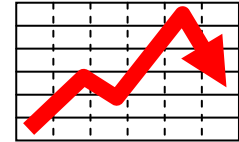


Earl J. Lum
+1-650-430-2221
elum@ejlwireless.com



Africa Wireless Cap Ex Analysis, 2008-2011

March 2009



Entire contents © 2009 EJL Wireless Research LLC. All Rights Reserved. Reproduction of this publication in any form without prior written permission is strictly forbidden and will be prosecuted to the fully extent of US and International laws. The transfer of this publication in either paper or electronic form to unlicensed third parties is strictly forbidden. The information contained herein has been obtained from sources EJL Wireless Research LLC deems reliable. EJL Wireless Research disclaims all warranties as to the accuracy, completeness or adequacy of such information. EJL Wireless Research LLC shall have no liability for errors, omissions or inadequacies in the information contained herein or for the interpretation thereof. The reader assumes sole responsibility for the selection of these materials to achieve its intended results. The opinions expressed herein are subject to change without notice.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	9
Key Countries	13
Key Trends	13
Conclusion	14
CHAPTER 1: AFRICA	15
2008 Africa Wireless Cap Ex Analysis	18
Africa Wireless Cap Ex Forecast 2009-2011.....	19
GSM/WCDMA vs. CDMA Technology Analysis.....	21
CHAPTER 2: NORTH AFRICA	25
2.1 Algeria	29
2.2 Egypt.....	32
2.3 Libya	34
2.4 Morocco	34
2.5 Sudan.....	36
2.6 Tunisia.....	38
CHAPTER 3: WEST AFRICA.....	40
3.1 Benin.....	46
3.2 Burkina Faso.....	47
3.3 Côte d'Ivoire.....	50
3.4 The Gambia	53
3.5 Ghana.....	54
3.6 Guinea.....	56
3.7 Guinea Bissau	59
3.8 Liberia	62
3.9 Mali	64
3.10 Mauritania	66
3.11 Niger	67
3.12 Nigeria	70
3.13 Senegal.....	73
3.14 Sierra Leone	76
3.15 Togo	78
CHAPTER 4: CENTRAL AFRICA	79
4.1 Angola	84
4.2 Cameroon	85
4.3 Central African Republic.....	88
4.4 Chad.....	90
4.5 Democratic Republic of the Congo.....	92
4.6 Equatorial Guinea	95
4.7 Gabon.....	96
4.8 Republic of the Congo	98
CHAPTER 5 EAST AFRICA	100
5.1 Burundi.....	108
5.2 Djibouti.....	108
5.3 Eritrea	109
5.4 Ethiopia	109
5.5 Kenya	110
5.6 Madagascar	113
5.7 Malawi	115

5.8 Mozambique	117
5.9 Rwanda.....	119
5.10 Somalia.....	120
5.11 Tanzania.....	121
5.12 Uganda	125
5.13 Zambia	128
5.14 Zimbabwe.....	130
CHAPTER 6: SOUTH AFRICA	131
6.1 Botswana	137
6.2 Lesotho.....	140
6.3 Namibia	141
6.4 South Africa.....	142
6.5 Swaziland.....	145

