

## Chapter 31 POST AND TELECOMMUNICATION

**31.1 Global Scenario : Postal services** transport mail and small packages to destinations around the world, and they are mostly public corporations. However, there has been increased privatization of postal operators in the past 20 years, and government restrictions on private postal services have eased. Postal authorities are often also involved in telecommunications, logistics, financial services and other business areas. Postal operations involve providing domestic and international postal services – receipt, transport and delivery of mail, specialized mailing services, operation of postal facilities and sale of postal, philatelic and mailing supplies. The world postal network in 2009 was based on around 650,000 post offices and 5.5 million postal employees (one-third women and 20 per cent part-time) providing postal services throughout the world. There are around 8 million postal workers overall (including private and informal services, and parts of courier services).

31.2 As per **Universal Postal Union**, Worldwide parcel traffic during 2013 reached 6.7 billion items, up 3.7 per cent from 2012. The bulk came from the domestic side or 6.6 billion items, representing an increase of 3.7 per cent. International parcels also went up to 67 million items, growing by 5.8 per cent since 2012. Parcel volumes increased in all regions of the world, except in Africa and Asia-Pacific, where slight decreases were observed.

31.3 The downward trend in global letter-post traffic also continued as the latter went down by 2.9 per cent from 2012 to 339.8 billion items during 2013. Volumes consisted of 336.3 billion domestic and 3.5 billion international items. While international letter-post volumes have decreased, the average weight of individual items is heavier. Despite volumes declining, the letter-post product continues to account for 43.4 per cent of global public postal revenues, which reached 234.8 billion SDR (361.5 billion USD), up three per cent in nominal terms on the previous year. In certain regions, the contribution of letter post to revenues was even higher. This could be seen in industrialized countries, where this stream contributed 59.6 per cent to revenues.

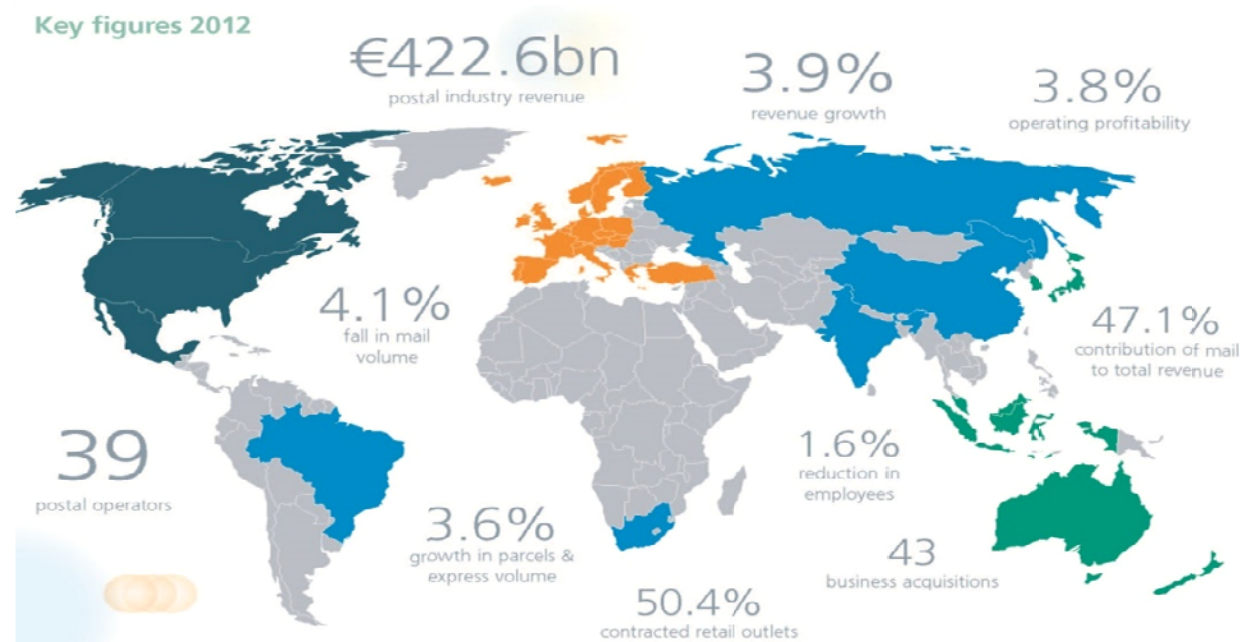
31.4 In 2013, the average number of letter-post items posted annually per capita was 289.2 for inhabitants of industrialized countries, 33.9 for those in Eastern Europe and the Community of Independent States, 18.9 for inhabitants of Latin America and the Caribbean, 10.2 for inhabitants in Asia-Pacific, and 2 respectively for those in Arab countries and Sub-Saharan Africa.

