



CONSUMER

Watch

October 2013

NCA's Vision

To become the most forward-looking and innovative Communications Regulatory Authority in the sub-region; by creating and maintaining an efficient, transparent and business friendly environment to enable Ghana become the premier destination of ICT investment in the sub-region.

Our Mission

To regulate the communications industry by setting and enforcing high standards of competence and performance to enable it to contribute significantly and fairly to the nation's prosperity through the provision of efficient and competitive services.



National Communications Authority

Communications for Development

Dear Valued Consumers,

Welcome to this first edition of the Consumer Watch publication from the National Communications Authority (NCA)

This publication, which is solely dedicated to you, is aimed at educating, enlightening and protecting you with regard to communication services in the country.

We want Consumer Watch to be the publication that you rely on to inform you of on-going developments within the industry and assure you that the NCA takes consumer issues very seriously and is actively playing its role of Consumer Protection in line with our mandate.

We are sure that the benefits of this publication will:

1. Educate, enlighten and protect the consumer regarding ICT products and services in the country;

2. Empower consumers through information dissemination;

3. Bridge existing gaps between consumers and other stakeholders;

4. Give a voice to consumers that cannot reach their operators;

5. Provide consumers with complete and accurate information in simple and clear language.

Hopefully, there will be other avenues for us to get in touch with you for your benefit.

We urge you to write to us with your suggestions and thoughts about how we can together develop this industry for the benefit of Ghana.

The NCA thanks all consumers and stakeholders for your continuous support.

Paarock VanPercy,
Director General,

National Communications Authority

Good-bye Analogue, Hello Digital - What You Need to Know About Ghana's Transition to Digital Broadcasting

Ghana will soon be joining the ranks of other countries who have migrated their broadcasting television services from the existing Analogue system to the much improved Digital system, known as Digital Terrestrial Transmission (DTT). What exactly is Digital Terrestrial Transmission and how does it affect you as a consumer? To help you get ready for this switch over, we bring you some important learning points.

What is DTT?

DTT simply means Digital Terrestrial Television, and is sometimes also referred to as DDTV. Normally, television broadcasting is transmitted via three (3) main platforms: Satellite (wireless through space), Terrestrial (wireless over land) and Cable (cables from broadcaster terminate at homes).

This transition from analogue to digital will be conducted only on the terrestrial platform, meaning that broadcasting will still be over the air but the technology which is used will be changed to a digital standard.

Why are we migrating from analogue to digital broadcasting?

There are several reasons for migrating to the digital broadcasting platform.

First of all, Ghana, as a member of the International Telecommunications Union (ITU) is a signatory to the Geneva 2006 (GE-06) Agreement and as a signatory to this agreement,

The transition from analogue to digital broadcasting would also enhance the experience of TV viewers in Ghana with the provision of better pictures, sound quality and more TV Programme channels and interactivity.

we have to comply with and adopt the principles of the Agreement.

The Agreement requires that all countries in Europe, Africa and some parts of the Middle East, forming Region 1 of the ITU classification, should introduce digital terrestrial television and switch off the existing analogue terrestrial transmissions by June 17, 2015. Other regions have different time tables for implementation.

The second reason why we are migrating is due to the fact that there are benefits associated with this. These benefits are:

1. Analogue TV usually suffers from transmission challenges such as ghosting, blurry images, lines across images and poor sound.

2. DTT provides a clearer picture and superior sound quality and has less interference.

3. DTT offers far more channels, thus providing you the consumer with more TV programme channels and greater interactivity.

4. You can watch television on your personal computers and surf the internet at the same time.

5. The migration from Analogue to Digital Terrestrial Transmission frees up some part of the spectrum, which is called the Digital Dividend. The benefits are explained below:

DTT provides for more efficient use of radio frequencies. Whereas in analogue transmission, a single television channel is transmitted using 8 megahertz of bandwidth to transmit signals, on the DTT platform TV programmes can be compressed before transmission, meaning that about 20 television channels can be transmitted on the same 8 megahertz bandwidth, thus freeing up some parts of the spectrum.