TABLES

Table 1: African Regional Population and Mobile Penetration Rate, 2008	9
Table 2: Africa Mobile Subscribers by Country, 2008	10
Table 3: Africa Mobile Penetration Rate by Country, 2008	11
Table 4: Africa Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	12
Table 5: African Wireless Cap Ex, GSM/WCDMA vs. CDMA, 2007-2008 (Millions of Dollars)	12
Table 6: African Wireless Cap Ex Forecast by Technology, 2008-2011 (Millions of Dollars)	13
Table 7: African Regional Population and Mobile Penetration Rate, 2008	15
Table 8: Africa Mobile Subscribers by Country, 2008	16
Table 9: Africa Mobile Penetration Rate by Country, 2008	17
Table 10: African Wireless Cap Ex by Region, 2007-2008	18
Table 11: African Wireless Cap Ex by Region, Q406 – Q408 (Millions of Dollars)	19
Table 12: African Wireless Cap Ex by Region, Q406 – Q408 (% Growth, QoQ)	19
Table 13: African Wireless Cap Ex Forecast by Region, 2008-2011 (Millions of Dollars)	19
Table 14: African Wireless Cap Ex Forecast by Region, 2008-2011 (% YoY Growth)	20
Table 15: African Wireless Cap Ex, GSM/WCDMA vs. CDMA, by Region, Q406 – Q408 (Millions of Dollars)	22
Table 16: African Wireless Cap Ex, GSM/WCDMA vs. CDMA, 2007-2008 (Millions of Dollars)	22
Table 17: African Wireless Cap Ex Forecast by Technology, 2008-2011 (Millions of Dollars)	23
Table 18: African CDMA Wireless Cap Ex Forecast by Region, 2008-2011 (Millions of Dollars)	23
Table 19: North African Regional Population and Mobile Penetration Rate, 2008	25
Table 20: North African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars)	27
Table 21: North African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars)	28
Table 22: Algeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	29
Table 23: Orascom Djezzy Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	30
Table 24: Wataniya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	30
Table 25: Algeria Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	31
Table 26: Egypt Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	32
Table 27: Orascom Mobinil Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	32
Table 28: Vodafone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	33
Table 29: Egypt Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	33
Table 30: Libya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	34
Table 31: Libya Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	34
Table 32: Morocco Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	34
Table 33: Maroc Telecom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	35
Table 34: Morocco Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	35
Table 35: Tunisia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	36
Table 36: MTN Sudan Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	36
Table 37: ZAIN Sudan Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	37
Table 38: Sudan Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	37
Table 39: Tunisia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	38
Table 40: Orascom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	38
Table 41: Tunisia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	39
Table 42: West African Regional Population and Mobile Penetration Rate, 2008	40
Table 43: West African Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	42
Table 44: West African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars)	45
Table 45: Benin Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	46
Table 46: MTN Benin Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	46
Table 47: Benin Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	47
Table 48: Burkina Faso Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	47
Table 49: ZAIN Burkina Faso Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	48
Table 50: Onatel Telmob Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	49
Table 51: Burkina Faso Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	49
Table 52: Côte d'Ivoire Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	50
Table 53: MTN Côte d'Ivoire Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	50
Table 54: Orange Côte d'Ivoire Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	51
Table 55: Côte d'Ivoire Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	52
Table 56: The Gambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	53
Table 57: The Gambia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	53
Table 58: Ghana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	54
Table 59: Millicom Ghana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	54
Table 60: MTN Ghana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	55
Table 61: Ghana Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	55

Table 62: Guinea Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	56
Table 63: MTN Guinea Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	56
Table 64: Orange Guinea Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	57
Table 65: Guinea Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	59
Table 66: Guinea Bissau Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	59
Table 67: MTN Guinea Bissau Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	59
Table 68: Orange Guinea Bissau Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	60
Table 69: Guinea Bissau Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	62
Table 70: Liberia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	62
Table 71: MTN Liberia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	63
Table 72: Liberia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	63
Table 73: Mali Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	64
Table 74: Orange Mali Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	64
Table 75: Mali Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	65
Table 76: Mauritania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	66
Table 77: Mauritel Mobiles Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	66
Table 78: Mauritania Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	67
Table 79: Niger Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	67
Table 80: Orange Niger Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	67
Table 81: ZAIN Niger Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	69
Table 82: Niger Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	69
Table 83: Nigeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	70
Table 84: MTN Nigeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	70
Table 85: ZAIN Nigeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	71
Table 86: Nigeria Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	72
Table 87: Senegal Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	73
Table 88: Millicom Senegal Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	73
Table 89: Orange Senegal Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	74
Table 90: Senegal Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	75
Table 91: Sierra Leone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	76
Table 92: Millicom Sierra Leone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	76
Table 93: ZAIN Sierra Leone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	77
Table 94: Sierra Leone Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	77
Table 95: Togo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	78
Table 96: Togo Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	78
Table 97: Central African Regional Population and Mobile Penetration Rate, 2008	79
Table 98: Central African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars).....	81
Table 99: Central African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars)	83
Table 100: Angola Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	84
Table 101: Angola Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	84
Table 102: Cameroon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	85
Table 103: MTN Cameroon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	85
Table 104: Orange Cameroon Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	86
Table 105: Cameroon Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	87
Table 106: Central African Republic Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	88
Table 107: Orange Central African Republic Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	88
Table 108: Central African Republic Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	89
Table 109: Chad Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	90
Table 110: Millicom Chad Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	90
Table 111: ZAIN Chad Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	91
Table 112: Chad Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	91
Table 113: Democratic Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	92
Table 114: Millicom DRC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	92
Table 115: Vodacom DRC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	93
Table 116: ZAIN DRC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	93
Table 117: Democratic Republic of the Congo Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	94
Table 118: Equatorial Guinea Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	95
Table 119: Orange Equatorial Guinea Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars) ..	95
Table 120: Equatorial Guinea Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	96
Table 121: Gabon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	96
Table 122: ZAIN Gabon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	97
Table 123: Gabon Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	97
Table 124: Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	98

