

# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Source: Informa Telecoms & Media, 4G Americas, Public Announcements



Information accurate to the best of our knowledge as of date indicated

Networks In Service

Countries In Service

Networks Planned/In Deployment

HSPA	HSPA+		LTE
<b>406</b>	<b>135</b>	94 @ 21Mbps	<b>22</b>
<b>153</b>	<b>70</b>	12 @ 28Mbps	<b>16</b>
<b>103</b>	<b>60</b>	29 @ 42Mbps	79 in Trial, 167 Planned or In Deployment, 49 Potential Licenses

Please send updates to [info@4gamericas.org](mailto:info@4gamericas.org)

Country	Operator/Network Name	HSPA	HSPA+	LTE	LTE Band	
<b>Americas - Latin America &amp; Caribbean</b>						
Argentina	Claro	In Service 2007	Planned (2011)	Planned		
Argentina	Personal	In Service 2007	Planned (2011)	In Trial June 2010	2.6GHz	
Argentina	Movistar	In Service 2007	Planned (2011)	In Trial Dec 2010	AWS 1.7/2.1GHz	
Aruba	SETAR	In Service 2008				
Bahamas	Batelco	In Deployment				
Barbados	Digicel	In Deployment	Planned (2011)			
Barbados	Sunbeach	Planned				
Bermuda	Cellular One (Bermuda Dig. Corp)	In Service 2009	Jan-11	21Mbps		
Bermuda	Digicel	In Service 2010	Jul-10	21Mbps		
Bermuda	M3 Wireless	In Service 2010				
Bolivia	NuevaTel / Viva	In Service 2010				
Bolivia	Movil de Entel	In Service 2011	Apr-11	21Mbps	Trials 2Q 2011	
Bolivia	Tigo	In Service 2008				
Brazil	Claro	In Service 2007		Planned		
Brazil	CTBC Telecom / Algar Telecom	In Service 2008	Testing 2Q 2011			
Brazil	Sercomtel Celular	In Service 2008		Commitment announced		
Brazil	Oi	In Service 2008		Trial 3Q 2011	2.6GHz	
Brazil	TIM Brasil	In Service 2008	In Deployment	Planned		
Brazil	Unicel / aeiou	Planned				
Brazil	Vivo	In Service 2007	Testing 2Q 2011	In Trial		
Chile	Claro	In Service 2007		Planned / Launch 2011		
Chile	Entel	In Service 2007	Dec-09	42Mbps	In Trial Dec 2009	2.6GHz
Chile	Movistar	In Service 2007	Jul-10	42Mbps	Planned / Launch 2012	
Chile	Nextel	Planned				
Chile	VTR	Planned			1.7 GHZ	
Colombia	Comcel	In Service 2008		Planned		
Colombia	Tigo	In Service 2008		Planned		
Colombia	Movistar	In Service 2008		Planned	LTE-700	
Colombia	UNE (EPM Telecomunicaciones)			Planned / Launch 2H 2011	2.6GHz	
Costa Rica	ICE	In Service 2009		Planned		
Dominican Rep.	Claro	In Service 2007				
Dominican Rep.	Orange Dominicana	In Service 2010				
Dominican Rep.	WIND (WiMAX)			In Trial 3Q 2011	2.6GHZ	
Ecuador	Claro (ex-Porta)	In Service 2007		Planned		
Ecuador	Movistar	In Service 2009		Planned		

\*Trials / Commitments = active testing or announced plans

\*Potential Networks = Likely to deploy; information from GSMA, Informa WCIS+ and Public Announcements

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<b>Americas - Latin America &amp; Caribbean</b>						
El Salvador	Claro	In Service 2008				
El Salvador	Movistar	In Service 2008				
El Salvador	Tigo	In Service 2008				
French Guiana	Outremer Telecom/Only	In Service 2008				
French Guiana	Orange Caraibe	In Service 2009				
French West Indies	Outremer Telecom/Only	In Service 2008				
French West Indies	Orange Caraibe	In Service 2009				
Guatemala	Claro	In Service 2008				
Guatemala	Tigo	In Service 2010				
Honduras	Tigo	In Service 2008				
Honduras	Claro	In Service 2008				
Jamaica	LIME / Cable & Wireless	In Service 2009				
Jamaica	Claro	In Service 2008			Planned	
Mexico	Telcel	In Service 2008	Planned (2011)		In Trial	700MHz
Mexico	Iusacell / Unefon	In Service 2010	Nov-10	21Mbps	Planned	
Mexico	Nextel	Planned				1.7 GHZ
Mexico	Movistar	In Service 2009	Planned (2011)		In Trial	
Netherlands Antilles	Setel / UTS	In Service 2011				
Nicaragua	Claro	In Service 2008				
Nicaragua	Movistar	In Service 2009				
Panama	Claro	In Service 2009				
Panama	Movistar	In Service 2008				
Paraguay	Claro	In Service 2007			Planned	
Paraguay	Personal	In Service 2008			Planned	
Paraguay	Tigo	In Service 2008			Planned	
Peru	Claro	In Service 2008			Planned	
Peru	Nextel	In Service 2009				
Peru	Movistar	In Service 2009			Field Data Call June 2010	700MHz
Puerto Rico	AT&T Mobility	In Service 2006	Jan-11	21Mbps	Planned	
Puerto Rico	Claro	In Service 2007	Feb-11	21Mbps	In Trial	
Puerto Rico	T-Mobile	In Service 2009	Dec-10	21Mbps		
Turks & Caicos	Islandcom	In Service 2010				
Uruguay	ANCEL	In Service 2007			In Trial 2Q 2011	1.7/2.1 GHz
Uruguay	Claro	In Service 2007			Planned	
Uruguay	Movistar	In Service 2007			Planned	
US Virgin Islands	AT&T Mobility	In Service 2008				
Venezuela	Digitel	In Service 2009			Planned	
Venezuela	Movilnet	In Service 2009			Planned	
Venezuela	Movistar	In Service 2008			Planned	