31.5 Almost 19 per cent of postal revenues came from parcels and logistics in 2013, while postal financial services contributed 14.5 per cent. 'Other services' accounted for 23.5 per cent of global revenues, up from 21 per cent in 2012. They encompass non-postal services, such as retail of mobile-phone cards and similar.

31.6 The penetration & access to postal services is varied across regions . Most of the world's population (nearly 89 per cent) continues to benefit from home mail delivery, 13

per cent of the world's population must collect their mail. In Africa, that figure reaches 44 per cent, compared to 29 per cent in Arab countries and about 4 per cent in industrialized countries. Almost 3 per cent of the world's inhabitants are without postal services. This includes 13 per cent of the African population, and 8 per cent of citizens in Arab countries.

31.7 Some key figures related to Global Postal Industry During 2012 are indicated below:



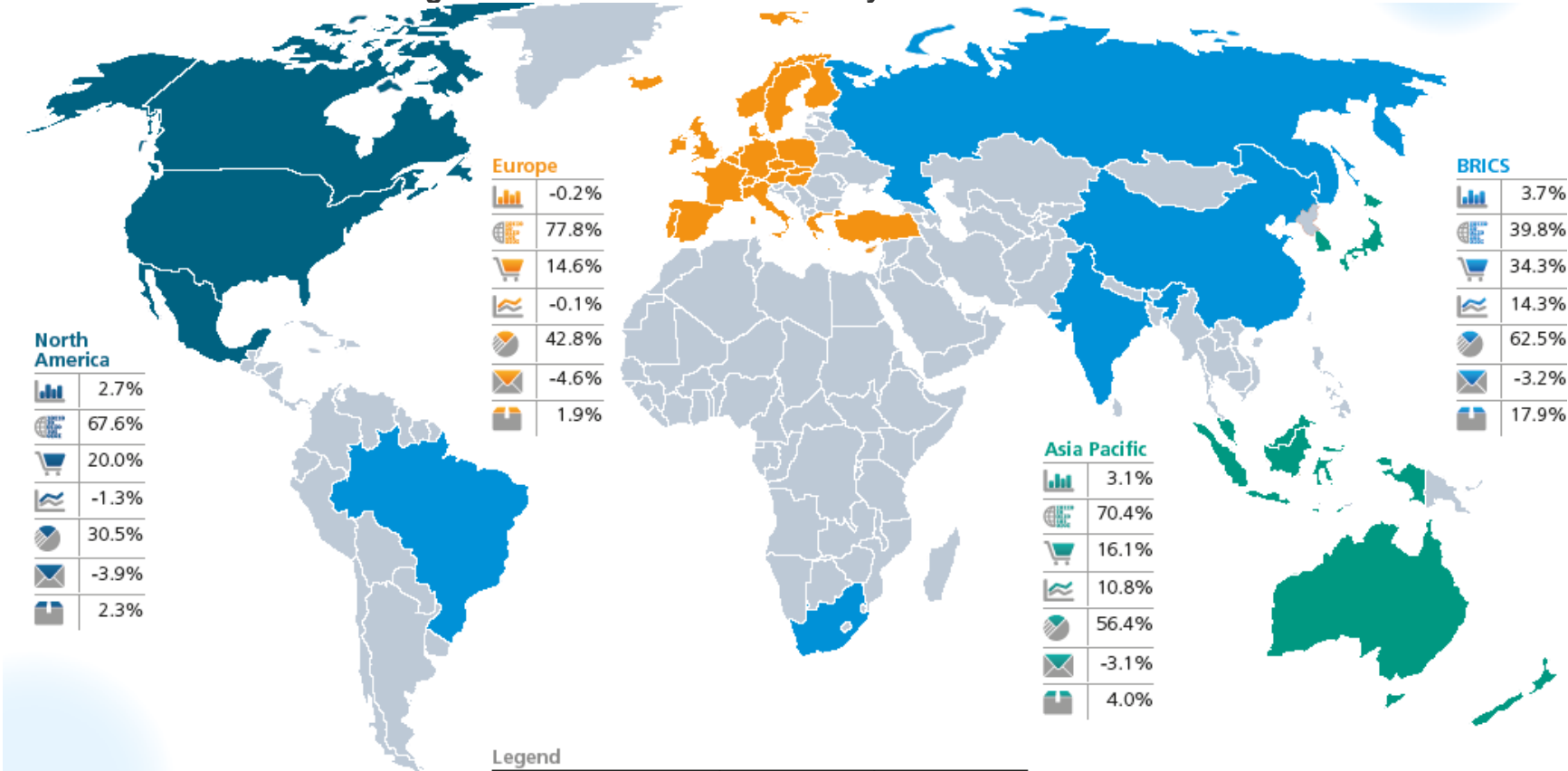
Source : International Postal Corporation

