سلطنة عُمان
Sultanate of Oman

هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

Quarterly Report on Telecom Sector Indicators

Q4, 2016

Competition and Tariffs Unit

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➢ Introduction

We are pleased to present Q4 2016 Report on the Indicators of Telecom Sector of Oman. The TRA has been compiling and publishing this Report on quarterly basis to provide market intelligence on Telecom Sector to all interested parties including the investors, consumers, and the licensees. The Quarterly reports provide a brief update on the status of major telecom services in the Sultanate of Oman. These reports cover voice and data services for both fixed and mobile segments.

The quarterly reports are being compiled collecting data from the telecom service providers operating in Oman. The TRA would like to acknowledge and appreciate the service providers' cooperation and support for providing data to TRA, which helped in preparing this report and disseminating the information contained in it. The source data is sometimes delayed by the licensees, which ultimately cause delays in publishing the report. We hope the publication timing will improve in future with the cooperation of service providers.

Comments and suggestions from the users of these reports are welcome for improvement of the contents and structure of the reports.

This report is also published on the TRA website **(www.tra.gov.om).**

➢ Disclaimer

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Major Market Observations

Q4, 2016

- As per the Monthly Statistical Bulletin of December 2016 which was published by NCSI, the population of the Sultanate reached to 4,550,538 inhabitants .

- The total number of households are reported as 575,000 by end of 2015 as per the NCSI estimation.

The penetration of different services stood at the following levels at the end of the Q4/2016:

- Fixed line 9.3% of inhabitants
- Mobile subscriptions 151% of inhabitants
- Fixed Internet 46.88% of households.

The Active Mobile Broadband Subscribers' reached to 86.5% of inhabitants by the end of Q4/2016 with the total active subscribers of 3,937,861 .

The Blackberry Subscribers represent 0.26% of the total Mobile Subscribers base at the end of Q4/2016.

During the Q4/2016, the TRA received and approved:

- 9 new and revised Tariff Plans.
- 46 promotional tariff offers

TRA type approved 187 telecom equipments, and issued 7 authorizations for importing equipments. In addition, TRA Issued 149 releases to customs for importing telecom equipments during Q4/2016.

TRA carried out 51 inspections of dealers to check compliance of TRA regulations.

Summary of Main Telecommunications Indicators

Q4, 2016

Indicator	Fixed Telephony Service *(other than Fixed Internet)*	Fixed Internet Service	Mobile Service
Subscribers	422,518	269,549	6,866,260
Penetration rate[1]	73.48% of household	46.88% of household	151% of inhabitant
Revenue (Mln.RO)	29.429	26.518	146.826
International Outgoing Voice Minutes (mln),	6.060	NA	227.622
ARPU, (RO) [2]	5.2	32.8	7.130
Service Providers	Omantel, Ooredoo, Teo, Connect Arabia International	Omantel, Ooredoo,Awaser	Oman Mobile, Ooredoo, Friendi, Renna, Teo

[1]Note: Penetration rate is the total number of subscriptions on every 100 inhabitants/households. The Q4/2016 penetration rates are calculated based on the population (4,550,538), as per the latest bulletin published by NCSI – December 2016. Households: 575,000 (as per the NCSI estimation for year 2015).

[2] ARPU (the average revenue per user). The Fixed ARPU is based on revenue for the fixed telephone lines (post-paid and prepaid).

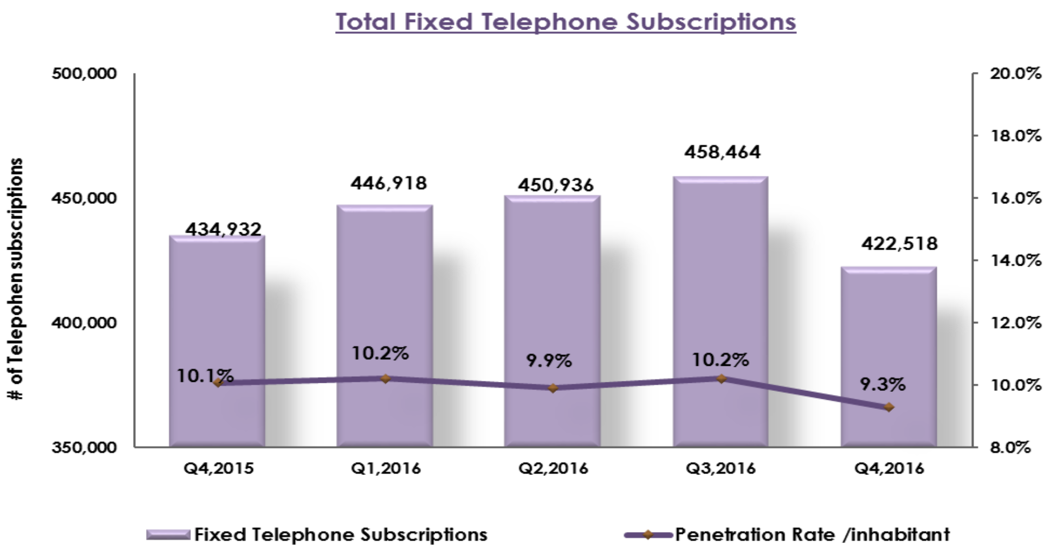
[3]Household figure used is 575,000 as per NCSI estimation for the year 2015.

	Q4/2016	Q3/2016	% Change
Population	4,550,538	4,490,943	1.33
Households[3]	575,000	575,000	-

Fixed Telephone Service

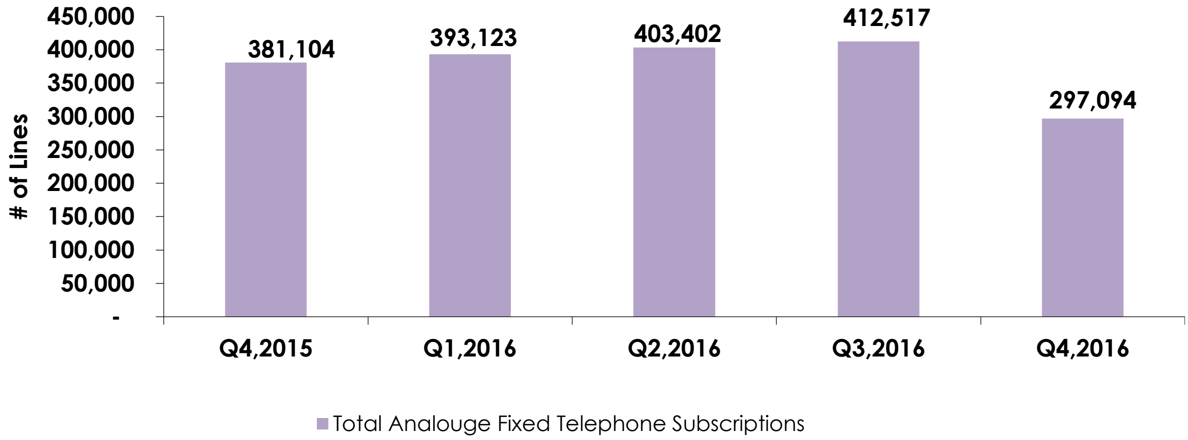
Type of Service	Q4/2016	Q3/2016	% Change
Fixed Telephone Subscriptions:[1]			
1.1 Analouge Fixed Telephone Lines:(Postpaid+ Prepaid)	297,094	412,517	**-28%**
1.2 VoIP Subscription	73,377	533	**13666.8%**
1.3 WLL Connections	1,574	1,526	**3.1%**
1.4 ISDN Channels (Equivalent DELs)*	43,672	37,080	**17.8%**
1.5 Public Telephone – Payphones	6,801	**6,801**	**0.0%**
1.Total Fixed Telephone Lines in Operation (1.1-1.5)	**422,518**	**458,464**	**-7.8%**
Fixed Line Penetration per 100 Inhabitant	**9.29%**	**10.2%**	**-0.91**
Fixed Line Penetration Per 100 Household	**73.48%**	**79.73%**	**-6.3%**

- Note: The Q4/2016 penetration rates are calculated based on the population (4,550,538), as per the latest bulletin published by NCSI – December 2016.
- Households: 575,000 (as per the NCSI estimation for year 2015).
- [1]Ooredoo reviewed the calculation of the fixed telephone subscriptions as per the ITU definition. Some connected through IP protocol so considered VoIP subscriptions not Analogue and some related to (PRI and SIP) was calculated as lines not channels which is not corrects per ITU definition. This resulted in drop in the total fixed telephone subscriptions.
- ISDN (Integrated services digital network): a network that provides digital connections between user-network interfaces.



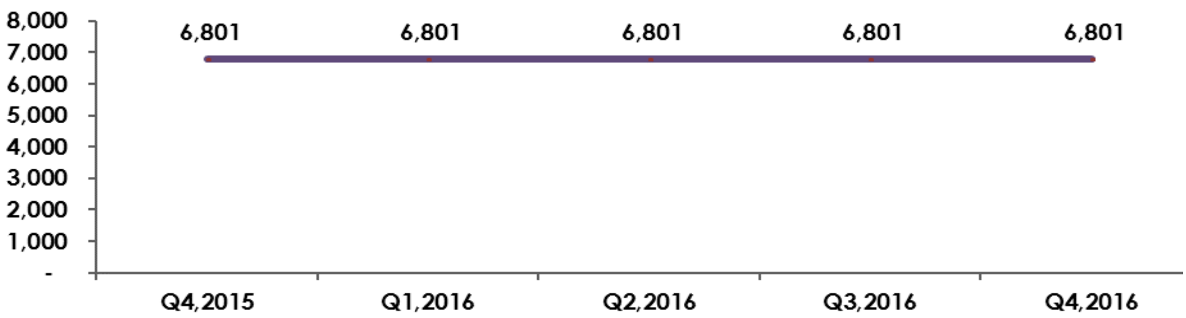
- Fourth Quarter 2016 achieved 422,518 fixed line subscribers with decrease of 7.8% due to the technical adjustment and recalculation of the indicators as per ITU standard as compared to the previous quarter (Q3/2016).
- The penetration rate per inhabitant of the fixed line subscriptions decreased by 0.9% during the last quarter.
- However, the penetration rate per household increased by -6.3% during the fourth quarter from 79.73% to 73.48%.