This free part of the spectrum is what is referred to as the digital dividend and it can be used to provide a variety of communication services such as wireless broadband services. But by far and most importantly, DTT will give people the opportunity to be connected wherever they are at any given time.

Has this migration been done elsewhere in the world?

Most European Union Member States successfully completed the transition from analogue to digital television in 2012. The United States of America completed their transition in 2009.

What is the African Experience?

In Africa, many other countries have begun the switchover process, Algeria began its process in 2009 and plans to switch entirely to DTT in 2014.

Good-bye Analogue, Hello Digital

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Mauritius embarked on their DTT journey in 2005 and is on course to finalise before the end of the deadline set by the International Telecommunications Union.

In Nigeria, digital television broadcasts started via satellite set-top box receivers and some terrestrial stations, and a timetable for nationwide transition is still in the process of being created just like other ECOWAS Countries.

In Kenya, Nairobi and some adjoining areas will experience the switch over to digital TV on December 13, 2013 as a pilot test and as part of a phased plan which would end on June 30, 2014, twelve (12) months before the global deadline of June 17, 2015.

Kenya took a step further with the Government waiving import duty on set top boxes 2012/2013 financial year.

Ghana is on course and the Government set up the National Digital Broadcast Migration Committee in December 2010 to manage and oversee the process.

The Committee has developed a road map and the NCA has developed Conformance Standards for the DTT Set Top Boxes and Digital Televisions.

In addition, a Conformance Logo has been designed and will be launched to the public in due course.

How does it affect me as a Consumer?

After the switch from analogue to digital broadcasts is complete, your analogue TVs will not be able to receive signals because these signals would be transmitted digitally.

However, analogue TVs can still receive signals with the use of a Set Top Box, an electronic device that will connect to your analogue television to receive digital transmissions. The STB will also need to be DVB-T2 compliant.

Alternatively, you can replace your analogue TV with a digital TV i.e. a TV set with a digital tuner built into it. There are many kinds of digital tuners, but please ensure that your tuner is DVB-T2 compliant to work in Ghana.

Do you need a Set Top Box to receive the DTT services if you have DSTV/Multi TV?

DSTV and Multi TV are satellite television services and not terrestrial so you will need an STB to receive DTT for your local television stations as these are terrestrial services.

The DTT set-top box (or decoder) is different from satellite decoders.

If I have five TV sets in the house, will I need five Set Top Boxes?

This will depend on how you want to operate the TV sets. It is possible to feed the other TV sets from one decoder. If the five TV sets are all connected to one decoder then they will all show one programme channel at the same time; that is the signal which is selected on the STB or decoder.

On the other hand, if you want each of the five TV sets to show different programme channels, then you will have to get an STB for each TV set.

How do I establish if my TV will be compatible to the Set Top Box?

It's simple, just ensure that the STB you intend to connect to your existing TV or the new digital TV you purchase conforms to Ghana's Standards. A conformance certification logo (which will be introduced to all consumers) would be posted on the receivers and digital TVs.

When will the Set Top Box and the new DTT services be available?

DTT services are currently available in Accra, Cape Coast, Koforidua, Takoradi and Kumasi for people using digital TVs which are DVB-T2 MPEG 4 compliant.

The conformance regime for DTT

service will be published by the end of the year. Following that the STBs would be available on the market.

Will I need a new aerial/antenna to receive DTT?

Not necessarily. This will depend on your existing aerial. Most existing aerials can receive DTT but some may not.

Will I need to pay a subscription every month?

The existing free-to-air analogue channels such as GTV, TV3, Metro TV, TV Africa, Viasat 1, Net 2, ETV, Top TV, U TV, Crystal TV, Coastal TV, and Cardinal TV will continue to be free.

However, there may be additional channels provided by Pay DTT service providers such as Skyy Digital, Cable Gold, Crystal TV and GOTV which may require the payment of subscription fees.

Any advice for us?

Certainly, we should all note that not all flat screen TVs are digital ready. A conformance logo would be launched to the public and Consumers should ensure that the logos are on the receivers before purchase. The NCA is committed to ensuring that consumers will be adequately informed and educated about the process.