31.8 As per International Postal corporation in absolute terms, industry revenue grew by €6.7bn in 2012, driven by an increase of €8.4bn in the parcels and express, postal financial services and logistics and freight segments and offset by a €1.6bn decline in mail. Overall industry revenue reached €422.6bn in 2012, up from €415.9bn in 2011. The degree of revenue diversification increased for the postal industry as a whole over 2010-12, with the share of mail revenue falling 3.9 percentage points to 47.1%

**31.9 Telecommunication services** – Use of telephones, radio and microwave communications, as well as fibre optics, satellites and the Internet plays a crucial role in the world economy. The worldwide telecommunication services revenue of the industry was estimated to be around \$1.8 trillion in 2010. The total workforce in telecommunications services is estimated to be about 6 million, of whom 20 per cent are women.

31.10 About 4.5 million workers from the postal and telecommunications services sector are affiliated to global union federations. Major trends include rapid technological developments, deregulation and privatization, and the proliferation of new high-value services.

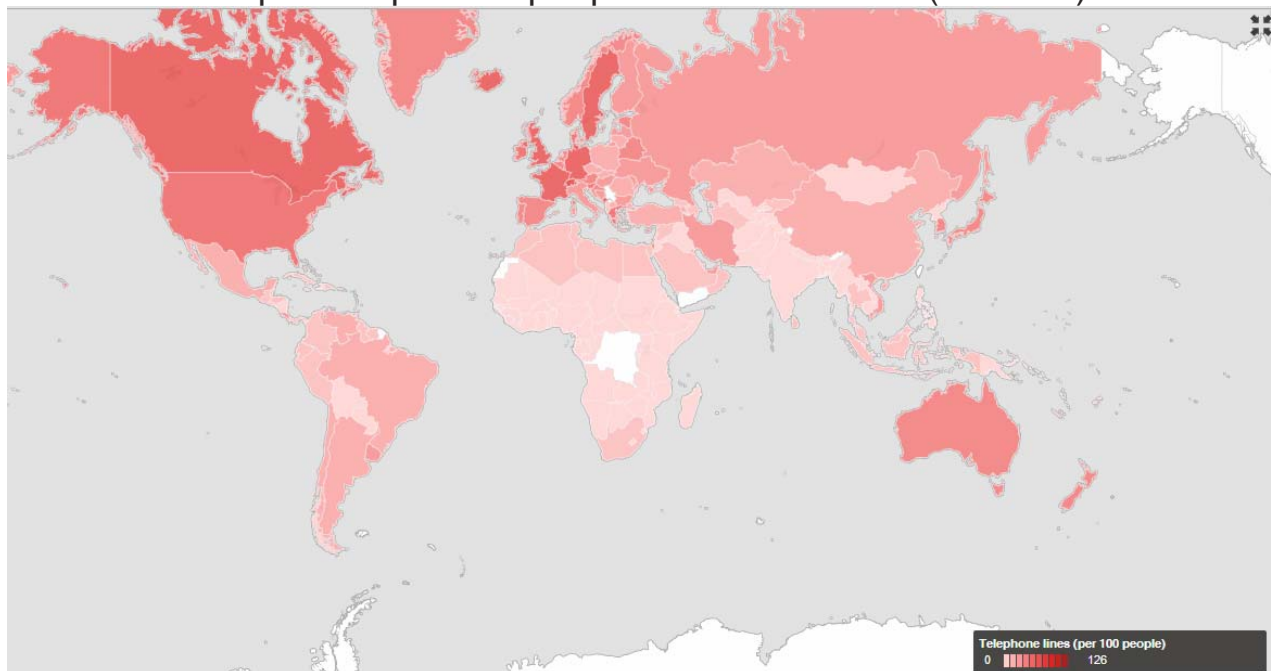
# Regional Overview : Postal Industry Annual Growth 2011-12