Total Analouge Fixed Telephones Subscriptions: (Post paid & Pre paid)



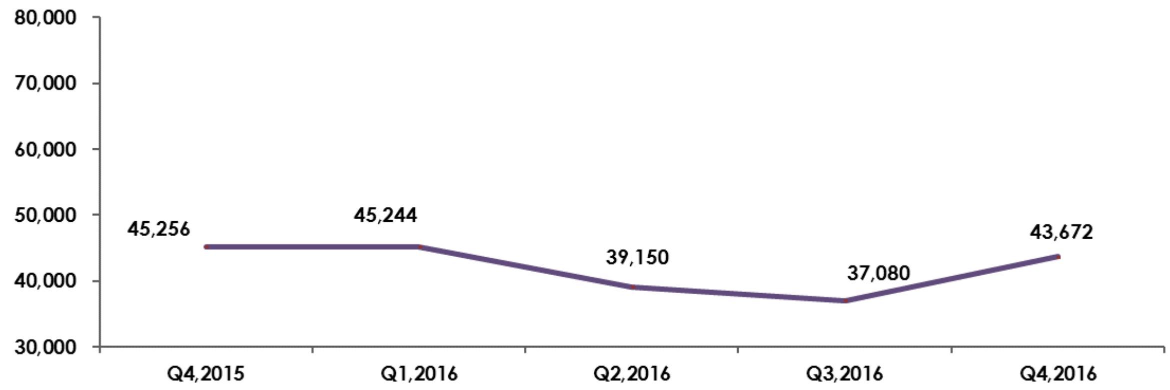
- Total analogue postpaid and prepaid fixed telephone subscriptions fixed declined during the fourth quarter 2016 by 28%. The reason behind such decline is the recalculation of fixed line subscriptions of services providers as some fixed lines (postpaid & prepaid) moved to VoIP subscription and as per ITU definition these lines are provided through internet protocol.

Pay Phones



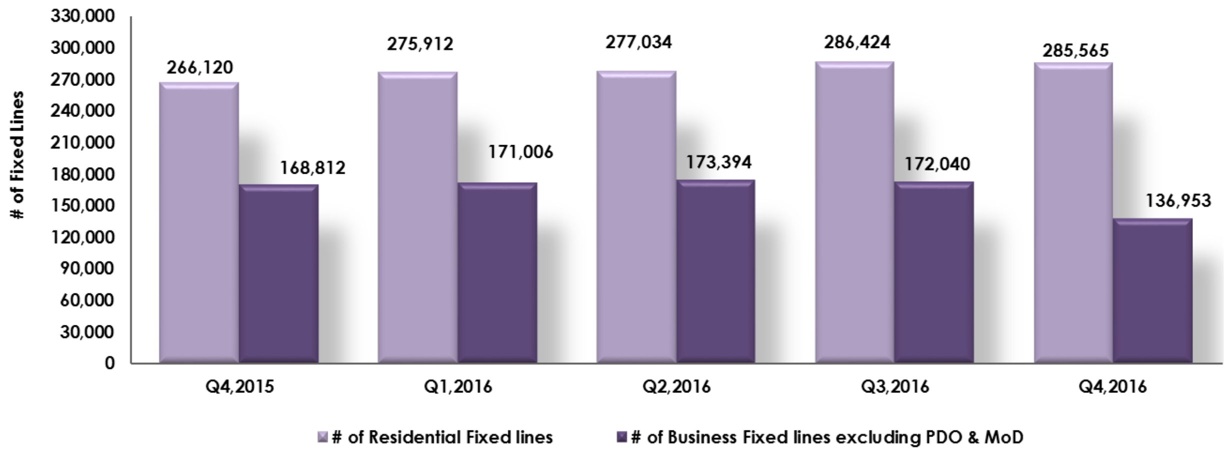
- Public payphones remained unchanged since last year with the total of 6,801 pay phones in service. These are being kept as a license obligation.

ISDN Equivalent Channels



- During the fourth quarter 2016, the ISDN1 equivalent channels increased by 18% reaching 43,672 channels.

Residential Vs Business Fixed Line Subscribers



- During the fourth quarter, both residential and business fixed line subscriptions decreased slightly by 0.3% and 20.4% respectively as compared to the previous quarter.
- The split between fixed residential and business lines stood at 60.57% and 39.43% respectively in Q4/2016.

[1]ISDN (Integrated services digital network): a network that provides digital connections between user-network interfaces.

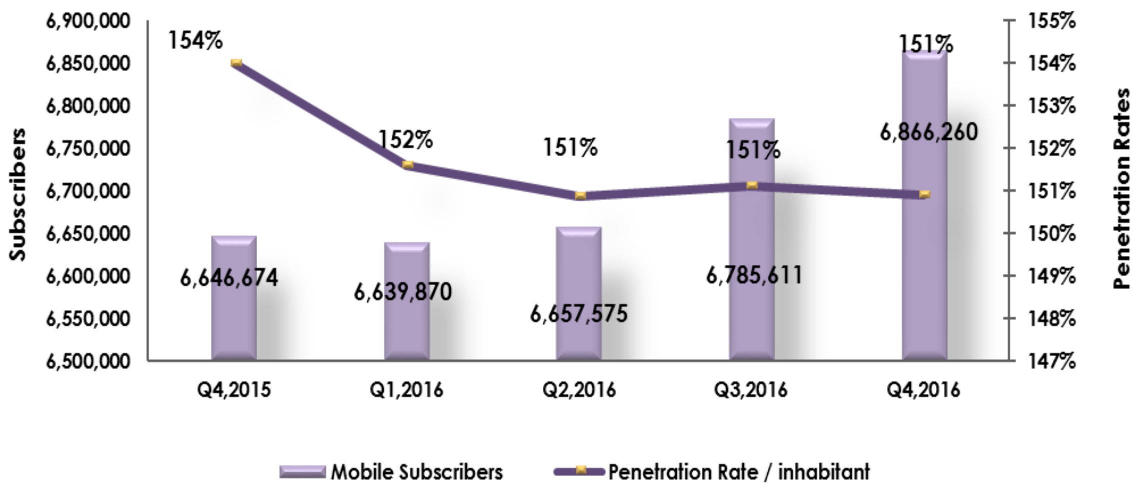
Mobile Service

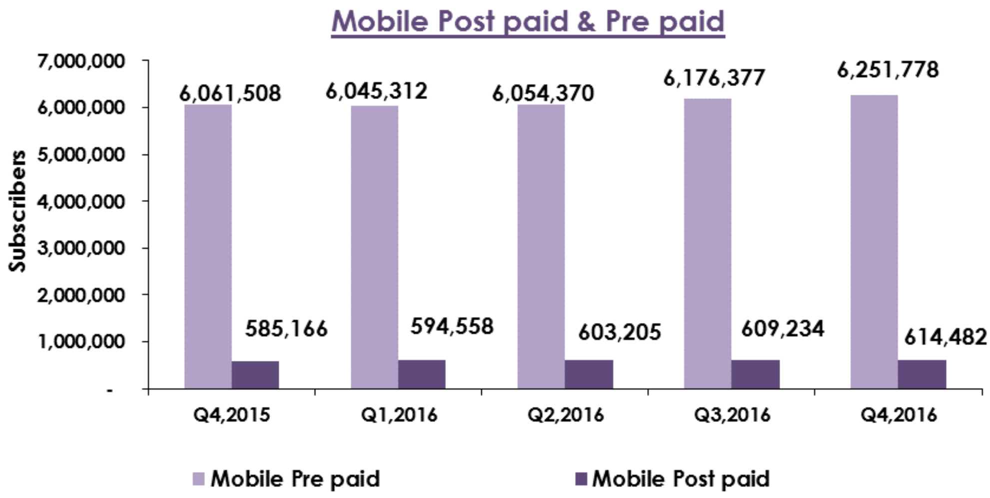
Mobile Subscribers	Q4/2016	Q3, 2016	% change
1 Post Paid			
1.1 Operators	614,482	609,234	**0.86%**
Total Postpaid Subscribers	**614,482**	***609,234***	**0.86%**
2 prepaid			
2.1 Operators	5,080,636	5,049,204	**0.62%**
2.2 Resellers	1,171,142	1,127,173	**3.9%**
Total Prepaid Subscribers	**6,251,778**	**6,176,377**	**1.2%**
Total Mobile Subscribers: (2.1+2.2)	**6,866,260**	**6,785,611**	**1.18%**
Mobile Penetration/100 Inhabitant	**151%**	**151%**	**0%**
BlackBerry Subscriptions:			
3.1 Post Paid	3,310	3,963	**-16.48%**
3.2 Pre-Paid	14,342	19,659	**-27.05%**
Total BlackBerry Subscribers (3.1+3.2)	**17,652**	**23,622**	**-25.3%**
% of BlackBerry Mobile Subscribers of total Base in Oman	**0.26%**	**0.35%**	**-25.7%**

- **Note: The Q4/2016 penetration rates are calculated based on the population (4,550,538), as per the latest bulletin published by NCSI – December 2016.**

- The total mobile subscribers increased slightly by 1.18% during the fourth quarter 2016 achieving a total of 6,866,260 subscribers base.
- The mobile penetration stayed constant during fourth quarter.

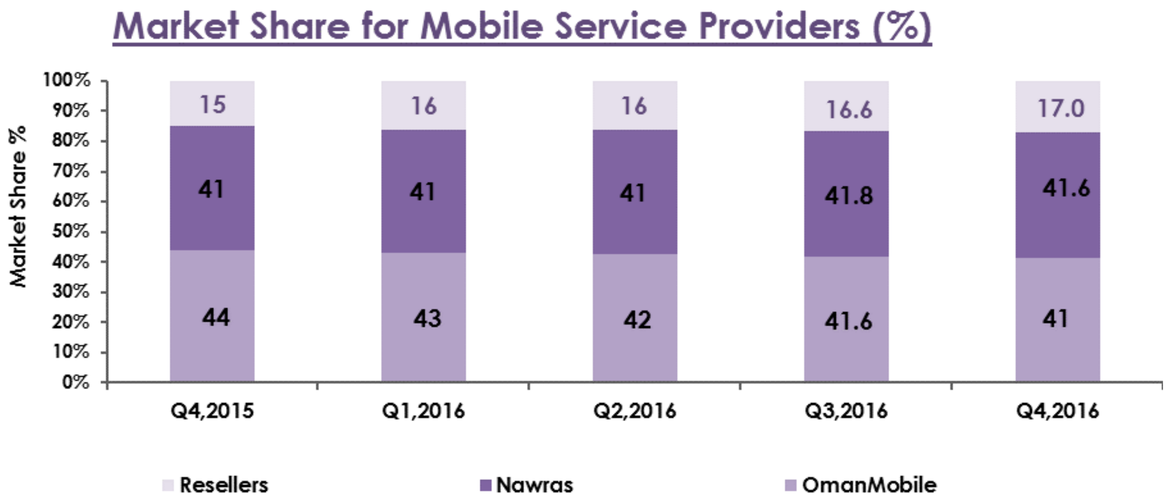
Mobile Subscribers





- Post-paid mobile subscribers reached 614,482 with 0.86% growth over the previous quarter.

- Prepaid mobile subscribers increased by1.2 % reaching to 6,251,778 subscribers.

