

INFORMATION COMMUNICATION TECHNOLOGY STATS BRIEF Q1, 2019



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# INFORMATION COMMUNICATION TECHNOLOGY STATS BRIEF

Q1, 2019

### 1. INTRODUCTION

This Stats Brief presents a snapshot of Botswana Information and Communications Technology Statistics for Q1 2019. It contains statistics relating to ICT Infrastructure and services as well as the contribution of Information and Communication Technology Sector to the economy. Some of indicators are preliminary estimates and thus subject to revision when data becomes available.

Fixed telephone line subscriptions increased marginally by 0.5 percent in Q1 2019 after having registered a total of 143,253 subscriptions in Q1 2019 from 142,481 subscriptions recorded in Q4 2018. Mobile cellular telephone subscriptions also grew during the quarter; they rose from 3,381,228 subscriptions in Q4 2018 to 5,073,369 subscriptions in Q1 2019, showing an increase of 50.0 percent.

Internet subscriptions experienced steadily increased during the quarter. It increased by 10.7 percent from 1,804,449 subscriptions registered in Q4 2018 to 1,997,322 subscriptions in Q1 2019.

Fixed telephone to mobile telephone domestic calls traffic reduced by 1.5 percent while mobile telephone to fixed telephone domestic calls traffic increased by 39.3 percent. Outgoing international calls from fixed telephones declined while those from mobile telephones increased.

The contribution of Postal and Communications Services Sector to the economy in Q1 2019 stood at 2.6 percent at nominal prices and 3.1 percent at real prices.

For more information and further enquiries, contact the Directorate of Stakeholder Relations on +267 367 1300. This publication, and all other Statistics Botswana outputs/publications are available on the website at (http://www.statsbots.org.bw) and at the Statistics Botswana Information Resource Centre (Head-Office, Gaborone).

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Dr. Burton Mguni Statistician General September 2019

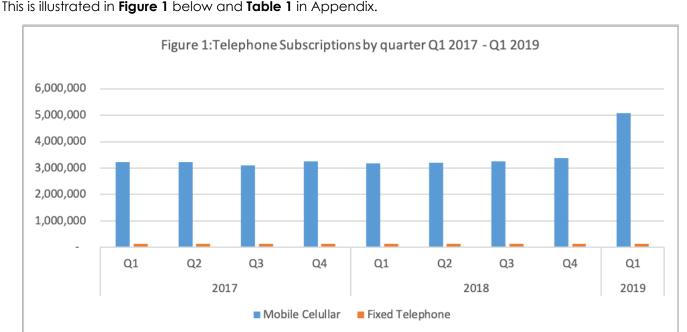
### 2. TELECOMMUNICATION

### 2.1 Fixed Telephone Lines and Mobile Cellular Telephone Subscriptions

Fixed telephone line subscriptions increased by only 0.5 percent on quarter to quarter comparison of Q1 2019 and Q4 2018. They rose from 142,481 subscriptions in Q4 2018 to 143,253 subscriptions in the quarter under review.

Mobile telephone subscriptions registered 5,073,369 subscriptions in Q1 2019 from 3,381,228 subscriptions in Q4 2018, showing an increase of 50.0 percent.

Comparing Q1 2019 to the same quarter of 2018, fixed telephone subscriptions increased by 1.0 percent while mobile cellular telephone subscription increased by 59.5 percent.



During Q1 2019, pre-paid mobile cellular telephone subscribers totaled 4,946,028 as compared to 3,295,636 subscribers in Q4 2018. This was a significant increase of 50.1 percent.

Post-paid mobile cellular telephone subscriptions realized a significant increase as well in Q1 2019. They increased by 48.8 percent after registering 127,341 subscriptions compared to 85,592 recorded in Q4 2018. This is illustrated in Figure 2 below and Table 1 in Appendix.