Quality of Service Findings for Second Quarter, 2013

The National Communications Authority (NCA) has released the Quality of Service findings for the second quarter, 2013. For the second quarter, the towns used in the assessment were Accra, Tema, Tamale, Yendi, Wa, Jirapa, Nandom, Bolgatanga, Bawku, Aflao Denu, Anloga, Keta, Ho, Hohoe, Kpando, Jasikan, Asamankese, Akim Oda, Akosombo, Suhum, Koforidua, Swedru, Winneba, Cape Coast, Elmina, Takoradi and Tarkwa.

QoS Parameters and their Definitions

The report which is an update of findings on Quality of Service (QoS) in June 2013 as part of the Authority's quarterly monitoring, measures the following parameters: which are also explained:

Stand-Alone Dedicated Control Channel (SDCCH) Congestion Rate - Stand Alone Dedicated Control Channel Congestion Rate is the extent of difficulty experienced in making a call because of unavailability of signaling channel at that moment. The acceptable rate of the SDCCH congestion should not exceed one call connection failure in 100 call attempts, i.e. not more than 1 %. This is applicable only to calls on the GSM technology.

Call Setup Time (CST) - Call Setup Time is the period between when a user dials a number and when the other party being called receives the signal. According to the licence conditions, Call Setup Time should be less than ten seconds. This means that when a user dials a number, it should ring within 10 seconds of the call.

Call Congestion Rate (CCR) - Call Congestion Rate is the extent of difficulty experienced in making a call because of unavailability of traffic channel at that moment. The acceptable rate of call congestion should not exceed one call connection failure in 100 call attempts, i.e. not more than 1 %.

Call Drop Rate (CDR) - Call Drop Rate is how often a call goes off during a conversation without either parties voluntarily ending the call. An acceptable rate of call drops should not exceed three (3) in a hundred (100) call conversations, i.e. not more than 3%.

These QoS indicators and their respective threshold for compliance are assessed as part of the Cellular Mobile licence obligations. On the next page, we bring you the details of the actual findings.

Avoid Huge Roaming Charges

- Find out the international roaming packages for data, voice, and text messaging services from your service providers. This is important because, roaming charges varies from country to country.
- Don't be afraid to ask questions if you do not understand something. Roaming can get complicated, and unanswered questions could mean huge phone bills.
- The safest way to avoid excessive roaming charges, is to configure your smart phone devices so that when it is roaming the data services are disabled. Switch your setting to MANUAL or PUSH, so you do not receive emails automatically.
- Set your phone to airplane mode when you do not need to make a call.
- Bundle up – if you have a rough idea how much data you are likely to need while away, ask your operators for fixed cost data bundle packages that can be purchased in advance.
- Keep your phone safe – losing your phone can lead to others running up huge data roaming bills.

Quality of Service Findings for SDCCH Congestion Rate and Traffic Channel Congestion Rate - Second Quarter, 2013

SDCCH Congestion is defined as the probability of failure of accessing a stand-alone dedicated control channel during call set up. SDCCH Congestion Rate should be equal or less than one per cent (1%).

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso	Glo
April	Accra	0.12	0.09	0.22	0.00	0.77	
April	Tema	0.00	0.00	0.00	0.00	0.60	
April	Tamale	0	0.3	0	0	N/A	
April	Yendi	0	0	0	0	N/A	
April	WA	0	0	0	0	N/A	
April	Jirapa	0	0	0	N/A	N/A	
April	Nandom	0	0	0	0	N/A	
April	Bolgatanga	0	0	0	0	N/A	
April	Navrongo	0	0	0	0	N/A	
April	Bawku	0	0	0	0	N/A	
May	Aflao-Denu	0	0	0	0	N/A	
May	Anloga	0	0	0	0	N/A	
May	Keta	0	0	0	0	N/A	
May	Ho	0.45	0	1.01	0	0	
May	Hohoe	0	0	0	0	6.71	
May	Kpando	0	4.84	0	6.58	24.32	
May	Jasikan	0	0	0	0	NA	
May	Asamankese	0	0	0	0	0.95	
May	Akim Oda	36.11	0	0	0	NA	
May	Akosombo	3.33	3.7	0	0	NA	
May	Suhum	0	0	0	0	0	
May	Koforidua	0.63	0	0.47	0.35	0	
June	Kasoa	0	0	0.6	0.76	0.5	
June	Swedru	0	0	0	0	N/A	
June	Winneba	0	0	0	0	N/A	
June	Cape Coast	1.12	0	0	2.03	N/A	
June	Elmina	0	0	0	0	N/A	
June	Takoradi	0.00	0.12	0.26	0.00	1.14	
June	Tarkwa	0.00	0.00	0.00	0.00	1.24	