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Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Americas - US/Canada</b>						
Canada	Bell Wireless Affiliates (JV Telus)	In Service	Nov-09	42Mbps	Planned 1H 2012	
Canada	Telus Mobility (JV Bell Wireless)	In Service	Nov-09	42Mbps	Planned 1H 2012	
Canada	Eastlink Wireless	Planned				
Canada	Mobilicity /(DAVE Wireless)	In Service			Planned	
Canada	MTS Mobility /Allstream	In Service	Mar-11	21Mbps	Planned	
Canada	Public Mobile	In Deployment			Planned	
Canada	Rogers Wireless Communications	In Service	Jul-09	21Mbps	Planned 2H 2011	2100MHz/1700MHz
Canada	SaskTel Mobility	In Service	Aug-10	21Mbps	Planned	AWS
Canada	Shaw Communications				Planned	
Canada	T-Bay-Tel (CDMA)	In Service	Nov-10	21Mbps		
Canada	Videotron (Quebecor Media)	In Service	Sep-10	21Mbps	Planned	
Canada	Virgin Mobile Canada (MVNO)	In Service	Jan-10	42Mbps		
Canada	WIND /Globalive	In Service			In Trial	
Canada	Xplornet (Barrett Xplore)				Planned	TD-LTE
USA	Agri-Valley (CDMA) (Michigan)				Planned	700MHz
USA	Aircell (In-Flight Network)				Planned / Launch 2011	
USA	AT&T Mobility	In Service	Nov-10	21Mbps	Planned /July 2011	AWS & 700MHz
USA	BayRICS (San Fran Public Safety)				Planned / Launch 2011	
USA	BendBroadband	In Service	Dec-09	21Mbps		
USA	Bluegrass Cellular (Rural CDMA)				Planned	700MHz
USA	Cellcom (WI, MI) (Rural CDMA)				Planned	700MHz
USA	Cellular South (CDMA)				Planned / Launch 2011	700MHz
USA	CenturyLink (former CenturyTel)				In Deployment	700MHz
USA	Clearwire Corp.(WiMAX)				In Trial	TD-LTE
USA	CommNet Wireless (Navajo Nation)				Planned / Launch 2011	
USA	Cordova Wireless (AK)				Planned	
USA	Cox Communications (Cable Operator)				In Deployment	AWS & 700MHz
USA	Cross Communications				Planned	700MHz
USA	Leap Wireless/Cricket Comm. (CDMA)				Planned 2H 2011	
USA	LightSquared / Skyterra (Wholesale)				Planned/Launch 2011	1.4-1.6GHz
USA	Metro PCS (CDMA)				<b>In Service Sept 2010</b>	AWS (1.7/2.1 GHZ)
USA	Mosaic Telecom (Rural CDMA)				Planned	AWS & 700MHz
USA	NetAmerica Alliance				Planned	AWS & 700MHz
USA	nTelos (Rural CDMA)				In Trial	AWS
USA	Pioneer Cellular (OK) (Rural CDMA)				Planned	
USA	Public Service Wireless (GA)				Planned	700MHz
USA	Stelera Wireless	In Service				
USA	Strata Networks (Rural CDMA)				Planned	700MHz
USA	Terrestar	In Service				
USA	Texas Energy Network /TEN (oil & gas)				Planned / Launch 2011	
USA	T-Mobile USA	In Service	Sep-09	42 Mbps	Commitment Announced	
USA	US Cellular				Planned / Launch 2011	
USA	Verizon Wireless				<b>In Service Dec 2010</b>	700MHz

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<b>Africa</b>						
Algeria	Algérie Télécom	Planned				
Algeria	Orascom Bangladesh	Planned				
Algeria	Wataniya Maldives (Qtel)	Planned				
Angola	Movicel	In Service Dec 2010				
Angola	Unitel	In Service 2007	Jul-10	21Mbps		
Botswana	Botswana Telecom / Be Mobile	In Deployment				
Botswana	Mascom Wireless	In Service Aug 2008				
Botswana	Orange Botswana	In Service Aug 2009				
Burundi	HiTs Telecom Burundi	Planned				
Burundi	Lacell	Planned				
Cameroon	MTN Cameroon	Planned				
Cameroon	Orange Cameroon	Planned				
Chad	Bharti Airtel Chad	Planned				
Chad	Millicom	Planned				
Côte D'Ivoire	Atlantique Telecom	Planned				
Côte D'Ivoire	Comium Côte D'Ivoire	Planned				
Côte D'Ivoire	MTN	Planned				
Côte D'Ivoire	Orange	Planned				
Dem. Rep. Congo	Vodacom	Planned				
Dem. Rep. Congo	Zain	Planned				
Egypt	ECMS / MobiNil	In Service 2009			In Trial	
Egypt	Etisalat Misr	In Service 2007	Jun-10	42Mbps	In Trial	
Egypt	Vodafone Egypt	In Service 2007			In Trial	
Equatorial Guinee	HiTs Telecom	In Service 2009				
Ethiopia	Ethiopian Telecom/Ethio-Mobile	In Service 2008				
Gambia	QuantumNet / Qcell	In Service 2009				
Ghana	Bharti/Zain (Airtel)	In Service 2010				
Ghana	GloMobile Ghana	In Deployment				
Ghana	Millicom /Tigo Ghana	In Deployment				
Ghana	MTN Ghana	In Service 2010				
Ghana	Vodafone Ghana	In Service 2010				
Guinea	Cellcom Guinée	Planned				
Guinea	Intercel Holdings	Planned				
Guinea	Orange	Planned				