### Legend

	Market			Corporate		Volumes	
Economy	Real GDP	Digitisation	E-Commerce	Revenue	Diversification	Mail	Parcels
	Real GDP	Internet users	Online retail	Revenue	Non-mail	Volume	Volume
	Δ 2011-12	2012	5-year CAGR	Δ 2011-12	revenue % of total, 2012	Δ 2011-12	Δ 2011-12

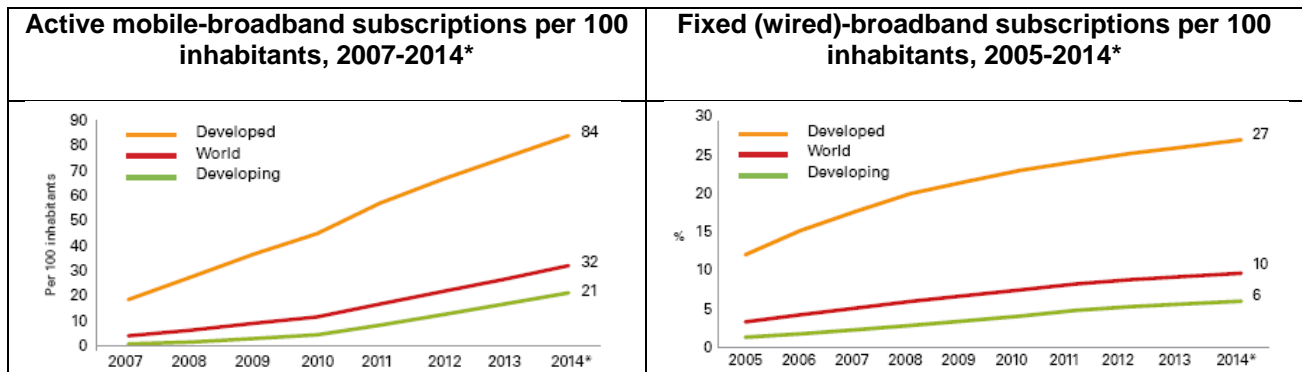
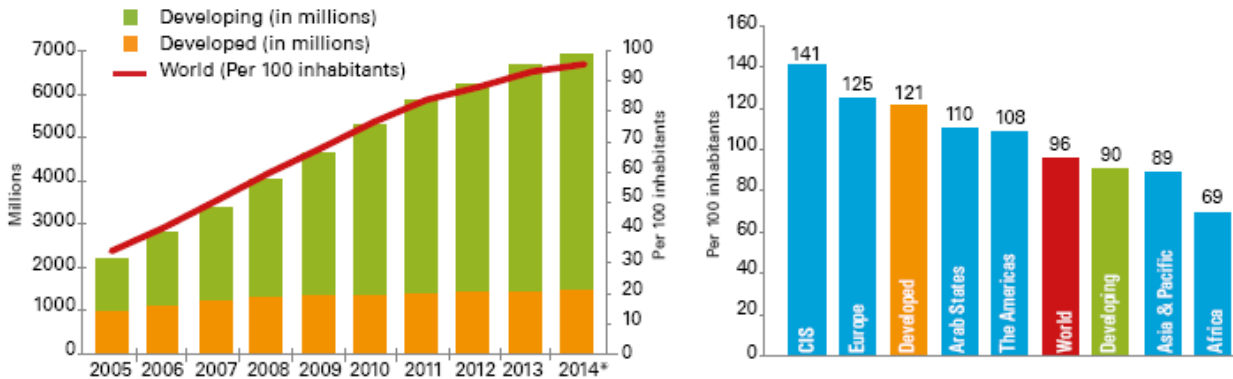
### Telephones per 100 people – IMF Database (2009-13)