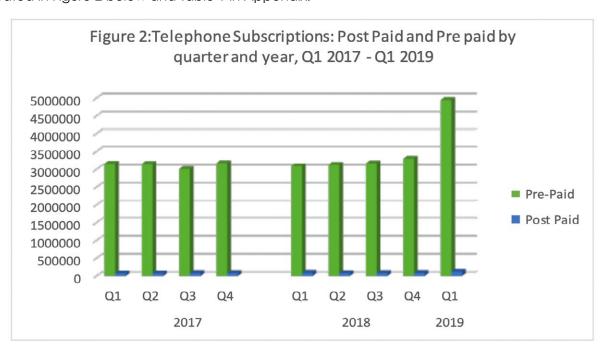


Table 2.1: Telephone Subscriptions by Quarter and Year, Q1 2018 - Q1 2019

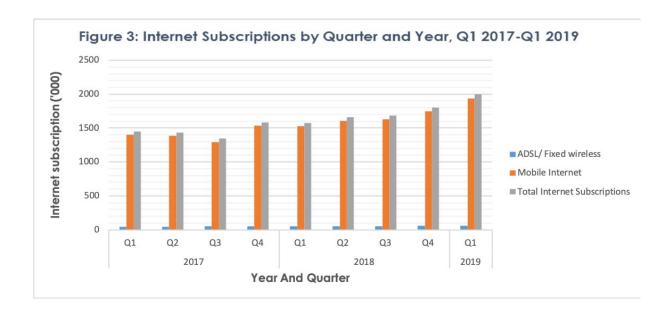
	2018							
Telephone Subscriptions	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1			
Fixed Telephone	141,835	142,602	143,213	142,481	143,253			
Mobile Cellular								
Pre-Paid	3,089,505	3,123,590	3,161,505	3,295,636	4,946,028			
Post Paid	92,086	80,549	84,928	85,592	127,341			
Total	3,181,591	3,204,139	3,246,433	3,381,228	5,073,369			

Source: Information and Communication Technology Statistics, Statistics Botswana

# 2.2 Internet Subscriptions

Total Internet (mobile internet plus fixed internet) subscriptions increased by 10.7 percent in Q1 2019, it increased from 1,804,449 subscriptions registered in Q4 2018 to 1,997,322 in Q1 2019. Looking at the two types of internet individually, Mobile internet subscriptions increased by 10.8 percent (from 1,749,059 subscriptions in Q4 2018 to 1,938,423 in Q1 2019) while fixed internet subscriptions went up by 6.3 percent (from 55,390 subscriptions recorded in Q4 2018 to 58,899 subscriptions in Q1 2019).

Compared to the same quarter of the previous year, overall internet subscriptions increased by 9.0 percent in Q1 2019 while mobile internet and fixed internet increased by 9.0 percent and 10.0 percent respectively. This is illustrated in Figure 3 below and Table 2 in the Appendix.



## 2. 3 Telephone Traffic

Telephone traffic comprises of Domestic calls, International calls and Short Message Service (SMS).

On-net fixed telephone domestic calls traffic (Fixed telephones to fixed telephones) increased in Q1 2019; they increased from 1,630,843,543 calls made in Q4 2018 to 1,630,877,925 calls in Q1 2019, registering a marginal increase of 34,382 calls.

Off net fixed telephone domestic calls traffic (Fixed telephones to mobile cellular telephones) went down in Q1 2019 as compared to Q4 2018. They decreased from 1,923,390,968 calls recorded in Q4 2018 to 1,894,426,277 calls in Q1 2019, a decrease of 1.5%.

With regard to mobile cellular telephone domestic calls traffic, on-net traffic reduced by 18.1 percent while

off-net traffic increased by 2.2 percent in Q1 2019. Mobile cellular telephones to fixed telephones traffic increased by 39.3 percent in Q1 2019.

International calls outgoing from fixed telephones decreased by 0.7 percent from 206, 052, 643 calls made in Q4 2018 to 204,672,812 calls made in Q1 2019. Outgoing international calls from mobile cellular telephones increased in Q1 2019 compared to those made in Q4 2018.

On-net short message services (SMS) increased in Q1 2019 while off-net ones reduced. The details are shown in **Table 3** in the **Appendix**.

### 3. CONTRIBUTION OF POSTAL AND COMMUNICATION SERVICES TO GDP

**Table 4** in **Appendix** shows the contribution of Postal and Communications Services Sector to the economy over the years. In Q1 2019, the sector contributed P1, 279.1million in current prices, which constituted 2.6 percent of total GDP. In real prices, Postal and Communication Services Sector contributed P760.8 million to the economy and this stood at 3.1 percent of total GDP.

