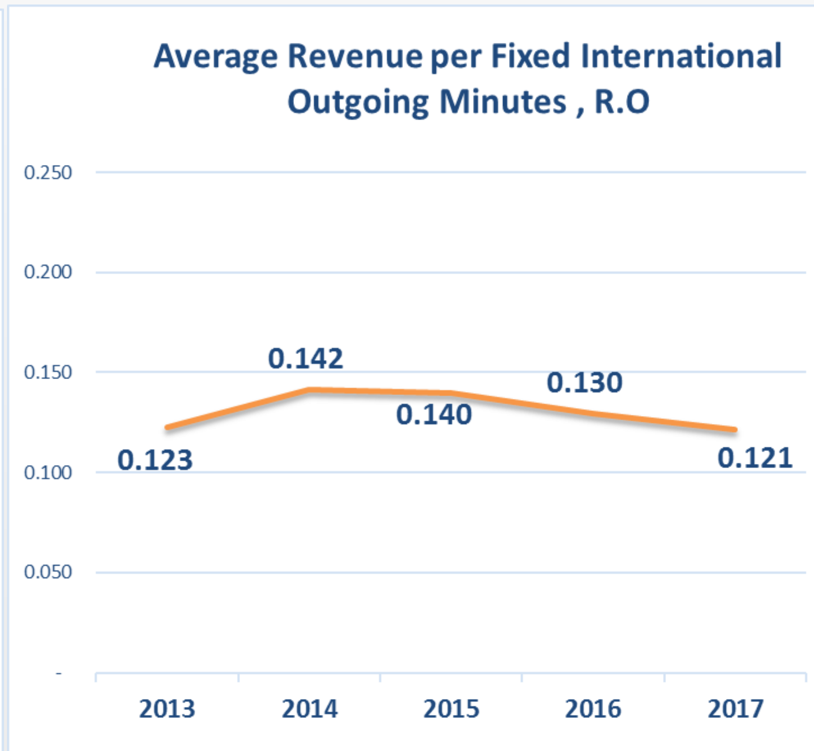




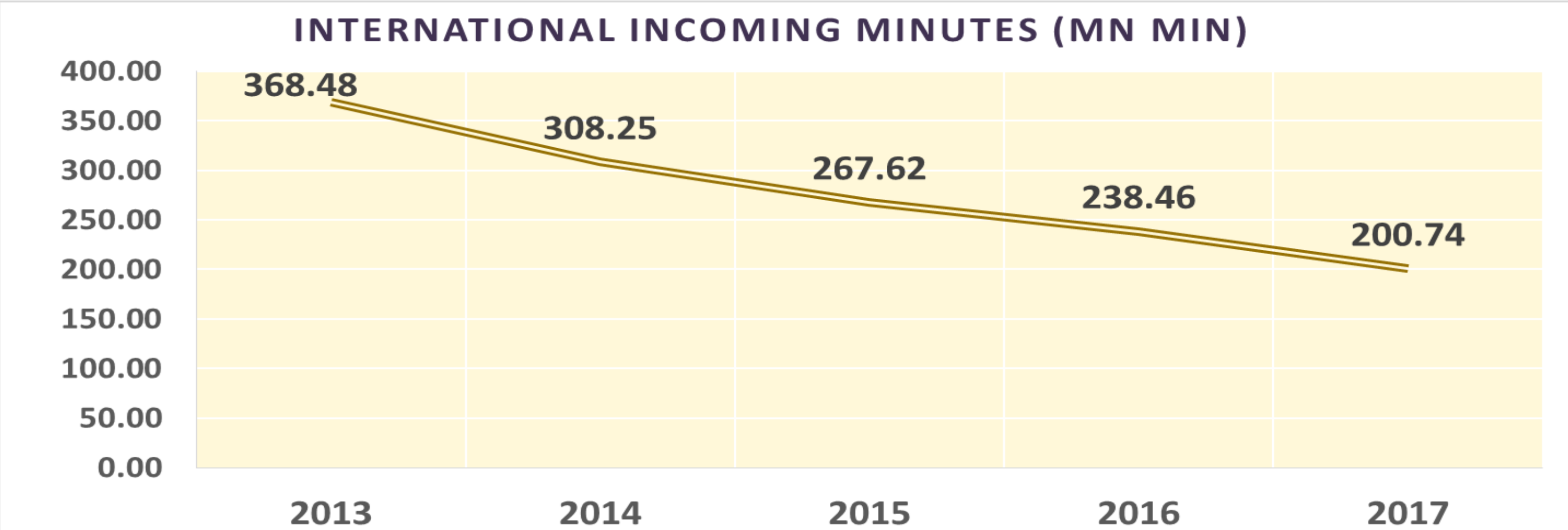
IV. International Telecom Market– Average Revenue from International Outgoing Calls

- During year 2017, the average revenue per minute from international mobile calls was R.O 0.052 , while R.O 0.121 per minute for international fixed calls.