**31.11 Growth in ICT Market :**As per **International Telecommunication Union (ITU)** estimates, the number of mobile-cellular subscriptions worldwide is approaching the number of people on earth. Mobile cellular subscriptions will reach almost 7 billion by end 2014, corresponding to a penetration rate of 96%. More than half of these (3.6 billion subscriptions) will be in the Asia-Pacific region and developing countries would account for more than three quarters of all mobile-cellular subscriptions. In developing countries, mobile-cellular penetration will reach 90% by end 2014, compared with 121% in developed countries. Mobile-cellular growth rates have reached their lowest-ever level (of 2.6% globally), indicating that the market is approaching saturation levels. The continuous increase in mobile-cellular subscriptions is mostly due to growth in the developing world: penetration in developing countries continues to grow twice as much as in developed countries (3.1% compared with 1.5%, respectively, in 2014). Africa and Asia and the Pacific, where penetration will reach 69% and 89%, respectively, by end 2014, are the regions with the strongest mobile-cellular growth (and the lowest penetration rates). Penetration rates in the CIS countries, Arab States, the Americas and Europe have reached levels above 100% (since 2012) and are expected to grow at less than 2% in 2014.

31.12 On the contrary, Fixed Broadband Growth is slowing down in Developing Countries. where fixed-broadband penetration growth rates are expected to drop from 18% in 2011 to 6% in 2014. In developed countries, fixed-broadband penetration will grow at around 3.5% in 2014 compared with 4.8% in 2011. 44% of all fixed-broadband subscriptions are in Asia-Pacific, compared with only 0.5% in Africa

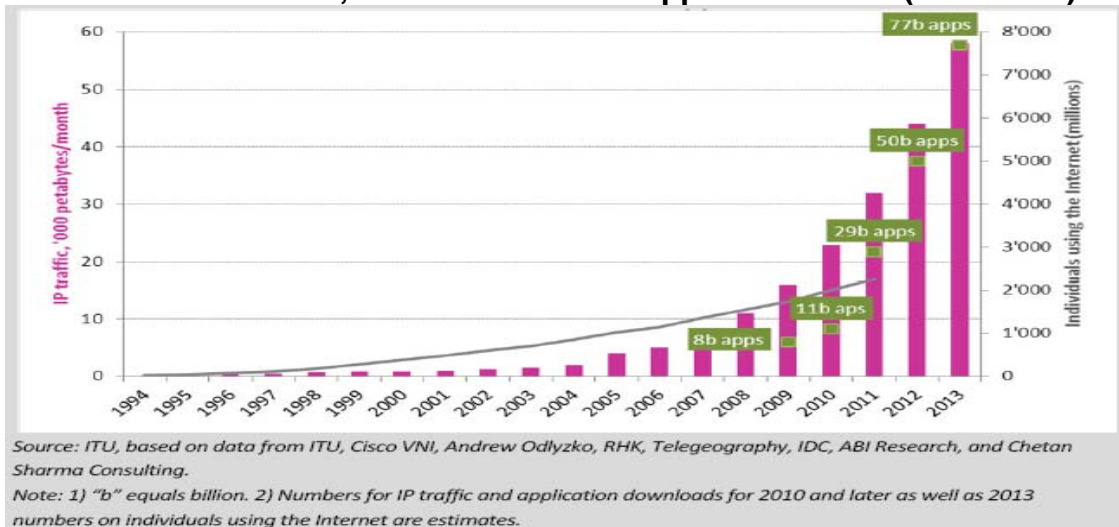
Mobile-cellular subscriptions, total and per 100 inhabitants, 2005-2014\*, and by region, 2014\*



2014: figures are estimates, Source: ITU

31.13 Triggered by the growing number of Internet connections over mobile and fixed platforms, monthly Internet protocol (IP) traffic has skyrocketed from the modest 1 petabyte two decades ago, to an estimated 44'000 petabytes in 2012. These tremendous volumes are driven by growth in the number of connected people and devices, and the growing availability of abundant, diversified, and in most cases free, online content. In 2012, the number of individuals using the Internet reached the milestone of 2.7 billion people and the total number of applications downloaded over all types of mobile devices is estimated to have surpassed 50 billion. As in recent years, data still generates over 90 percent of consumer traffic, through video streaming, file sharing or online gaming. Online gaming and video calling, boosted by new mobile devices providing a richer user experience, are the rising stars in IP traffic growth, with over 40 percent year-on-year increase from 2010-2015. File sharing has also been experiencing dynamic growth. The trend is likely to continue as by end 2014, 44% of the world's households will have Internet access at home. Close to one third (31%) of households in developing countries will be connected to the Internet, compared with 78% in developed countries. Though almost 3 billion people — 40% of the world's population — are using the internet and close to one out of three people in the developing countries are online, globally, there are 4 billion people not yet using the Internet and more than 90% of them are from the developing world.