# **APPENDIX**

Table 1: Telephone Subscriptions by Quarter and Year, Q1 2012 - Q1 2019

		Telephone Subscriptions									
		Mobile Cellular			Eive d	Mobile Cellular				— Eivod	
	_	Pre-Paid	Post Paid	Total	Fixed — Telephone	Pre-Paid	Post Paid		Total	<ul><li>Fixed</li><li>Telephone</li></ul>	
Year/C	Quarter		Numbe	Numbers			Quarterly Pe	rcentag	ge Change		
2012	Q1	2,893,480	59,636	2,953,116	150,549						
	Q2	2,914,071	61,920	2,975,991	151,360	0.7	3.8		0.8	0.5	
	Q3	2,928,017	62,514	2,990,531	159,182	0.5	1.0		0.5	5.2	
	Q4	3,017,884	63,842	3,081,726	160,488	3.1	2.1		3.0	0.8	
2013	Q1	3,032,563	68,839	3,101,402	162,718	0.5	7.8		0.6	1.4	
	Q2	3,047,241	73,836	3,121,077	163,699	0.5	7.3		0.6	0.6	
	Q3	3,139,210	76,409	3,215,619	170,910	3.0	3.5		3.0	4.4	
	Q4	3,169,148	77,639	3,246,787	174,165	1.0	1.6		1.0	1.9	
2014	Q1	3,126,346	78,523	3,204,869	174,992	(1.4)	1.1		(1.3)	0.5	
	Q2	3,116,697	79,415	3,196,112	175,674	(0.3)	1.1		(0.3)	0.4	
	Q3	3,137,570	81,690	3,219,260	168,817	0.7	2.9		0.7	(3.9)	
	Q4	3,328,284	82,223	3,410,507	169,236	6.1	0.7		5.9	0.2	
2015	Q1	3,324,654	81,233	3,405,887	169,474	(0.1)	(1.2)		(0.1)	0. i	
	Q2	3,334,807	79,851	3,414,658	171,006	0.3	(1.7)		0.3	0.9	
	Q3	3,361,527	78,150	3,439,677	172,920	0.8	(2.1)		0.7	1.1	
	Q4	3,395,758	79,569	3,475,327	160,490	1.0	1.8		1.0	(7.2)	
2016	Q1	3,379,127	81,204	3,460,331	161,641	(0.5)	2.1		(0.4)	0.7	
	Q2	3,176,217	77,984	3,254,201	163,719	(6.0)	(4.0)		(6.0)	1.3	
	Q3	3,194,444	80,678	3,275,122	141,954	0.6	3.5		0.6	(13.3)	
	Q4	3,209,519	79,467	3,288,986	142,122	0.5	(1.5)		0.4	0.1	
2017	Q1	3,150,273	76,116	3,226,389	140,873	(1.8)	(4.2)	(0.9)	(1.9)	(0.9)	
	Q2	3,144,258	76,574	3,220,832	141,882	(0.2)	0.6 0.6	0.7	(0.2)	0.7	
	Q3	3,013,825	83,092	3,096,917	142,816	(4.1)	8.5		(3.8)	0.7	
	Q4	3,168,194	81,709	3,249,903	141,207	5.1	(1.7)		4.9	(1.1)	
2018	Q1	3,089,505	92,086	3,181,591	141,835	(2.5)	12.7 12.7	0.4	(2.1)	0.4	
	Q2	3,123,590	80,549	3,204,139	142,602	1.1	(12.5)		0.7	0.5	
	Q3	3,161,505	84,928	3,246,433	143,213	1.2	5.4		1.3	0.4	
	Q4	3,295,636	85,592	3,381,228	142,481	4.2	- 0.8	-	4.2	- (0.5)	
2019	Q1	4,946,028	84,894	5,030,922	143,253	50.1	(0.8)		48.8	0.5	