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<b>Africa</b>						
Guinea	Sotelgui	Planned				
Guinea Bissau	Guinetel	Planned				
Guinea Bissau	Spacotel	Planned				
Kenya	Airtel (Bharti-Zain)	In Deployment				
Kenya	Essar Telecom	Planned				
Kenya	Orange Kenya	In Deployment	In Deployment			
Kenya	Safaricom	In Service 2008			In Trial	
Lesotho	Econet Telecom Lesotho	In Deployment				
Lesotho	Vodacom Lesotho	In Service 2009				
Libya	Almadar Aljadeed	Planned			Planned	
Libya	Libyana	In Service 2008				
Madagascar	Telecom Malagasy	In Service 2009				
Malawi	Telekom Networks Malawi (TNM)	In Service 2009				
Malawi	Airtel / Zain	In Service 2010	In Deployment			
Mali	Orange Mali	In Service 2010				
Mauritania	Mauritel Mobiles	In Service 2010				
Mauritius	Emtel Mauritius	In Service 2007				
Mauritius	Orange Mauritius	In Service 2007				
Mauritius	Outremer Telecom	In Service 2008				
Morocco	Ittissalat Al-Maghrib/Maroc Telecom	In Service 2008				
Morocco	Médi Télécom/Méditel	In Service 2008				
Mozambique	Mocambique Celular / mCel	In Service 2008				
Mozambique	Vodacom	In Service 2010				
Namibia	Leo (Orascom) / Cell One	In Service 2007	Planned		Planned	
Namibia	MTC	In Service 2006	In Deployment			
Niger	Orange Niger	Planned				
Niger	Sahelcom	Planned				
Niger	Telecel	Planned				
Niger	Zain	Planned				
Nigeria	Alheri Engineering Co.	In Deployment				
Nigeria	Etilisat Nigeria	In Service 2009				
Nigeria	Globacom/Glo Mobile	In Service 2008			In Service Jan 2011	LTE-2100
Nigeria	MTN Nigeria	In Service 2008			Potential License	
Nigeria	Bharti Airtel / Zain Nigeria	In Service 2009			Potential License	

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<b>Africa</b>						
Réunion	Orange Reunion	In Service 2009				
Réunion	Outremer Telecom Reunion / Only	In Service 2008				
Réunion	SFR Reunion	In Service 2008				
Rwanda	MTN Rwanda	In Service 2010				
Rwanda	RwandaTel	In Service 2008				
Rwanda	Tigo Rwanda	In Service 2010				
Senegal	Sonatel-Mobiles/Orange Senegal	In Service 2008			Planned	
Senegal	Sentel	Planned				
Senegal	Sudatel Senegal	In Service 2010				
Seychelles	Telecom Seychelles / Airtel	In Service 2008				
South Africa	Cell C	In Service 2010	Aug-10	21Mbps	Planned	2.6GHz
South Africa	MTN	In Service 2009	May-10	21Mbps	In Trial	LTE-2100
South Africa	Telkom (8ta)	In Service 2009	Planned		Commitment Announced	
South Africa	Vodacom	In Service 2009	Apr-11	42Mbps	Planned/Launch 2011	
Sudan	MTN Sudan	In Service 2009				
Sudan	Sudatel (Sudan Telecom)	In Service 2009				
Sudan	Zain Sudan	In Service 2008				
Tanzania	Tigo Tanzania	Planned				
Tanzania	Vodacom Tanzania	In Service 2010				
Tanzania	Airtel / Zain	In Service 2008	In Deployment			
Togo	TogoCel	In Deployment	In Deployment			
Tunisia	Orange Tunisie	In Service 2010	Aug-10	21Mbps		
Tunisia	Tunisie Télécom	Planned				
Uganda	MTN Uganda	In Service 2010				
Uganda	Orange Uganda	In Service 2009				
Uganda	Uganda Telecom	In Service 2008				
Uganda	Zain Uganda	Planned				
Zambia	MTN Zambia	Planned				
Zambia	Zain Zambia	Planned				
Zimbabwe	Econet Wireless	In Service 2009				
Zimbabwe	Telecel	Planned				