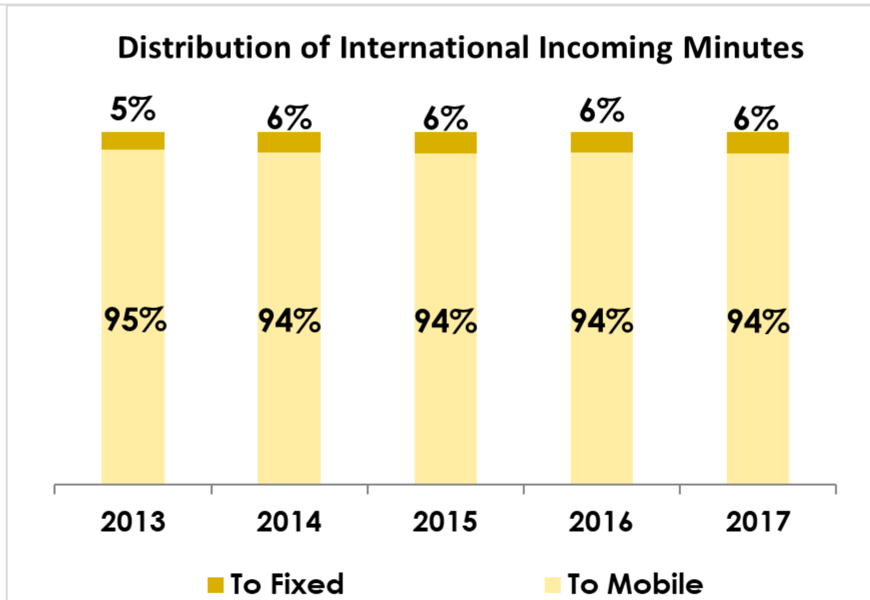




IV. International Telecom Market – International Incoming Call Minutes



- The total incoming minutes from international calls was reduced by 16% during year 2017.
- Out of total 200.74 million minutes, 94% was terminated on mobile network, while 6% was terminated on fixed network.