Source: Botswana Communications Regulatory Authority/ Statistics Botswana

Note: "..." denotes no data

Table 2: Internet Subscriptions by Quarter and Year, Q1 2011 - Q2 2018

				Internet Subsc	riptions		
		ADSL/ Fixed wireless	Mobile Internet	Total	ADSL/ Fixed wireless	Mobile Internet	Tota
Year/Qu	uarter		Numbers		Quarterly P	ercentage Change	
2011	Q1	14,082	189,803	203,885			
	Q2	14,419	200,198	214,617	2.4	5.5	5.
	Q3	14,474	224,474	238,948	0.4	12.1	11.
	Q4	15,707	238,942	254,649	8.5	6.4	6.
2012	Q1	16,298	263,131	279,429	3.8	.8 10.1 .6 11.9 .6 73.1 .7 51.0 .9 24.5 .8 14.7 .0 14.7 .9 14.7 .1 14.7 .2 14.7 .8 14.7 .6 (52.4) .5 4.8 .8 4.0	9.
	Q2	17,204	294,548	311,752	5.6	11.9	11.
	Q3	18,166	509,926	528,092	5.6	73.1	69.
	Q4	18,838	769,805	788,643	3.7	51.0	49.
2013	Q1	19,388	958,074	977,462	2.9	2.4       5.5         0.4       12.1         3.5       6.4         3.8       10.1         5.6       73.1         3.7       51.0         2.9       24.5         2.8       14.7         2.0       14.7         2.1       14.7         3.2       14.7         3.8       14.7         3.6       (52.4)         3.5       4.8         1.8       4.0         1.6       6.8         1.4       (1.7)         3.4       (6.4)         1.4       5.3         5.8       5.1         2.5       (0.4)         0.9       (1.1)         5.7       (6.7)         0.2       18.4         3.3       (0.6)         5.0       5.4	23.
	Q2	23,224	1,098,523	1,121,747	19.8	14.7	14.8
	Q3	25,309	1,259,561	1,284,870	9.0	14.7	14.
	Q4	27,819	1,444,207	1,472,026	9.9	14.7	14.0
2014	Q1	22,740	1,655,921	1,678,661	(18.3)	14.7	14.0
	Q2	24,800	1,898,671	1,923,471	9.1	14.7	14.
	Q3	26,836	2,177,007	2,203,843	8.2	14.7	14.
	Q4	27,867	2,496,146	2,524,013	3.8	14.7	14.
2015	Q1	34,435	1,188,640	1,223,075	23.6	(52.4)	-51.
	Q2	35,641	1,245,994	1,281,635	3.5	4.8	4.8
	Q3	36,272	1,295,663	1,331,935	1.8	4.0	3.
	Q4	36,845	1,384,146	1,420,991	1.6	6.8	6.3
2016	Q1	37,366	1,360,236	1,397,602	1.4	(1.7)	(1.7
	Q2	38,622	1,272,521	1,311,143	3.4	(6.4)	(6.2
	Q3	39,174	1,340,549	1,379,723	1.4	5.3	5.3
	Q4	41,833	1,409,274	1,451,107	6.8	5.1	5.
2017	Q1	45,793	1,404,065	1,449,858	9.5	(0.4)	(0.1
	Q2	46,191	1,388,359	1,434,550	0.9	(1.1)	(1.1
	Q3	48,811	1,294,764	1,343,575	5.7	(6.7)	(6.3
	Q4	48,901	1,532,954	1,581,855	0.2	18.4	17.
2018	Q1	50,514	1,523,545	1,574,059	3.3	(0.6)	(0.5
	Q2	53,057	1,605,727	1,658,784	5.0	5.4	5.4
	Q3	54,687	1,630,364	1,685,051	3.1	1.5	1.0
	Q4	55,390	1,749,059	1,804,449	1.3	7.3	7.
2019	Q1	58,899	1,938,423	1,997,322	6.3	10.8	10.7

Source: Botswana Communications Regulatory Authority/ Statistics Botswana

Note: "..." denotes no data Quarter 1 Estimated figures

Table 3: Domestic and International Telephone Traffic (Minutes) by Quarter and Year, Q1 2012 - Q1 2019