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<b>Asia Pacific</b>						
Australia	3 Australia	In Service	In Deployment		In Deployment	
Australia	Energy Australia				Planned	
Australia	Optus (SingTel)	In Service	In Deployment		In Trial	1800/2100 MHz
Australia	Telstra	In Service	Feb-09	42Mbps	Launch by YE2011	2.6GHz/1800MHz
Australia	vividwireless (Seven Group) (WiMAX)				Planned/Launch 2012	TD-LTE
Australia	Vodafone Hutchison (VHA)	In Service			In Trial	1800MHz
Bangladesh	Axiata Bangladesh	Planned				
Bangladesh	GrameenPhone	Planned			Potential License	
Bangladesh	Orascom Bangladesh	Planned				
Bangladesh	Teletalk	Planned				
Bangladesh	Warid Bangladesh / Airtel	Planned				
Bhutan	Bhutan Telecom / B-Mobile	In Service			Potential License	
Bhutan	Tashi Infocomm	In Service			Potential License	
Brunei	B-Mobile Brunei	In Service			Planned	
Brunei	DSTCom	In Service			Planned	
Cambodia	Alltech Telecom				Planned	
Cambodia	Cadcomms / qb	In Service			Planned	
Cambodia	CamGSM/Cellcard (MobiTel)	In Service			Planned	
Cambodia	CamShin mfone	In Service			Planned	
China	China Mobile / TD-SCDMA				In Trial / Launch 2012	TD-LTE
China	China Telecom (CDMA)				Planned / Launch 2011	
China	China Unicom	In Service	In Deployment		Planned	
East Timor	Timor Telecom	In Service				
Fiji	Vodafone Fiji	In Service				
French Polynesia	Mara Telecom	In Deployment				
French Polynesia	Tikiphone VINI 3G	In Service				
Guam	Guamcell (DoCoMo Pacific)	In Service				
Hong Kong	CSL New World	In Service	Mar-09	21Mbps	<b>In Service Nov 2010</b>	2.6 MHz
Hong Kong	Hutchison 3 / JV Genius	In Service	Jul-09	21Mbps	Planned / Launch 2011	2.6 MHz
Hong Kong	PCCW Mobile / JV Genius	In Service	Jun-09	42Mbps	Planned / Launch 2011	2.6 MHz
Hong Kong	SmarTone-Vodafone	In Service	Nov-09	28Mbps	Planned	1800 MHz
India	Aircel (Maxis)	In Service	Feb-11	21Mbps	Planned	TD-LTE
India	Bharti Airtel	In Service	Dec-10	21Mbps	Planned	TD-LTE
India	BSNL	In Service			Planned	2.3 GHZ

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<b>Asia Pacific</b>						
India	Idea Cellular	In Service	Mar-11	21Mbps		
India	MTNL	In Service			Planned	2.3 GHZ
India	Qualcomm India LTE Venture				Planned / Launch 2011-2012	
India	Reliance/Infotel Broadband	In Service	Dec-10	21Mbps	Planned / Launch 2011	TD-LTE
India	Tata DoCoMo Teleservices	In Service	Nov-10	21Mbps	Potential License	
India	Vodafone Essar	In Service	Mar-11	21Mbps		
Indonesia	Excelcomindo XL (Axiata)	In Service			In Trial / Launch 2013	
Indonesia	3 Indonesia	In Service				
Indonesia	Natrindo Telepon Seluler Axis	In Service				
Indonesia	Indosat/Qtel	In Service	May-10	42Mbps	In Trial / Launch 2013	
Indonesia	Telkomsel	In Service	Dec-09	21Mbps	In Trial / Launch 2013	
Japan	eAccess / emobile	In Service	Jul-09	42Mbps	In Deployment / 2011	1.7 GHZ
Japan	KDDI / au (CDMA)				Planned / Q4 2012	1.5 GHZ & 800MHz
Japan	NTT DoCoMo / Xi	In Service			<b>In Service / Dec 24, 2010</b>	1.5 GHZ
Japan	Softbank Mobile	In Service			In Deployment / 2011 Launch	2.5GHZ
Laos	LaoTel (Viettel)	In Service				
Laos	Star Telecom / Unitel	In Service				
Macau	CTM (C&W)	In Service	In Deployment			
Macau	Hutchison 3	In Service	In Deployment			
Macau	SmarTone-Vodafone	In Service	Jul-10	21Mbps		
Malaysia	Asiaspace (WiMAX)				Planned LTE TDD	2.3GHZ
Malaysia	Celcom (Axiata)	In Service			In Trial	
Malaysia	DiGi (Telenor)	In Service			Planned / Launch 2013	2.6GHz
Malaysia	Maxis Communications/UMTS	In Service	Dec-09	21Mbps	In Trial	
Malaysia	PacketOne Networks (WiMAX to TD-LTE)				Planned YE 2012	
Malaysia	Telecom Malaysia / TM				In Trial	
Malaysia	U Mobile	In Service	Nov-10	42Mbps	Planned	
Maldives	Dhiraagu	In Service			Potential License	
Maldives	Wataniya Maldives (Qtel)	In Service			Potential License	
Mongolia	G-Mobile (CDMA)				Potential License	450MHz
Mongolia	Mobicom	In Service				
Mongolia	Skytel (CDMA to GSM)	In Service	Jan-10	21Mbps		
Mongolia	Unitel	In Service				
Myanmar	Myanmar P&T	Planned				
Nepal	Ncell (TeliaSonera subsidiary)	In Service			Planned 2012	
Nepal	Nepal Telecom	In Service			Potential License	
Nepal	Spice /Mero Mobile	Planned				
New Zealand	2degrees Mobile	In Service	Planned			
New Zealand	Telecom NZ (CDMA to GSM)	In Service	Aug-10	21Mbps	In Trial / Launch 2011	
New Zealand	Vodafone New Zealand	In Service	Dec-10	28.8Mbps	Planned	