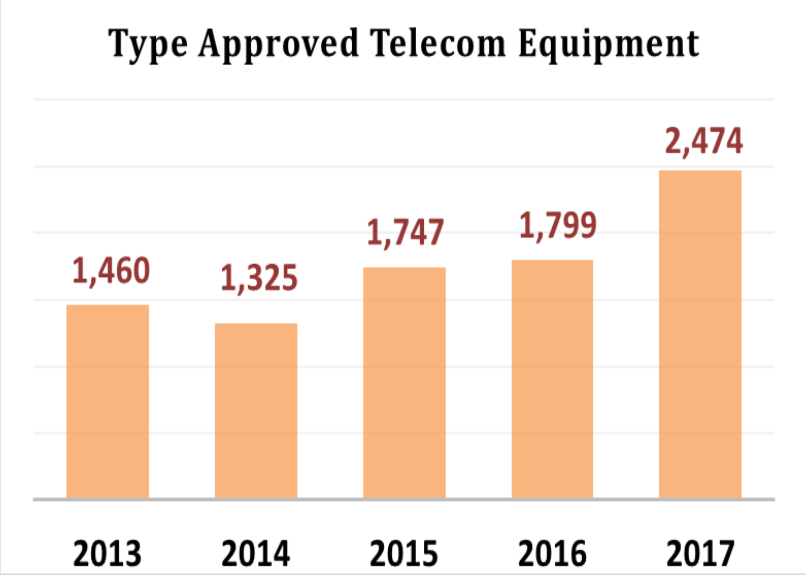


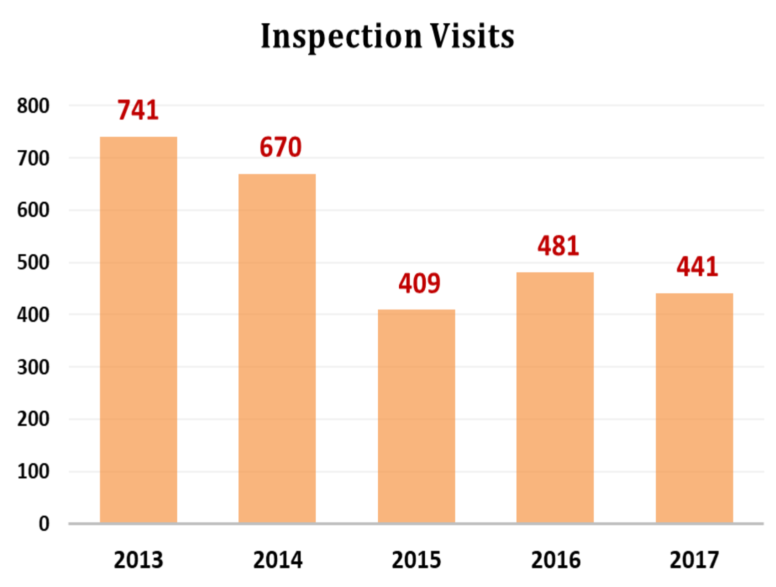
V. TYPE APPROVAL

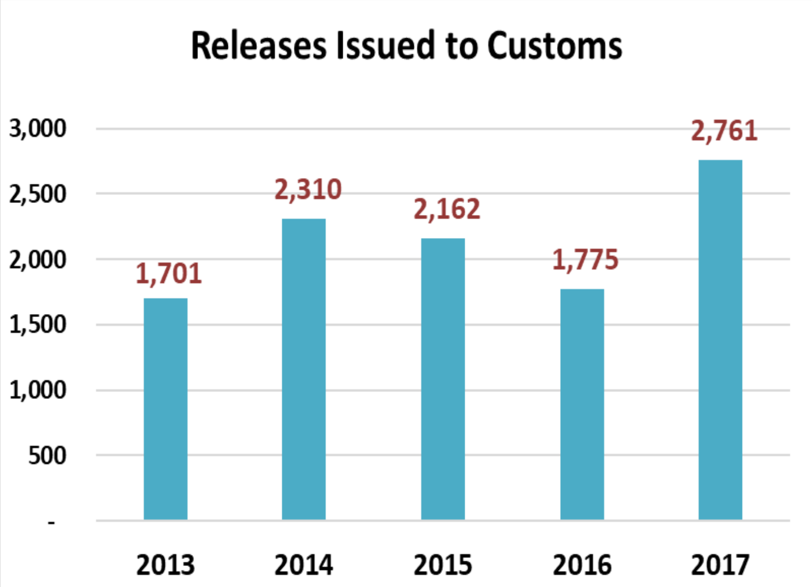
V. Type Approval

During the year 2017,

- TRA had approved 2,474 telecom equipment which is 37.5% higher than that of year 2016.
- Telecom equipment includes Mobile Handsets, Radio Equipment, and other Terminal Equipment.







VI. TELECOM SERVICE PROVIDERS IN OMAN

VI. Telecom Service Providers in Oman

Class I	Service Provider	Services	License Issue Year
	Omantel	Fixed/Mobile/International Gateway	2004
	Ooredoo	Fixed/Mobile/International Gateway	2005/2009
	Sama Tel/ TeO	International Gateway	2011
	Awasr	Fixed Broadband	2012
	Connect Arabia International	International Gateway	2013
	Madakhel	General Marine Telecommunication	2013
	Oman Broadband Company (OBC)	Fixed Broadband Infrastructure	To be Awarded

VI. Telecom Service Providers in Oman

Class II	Service Provider	Service	Issue Year
FRIENDI mobile	Connect Arabia (Friendi)	Resale of public mobile telecommunications services	2008
renna رنة	Majan (Renna)	Resale of public mobile telecommunications services	2008
زاجل Zajel INFORMATION TECHNOLOGY SERVICES	Zajel	Generalized Multiprotocol Label Switching (GMPLS)	2014

Class III	Service Provider	Service	Issue Year
Azyan Telecom	Azyan	Very Small Aperture Terminal (VSAT) – Private Network	2010
RigNet	Rignet	Very Small Aperture Terminal (VSAT) – Private Network	2011
MAHD GROUP Progress Through Partnerships	Mahd Telecom	Vehicles Management System (Machine to Machine M2M)	2014
	Mahd Satellite	Very Small Aperture Terminal (VSAT) –Private Network	2017

VII. ACRONYMS

VII. Acronyms

ADSL	Asymmetric Digital Subscriber Line
CAI	Connect Arabia International
CAGR	Cumulative Average Growth Rate
FBB	Fixed Broadband
FTTH	Fiber-To-The-Home
GCC	Gulf Cooperation Council
ICT	Information & Communication Technology
IDI	ICT Development Index
ISDN	Integrated Services Digital Network
ITU	International Telecommunication Union & Communication Technology
LTE	Long Term Evolution
M2M	Machine to Machine
Mbps	Megabits Per Second
Min	Minutes
Mn	Million
MMS	Multimedia Message Service
MoTC	Ministry of Transport and Communication
NCSI	National Center for Statistics and Information
OTT	Over-The-Top Services
R.O	Rial Omani
SMS	Short Message Service
TeO	Telecom Oman
TRA	Telecommunication Regulatory Authority
VoIP	Voice-Over Internet Protocol
VSAT	Very Small Aperture Terminal
WLL	Wireless Local Loop