			Do	omestic Calls			lr	nternational C	Short Messo	ige Service	
			From fixed Telephones to Mobile Cellular Telephones		Off Net Mo- bile Cellullar Telephone Calls	From Mobile Cellular Telephones to Fixed Telephones	from Fixed		Outgoing from Mobile Cellular Telephones	On Net	Off Ne
ear/Qu	arter										
2012	Q1	44,807,471	32,067,146	305,145,554		86,208,330	6,895,539	3,833,461	14,943,619	188,337,052	
	Q2	46,165,242	28,438,798	378,223,041	92,329,860	6,156,853	5,576,032	2,649,892	12,170,992	182,518,901	100,177,33
	Q3	46,058,747	33,049,118	384,652,300	126,175,464	13,173,891	4,256,524	1,466,323	16,394,509	217,903,594	121,996,70
	Q4	42,992,250	27,222,676	408,930,424	151,690,137	12,449,792	6,383,477	2,058,108	17,028,469	224,910,519	134,605,87
2013	Q1	40,847,222	25,433,762	415,805,694	130,302,022	10,494,493	6,313,054	-	14,312,615	205,754,037	72,501,47
	Q2	42,084,988	22,555,971	515,384,517	94,081,552	749,499	4,819,138	-	19,279,307	199,397,837	69,355,44
	Q3	41,987,906	41,135,405	524,145,328	128,569,278	1,603,712	7,227,225	-	20,024,820	238,054,826	84,461,57
	Q4	39,192,437	41,135,405	557,227,843	154,568,018	1,515,564	7,147,494	-	16,831,081	245,709,736	93,191,24
2014	Q1	22,992,190	27,010,100	455,270,768	141,011,907	11,881,057	2,060,221	-	15,687,913	199,930,668	129,240,70
	Q2	2,369,077,575	1,697,253,376	494,674,723	151,200,137	11,691,792	19,296,867	-	15,661,291	212,301,376	135,407,57
	Q3	39,113,572	29,184,702	528,763,242	168,612,126	12,121,336	4,198,532	-	16,605,584	226,876,144	160,659,62
	Q4	424,793,378	390,589,346	538,595,573	178,652,457	12,105,602	671,227,267	-	16,990,114	226,930,504	146,297,19
2015	Q1	38,354,146	6,327,160	520,550,402	152,171,070	6,665,492	5,553,381	-	12,818,574	206,479,961	146,257,91
	Q2	36,861,131	6,122,266	522,684,176	160,042,387	11,454,538	5,399,350	-	15,468,748	201,630,906	152,963,48
	Q3	37,557,267	29,923,404	1,867,212,151	209,491,965	11,259,715	5,525,421	-	15,857,336	196,945,120	139,614,37
	Q4	2,067,470,773	399,920,925	525,492,538	176,298,042	9,356,236	929,767,092	-	15,426,446	209,840,809	157,962,09
2016	Q1	34,965,488	6,949,306	480,585,051	154,869,695	8,737,525	4,953,934	-	13,161,451	157,239,036	93,681,27
	Q2	1,331,557,873	2,041,660,546	653,014,162	262,630,413	9,703,623	306,014,551	-	14,112,699	183,691,703	138,911,60
	Q3	2,042,864,630	2,110,094,413	476,676,551	125,662,178	8,352,695	296,405,140	-	12,267,683	184,225,029	164,463,24
	Q4	1,995,163,417	2,158,781,171	525,492,538	176,298,042	9,356,236	272,672,930	-	15,426,446	209,840,809	157,962,09
2017	Q1	1,996,616,714	2,175,125,352	353,714,166	101,619,312	5,355,226	263,327,903	-	6,945,727	133,355,242	176,904,69
	Q2	1,995,163,417	2,158,781,171	403,115,950	100,591,502	5,587,481	272,672,930	-	7,405,278	124,428,020	106,809,71
	Q3	1,839,716,566	1,862,241,472	604,005,497	157,577,607	9,423,562	238,735,341	-	11,846,344	175,981,585	164,526,83
	Q4	1,925,384,926	1,880,086,902	316,560,889	169,337,479	10,077,726	217,171,325	-	10,825,559	166,743,720	178,144,29
2018	Q1	1,743,088,946	1,870,056,276	583,152,907	135,349,759	9,727,092	204,672,812	-	10,579,435	121,595,497	151,872,1
	Q2	1,995,163,467	2,282,620,465	248,849,839	38,528,098	3,217,349	242,964,024		3,885,730	84,284,330	82,126,43
	Q3	1,743,088,946	1,870,056,276	730,436,647	165,312,108	6,737,448	238,735,341	-	13,482,935	174,420,541	177,695,6
	Q4	1,630,843,543	1,923,390,968	711914725	132,472,504	6,981,007	206,052,643		6,891,130	172,698,636	137,566,70
2019	Q1	1.630.877.925	1,894,426,277	583.152.907	135,349,759	9,727,092	204,672,812		10,037,404	173,606,036	131 228 7

Source: Botswana Communications Regulatory Authority/ Statistics Botswana Note: "-" denotes zero

Table 4: Contribution of Communication & Postal Services To Gross Domestic Product by Quarter and Year, Q1 2013 - Q1 2019