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<b>Asia Pacific</b>						
North Korea	Koroyolink (CHEO/Orascom Telecom)	In Service				
Pakistan	PMCL / Mobilink	Planned			Planned	
Pakistan	PTML	Planned				
Pakistan	Telenor Pakistan	Planned			Planned	
Philippines	Digitel/Sun Cellular	In Service	Planned			
Philippines	Globe Telecom/SingTel	In Service	Apr-11	21Mbps	In Trial	
Philippines	Smart Communications/Piltel	In Service	In Deployment		<b>In Service April 2011</b>	
Singapore	MobileOne/M1 3G	In Service	Jul-09	28Mbps	In Trial	
Singapore	SingTel Mobile/3loGy Live	In Service	Dec-09	21Mbps	In Trial	
Singapore	StarHub	In Service	Mar-09	21Mbps	In Trial	
South Korea	KTF Corp	In Service	In Deployment		Planned	
South Korea	LG Uplus				Planned / July 2011	
South Korea	SK Telecom	In Service	Jul-10	21Mbps	Planned Seoul July 2011	800 MHz / LTE-A in 2013
Sri Lanka	Bharti Airtel Sri Lanka	In Service				
Sri Lanka	Dialog Axiata	In Service	In Deployment		In Trial	
Sri Lanka	Etisalat Sri Lanka	In Service	Jan-11	28Mbps		
Sri Lanka	Mobitel M3	In Service	In Deployment		In Trial	
Taiwan	Chunghwa Telecom	In Service	In Deployment		In Trial	
Taiwan	FarEasTone	In Service	In Deployment		In Trial	TD-LTE
Taiwan	Taiwan Mobile Company	In Service	Planned		Planned	
Taiwan	VIBO	In Service	In Deployment		Planned	
Taiwan	AIS	In Service			In Trial	
Taiwan	CAT CDMA	In Deployment				
Thailand	DTAC (Telenor)	In Service			Planned	
Thailand	True Move (Hutch)	In Service				
Vietnam	CMC Corporation				In Trial	
Vietnam	EVN Telecom (E-Mobile)	In Service			Planned	
Vietnam	FPT Telecom				In Trial	
Vietnam	Mobifone	In Service			Planned	
Vietnam	Vietnam Data Communications				In Trial	
Vietnam	Vietnamobile (Hutchison)	In Service				
Vietnam	Viettel Vietnam	In Service	Mar-10	21Mbps	In Trial	
Vietnam	VinaPhone (VNPT)	In Service			In Trial	
Vietnam	VTC (Vietnam Multimedia Corporation)				Planned	

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Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Eastern</b>						
Abkhazia	Aquaфон	In Service			In Trial	
Albania	Albanian Mobile	Planned				
Albania	Eagle Mobile	In Deployment			Potential License	
Albania	Vodafone Albania	In Service				
Armenia	Armentel/Beeline	In Service			Planned	
Armenia	K-Telecom/VivaCell-MTS	In Service	Nov-10	21Mbps	<b>In Service Feb 2011</b>	
Armenia	Orange Armenia	In Service			Planned	
Azerbaijan	Azercell	Planned			Potential License	
Azerbaijan	Azerfon/Nar Mobile/Vodafone	In Service			Potential License	
Azerbaijan	Bakcell	Planned			Potential License	
Belarus	BeST / life:)	In Service	In Deployment		In Trial	2.6GHz
Belarus	Dialog (CDMA)				Permission Requested	450MHz
Belarus	Mobile TeleSystems /MTS	In Service	May-10	21Mbps	Potential License	
Belarus	Velcom	In Service	Mar-10	21Mbps	Potential License	
Belarus	Yota (Scartel)				Planned	
Bosnia Herz.	BH Telecom	In Service				
Bosnia Herz.	Republika Srpska (mtel)	In Service				
Bulgaria	Cosmo Bulgaria Mobile/GloBul	In Service	In Deployment			
Bulgaria	MobilTel / M-Tel	In Service	Sep-09	42Mbps	Potential License	
Bulgaria	Vivacom (BTC/Vivatel)	In Service	In Trial			
Croatia	Tele2	In Service	Dec-10	21Mbps		
Croatia	Hrvatski Telekom (T-Mobile)	In Service			In Deployment	2.6GHz
Croatia	VIPnet	In Service	Dec-09	42Mbps	In Trial	2.6GHz
Czech Republic	Mobilkom Czech Republic				Potential License	2.6GHz
Czech Republic	Telefonica O2 Czech Republic	In Service			In Trial	2.6GHz
Czech Republic	T-Mobile Czech Republic	In Service	Nov-10	21Mbps	Potential License	2.6GHz
Czech Republic	Ufone (CDMA)				Permission Requested	450MHz
Czech Republic	Vodafone Czech Republic	In Service			Potential License	2.6GHz
Estonia	Elisa	In Service	Apr-10	21Mbps	In Deployment	2.6GHz
Estonia	EMT	In Service	Nov-09	21Mbps	<b>In Service Dec 2010</b>	2.6GHz
Estonia	ProGroup Holding	Planned				
Estonia	Tele2	In Service			In Trial	2.6GHz
Georgia	A-Mobile	Planned				
Georgia	Aquaфон	In Service			Potential License	
Georgia	Geocell	In Service			Potential License	
Georgia	Magticom	In Service			Potential License	

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\*Potential Networks = Likely to deploy; information from GSMA, Informa WCIS+ and Public Announcements

# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Eastern</b>						
Hungary	Telenor Magyarország (ex-Pannon)	In Service			In Deployment	
Hungary	Maygar Telecom (T-Mobile)	In Service	Summer 2011	21Mbps	In Trial	450MHz & 900MHz
Hungary	Vodafone Hungary	In Service	Feb-10	21Mbps	Planned	
Kazakhstan	Neo/ Mobile Telecom Service				In Trial	
Kazakhstan	GSM Kazakhstan / Kcell	In Service	Dec-10	21Mbps	Planned	
Kazakhstan	Kar-Tel / Beeline	In Service	Dec-10	21Mbps	In Trial	LTE 700
Kirghizstan	AkTel	Planned				
Kirghizstan	Katel	Planned				
Kirghizstan	MegaCom	Planned			Potential License	
Kirghizstan	Sky Mobile / Beeline	In Service	Dec-10	21Mbps	Potential License	
Kosovo	Ipko Net				Potential License	2.1GHz
Kosovo	Vala				Potential License	2.1GHz
Latvia	Bité	In Service	Sep-10	21Mbps	In Trial	2.6GHz
Latvia	LMT (TeliaSonera)	In Service			Planned	2.6GHz
Latvia	Tele2	In Service			Planned	2.6GHz
Latvia	Triatel (CDMA)				In Trial	450 MHz
Lithuania	Bité	In Service	Sep-10	21Mbps	In Trial	2.6GHz
Lithuania	Omnitel (TeliaSonera)	In Service			<b>In Service May 2011</b>	2.6GHz
Lithuania	Tele2	In Service			Potential License	2.6GHz
Macedonia	ONE / Cosmofon / Telekom Slovenije)	In Service			Potential License	2.1GHz
Macedonia	T-Mobile (Makedonski Telekom)	In Service			Potential License	2.1GHz
Macedonia	VIP	Planned				
Moldova	Moldcell (TeliaSonera)	In Service			Potential License	2.1GHz
Moldova	Eventis Mobile	Planned				
Moldova	Mold Telecom/Unite	In Service	In Deployment			
Moldova	Orange	In Service	Dec-09	21Mbps	In Trial	
Moldova	T-Mobile	Planned				
Montenegro	MTEL	In Service				
Montenegro	Telenor (Promonte)	In Service	Sep-10	21Mbps	Potential License	2.6GHz
Montenegro	T-Mobile	In Service			Potential License	2.6GHz
Poland	Aero 2	In Service	Nov-10	28Mbps	Planned / Launch 2011	2.6GHz
Poland	Centernet Wrodzinie	In Service				
Poland	Mobyland / Eutelia	In Service			<b>In Service Sept 2010</b>	1800MHz
Poland	Milmex				Potential License	
Poland	Orange Poland	In Service	Oct-10	42Mbps	Planned/JV with P4	2.6GHz
Poland	P4 / Play	In Service	Dec-10	21Mbps	Planned /JV with Orange	LTE 800
Poland	Polkomtel / Plus	In Service	Jun-09	21Mbps	In Trial	1800 MHz
Poland	Polska Telefonía Cyfrowa / Era GSM	In Service	Sep-09	21Mbps	Potential License	2.6GHz

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\*Potential Networks = Likely to deploy; information from GSMA, Informa WCIS+ and Public Announcements

# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Eastern</b>						
Romania	RCS&RDS / Digi.Mobil	In Service			Potential License	
Romania	Orange Romania	In Service			Potential License	
Romania	Cosmote (OTE)	In Service	Sep-09	21Mbps	Planned	
Romania	Telemobil (CDMA)	In Service	Aug-09	21Mbps	Permission Requested	450MHz
Romania	Vodafone Romania	In Service	Mar-09	21Mbps	Planned	
Russia	MegaFon	In Service	Sep-10	28.8Mbps	In Trial	
Russia	Mobile TeleSystems /MTS	In Service	Dec-10	21Mbps	In Trial	
Russia	Osnova Telekom				Planned	
Russia	Rostelecom (WiMAX to LTE)				Planned / Launch 2013	2.3-2.4 GHZ
Russia	Skylink (CDMA)				Permission Requested	450 MHz
Russia	Sibirtelecom/Svyazinvest				Planned	
Russia	VimpelCom / Beeline	In Service	Planned		In Trial	
Russia	Yota/Scartel (WiMAX to LTE)				Planned Launch Apr 2011	
Serbia	Telekom Srbija /MT:S	In Service			Potential License	
Serbia	Telenor	In Service			Potential License	
Serbia	VIP Mobile	In Service	Feb-11	42Mbps		
Slovak Republic	Orange	In Service	In Deployment		In Trial	2.6GHZ
Slovak Republic	T-Mobile	In Service	Mar-11	21Mbps	Planned	
Slovak Republic	Telefónica O2				In Trial	2.6GHZ
Slovenia	Mobitel	In Service	Apr-10	21Mbps	Potential License	
Slovenia	Si.mobil	In Service	Dec-10	21Mbps	Potential License	
Slovenia	T-2	In Service	Planned		Potential License	
Slovenia	Tus Mobil	In Service	Nov-10	21Mbps		
Tadjikistan	Babilon Mobile	In Service				
Tadjikistan	Indigo-Somoncom /TeliaSonera	In Service				
Tadjikistan	Tacom / Beeline	In Service				
Tadjikistan	TT Mobile	In Service				
Turkmenistan	MTS-Turkmenistan	In Service	Nov-10	21Mbps		
Turkmenistan	TM Cell / Atlyn Asyr	In Service				
Ukraine	Life:) Astelit	Planned				
Ukraine	CDMA Ukaraine (ITC)				Planned	
Ukraine	Kyivstar	Planned				
Ukraine	MTS-Ukraine	Planned			In Trial	
Ukraine	Ukrtelecom / Utel	In Service				
Uzbekistan	MTS-Uzbekistan	In Service			<b>In Service July 2010</b>	2.6GHz / 700MHz
Uzbekistan	Ucell/TeliaSonera	In Service	Feb-11	42Mbps	<b>In Service Aug 2010</b>	2.6GHz
Uzbekistan	Unitel LLC Beeline	In Service	In Deployment			

