



QoS Field Trends for 2011

1. CONGESTION RATE OF CELLULAR OPERATORS 2011 TRENDS

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso
Apr-11	Cape Coast	1%	4%	1%	3%	8%
Apr-11	Elmina	0%	2%	0%	0%	0%
Apr-11	Winneba	0%	0%	0%	18%	3%
May-11	Sekondi Takoradi	2.18%	0.37%	1.82%	2.54%	5.24%
May-11	Tarkwa & Prestea	8.82%	0%	0%	13%	78.57%
Jun-11	Wa & Jirapa	1.32%	0.68%	3.95%	31.81%	15.63%
Jun-11	Bolgatanga & Navrongo	1.47%	0%	1%	8.53%	21.29%
Jun-11	Tamale	1.41%	1.72%	1%	23.10%	5.64%

2. CALL SETUP TIME FOR CELLULAR OPERATORS 2011 TRENDS

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso
Apr-11	Cape Coast	9.30secs	7.59secs	8.69secs	10.62sec s	10.50secs
Apr-11	Elmina	9.05secs	8.40secs	9.81secs	10.36sec s	9.78secs
Apr-11	Winneba	8.77secs	7.59secs	8.94secs	13.71sec s	9.93secs
May-11	Sekondi Takoradi	9.75secs	8.64secs	9.72secs	10.27sec s	8.53secs
May-11	Tarkwa & Prestea	7.23secs	6.81secs	9.27secs	8.25secs	
Jun-11	Wa & Jirapa	10.89secs	10.6secs	8.98secs	18.06sec s	12.58secs
Jun-11	Bolgatanga & Navrongo	9.71secs	9.19secs	9.09secs	11.81sec s	10.44secs
Jun-11	Tamale	11.18secs	10.86secs	8.86secs	10.42sec s	10.12secs



3. CALL DROP RATES OF CELLULAR OPERATORS 2011 TRENDS

Month	City/Town	MTN	Vodafone	Tigo	Airtel	Expresso
Apr-11	Cape Coast	0%	0%	0%	1%	1%
Apr-11	Elmina	0%	0%	0%	0%	0%
Apr-11	Winneba	0%	0%	0%	0%	0%
May-11	Sekondi Takoradi	0.20%	1.85%	1.09%	0.54%	1.05%
May-11	Tarkwa & Prestea	0%	0%	0%	0%	0%
Jun-11	Wa & Jirapa	0%	0%	0%	1.95%	0%
Jun-11	Bolgatanga & Navrongo	0%	0%	0%	0.95%	0.41%
Jun-11	Tamale	1.41%	0.57%	0.28%	1.23%	0%