### Growth in IP traffic, internet users and apps downloads (1994-2013)

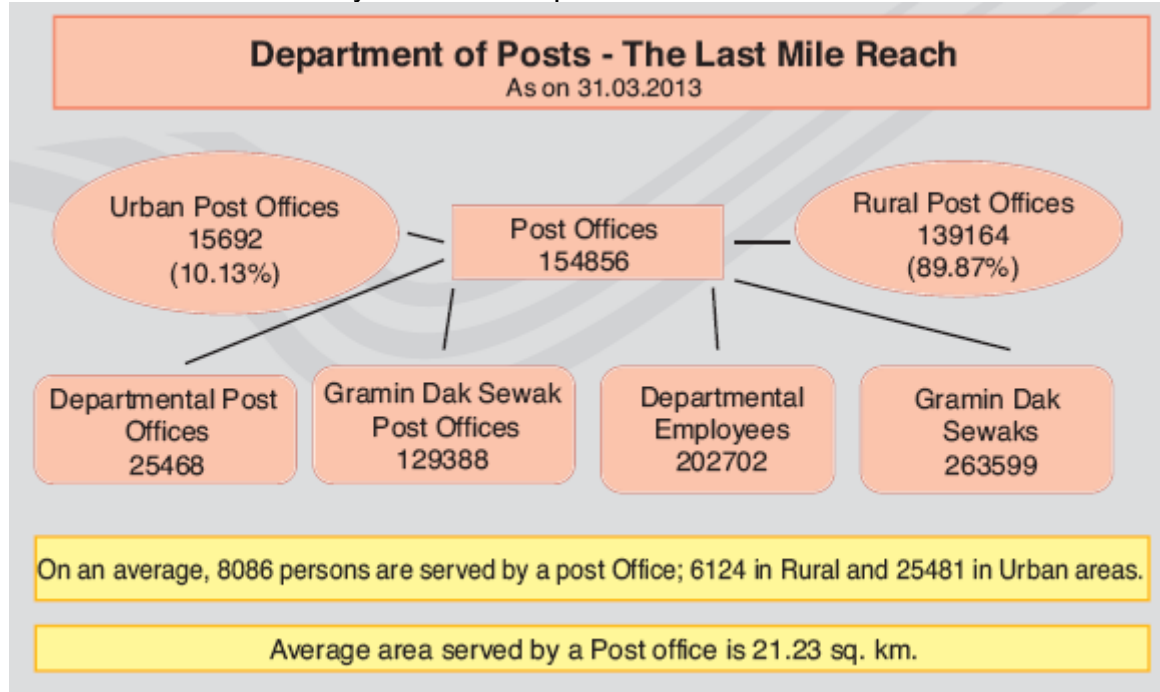


**31.14 Postal Services in India :** The postal system in India is the synthesis of many influences. Its origins include elements of systems established from the Maurya era and those added by the British, the Princely States, the District postal systems and the Zamindari dak. The British Postal system in India was established by Lord Clive in 1776, and further developed by Warren Hastings, who established the Calcutta GPO in 1774 . Mail order services were started with the value payable service introduced in 1877, while fund remittances at the doorstep became possible from 1880 through money order services. With the introduction of the Post Office Savings Bank in 1882, banking facilities were accessible to all and by 1884 all Government employees were covered by the **Postal Life Insurance**. 1854 marks a watershed in the history of Post in India. On 1<sup>st</sup> October, 1854, India Post, as we know it today, was born with a skeletal network of 701 post offices under the control of a Director General.