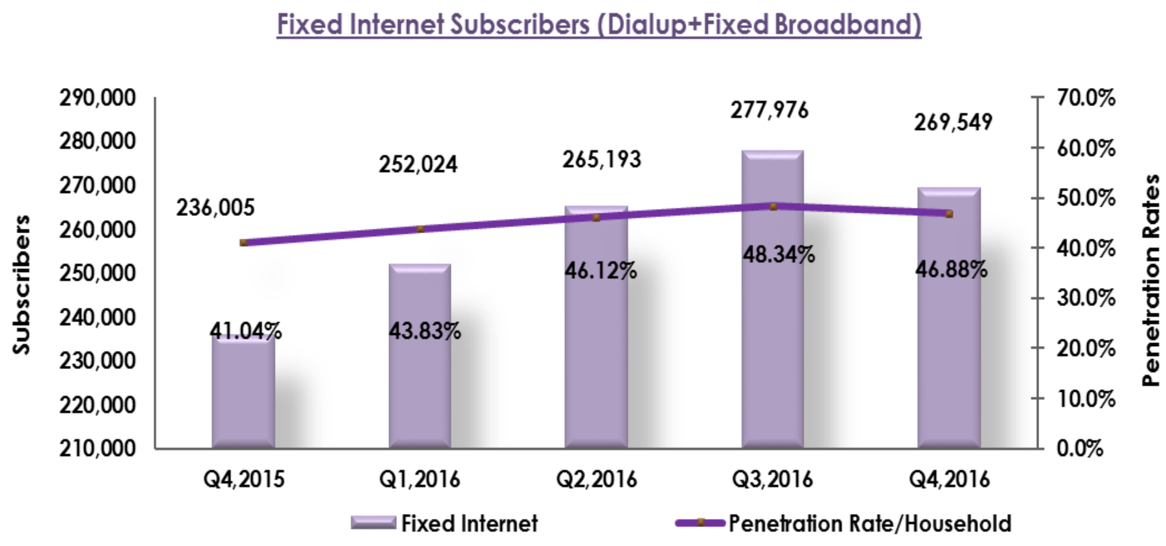


- During the fourth quarter 2016, Omantel mobile and Ooredoo almost attained equal market share. The Resellers attained 17% market share slightly higher than previous quarter 2016.

Internet Services

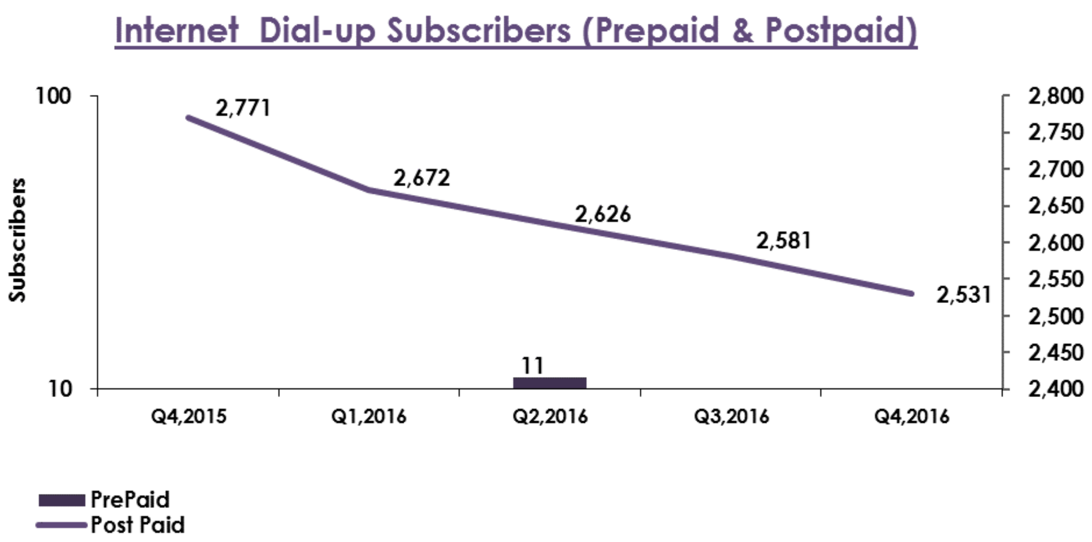
Type of Service	Q4/2016	Q3/2016	% change
Fixed Narrowband			
1.1Dial-up Fixed Internet Subscribers	2,531	2,581	**-1.94%**
1.2 Internet Leased Lines(Narrowband)	35	-	-
1. Total fixed Narrowband Subscriptions : (1.1+1.2)	**2,531**	**2,581**	***-1.94%***
Fixed Broadband Subscribers			
2. Total Fixed Broadband Subscribers[1]	**266,983**	**275,395**	**-3.1%**
Total Fixed Internet Subscribers (1+2)	**269,549**	**277,976**	**-3%**
Fixed Internet Penetration /100 Household	**46.88%**	**48.34%**	**-1.5%**
Fixed Broadband Subscribers Penetration/100 Household	**46.43%**	**47.89%**	**-0.96%**
Active Mobile Broadband Subscribers			
3.1 Dedicated mobile-broadband Subscribers	2,452,983	2,539,307	**-3.39%**
3.2 Standard mobile-broadband Subscribers	1,484,878	1,298,782	**14.3%**
Total Active Mobile Broadband Subscribers (3.1+3.2)	**3,937,861**	**3,838,089**	**2.6%**
Active Mobile Broadband Penetration Rate /100 Inhabitant	**86.5%**	**85.5%**	**1%**

- **Note: The Q4/2016 penetration rates are calculated based on the population (4,550,538), as per the latest bulletin published by NCSI – December 2016.**
- **Households: 575,000 (as per the NCSI estimation for year 2015).**
- **[1]the drop in the fixed broadband subscriptions resulted from the update recalculation of Ooreedoo subscriptions as per the ITU standard.**

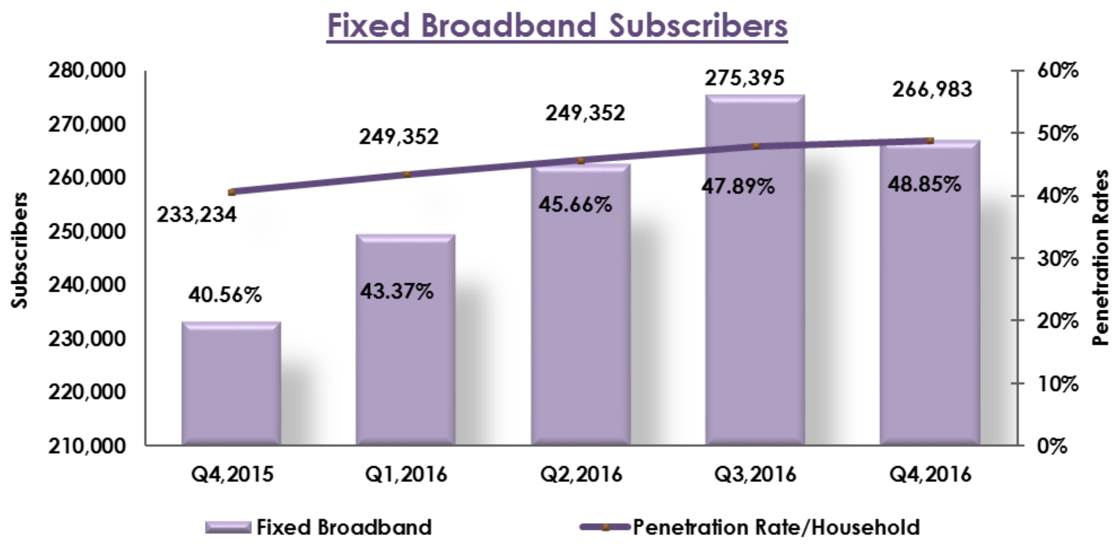


➢ The total fixed internet subscribers were dropped slightly by 3% during the fourth quarter 2016 reaching a total of 269,549 subscribers due to the technical adjustment and recalculation of the indicators as per ITU standard as compared to the previous quarter (Q3/2016).

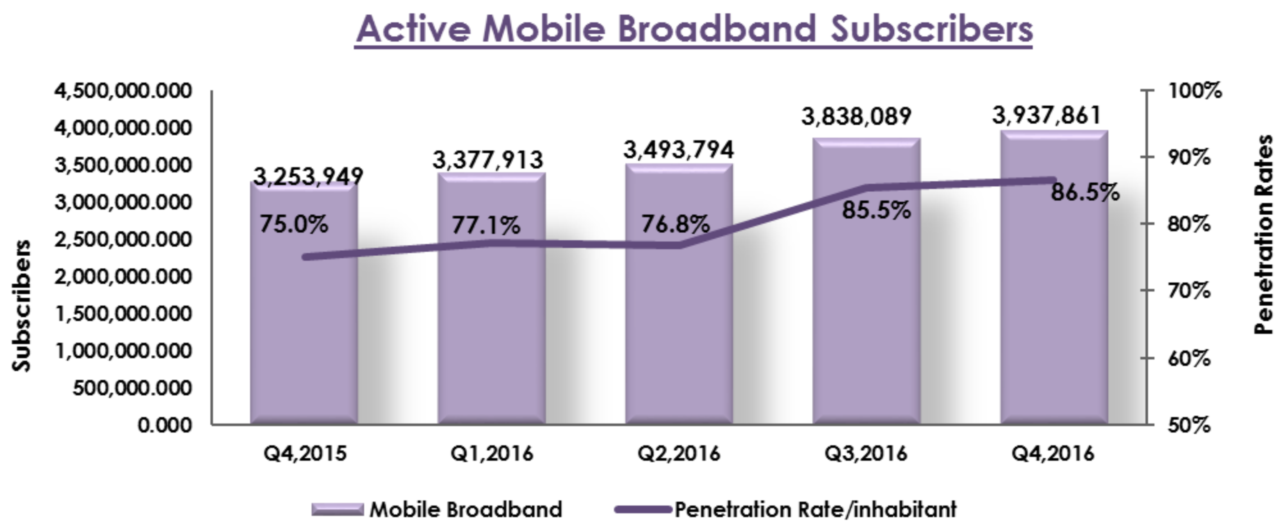
➢ During the reported quarter, the fixed internet penetration rate per household reached 46.88% which is almost 1.5% lower than the previous quarter.



