

Commonwealth Telecommunications Organisation

Country Profile India

ICT Sector Information

Sector Name	Electronics and Information Technology
Ministers	Hon Shri Kapil Sibal
Principal Institution	Ministry of Communications and Information Technology which contains the following departments: Department of Electronics and Information Technology Department of Telecommunications
Regulator	Telecom Regulatory Authority of India (TRAI) – a statutory body that regulates the telecom, broadcasting and cable TV sectors

Telecom Operators in India

Operator	Technology
Bharti Airtel	GSM, EDGE, HSPA, TD-LTE
Reliance Communications	CdmaOne, CDMA 1xRTT DCN, EVDO, GSM, HSPA, WiMAX
Vodafone India	GSM, EDGE, HSPA, EVDO (Using MTS' network)
Idea Cellular	GSM, EDGE, HSPA
BSNL	GSM, EDG, UMTS, HSDPA, CdmaOne, EVDO, WiMAX WiFi
Tata Teleservices	GSM, HSPA, CDMA, EVDO, WiMAX
Airtel	GSM, EDGE, HSPA
Uninor	GSM, EDGE
MTS India	CDMA EVDO
Videocon	GSM, GPRS, EDGE
MTNL	GSM, HSDPA CDMAone
S Tel	GSM, GPRS, HSDPA
Loop Mobile India	GSM, GPRS
Etisalat DB Telecom	GSM, GPRS
Ping Mobile	CDMA, GSM via brand sharing

CTO Niche Areas

Broadband

Policy Documents	National Telecom Policy, 2012 National Broadband Plan
Agency	Department of Telecommunications Telecom Regulatory Authority of India (TRAI) Bharat Broadband Network Limited (BBNL)
Projects	National Optic Fibre Network
Publications	India 2009 - 2014: Broadband Roadmap for Inclusive Growth

Broadband Indicators¹

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Mobile broadband subscriptions per 100 inhabitants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Fixed Broadband Subscriptions per 100 inhabitants	0.00	0.00	0.01	0.01	0.02	0.12	0.20	0.27	0.44	0.64	0.90	1.08	1.14

¹ ITU statistics

Cyber security & Cybercrime

Policy Documents	Information Technology Act, 2000 IT(Amendment) Act, 2008 Cybersecurity Strategy
Agency	CERT-In
Related Publications	India's Cyber Security Challenge
Other Resources	Cybersecurity Forum

E-Education Skill Development and Entrepreneurship

Policy Documents	Education Policy (1992) National Policy on ICT in School Education Guidelines on ICT in School Scheme
Agency	Ministry of Human Resource and Development [Link] Ministry of Communications and Information Technology
Indicator - Internet access in schools, Out of a 1–7 (best) scale	4.0
Example Projects	ICT@ Schools, 2004 EDUSAT Sakshat Portal
Publications	Survey on ICTs for Education in India and South Asia

ICT For Disabilities

Policy Documents	Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act
Agency	Universal Service Obligation Fund Department of Telecommunications
Projects	Access for the Disabled Scheme
Publications	Concept Paper on the Pilot Project Scheme for Access to ICTs & ICT Enabled Services for Persons with Disabilities in Rural India

Regulatory Environments including convergence and digital broadcasting switchover

Policy Documents	TRAI Act 1997 TRAI (Amendment) Act 2000 National Telecom Policy 2012 Cable Television Network (Regulation) Act 1995 Cable Television Network (Regulation) Amendment Act 2011
Agency	Telecom Regulatory Authority of India (TRAI)
Projects	Digital Switchover
Related Publications	Telecom Regulatory and Policy Environment in India: Results and Analysis of the 2008 TRE Survey

Youth and ICTs

Policy Documents	Education Policy (1992) National Policy on ICT in School Education Guidelines on ICT in School Scheme
Agency	Ministry of Human Resource and Development [Link] Ministry of Communications and Information Technology
Projects	ICT@ Schools, 2004

	EDUSAT Sakshat Portal
Publications	Survey on ICTs for Education in India and South Asia

ICT Sector Indicators

Indicators on ICT infrastructure and access - ²

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fixed telephone subscriptions	32,436,134	38,536,187	41,420,000	42,000,000	46,198,025	50,176,509	40,770,000	39,250,000	37,900,000	37,060,000	35,090,000	32,685,211	31,080,000
Fixed telephone subscriptions per 100 inhabitants	3.08	3.60	3.80	3.80	4.11	4.40	3.52	3.34	3.18	3.07	2.87	2.63	2.47
Mobile cellular telephone subscriptions	3,577,095	6,540,000	13,000,000	33,690,000	52,220,000	90,140,000	166,050,000	233,620,000	346,890,000	525,090,000	752,190,000	893,862,478	864,720,000
Mobile cellular telephone subscriptions per 100 inhabitants	0.34	0.61	1.19	3.05	4.65	7.91	14.35	19.90	29.13	43.48	61.42	72.00	68.72
Estimated Internet Users per 100 inhabitants	0.53	0.66	1.54	1.69	1.98	2.39	2.81	3.95	4.38	5.12	7.50	10.07	12.58

² ITU statistics

World Economic Forum ICT Readiness Indicators³

Laws relating to ICT, out of a 1–7 (best) scale	4.3
Mobile Network Coverage, % pop. covered	83.0
Broadband Internet subscriptions/100 pop	1.1
Mobile broadband subscriptions/100 pop	1.9
Households with personal computers, %	6.1
Use of virtual social networks, out of a 1–7 (best) scale	5.1
Impact of ICT on new services and products, out of a 1–7 (best) scale	5.0
Impact of ICT on new organisational models, out of a 1–7 (best) scale	4.9
Gov't Success in ICT Promotion, out of a 1–7 (best) scale,	5.1
Importance of ICT to gov't vision, out of a 1–7 (best) scale	4.3
ICT use & gov't efficiency, out of a 1–7 (best) scale	4.4

³ These indicators are derived from the World Economic Forum's Executive Opinion Survey. http://www3.weforum.org/docs/WEF_GITR_Report_2013.pdf

Gov't Online Service Index, out of a 0-1 (best) scale	0.54
E-Participation Index, out of a 0-1 (best) scale	0.18

ICT Publications from Other International Organisations

Source Organisation	Title of Publication
InfoDev	<u>Survey on ICTs for Education in India and South Asia</u>
World Economic Forum	<u>The Global Information Technology Report 2013</u>
OECD	<u>The Information and Communication Technology Sector in India - Performance, Growth and Key Challenges</u>