Call Congestion Rate is the probability of failure of accessing a traffic channel during call setup and the Traffic Channel Congestion should be equal or less than one per cent (1%).

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso	Glo
April	Accra	2.62	0	1.13	0.3	2.04	0
April	Tema	0.4	0	0	0	0	0
April	Tamale	2.6	0	1.2	2.24	2.4	N/A
April	Yendi	0	0	0	17.95	N/A	0
April	Wa	0	0	1.2	0.32	2.4	N/A
April	Jirapa	0	0	0	N/A	N/A	N/A
April	Nandom	0	0	0	N/A	N/A	N/A
April	Bolgatanga	1.73	0	11.73	9.59	2.3	N/A
April	Navrongo	0	0	42.98	0	4.4	N/A
April	Bawku	0	0	2.41	0	N/A	N/A
May	Aflao-Denu	0	0	0	2.74	4.05	N/A
May	Anloga	0	0	0	0	50	N/A
May	Keta	0	0	0	1.75	8.89	N/A
May	Ho	6.7	0	0	0	1.04	0
May	Hohoe	0	0	0	0	0	0
May	Kpando	0	0	0	0	4.55	0
May	Jasikan	0	0	0	0	4	N/A
May	Asamankese	0.76	0	0	0	0	0
May	Akim Oda	19.44	0	0	0	1.18	N/A
May	Akosombo	0	0	0	0	3.45	N/A
May	Suhum	0	0	0	2.48	0	0
May	Koforidua	5.36	0	0	0	0	0
June	Kasoa	0	0	0	19.2	7	0
June	Swedru	0	0	0	0	0	0
June	Winneba	0	0	0	0	0	0
June	Cape Coast	0	0	2.6	0	0.86	0
June	Elmina	0	0	5.8	0	4.8	0
June	Takoradi	0.51	0	0	0	6.08	0
June	Tarkwa	0	0	0.62	0.61	0	0

Quality of Service Findings for Voice Call Drop Rate and Call Setup Time - Second Quarter, 2013

Voice Call Drop Rate is the probability of a call terminating without any of the users' will and should be equal or less than three per cent (3%).

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso	Glo
April	Accra	0.45	0.22	0.34	0.64	0	0.16
April	Tema	0	0	0.46	0.23	0	0
April	Tamale	0.3	0.3	1.16	0	0	N/A
April	Yendi	0	0	0	0	0	N/A
April	Wa	0	0.2	0	0.64	0	N/A
April	Jirapa	0	0	0	N/A	N/A	N/A
April	Nandom	0	0	0	0	N/A	N/A
April	Bolgatanga	0	0	0	0	0	N/A
April	Navrongo	0	0	0	0	0	N/A
April	Bawku	0	0	0	0	N/A	N/A
May	Aflao-Denu	0	0	0	0	0	NA
May	Anloga	0	0	0	0	5.88	NA
May	Keta	0	0	0	0	0	0.71
May	Ho	0.45	0	0	0	0.52	0
May	Hohoe	0	0	0	0	0	0
May	Kpando	0	0	1.82	0	0	0
May	Jasikan	0	0	2.22	0	0	NA
May	Asamankese	0	0	0	0	0	0
May	Akim Oda	0	0	0	0	1.18	NA
May	Akosombo	1.67	0	0	0	1.72	N/A
May	Suhum	0	0	0	0	0	0
May	Koforidua	0.32	0	0	0	0.7	0
June	Kasoa	0	0	0	0	0	0
June	Swedru	2.4	0	0	0	0	0
June	Winneba	1.19	0	0	0	0	0
June	Cape Coast	0.6	0	0	0	0	0
June	Elmina	0	1.16	0	0	0	0
June	Takoradi	0.51	0.00	0.78	0.13	0.00	1.01
June	Tarkwa	0.00	0.00	0.62	1.22	0.00	0.62