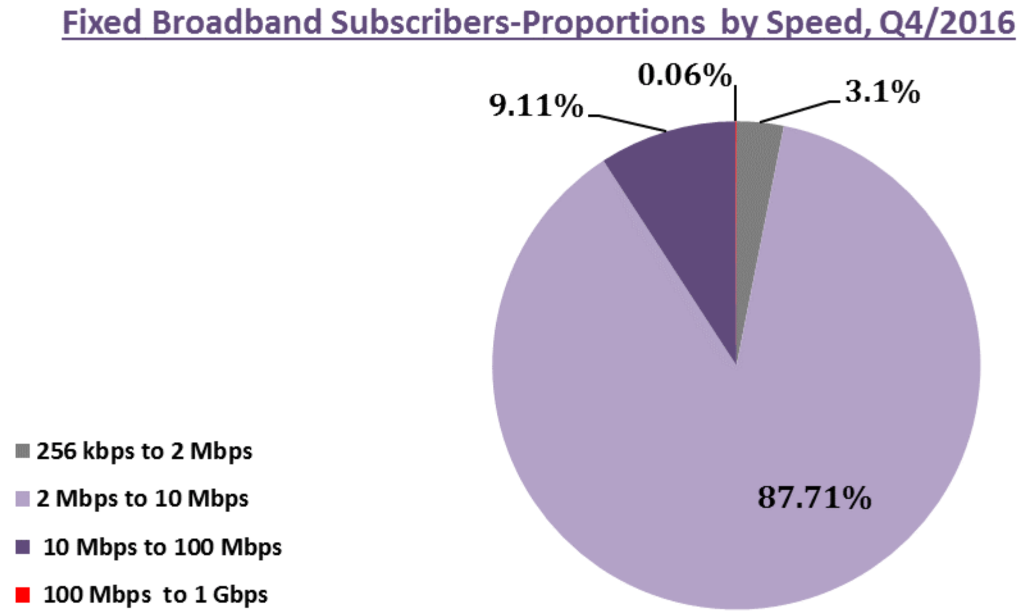
➢ Since last year, dial up postpaid internet subscribers have been gradually shrinking reaching to 2,531 subscribers by end of Q4, 2016.



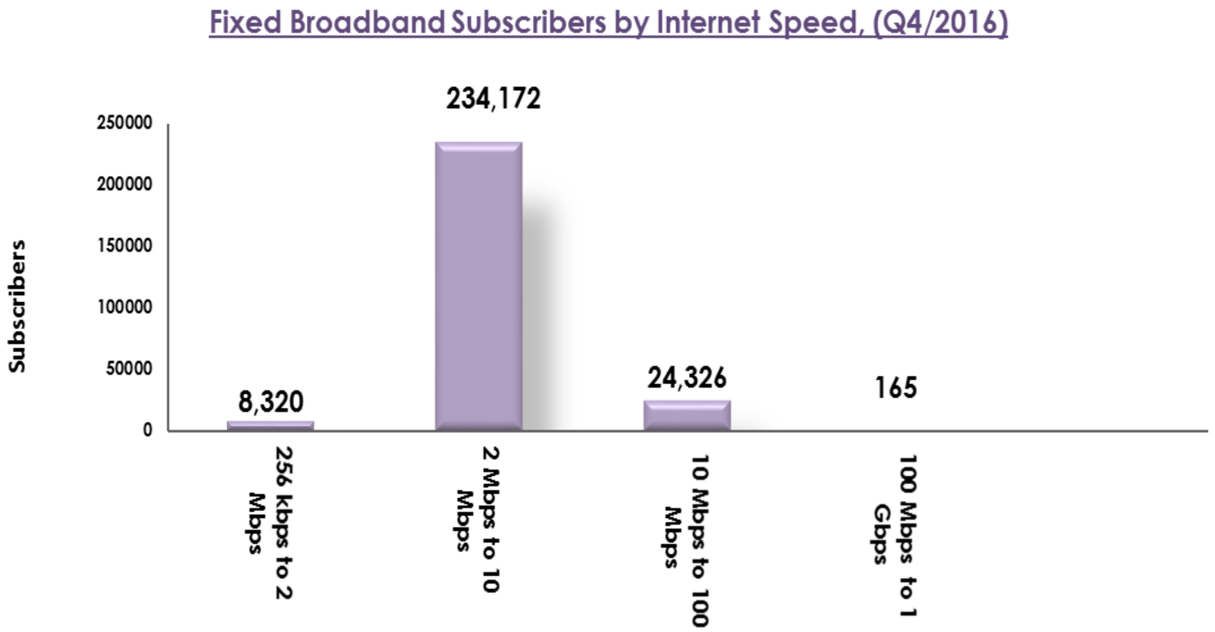
➢ During the fourth quarter 2016, fixed broadband segment has experienced 3% drop over the previous quarter. Fixed Broadband subscription reached 266,983 subscribers with penetration rate of 48.85% per household.

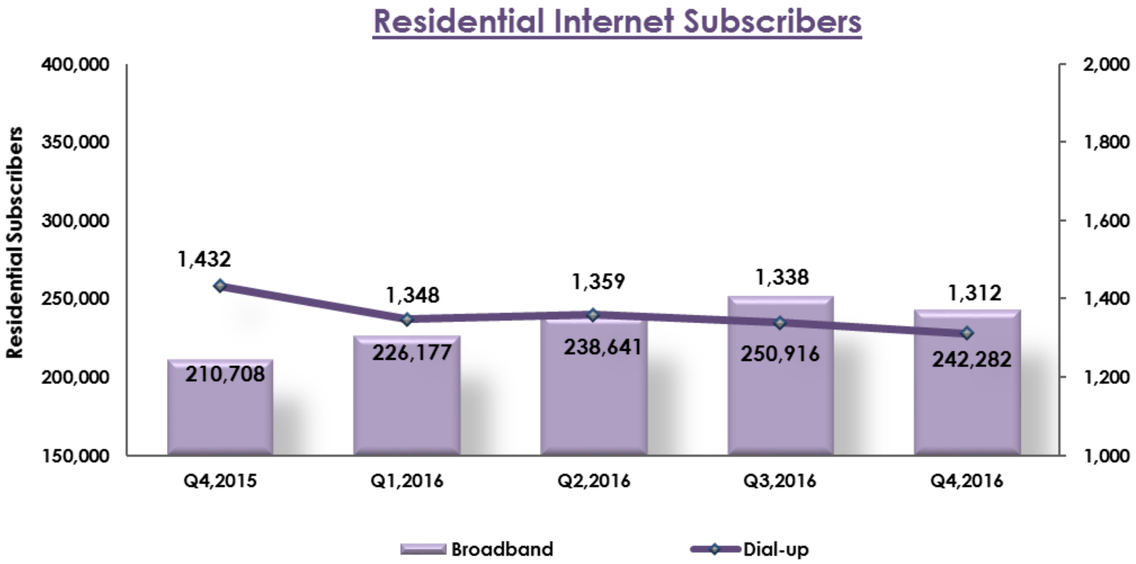


➢ During the fourth quarter 2016, total active mobile broadband subscribers rose by 9.9% to 3,937,861 from 3,838,089. Also, the penetration rate increased by 1 % from 85.5% to 86.5% per inhabitant.



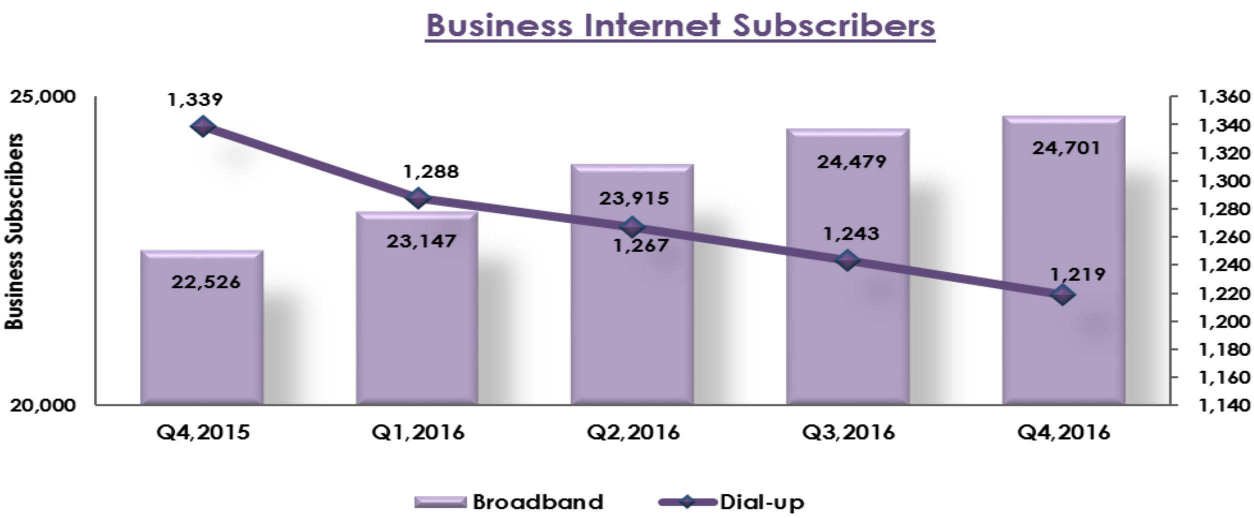
- 3.1% of fixed Broadband subscribers during Q4,2016 had access speed of 256 Kbps to 2 Mbps.
- 87.7% of fixed Broadband subscribers during Q4,2016 had access speed of 2 Mbps to 10 Mbps.
- 9.11% of fixed Broadband subscribers during Q4,2016 had access speed of 10 Mbps to 100 Mbps.
- 0.06% of fixed Broadband subscribers during Q4,2016 has access speed of 100 Mbps to 1 Gbps.