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# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Western</b>						
Andorra	Andorra Telecom STA	In Service			Planned 2011	
Austria	Hutchison 3 Austria	In Service	Aug-09	42Mbps	Planned / Launch 2011	2.6GHz
Austria	A1 Telekom (Telekom Austria)	In Service	Mar-09	21Mbps	<b>In Service Oct 2010</b>	2.6GHz
Austria	Orange	In Service	Mar-09	42Mbps	Planned 2011-2012	2.6GHz
Austria	T-Mobile Austria	In Service	Jan-11	21Mbps	<b>In Service Oct 2010</b>	2.6GHz
Belgium	KPN Group Belgium/BASE	In Service	In Deployment		Planned	
Belgium	Belgacom Mobile/Proximus	In Service	In Deployment		In Deployment	
Belgium	Mobistar (France Telecom)	In Service	Dec-10	28Mbps	In Trial	
Cyprus	CYTA Mobile / Vodafone	In Service				
Cyprus	Kibris Turkcell / KKT Cell	In Service			Potential License	
Cyprus	MTN (Areeba)	In Service				
Denmark	HI3G Denmark / 3	In Service	Jun-09	21Mbps	Planned/Launch 2011	900/1800MHz
Denmark	TDC Mobil	In Service	May-10	21Mbps	Planned/Launch 2011	
Denmark	Telenor Denmark	In Service	Oct-10	21Mbps	Planned/Launch 2011	
Denmark	TeliaSonera Denmark	In Service			<b>In Service Dec 2010</b>	2.6 GHz
Faroe Islands	Faroese Telecom /Foroya Tele	In Service	Dec-10	21Mbps		
Finland	Alands Mobiltelefon	In Service				
Finland	DNA Finland	In Service	Oct-09	21Mbps	Planned/Launch 2011	2.6GHz
Finland	Elisa	In Service	Apr-10	21Mbps	<b>In Service Dec 2010</b>	2.6GHz & 1800MHz
Finland	TDC Song					
Finland	TeliaSonera	In Service			<b>In Service Nov 2010</b>	2.6GHz
France	Bouygues Telecom	In Service	In Deployment		In Trial	1800MHz
France	Orange France	In Service	In Deployment		Planned / Launch 2012	2.6GHz & 800MHz
France	SFR	In Service	Sep-10	21Mbps	In Trial	
Germany	E-Plus (KPN)	In Service			Field Tests 1Q 2011	2.6GHz & 900MHz
Germany	O2/Telefonica)	In Service	Nov-09	28Mbps	Planned/Launch YE 2011	2.6GHz & 800MHz
Germany	T-Mobile / DeutscheTelekom	In Service	Apr-10	21Mbps	<b>In Service Apr 2011</b>	800MHz
Germany	Vodafone D2	In Service			<b>In Service Nov 2010</b>	790-862 MHz (DigDiv)
Gibraltar	Gibtelecom (Telekom Slovenije)	In Service			Planned	
Greece	Cosmote	In Service	May-09	28Mbps	In Trial	900/1800MHz
Greece	Panafon / Vodafone	In Service	Jul-09	42Mbps	Potential License	
Greece	WIND Hellas	In Service			Potential License	
Greenland	TeleGreenland	In Service				
Guernsey	Airtel (Vodafone/Bharti)	In Service				
Guernsey	Sure/Cable & Wireless Guernsey	In Service				
Guernsey	Wave Telecom	In Service				

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# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Western</b>						
Iceland	Iceland Telecom/Síminn	In Service			Potential License	
Iceland	Nova	In Service			Potential License	
Iceland	Vodafone /Teymi	In Service				
Ireland	Hutchison 3	In Service	In Deployment		Planned / Launch 2011	
Ireland	Meteor Communications (eircom)	In Service	In Trial		Planned	
Ireland	O2	In Service	Nov-10	21Mbps	Planned	
Ireland	Vodafone Ireland	In Service	Feb-10	21Mbps	Planned	
Isle of Man	Manx Telecom	In Service			Potential License	
Israel	Cellcom Israel	In Service				
Israel	Partner Communications/Orange	In Service	In Deployment		Planned	
Israel	Pelephone (Bezeq)	In Service	May-10	21Mbps		
Italy	3 Italy	In Service	In Deployment		Planned	
Italy	Telecom Italia/TIM	In Service	Jul-09	28Mbps	In Trial	
Italy	Vodafone Italia	In Service	Nov-10	42Mbps	Planned	
Italy	Wind	In Service	In Deployment		Planned	
Jersey	Airtel Vodafone (Bharti)	In Service				
Jersey	Cable & Wireless Jersey/sure.Mobile	In Service				
Jersey	Clear Mobitel				Planned / Launch 2011	2.6GHz
Jersey	Jersey Telecoms	In Service				
Liechtenstein	mobilkom	In Service				
Liechtenstein	Orange	In Service				
Liechtenstein	Tango / Tele2	Planned				
Luxembourg	LOL Mobile (Luxembourg Online)	In Service				
Luxembourg	P&T Luxembourg/LUXGSM	In Service			Potential License	
Luxembourg	Tango (Belgacom)	In Service			Potential License	
Luxembourg	Orange (Mobistar)	In Service	In Deployment		Planned	
Malta	3G / Melita Mobile	In Service				
Malta	Go	In Service				
Malta	Vodafone Malta	In Service	Dec-10	21Mbps		
Monaco	Monaco Telecom (C&W)	In Service			In Trial - 2013 launch	
Netherlands	KPN Mobile	In Service	Dec-10	21Mbps	Planned	2.6GHz
Netherlands	T-Mobile Netherlands	In Service	In Deployment		Planned	2.6GHz
Netherlands	Vodafone Netherlands	In Service	Jul-10	28Mbps	Planned	2.6GHz
Netherlands	Tele2				In Trial	
Netherlands	Ziggo 4				Planned	