31.15 The postal system, which we have today, became effective with the spread of roadways and railways as means of transport. In India, until 1837, the postal service was used solely for sending official mail. After 1837, the postal services were made available to the public. In course of time, Post Offices offered several other services including remittance of money, delivery of parcels, banking, insurance and many other such services. Postal services are administered by Government of India throughout the country and the charges for all these services are minimal, which the common man can afford. It is viewed as the most dependable means of written communication. It is also used by the common man as the most reliable means of sending money through money orders to persons staying at far off places.

**31.16 Performance :** India Post has the largest postal network in the world with 154856 post offices across the length and breadth of the country as on 31 March 2013, of which 139164 (90%) are in the rural areas. Mail is collected from more than 5.36 lakh letter boxes, processed by network of Mail Offices and conveyed by rail, road and airlines all over the country to reach the addressee. Similarly, money is moved from sender to receiver through eMO door to door money remittance service, iMO Instant Money Order

which reaches money in minutes and Mobile to Mobile Money Order. The post office has thus evolved as a countrywide service provider.



31.17 The number of post offices as on 31<sup>st</sup> march 2013, both rural and urban , has declined compared to that on 31<sup>st</sup> march 2008 , while compared to the previous year number of rural post offices increased during 2012-13 :

Year	No. of Post Offices	
	Urban	Rural
2007-08	15862	139173
2008-09	15871	139144
2009-10	15797	139182
2010-11	15826	139040
2011-12	15736	139086
2012-13	15692	139164

31.18 Maximum number of Post offices are in Uttar Pradesh (11%) followed by Andhra Pradesh (10%) and Maharashtra (8%). Likewise the largest number of letter boxes is in Uttar Pradesh (13 %) followed by Maharashtra (9%), Andhra Pradesh (9%). Compared to 2011-12, the number of letter boxes in UP during 2012-13 decreased drastically ( 20.6 % decrease) , while the decrease in Maharashtra was marginal (about 3 %).

**31.19 Postal Traffic:** The number of total mail traffic has decreased from 14243.4 million in 2000-01 to 6371.8 million in 2011-12 and further to 6055.4 million during 2012-13. The decline is most prominent in case of unregistered articles as the use of postcards decreased from 3441.2 million in 2000-01 to 1145.4 million in 2012-13 and unregistered letters decreased from 8438.8 million to 2888.4 million. The number of Speed Posts

increased to more than 11 times during the period from 37.8 million to about 450 million & Express Posts also increased to about 4 times to reach about 10 million in 2012-13 .

31.20 Although over the years 2000-01 to 2012-13, the number of **Money Order** has declined from 10.96 crores to about 7 crores, the amount issued under Money Order has increased from 5851.8 crores to 10484 crores. Usage of Money Orders, however is still quite prevalent in southern states. In 2012-13, total number of Money Orders issued was highest in Tamil Nadu, followed by Karnataka & Kerala, each accounting for more than 1 Cr money orders ( 3.5, 2.1 &1.3 Cr respectively) . In terms of amount of money issued through money orders also states of Tamil Nadu, Kerala & Karnataka led , each with money orders issued worth more than 1500 Cr (Rs 3619 – Tamil Nadu, Rs 1609-Karnataka and Rs 1959 Kerala)

**31.21 Post Office Savings Bank (POSB)** The Post Office Savings Bank (POSB) has a customer base of more than 312.07 million account holders as on 31.03.2013 provided through a network of 0.154 million post offices across the country. The banking services provided by Post Offices attract a large number of people both from rural and urban areas due to easy accessibility and wide network of post offices. The Post Office Savings Bank operates Savings Accounts, Recurring Deposit (RD), Time Deposit (TD), Monthly Income Scheme (MIS), Public Provident Fund (PPF), National Savings Certificate (NSC) and Senior Citizens Savings Scheme (SCSS). The outstanding balance under all National Savings Schemes and Saving Certificates in Post Office is over Rs 6031699.58 million as on 31.03.2013. Nearly 57.5 Million MGNREGA accounts were opened upto 2012-13 and an amount of Rs 120140 million was disbursed during the year, taking total amount disbursed since 2008-09 to over 408.2 billion . During the period from April, 2013 to February, 2014 an amount of Rs 104100 million was disbursed and total accounts opened reached 63.9 million. Also In 2012-13, more than Rs 8137.9 million have been disbursed through POSB accounts and more than Rs 32000 million have been paid through money orders under National Social Assistance Programme(Pension Scheme) . During the year 2013-2014, Rs 12306.5 million have been disbursed through POSB accounts and Rs 32249.1 million through money orders by January 2014.