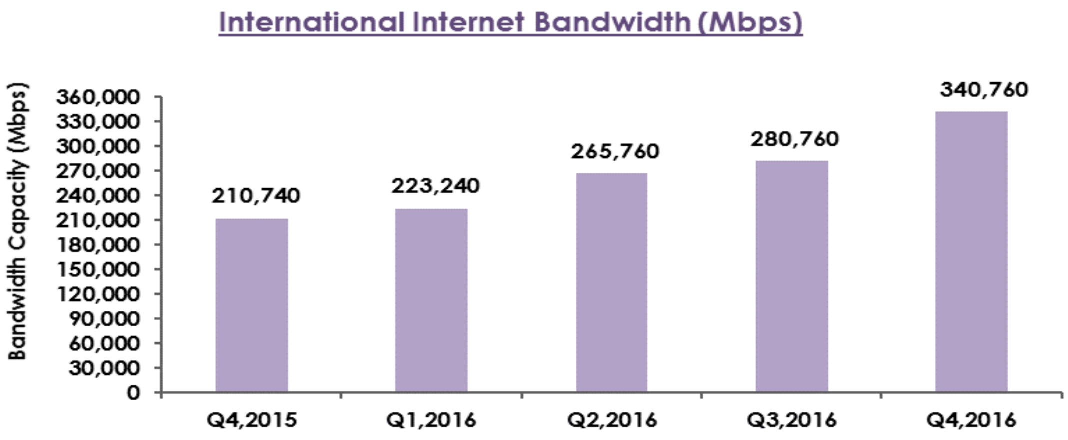




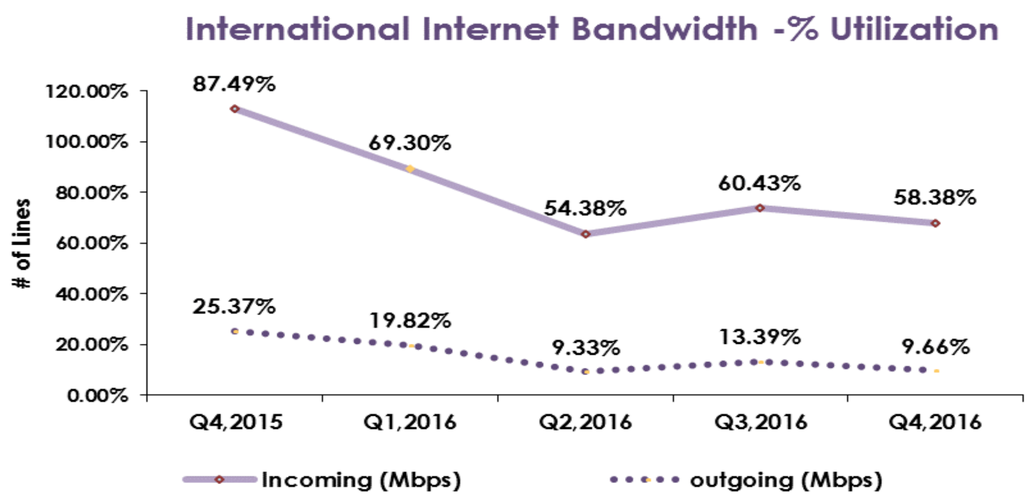
- The residential broadband subscribers in the above chart declined by 3.4% during the fourth quarter 2016, also the residential dial up subscribers declined by 1.9% over the fourth quarter 2016.

- The below chart presents a slight increase of 0.9% in the business segment of broadband, while 1.9% drop in the dial up internet subscribers.



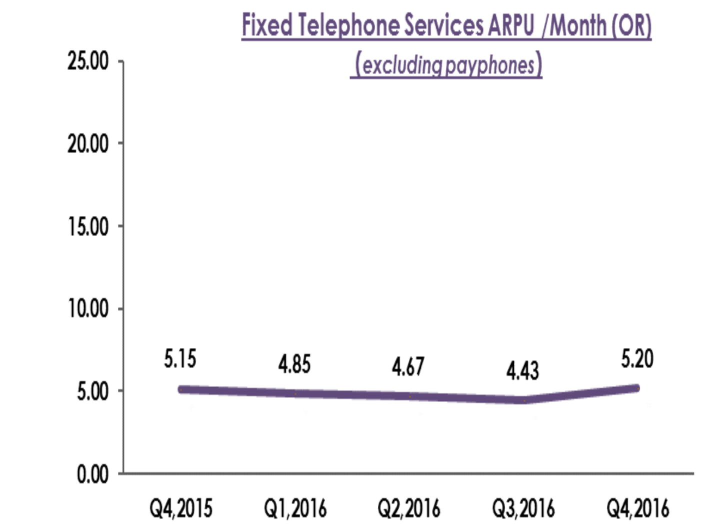


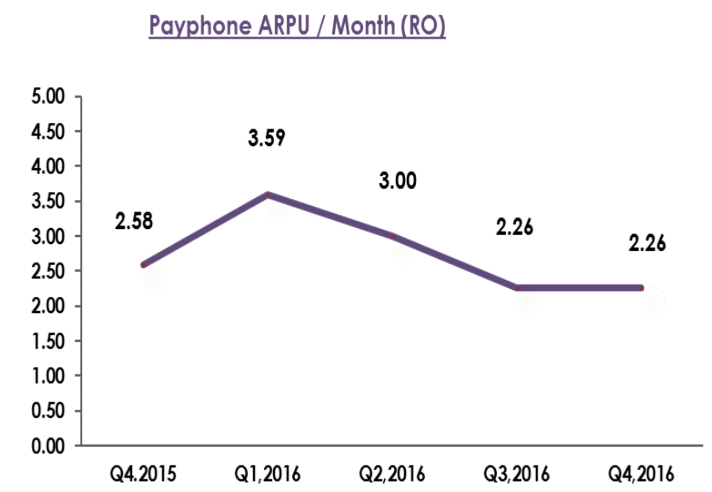
➢ During the fourth quarter 2016, the operators had 340,760 Mbps capacity for international internet bandwidth as compared to the previous quarter when it was 280,760 Mbps.

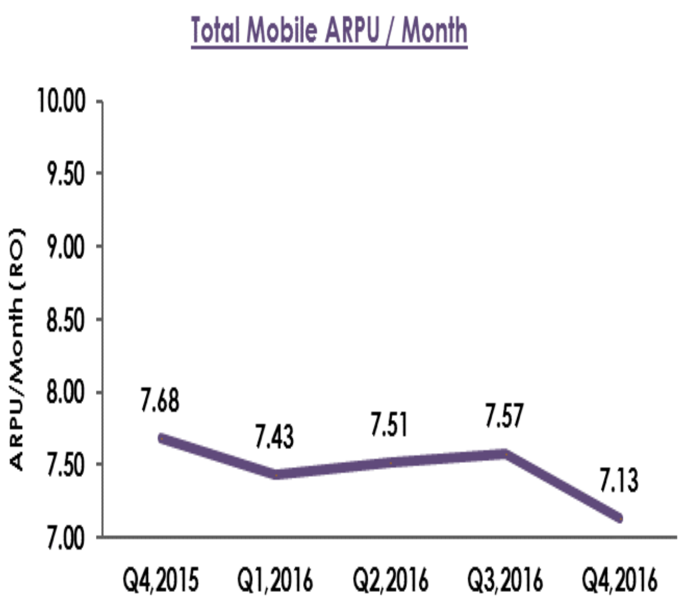


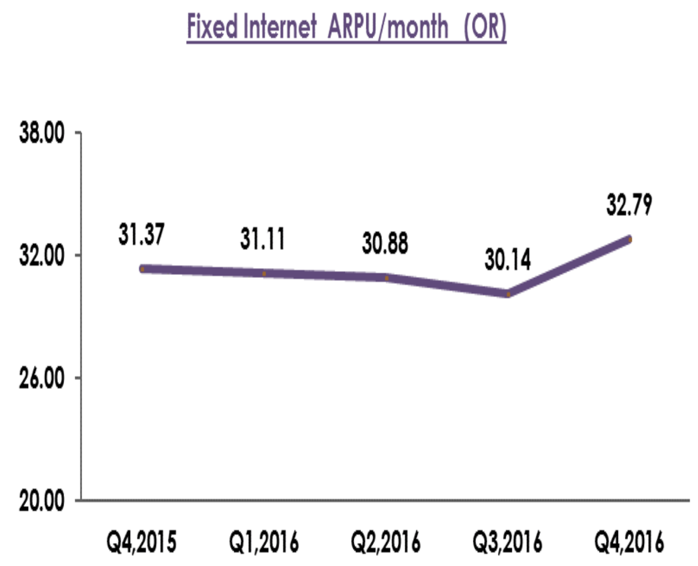
➢ Out of 340,760 Mbps capacity, on average 9.66% was utilized for the outgoing and 58.38% for the incoming traffic.

ARPUs[1]



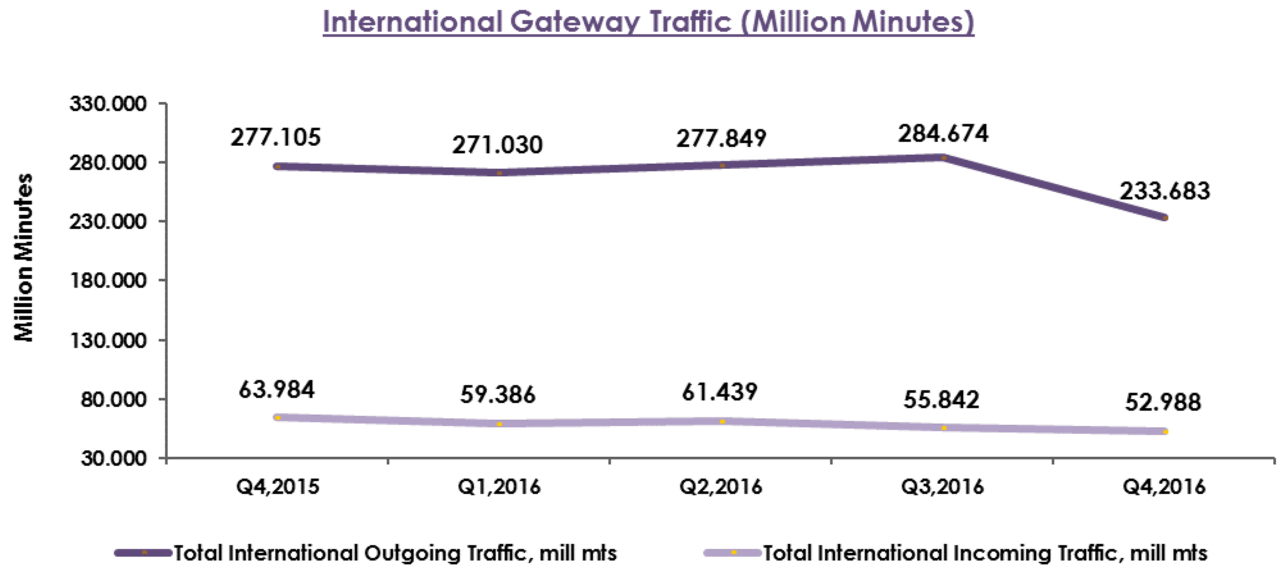




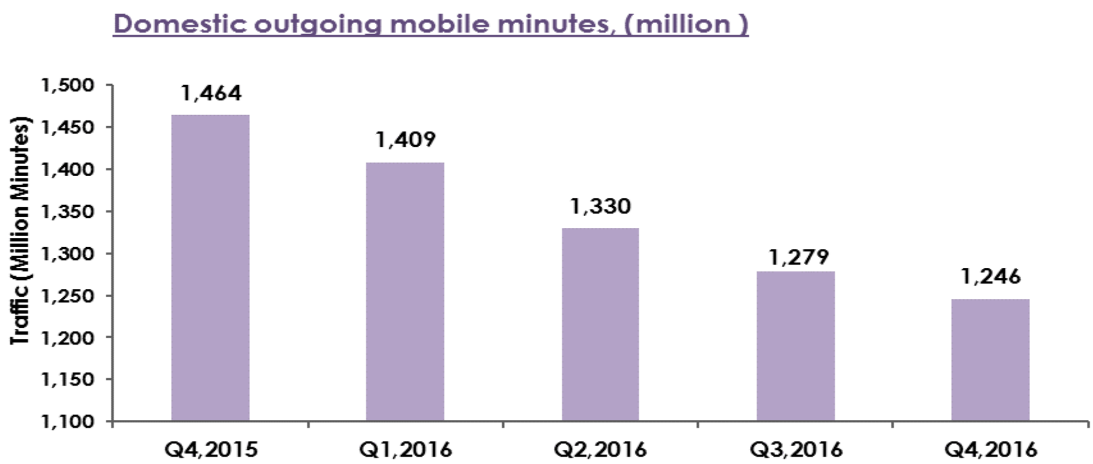


[1] ARPU (the average revenue per user)

