

## Commonwealth Telecommunications Organisation

### Country Profile India

#### ICT Sector Information

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

#### Telecom Operators in India

<b>Operator</b>	<b>Technology</b>
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**

<b>Policy Documents</b>	<a href="#">National Telecom Policy, 2012</a> <a href="#">National Broadband Plan</a>
<b>Agency</b>	<a href="#">Department of Telecommunications</a> <a href="#">Telecom Regulatory Authority of India (TRAI)</a> <a href="#">Bharat Broadband Network Limited (BBNL)</a>
<b>Projects</b>	National Optic Fibre Network
<b>Publications</b>	<a href="#">India 2009 - 2014: Broadband Roadmap for Inclusive Growth</a>

### **Broadband Indicators<sup>1</sup>**

<b>Indicators</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Mobile broadband subscriptions per 100 inhabitants</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
<b>Fixed Broadband Subscriptions per 100 inhabitants</b>	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

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<sup>1</sup> ITU statistics

### **Cyber security & Cybercrime**

<b>Policy Documents</b>	<a href="#">Information Technology Act, 2000</a> <a href="#">IT(Amendment) Act, 2008</a> <a href="#">Cybersecurity Strategy</a>
<b>Agency</b>	<a href="#">CERT-In</a>
<b>Related Publications</b>	<a href="#">India's Cyber Security Challenge</a>
<b>Other Resources</b>	<a href="#">Cybersecurity Forum</a>

### **E-Education Skill Development and Entrepreneurship**

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

### **ICT For Disabilities**

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

### **Regulatory Environments including convergence and digital broadcasting switchover**

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

### **Youth and ICTs**

<b>Policy Documents</b>	Education Policy (1992) <a href="#">National Policy on ICT in School Education</a> <a href="#">Guidelines on ICT in School Scheme</a>
<b>Agency</b>	Ministry of Human Resource and Development [Link] Ministry of Communications and Information Technology
<b>Projects</b>	ICT@ Schools, 2004

	EDUSAT Sakshat Portal
<b>Publications</b>	Survey on ICTs for Education in India and South Asia

### ICT Sector Indicators

#### Indicators on ICT infrastructure and access - <sup>2</sup>

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Fixed telephone subscriptions</b>	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
<b>Fixed telephone subscriptions per 100 inhabitants</b>	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
<b>Mobile cellular telephone subscriptions</b>	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
<b>Mobile cellular telephone subscriptions per 100 inhabitants</b>	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
<b>Estimated Internet Users per 100 inhabitants</b>	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

<sup>2</sup> ITU statistics

### World Economic Forum ICT Readiness Indicators<sup>3</sup>

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

<sup>3</sup> These indicators are derived from the World Economic Forum's Executive Opinion Survey. [http://www3.weforum.org/docs/WEF\\_GITR\\_Report\\_2013.pdf](http://www3.weforum.org/docs/WEF_GITR_Report_2013.pdf)

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

#### **ICT Publications from Other International Organisations**

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