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# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Europe - Western</b>						
Norway	Hi3G Access Norway	In Deployment				
Norway	Netcom/Telia Sonera	In Service	Dec-10	21Mbps	<b>In Service Dec 2009</b>	2.6GHz
Norway	Telenor Mobil	In Service	In Deployment		In Trial	
Portugal	Optimus Sonaecom	In Service	Aug-09	21Mbps	Planned	
Portugal	TMN	In Service	Jun-09	21Mbps	Planned / Launch 2011	
Portugal	Vodafone Portugal	In Service	Jul-09	42Mbps	Planned / Launch 2011	
San Marino	Telecom Italia/TIM					
Spain	Orange	In Service			Planned	
Spain	Telefónica Móviles/Movistar	In Service	Nov-09	42Mbps	In Trial	
Spain	Vodafone Espana	In Service	Dec-09	42Mbps	In Trial	
Spain	Yoigo	In Service	In Deployment			
Sweden	Hi3G/3 Sweden	In Service	Jun-09	42Mbps	Planned / Launch 2011	
Sweden	TeleNor /Net4Mobility	In Service	Jun-09	21Mbps	<b>In Service Nov 2010</b>	2.6GHz & 900MHz
Sweden	Tele2 /Net4Mobility	In Service	Jun-09	21Mbps		
Sweden	TeliaSonera Sweden	In Service	Jun-09	21Mbps	<b>In Service Dec 2009</b>	2.6GHz
Switzerland	Orange Switzerland	In Service	In Deployment		Planned/ Launch 2011	
Switzerland	Swisscom Mobile/Natel	In Service	Oct-09	28Mbps	Planned / Launch 2011	
Switzerland	TDC Switzerland/sunrise	In Service				
Turkey	AVEA	In Service	Jul-09	21Mbps	Planned	
Turkey	Turkcell	In Service	Jul-09	42Mbps	In Trial	
Turkey	Vodafone	In Service	Jul-09	21Mbps	Planned	
UK	Arqiva				In Trial	800MHz
UK	Clear Mobitel				In Trial	800MHz
UK	Everything Everywhere (Orange+T-Mobile)	In Service			Planned	
UK	Hutchison 3G / 3 UK	In Service	In Deployment		Planned	
UK	O2 (Telefonica)	In Service	In Deployment		In Trial	2.6GHz & 800MHz
UK	Vodafone	In Service			Planned / Launch 2012	

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\*Potential Networks = Likely to deploy; information from GSMA, Informa WCIS+ and Public Announcements

# Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE /May 13, 2011

Country	Operator/Network Name	HSPA	HSPA+		LTE	LTE Band
<b>Middle East</b>						
Afghanistan	Afghan Wireless/AWCC	Planned				
Afghanistan	Etisalat Afghanistan	Planned				
Afghanistan	MTN Afghanistan	Planned				
Afghanistan	Roshan (Telecom Dev. Comp)	Planned				
Bahrain	Batelco	In Service	Apr-10	21Mbps	Planned	
Bahrain	STC / Viva Bahrain	In Service	Mar-10	21Mbps	Planned	
Bahrain	Zain	In Service	In Deployment		Planned	2.6GHZ
Iran	Etisalat	Planned				
Iran	MTCE	Planned				
Iran	MTN Irancell	Planned				
Iran	Taliya	Planned				
Iraq	TCI	Planned				
Iraq	Asiacell	Planned				
Iraq	Korek Telecom	Planned				
Iraq	Zain Iraq	Planned				
Jordan	Orange Jordan	In Service	In Deployment		Potential License	
Jordan	Umniah	Planned				
Jordan	Zain Jordan	Planned	Mar-11	21Mbps	Planned / Launch 2011	2.6GHZ
Kuwait	Kuwait Telecom Company/VIVA	In Service	Sep-09	21Mbps		
Kuwait	Wataniya Telecom	In Service				
Kuwait	Zain	In Service	Aug-09	21Mbps	Planned	
Lebanon	Alfa Telecom	In Service	In Deployment			
Lebanon	LibanCell/MTC Touch	In Service				
Oman	Nawras	In Service				
Oman	Omantel/Oman Mobile	In Service			In Trial	
Palestine	Palestine Cellular	Potential License				
Qatar	Q-TEL	In Service	Aug-10	21Mbps	Planned	
Qatar	Vodafone	In Service			In Trial	800MHz
Saudi Arabia	Etihad Etisalat/Mobily	In Service	Jan-10	21Mbps	Planned/Launch 3Q 2011	
Saudi Arabia	Saudi Telecom Company / Al-Jawwal	In Service	Sep-09	42Mbps	In Trial	
Saudi Arabia	SMTc / Zain	In Service	In Deployment		In Trial	
Syria	MTN Syria	In Service				
Syria	Syriatel	In Service				
UAE	du	In Service	Mar-10	42Mbps	In Trial	2.6GHZ
UAE	Etisalat	In Service	Jan-10	21Mbps	Planned Launch 1Q 2011	
Yemen	MTN	Planned				
Yemen	Unitel	Planned				
Yemen	Yemen Mobile	Planned				

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