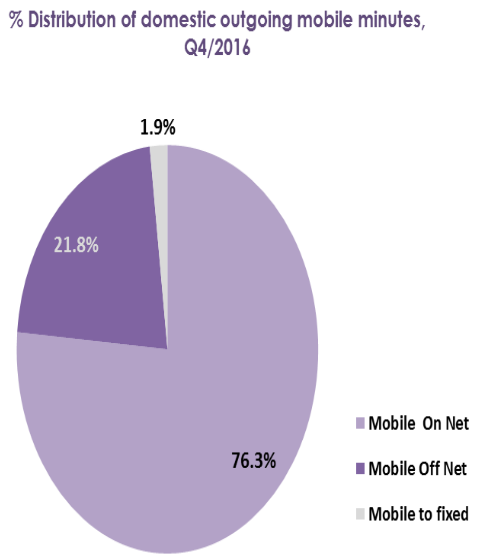
Traffic

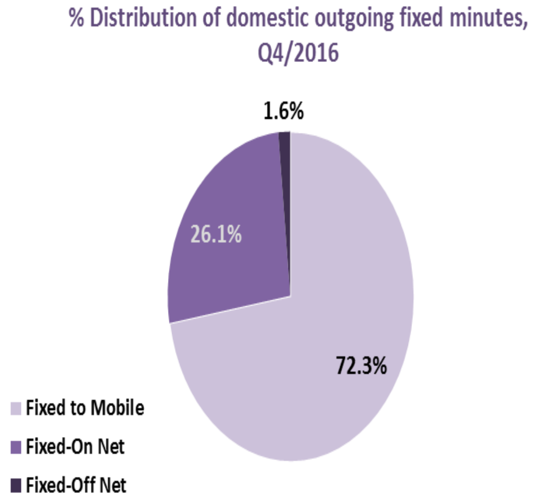


- The fourth quarter 2016 experienced decline in the outgoing international traffic by 17.91% and in the incoming traffic by 5.1% against the third quarter 2016.



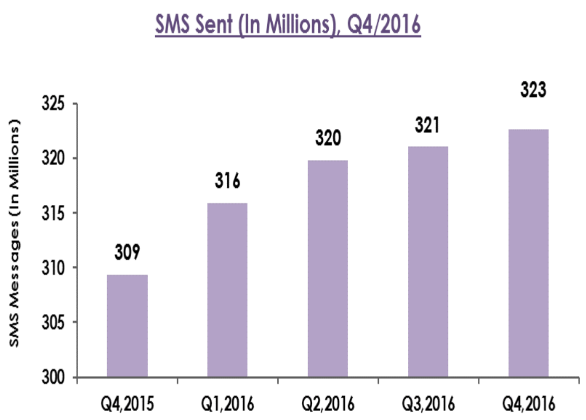
- During the fourth quarter 2016, the domestic outgoing mobile traffic declined by 2.58% to 1,246 million minutes from the previous quarter traffic of 1,279 million minutes.

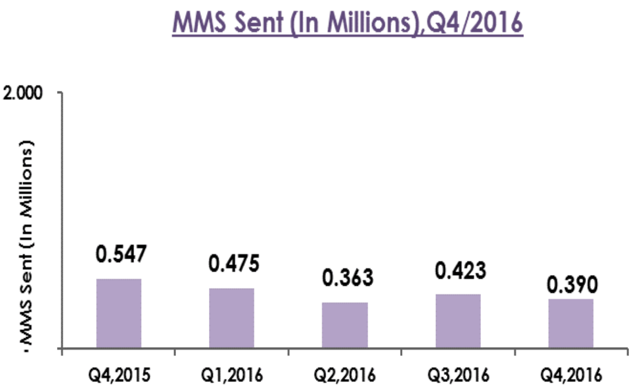




During the fourth quarter 2016, mobile to mobile (On net) traffic had the major share of the 76.3% out of the total domestic outgoing traffic. While the Off net mobile domestic traffic has 21.8%, share Mobile to fixed Traffic represents1.9% of the mobile domestic traffic.

During the fourth quarter 2016, the domestic outgoing fixed traffic achieved 72.3% share for fixed to mobile, 26.1% for fixed to fixed (On-net), and 1.6% for fixed to fixed (Off-net) traffic.





Total outgoing SMS (short messages) Traffic increased to reach 323 million messages by the fourth quarter 2016 from 321 million messages in the third quarter, 2016.

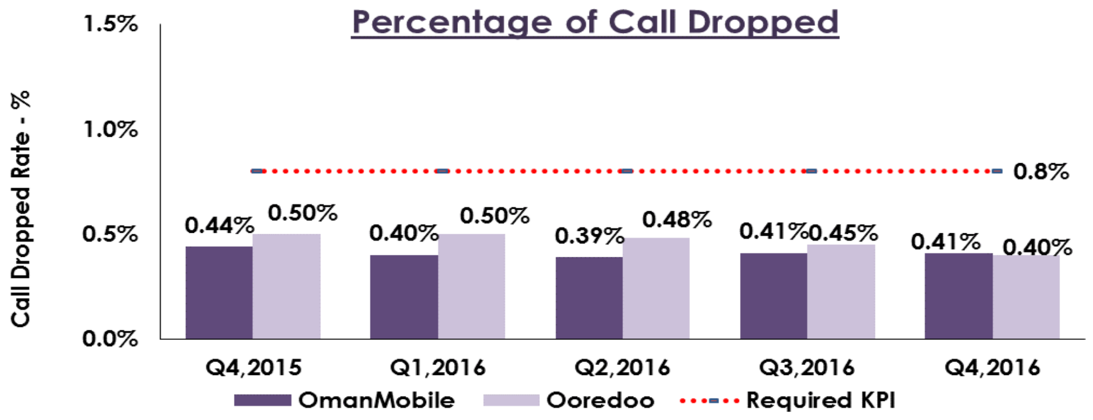
The number of outgoing MMS (multimedia massages) has been gradually decreasing since the last year.

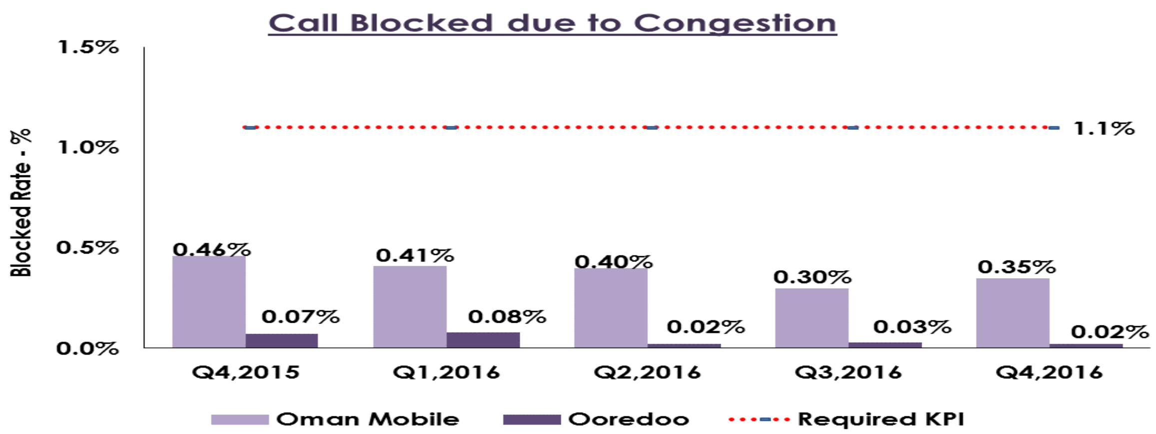
Quality of Service

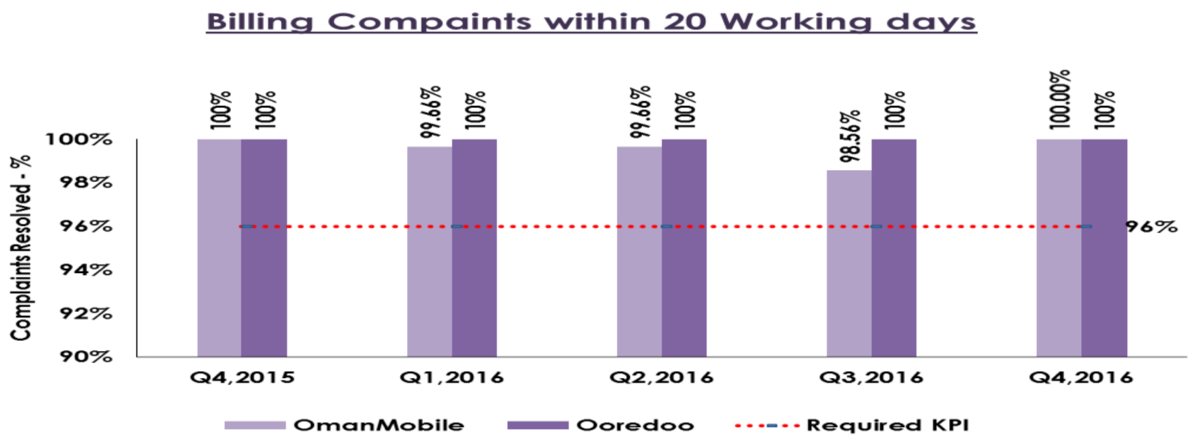
Mobile Services KPIs*

Mobile Services KPIs	Required KPI (Quarterly)	Q4/2016		Q3/2016	
		Oman Mobile %	Ooredoo %	Oman Mobile %	Ooredoo %
1. Percentage of Calls Dropped	Less than 0.8%	0.41	0.40	0.41	0.45
2. Percentage of Calls Blocked due to Congestion	Less than 1.1%	0.35	0.02	0.30	0.03
3. Percentage of billing complaints resolved within 20 working days	More than 96%	100	100	98.56	100

*(QoS indicators are as measured and reported by the operators, not audited or verified figures by TRA)