			Currer	nt Prices			Constant Prices				
		Total GDP (P Million)	tion Services	Communica- tion Services Contribution	Postal & Com- munication Services Annual Growth Rates (%)	Total GDP (P Million)	nication Services Value Added (P	Postal & Commu- nication Services Contribution To GDP (%)	Postal & Commu- nication Services Annual Growth Rates (%)		
ear/Quarter											
2013	Q1	28425.6	626.6	2.2	6.7	20507.5	485.3	2.4	5.7		
	Q2	32462.8	648.5	2.0	8.8	20931.5	501.5	2.4	8.0		
	Q3	31665.7	664.7	2.1	10.4	20917.2	508.6	2.4	8.5		
	Q4	32604.2	704.6	2.2	15.8	21724.5	522.7	2.4	10.7		
2014	Q1	34508.4	739.8	2.1	18.1	21190.8	544.2	2.6	12.1		
	Q2	37718.4	762.0	2.0	17.5	21887.7	552.4	2.5	10.1		
	Q3	36155.6	778.0	2.2	17.0	22178.7	563.2	2.5	10.7		
	Q4	37486.0	778.5	2.1	10.5	22312.2	554.5	2.5	6.1		
2015	Q1	36570.3	817.4	2.2	10.5	21769.4	573.7	2.6	5.4		
	Q2	37329.7	850.1	2.3	11.6	21814.9	587.2	2.7	6.3		
	Q3	37240.2	892.6	2.4	14.7	20971.5	607.0	2.9	7.8		
	Q4	34783.2	905.1	2.6	16.3	21525.0	604.0	2.8	8.9		
2016	Q1	39499.5	916.0	2.3	12.1	22277.1	597.3	2.7	4.1		
	Q2	42440.5	973.7	2.3	14.5	22666.8	626.0	2.8	6.6		
	Q3	44090.6	1025.3	2.3	14.9	22409.5	653.7	2.9	7.7		
	Q4	43657.4	1041.7	2.4	15.1	22421.6	654.1	2.9	8.3		
2017	Q1	43645.6	1062.5	2.4	16.0	22465.4	661.4	2.9	10.7		
	Q2	43005.2	1073.1	2.5	10.2	22886.1	664.3	2.9	6.1		
	Q3	44963.3	1116.1	2.5	8.9	22659.7	685.9	3.0	5.0		
	Q4	46653.0	1136.1	2.4	9.1	23896.6	695.3	2.9	6.3		
2018	Q1	46156.5	1164.5	2.5	9.6	23545.0	707.0	3.0	6.9		
	Q2	47362.7	1180.9	2.5	10.0	24099.0	714.3	3.0	7.6		
	Q3	48699.3	1216.3	2.5	9.0	24126.2	733.1	3.0	6.9		
	Q4	48491.6	1240.6	2.6	9.2	24850.9	742.8	3.0	6.8		
2019	Q1	48728.9	1279.1	2.6	9.8	24485.2	760.8	3.1	7.6		

Source: National Accounts, Statistics Botswana

### **APPENDIX IX: DEFINITIONS**

### 1.1 Fixed Telephone

Fixed telephone lines refer to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange. This term is synonymous with the terms main station or Direct Exchange Line (DEL) that are commonly used in telecommunication documents. It may not be the same as an access line or a subscriber.

### 1.2 Mobile Cellular Phone

A mobile cellular phone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both post-paid subscriptions and pre-paid accounts are included.

### 1.3 Internet

A world-wide public computer network which provides access to a number of communication services including services including the World – Wide Web and carries email, news, entertainment and data files. Access may be any device enabling internet access (not only a computer). It may also be by mobile phone. PDA, Games Machine, Digital TV etc.

# 1.4 Asymmetric Digital Subscriber line (ADSL)

DSL with different speed for upstream and downstream.

# 1.5 Domestic Fixed Telephone Traffic (Minutes)

It consists of effective (completed) fixed telephone line traffic exchanged within the local charging area in which the calling station is situated. This is the area within which one subscriber can call another on payment of the local charge (if applicable). This indicator should be reported in the number of minutes.

# 1.6 National (fixed) Trunk Telephone Traffic (Minutes)

National (fixed) trunk (toll) traffic consists of effective (completed) fixed national telephone traffic exchange with a station outside the local charging area of the calling station. The indicator should be reported as the number of minutes of traffic.

# 1.7 International Outgoing Fixed Telephone Traffic (Minutes)

This covers the effective (completed) fixed traffic originating in a given country to destinations outside that country. The indicator should be reported as the number of minutes of traffic.

# 1.8 International Incoming Fixed Telephone Traffic (Minutes)

Effective (completed) fixed traffic originating outside the country with a destination inside the country. The indicator should be reported as the number of minutes of traffic.

## 1.9 Outgoing National Mobile Telephone Traffic (Minutes)

Total number of minutes made by mobile subscribers within a country (including minutes to fixed lines and minutes to other mobile subscribers).

### 1.10 SMS Traffic

Total number of mobile Short Message Service (SMS) sent, both to national and international destinations

# INFORMATION COMMUNICATION TECHNOLOGY STATS BRIEF

Q1, 2019