Table 125: MTN Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	98
Table 126: ZAIN Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	99
Table 127: Republic of the Congo Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	99
Table 128: East African Regional Population and Mobile Penetration Rate, 2008.....	101
Table 129: East African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars)	103
Table 130: East African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars).....	106
Table 131: Burundi Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	108
Table 132: Burundi Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	108
Table 133: Djibouti Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	108
Table 134: Djibouti Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	108
Table 135: Eritrea Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	109
Table 136: Eritrea Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	109
Table 137: Ethiopia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	109
Table 138: Ethiopia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	109
Table 139: Kenya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	110
Table 140: Safaricom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	111
Table 141: ZAIN Kenya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	111
Table 142: Kenya Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	112
Table 143: Madagascar Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	113
Table 144: Orange Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	113
Table 145: ZAIN Madagascar Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	114
Table 146: Madagascar Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	115
Table 147: Malawi Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	115
Table 148: ZAIN Malawi Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	116
Table 149: Malawi Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	116
Table 150: Mozambique Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	117
Table 151: Vodacom Mozambique Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	117
Table 152: Mozambique Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	118
Table 153: Rwanda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	119
Table 154: MTN Rwanda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	119
Table 155: Rwanda Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	120
Table 156: Somalia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	120
Table 157: Somalia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	120
Table 158: Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	121
Table 159: Millicom Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	121
Table 160: Vodacom Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	122
Table 161: ZAIN Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	123
Table 162: Tanzania Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	124
Table 163: Uganda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	125
Table 164: MTN Uganda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	125
Table 165: ZAIN Uganda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	126
Table 166: Uganda Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	127
Table 167: Zambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	128
Table 168: MTN Zambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	128
Table 169: ZAIN Zambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	129
Table 170: Zambia Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	129
Table 171: Zimbabwe Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	130
Table 172: Zimbabwe Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	130
Table 173: South African Regional Population and Mobile Penetration Rate, 2008	131
Table 174: South African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars)	133
Table 175: South African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars)	135
Table 176: Botswana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	137
Table 177: Orange Botswana Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	137
Table 178: MTN MASCOM Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	139
Table 179: Botswana Cap Ex Forecast, 2008-2011 (Millions of Dollars)	139
Table 180: Lesotho Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	140
Table 181: Vodacom Lesotho Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	140
Table 182: Lesotho Cap Ex Forecast, 2008-2011 (Millions of Dollars)	141
Table 183: Namibia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	141
Table 184: MTC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	141
Table 185: Namibia Cap Ex Forecast, 2008-2011 (Millions of Dollars)	142
Table 186: South Africa Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	142
Table 187: MTN South Africa Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	142
Table 188: Vodacom South Africa Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	143

Table 189: South Africa Cap Ex Forecast, 2008-2011 (Millions of Dollars)	144
Table 190: Swaziland Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	145
Table 191: MTN Swaziland Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	145
Table 192: Swaziland Cap Ex Forecast, 2008-2011 (Millions of Dollars)	145