Percentage of Call Dropped
Call Dropped Rate - %
1.5%
1.0%
0.5%
0.0%
0.8%
0.44%
0.50%
0.40%
0.50%
0.39%
0.48%
0.41%
0.45%
0.41%
0.40%
Q4,2015
Q1,2016
Q2,2016
Q3,2016
Q4,2016
OmanMobile
Ooredoo
Required KPI

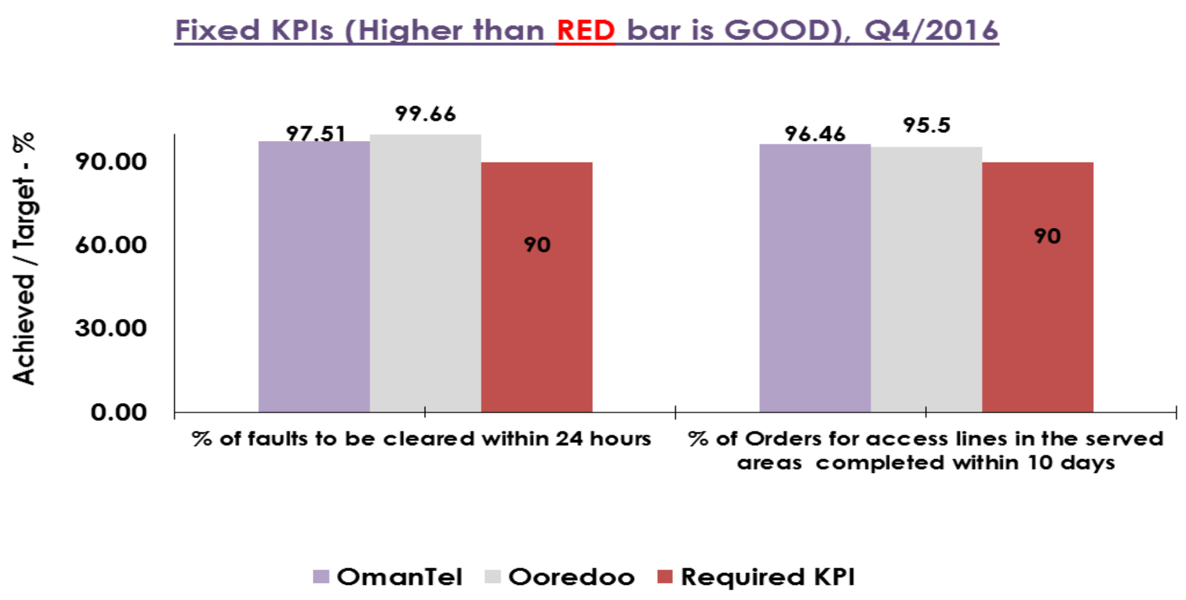

Call Blocked due to Congestion
Blocked Rate - %
1.5%
1.0%
0.5%
0.0%
1.1%
0.46%
0.07%
0.41%
0.08%
0.40%
0.02%
0.30%
0.03%
0.35%
0.02%
Q4,2015
Q1,2016
Q2,2016
Q3,2016
Q4,2016
Oman Mobile
Ooredoo
Required KPI


Billing Compaints within 20 Working days
Complaints Resolved - %
100%
98%
96%
94%
92%
90%
100%
100%
99.66%
100%
99.66%
100%
98.56%
100%
100.00%
100%
96%
Q4,2015
Q1,2016
Q2,2016
Q3,2016
Q4,2016
OmanMobile
Ooredoo
Required KPI

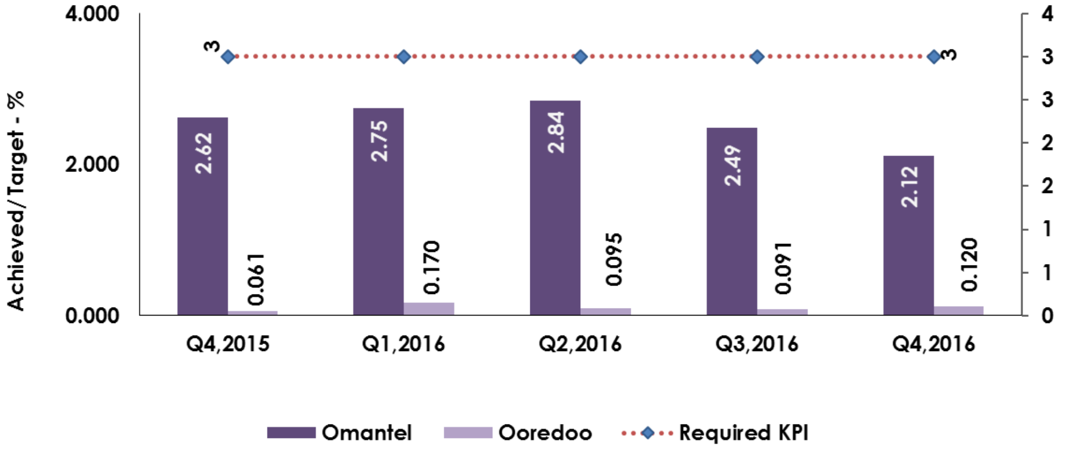
Fixed Services KPIs*

Fixed Services KPIs	Required KPI (Quarterly)	Q4/2016		Q3/2016	
		Omantel %	Ooredoo %	Omantel %	Ooredoo %
1. Faults per 100 lines per quarter	Less than 3	2.12	0.120	2.49	0.091
2. % of faults to be cleared within 24 hours	More than 90%	97.51	99.66	96.56	99.37
3. Unsuccessful call Ratio for local and national fixed calls	Less than 1%	0.01	0.150	0.01	0.16
4. Percentage of Orders for access lines in the served areas completed within 10 days	More than 90%	96.46	95.5	96.91	98.71
5. Billing complaints per 1000 Bills	Less than 1.5	0.23	0.646	0.22	0.169
6. Percentage of billing complaints resolved within 20 working day	More than 96%	100	100	99	100

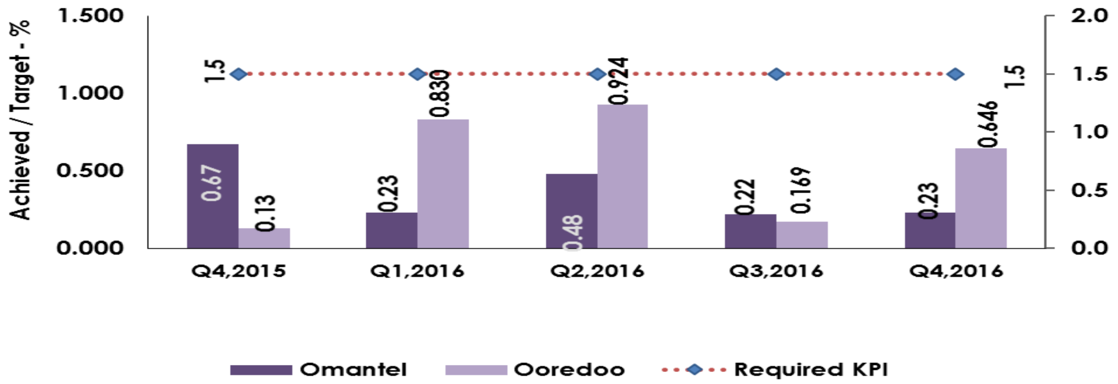
*(QoS indicators are as measured and reported by the operators, not audited or verified figures by TRA)



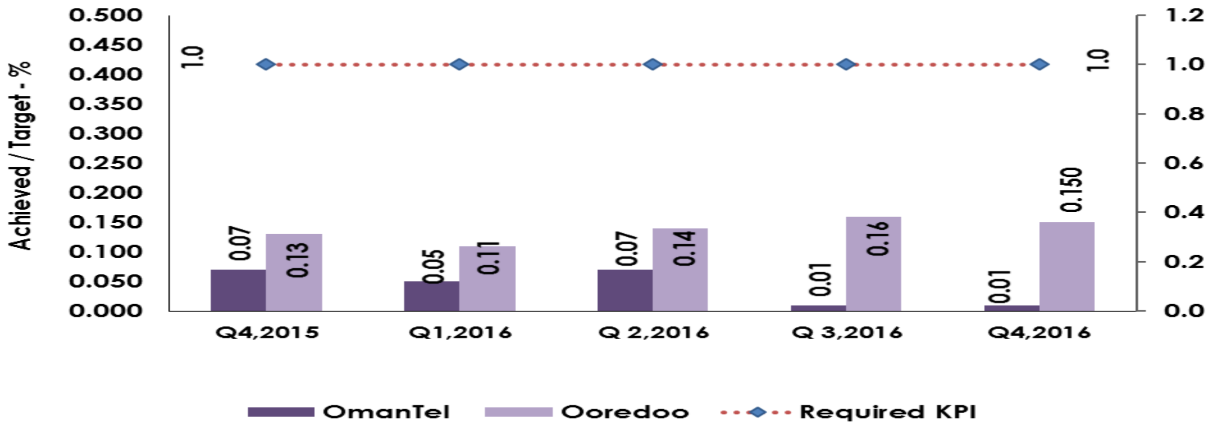
Faults per 100 lines



Billing complaints per 1000 Bills



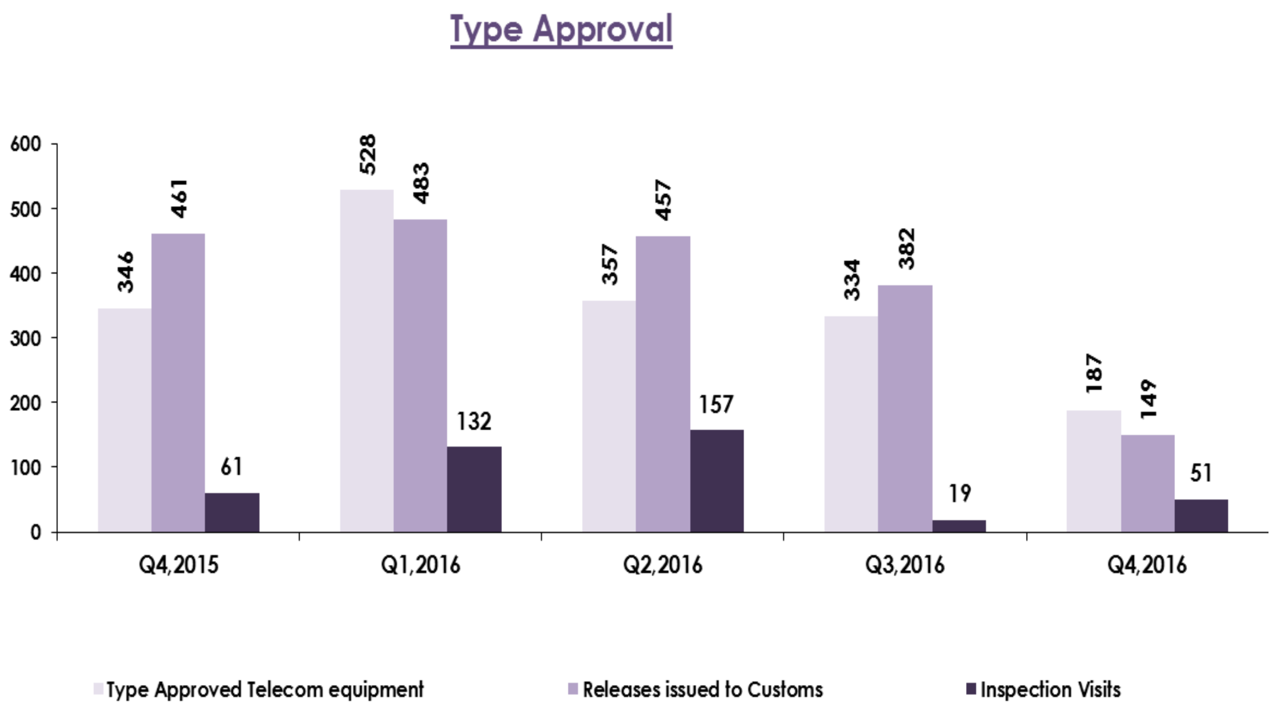
Unsuccessful call Ratio for local and national fixed calls