Call Setup Time is the period of time elapsing from the sending of a complete destination address (target telephone number) to the setting up of a call to the receiving terminal. CST should be less than ten seconds (<10secs) in 95% of cases.

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso	Glo
April	Accra	12.79	8.93	13.00	8.80	15.66	8.64
April	Tema	14.02	9.29	9.83	8.23	15.34	7.82
April	Tamale	10.45	11.53	8.59	8.86	12.34	N/A
April	Yendi	10.88	15.72	8.12	9.33	9.57	N/A
April	Wa	10.8	8.46	8.28	9.59	14.55	N/A
April	Jirapa	10.36	7.86	7.96	N/A	N/A	N/A
April	Nandom	9.86	7.29	8.13	8.65	N/A	N/A
April	Bolgatanga	12.1	8.82	9.87	9.59	12.09	N/A
April	Navrongo	9.92	8.09	10.13	9.19	14.89	N/A
April	Bawku	10.28	9.82	9.94	9.91	N/A	N/A
May	Aflao-Denu	9.46	6.29	8.48	9.16	7.3	N/A
May	Anloga	15.47	8.57	8.48	9.09	15.52	N/A
May	Keta	24	8.51	9.67	8.62	5.9	8.62
May	Ho	10	9.18	8.53	9.18	8.59	9.84
May	Hohoe	9.21	11.45	8.21	9	5.2	10.81
May	Kpando	12.36	9.11	7.62	16.08	7.3	17.76
May	Jasikan	10.14	10.46	8.19	8.59	5.3	N/A
May	Asamankese	9.99	8.82	7.73	10.31	8.29	16.67
May	Akim Oda	18.42	8.31	8.5	8.66	6.28	N/A
May	Akosombo	11.24	9.75	7.63	9.01	5.3	N/A
May	Suhum	11.5	8.6	8.37	8.32	5.98	8.55
May	Koforidua	13.61	9.19	8.32	10.56	6.15	9.3
June	Kasoa	9.64	10.05	10.65	10.78	19.31	24.38
June	Swedru	19.9	10.88	8.6	9.19	10.07	17.86
June	Winneba	11.86	8.65	8.59	9.16	9.89	16.3
June	Cape Coast	12.19	8.82	8.33	8.82	15.48	9.13
June	Elmina	10.47	9.52	8.16	10.18	14.51	9.13
June	Takoradi	13.27	9.01	9.91	11.64	14.17	18.82
June	Tarkwa	9.75	8.05	8.33	8.41	12.57	17.58

Mobile Telephony Tariffs as at September 2013

The National Communications Authority brings here for your information, the Tariffs of Telephony Operators (Pre-paid) as at September, 2013.

Please note that all the rates are quoted in Ghana Cedis and the billing rate is per minute. It will be useful to take note of the following:

For Mobile Telephony:

- Local call and SMS rates are regular rates of mobile network operators. Take note that Promotional Rates are different from the Regular Rates and could be higher or lower depending on

the type of promotion being advertised.

- ** Airtel, Glo and Tigo have different SMS-IDD rates for various destinations.
- All the international destination rates are calls to Mobile Networks.
- All calls are charged per second except calls to international destinations on MTN and Vodafone.
- Calls to international destinations on MTN are charged in 5 second blocks.
- Calls to international destinations on Vodafone are charged per minute.
- Vodafone charges 20Gp for first 3MB of Data, 15Gp for next 3MB of Data, 10Gp for next 4MB OF Data and 5Gp after that.