EXHIBITS

Exhibit 1: African Wireless Cap Ex by Region, 2007-2008.....	12
Exhibit 2: African Wireless Cap Ex by Region, 2008.....	18
Exhibit 3: African Wireless Cap Ex Forecast by Region, 2008-2011 (Millions of Dollars).....	20
Exhibit 4: African Wireless Cap Ex Forecast by Region, 2008-2011 (Millions of Dollars).....	21
Exhibit 5: African Wireless Cap Ex, GSM/WCDMA vs. CDMA, 2008.....	22
Exhibit 6: African CDMA Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	23
Exhibit 7: African Wireless Cap Ex Forecast by Technology, 2008-2011 (Millions of Dollars).....	24
Exhibit 8: North Africa Regional Map.....	26
Exhibit 9: North African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars).....	27
Exhibit 10: North African Wireless Cap Ex by Country, 2008.....	28
Exhibit 11: North African Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	29
Exhibit 12: Orascom Djezzy Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	30
Exhibit 13: Wataniya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	31
Exhibit 14: Mobinil Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	32
Exhibit 15: Vodafone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	33
Exhibit 16: Maroc Telecom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	35
Exhibit 17: MTN Sudan Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	36
Exhibit 18: ZAIN Sudan Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	37
Exhibit 19: Orascom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	38
Exhibit 20: West Africa Regional Map.....	41
Exhibit 21: West African Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	42
Exhibit 22: West African Wireless Cap Ex by Country (Benin-Liberia), Q406 – Q408 (Millions of Dollars).....	43
Exhibit 23: West African Wireless Cap Ex by Country (Mali-Togo), Q406 – Q408 (Millions of Dollars).....	43
Exhibit 24: West African Wireless Cap Ex by Country, 2008.....	44
Exhibit 25: West African Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	45
Exhibit 26: MTN Benin Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	46
Exhibit 27: ZAIN Burkina Faso Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	48
Exhibit 28: Onatel Telmob Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	49
Exhibit 29: MTN Côte d'Ivoire Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	50
Exhibit 30: Orange Côte d'Ivoire Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	51
Exhibit 31: Orange Côte d'Ivoire Wireless Subscribers, Q406 – Q408 (Thousands).....	52
Exhibit 32: Millicom Ghana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	54
Exhibit 33: MTN Ghana Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	55
Exhibit 34: MTN Guinea Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	57
Exhibit 35: Orange Guinea Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	58
Exhibit 36: Orange Guinea Wireless Subscribers, Q406 – Q408 (Thousands).....	58
Exhibit 37: MTN Guinea Bissau Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	60
Exhibit 38: Orange Guinea Bissau Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	61
Exhibit 39: Orange Guinea Bissau Wireless Subscribers, Q406 – Q408 (Thousands).....	61
Exhibit 40: MTN Liberia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	63
Exhibit 41: Orange Mali Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	64
Exhibit 42: Orange Mali Wireless Subscribers, Q406 – Q408 (Thousands).....	65
Exhibit 43: Mauritel Mobiles Cap Ex, Q406 – Q408 (Millions of Dollars).....	66
Exhibit 44: Orange Niger Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	68
Exhibit 45: Orange Niger Wireless Subscribers, Q406 – Q408 (Thousands).....	68
Exhibit 46: ZAIN Niger Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	69
Exhibit 47: MTN Nigeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	71
Exhibit 48: ZAIN Nigeria Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	72
Exhibit 49: Millicom Senegal Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	73
Exhibit 50: Orange Senegal Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	74
Exhibit 51: Orange Senegal Wireless Subscribers, Q406 – Q408 (Thousands).....	75
Exhibit 52: Millicom Sierra Leone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	76
Exhibit 53: ZAIN Sierra Leone Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	77
Exhibit 54: Central Africa Regional Map.....	80
Exhibit 55: Central African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars).....	81
Exhibit 56: Central African Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	82
Exhibit 57: Central Africa Wireless Cap Ex by Country, 2008.....	82
Exhibit 58: Central African Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars).....	83
Exhibit 59: MTN Cameroon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	85
Exhibit 60: Orange Cameroon Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	86
Exhibit 61: Orange Cameroon Wireless Subscribers, Q407 – Q408 (Thousands).....	87
Exhibit 62: Orange Central African Republic Wireless Subscribers, Q407 – Q408 (Thousands).....	88