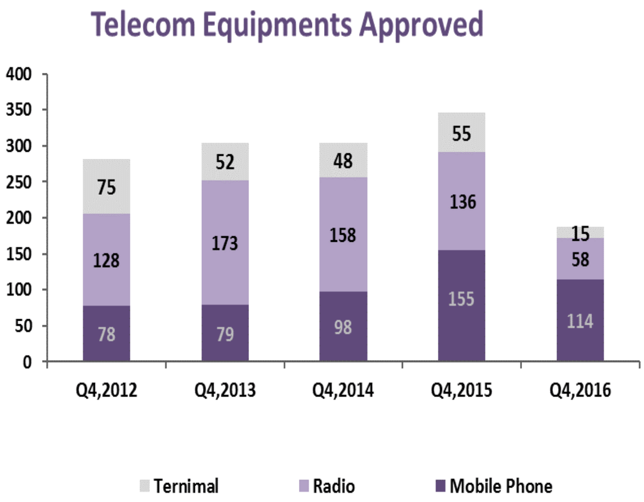


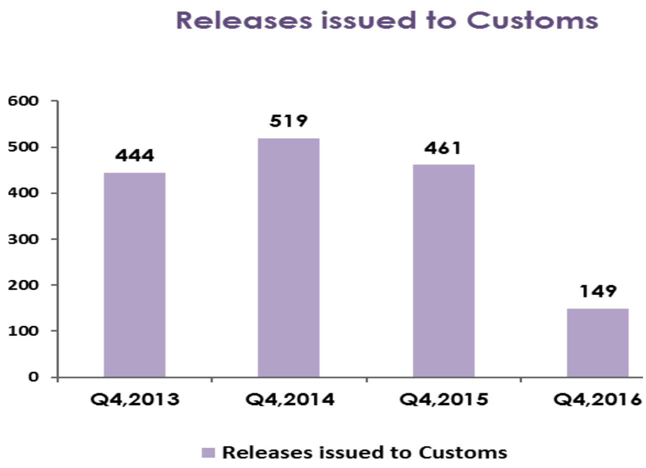
Type Approval

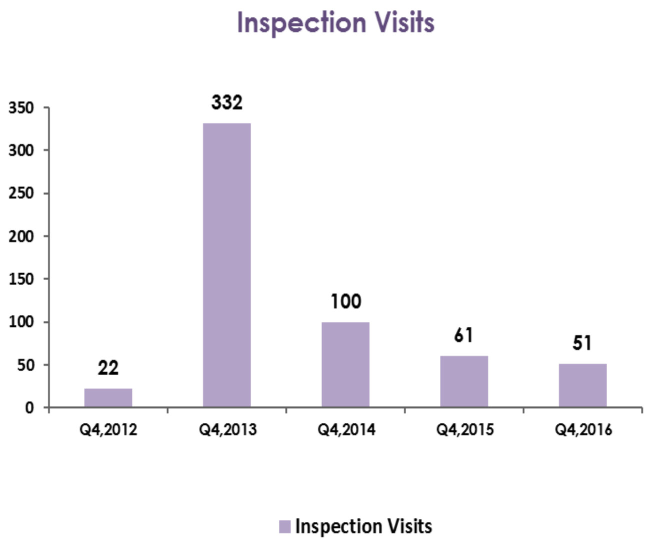
During the fourth Quarter 2016, TRA:

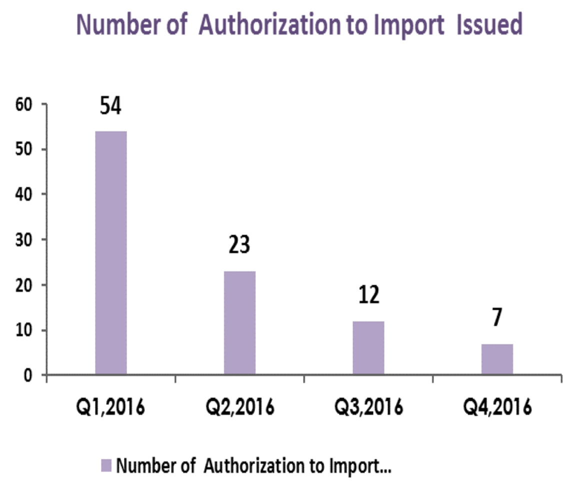
- Approved a total number of 187 (Previous Quarter 334) Telecom Equipment.
- Issued 149 (Previous Quarter: 382) Releases to Customs for Import of Telecom equipment.
- Inspected 51 (Previous Quarter: 19) dealerships.




Telecom Equipments Approved
400
350
300
250
200
150
100
50
0
75
128
78
52
173
79
48
158
98
55
136
155
15
58
114
Q4,2012
Q4,2013
Q4,2014
Q4,2015
Q4,2016
Ternimal
Radio
Mobile Phone


Releases issued to Customs
600
500
400
300
200
100
0
444
519
461
149
Q4,2013
Q4,2014
Q4,2015
Q4,2016
Releases issued to Customs


Inspection Visits
350
300
250
200
150
100
50
0
22
332
100
61
51
Q4,2012
Q4,2013
Q4,2014
Q4,2015
Q4,2016
Inspection Visits


Number of Authorization to Import Issued
60
50
40
30
20
10
0
54
23
12
7
Q1,2016
Q2,2016
Q3,2016
Q4,2016
Number of Authorization to Import...

Tariffs & Promotions

Number of Promotions approved Q4, 2016															
Licensee	Voice National		Voice International		Data		New Connections/ Starter Pack		International Mobile Roaming	Value Added Services	Top-Up and Bundled services	Leased line/MPLS	Miscellanious	Total	%
	Mobile	Fixed	Mobile	Fixed	Mobile	Fixed	Mobile	Fixed							
Renna	2		3		2		1							8	17%
Friendi	1		1				2				2			6	13%
Teo			4											4	9%
Omantel	1		1		4		1		2	1	6		1	17	37%
Ooredoo					1	2	1		1		4			9	20%
Awaser						2								2	4%
Total	4	0	9	0	7	4	5	0	3	1	12	0	1	46	100%
	8.7%	0.0%	19.6%	0.0%	15.2%	8.7%	10.9%	0.0%	6.5%	2.2%	26.1%	0.0%	2.2%	100%	

Number of new services, Tariffs and Revisions approved Q4, 2016															
Licensee	Voice		Voice International		Data		New Connections/ Starter Pack		International Mobile Roaming	Value Added Services	Top-Up and Bundled services	Leased line/MPLS	Miscellanious	Total	%
	Mobile	Fixed	Mobile	Fixed	Mobile	Fixed	Mobile	Fixed							
Renna					1									1	11%
Friendi					1						1			2	22%
Teo			2											2	22%
Omantel					1	2				1				4	44%
Ooredoo														0	0%
Awaser														0	0%
Total	0	0	2	0	3	2	0	0	0	1	1	0	0	9	100%
	0%	0%	22%	0%	33%	22%	0%	0%	0%	11%	11%	0%	0%	100%	

Number of promotions/ new services and revisions segment wise

No. of Promotions	Mobile	Fixed	Mobile & Fixed	Total
	42	4	0	**46**
%	91%	9%	0%	**100%**
No. of new services and revisions	5	2	2	**9**
	56%	**22%**	**22%**	**100%**

No. of Promotions	Personal	Corporate	Personal & Corporate	Total
	44	2		**46**
%	93%	0%	0%	**93%**
No. of new services and revisions	9	0	0	**9**
	100%	0%	0%	**100%**

No. of Promotions	Prepaid	Postpaid	Prepaid & Postpaid	Total
	24	9	13	**46**
%	67%	17%	17%	**100%**
No. of new services and revisions	3	3	3	**9**
	33%	33%	33%	**100%**

Summary of Promotion's Statistics for Q4/2016:

- Number of Promotions increased by 28% comparing with Q4 2015 from 36 to 45.
- Most of Promotions approved or filed related to Top-Up and Bundled Services (26%), International Voice (20%), MBB(15%) and Welcome Packs (11%).
- Most of services and revisions approved and filed dominated by MBB (33%), FBB and International voice with the same percentage each of 22% and Value Added Services, Top-Up (11%) and Bundled Services (11%).
- Non-dominant licensees contributed for 43 % of the total promotions approved and filed this quarter and for 56% of the total Services and Revisions approved and filed for the same quarter.

Most Remarkable Aspects of Promotions for the subject quarter:

- This period witnessed launching number of promotions on the occasion of National Days such as reductions in rates of local voice, free data usage, Bonus credit and special international roaming packages.
- Omantel introduced 3 new prepaid bundles on a promotional basis.
- Omantel also launched their double data offering on their Baqati plans in return for a one-year commitment.
- Ooredoo introduced Musafir World for first time as a promotion.
- Renna introduced a promotion on their new VOIP international Calling Service.

The most important services and revisions approved this quarter are as follows:

- Omantel made a revision to their Omantel TV Plus (IPTV) Service reflecting the revamp on their fixed broadband plans.
- Omantel reduced the Pay as You Go Rate for data for subscribers of Baqati Basic from 29Bz/MB to 9 Bz/MB.
- Omantel introduced a new service offering consumers temporary disconnection of their fixed broadband service.

- Direct Carrier Billing was introduced by Omantel as a permanent value added service.
- Friendi decreased the rate of Friendi to Friendi call Plan from 19 Bz/Min to 10 Bz/Min.
- TeO introduced new Allo Card and made a revision to the rates of international calling.