	MTN	Tigo	Vodafone	Airtel	Glo Mobile	Expresso	Industry Average
On Net	0.09	0.03	0.144	0.0899	0.12	0.0954	0.0949
Other Local Networks	0.13	0.102	0.144	0.0899	0.12	0.1494	0.1226
UK	0.44	0.354	0.3	0.36	0.44	0.3601	0.3757
USA	0.1	0.132	0.13	0.144	0.11	0.22	0.1393
Canada	0.1	0.132	0.13	0.144	0.11	0.22	0.1393
Italy	0.144	0.354	0.45	0.44	0.275	0.3601	0.3372
Nigeria	0.192	0.24	0.3	0.2	0.165	0.2118	0.2181
South Africa	0.44	0.354	0.88	0.39	0.275	0.3601	0.4499
Germany	0.44	0.54	0.45	0.44	0.275	0.3601	0.4175
China	0.1	0.132	0.13	0.144	0.11	0.22	0.1393
UAE	0.44	0.354	0.45	0.39	0.44	0.3601	0.4057
SMS-On Net	0.04	0.0403	0.04	0.04	0.04	0.0424	0.0405
SMS-Other Networks	0.05	0.0477	0.05	0.044	0.04	0.0438	0.0459
MMS	0.18	0.1	0.19	0.18			0.1625
Data/MB	0.09	0.2	0.2	0.09	0.05	0.05	0.1133
SMS-IDD	MTN	Airtel	Tigo	Vodafone	Glo Mobile	Expresso	Industry Average
US	0.1	0.12	0.1152	0.0848	0.142	0.0636	0.1042667
Canada	0.1	0.12	0.1152	0.0848	0.142	0.0636	0.1042667
UK	0.1	0.15	0.1152	0.0848	0.182	0.0636	0.1159333
Germany	0.1	0.15	0.1152	0.0848	0.162	0.0636	0.1126
Italy	0.1	0.15	0.144	0.0848	0.162	0.0636	0.1174
Nigeria	0.1	0.15	0.144	0.0848	0.152	0.0636	0.1157333
South Africa	0.1	0.15	0.1152	0.0848	0.162	0.0636	0.1126
China	0.1	0.15	0.1152	0.0848	0.142	0.0636	0.1092667
U.A.E.	0.1	0.15	0.1152	0.0848	0.182	0.0636	0.1159333

Fixed Telephony Tariffs as at September 2013

In addition to the six (6) mobile telephone operators, there are two (2) fixed telephone operators in Ghana, Vodafone and Airtel. Fixed telephony, otherwise known as land lines are telephone services using devices which cannot be moved.

Please find here as well, the tariffs of the fixed telephone operators as at September, 2013.

Again kindly note that that all the rates are quoted in Ghana Cedis and the billing rate is per minute.

For Fixed Telephony:

- All the international destination rates are calls to Mobile Networks.
- All calls are charged per second except calls to international destinations on Vodafone.
- Calls to international destinations on Vodafone are charged per minute.

	Vodafone	Airtel	Industry Average
On Net	0.06	0.053	0.0565
Other Local Networks (Fixed)	0.06	0.053	0.0565
Other Local Networks (Mobile)	0.1368	0.084	0.1104
UK	0.3	0.36	0.33
USA	0.13	0.144	0.137
Canada	0.13	0.144	0.137
Italy	0.45	0.44	0.445
Nigeria	0.3	0.2	0.25
South Africa	0.88	0.39	0.635
Germany	0.45	0.44	0.445
China	0.13	0.144	0.137
UAE	0.45	0.39	0.4200
SMS-On Net		0.04	0.04
SMS-Other Networks		0.044	0.044
SMS-IDD		Same as Mobile	



For further information, contact the Consumer & Corporate Affairs Division, National Communications Authority

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- Kumasi** - P.O. Box KS 10768, Kumasi, Ashanti Region, Ghana, Tel: + 233(0)3220-20014/20018/20019
- Takoradi** - P.O. Box SL 409, Sekondi, Western Region, Ghana, Tel: +233 (0)3120-28073/28049

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