Exhibit 63: Millicom Chad Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	90
Exhibit 64: ZAIN Chad Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	91
Exhibit 65: Millicom DRC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	92
Exhibit 66: Vodacom DRC Cap Ex, Q406 – Q408 (Millions of Dollars)	93
Exhibit 67: ZAIN DRC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	94
Exhibit 68: Orange Equatorial Guinea Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars) .	95
Exhibit 69: Orange Equatorial Guinea Wireless Subscribers, Q406 – Q408 (Thousands)	96
Exhibit 70: ZAIN Gabon Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	97
Exhibit 71: MTN Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	98
Exhibit 72: ZAIN Republic of the Congo Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	99
Exhibit 73: East Africa Regional Map	102
Exhibit 74: East African Wireless Cap Ex by Country (Burundi-Mozambique), Q406 – Q408 (Millions of Dollars)	103
Exhibit 75: East African Wireless Cap Ex by Country (Rwanda-Zimbabwe), Q406 – Q408 (Millions of Dollars)	104
Exhibit 76: East African Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	104
Exhibit 77: East African Wireless Cap Ex by Country, 2008.....	105
Exhibit 78: East African Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	106
Exhibit 79: East African Wireless Cap Ex Forecast by Country (Burundi-Malawi), 2008-2011 (Millions of Dollars)	107
Exhibit 80: East African Wireless Cap Ex Forecast by Country (Mozambique-Zimbabwe), 2008-2011 (Millions of Dollars)	107
Exhibit 81: Orange Kenya Wireless Subscribers, Q406 – Q408 (Thousands)	110
Exhibit 82: Safaricom Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	111
Exhibit 83: ZAIN Kenya Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	112
Exhibit 84: Orange Madagascar Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars).....	113
Exhibit 85: Orange Madagascar Wireless Subscribers, Q406 – Q408 (Thousands)	114
Exhibit 86: ZAIN Madagascar Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	115
Exhibit 87: ZAIN Malawi Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	116
Exhibit 88: Vodacom Mozambique Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	118
Exhibit 89: MTN Rwanda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	119
Exhibit 90: Millicom Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	122
Exhibit 91: Vodacom Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	123
Exhibit 92: ZAIN Tanzania Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	124
Exhibit 93: MTN Uganda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	125
Exhibit 94: ZAIN Uganda Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	126
Exhibit 95: MTN Zambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	128
Exhibit 96: ZAIN Zambia Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	129
Exhibit 97: South African Regional Map	132
Exhibit 98: South African Wireless Cap Ex by Country, Q406 – Q408 (Millions of Dollars).....	133
Exhibit 99: South African Wireless Cap Ex by Country (w/o South Africa), Q406 – Q408 (Millions of Dollars)	134
Exhibit 100: South African Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	134
Exhibit 101: South African Wireless Cap Ex by Country, 2008.....	135
Exhibit 102: South African Wireless Cap Ex Forecast, 2008-2011 (Millions of Dollars)	136
Exhibit 103: South African Wireless Cap Ex Forecast by Country, 2008-2011 (Millions of Dollars)	136
Exhibit 104: Orange Botswana Wireless Subscriber Revenues, Q406 – Q408 (Millions of Dollars)	138
Exhibit 105: Orange Botswana Wireless Subscribers, Q406 – Q408 (Thousands).....	138
Exhibit 106: MTN MASCOM Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	139
Exhibit 107: Vodacom Lesotho Wireless Cap Ex, Q406 – Q408 (Millions of Dollars).....	140
Exhibit 108: MTC Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	141
Exhibit 109: MTN South Africa Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	143
Exhibit 110: Vodacom South Africa Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	144
Exhibit 111: MTN Swaziland Wireless Cap Ex, Q406 – Q408 (Millions of Dollars)	145