31.22 Number of Depositors in the Post Office saving Banks swung during 2000-01 to 2006-07 and stood at around 61-61.5 million at both the beginning and end of the period. It has increased steadily thereafter to 78.05 million in 2009-10, 88.6 million depositors in 2010-11 , 96.5 million depositors in 2011-12 and 115.8 million in 2012-13.

**31.23 Postal Life Insurance(PLI) & Rural Postal Life Insurance (RPLI):** Postal Life Insurance (PLI)was introduced in 1884 and Rural Postal Life Insurance (RPLI) was introduced in 1995 . Maximum sum assured limit of PLI was raised from Rs 10 lakhs to Rs 20 lakhs and in RPLI from Rs 5 lakhs to Rs 10 lakhs from January 2012. The status of PLI / RPLI Funds as on 31.03.2013 and the business procured during the year 2012-2013 is as under :



PERFORMANCE OF PLI/RPLI				
Name of Plan	No. of Policies procured	Sum Assured (₹ in million)	Aggregate No. of Active Policies	Aggregate Sum Assured (₹ in million)
PLI	454053	146955.9	5219326	888964.6
RPLI	1634767	74131.7	14664650	751540.6

31.24 Total Revenue earned by the postal departments from various services increased by 18.57 % to Rs 93664.98 million during 2012-13 compared to 2011-12 whereas the net expenditure (expenditure – recoveries) increased only by 7.93 % resulting in decrease of deficit by 6.55 %.

REVENUE AND EXPENDITURE (for the years 2011-2012 & 2012-2013)				(₹ in million)
Particulars	Actuals 2011-2012	Actuals 2012-2013	% age increase(+) / Decrease(0) over previous year	
<b>Revenue</b>				
Sale of Stamps *	6637.30	6490.56	(-)2.21%	
Postage Realised in Cash	22759.21	27521.09	20.92%	
Commission on Money Orders and Indian Postal Orders etc.	4907.79	5148.73	4.91%	
Remuneration for Savings Bank/Saving Certificates Work.	43040.82	50316.02	16.90%	
Other Receipts **	1648.35	4188.58	154.11%	
<b>Total Revenue</b>	<b>78993.47</b>	<b>93664.98</b>	<b>18.57%</b>	
<b>Expenditure</b>				
General Administration	7977.48	8419.55	5.54%	
Operation	87921.97	95554.46	8.68%	
Agency Services	4283.91	4430.20	3.41%	
Others ***	41455.73	46407.29	11.94%	
<b>Total Gross Expenditure</b>	<b>141639.09</b>	<b>154811.50</b>	<b>9.30%</b>	
<b>Less Recoveries</b>	<b>4586.40</b>	<b>6887.67</b>	<b>50.18%</b>	
<b>Net Expenditure</b>	<b>137052.69</b>	<b>147923.83</b>	<b>7.93%</b>	
<b>Deficit (Net Expenditure - Revenue)</b>	<b>58059.22</b>	<b>54258.85</b>	<b>(-)6.55%</b>	

**31.25 Modernization:** In view of the increasing use of technology whereby emails, sms call, voice chats etc increasingly replace conventional communication through letters, Department of Posts has been diversifying its services besides attempting integrated use of IT so that its infrastructure and outreach can be used in a better way. The Department of Posts has launched **Project Arrow**, to lay the foundation for a comprehensive, long-term transformation of India Post. Project Arrow aims at comprehensive improvement of the core post office operations as well as the ambience in which postal transactions are undertaken. The response of the general public and the staff of the Department to these initiatives have been overwhelmingly positive and Project Arrow offices have shown significant increase in revenue earnings. The initiative 'Project Arrow— Transforming India Post' has also won the Prime Minister's award for Excellence in Public Administration for the year 2008-09. The scheme operating since 2008 was extended to 18600 Post Offices in 2012-2013 by adding 3039 Post Offices for improvement and monitoring of core operations.

31.26 The Government has approved the Department of Posts' IT Modernization Project with a total outlay of 4909 crore in November,2012. The IT Modernization Project aims at modernization and computerization of all post offices in the country including more than 130000 Branch Post Offices in rural areas. The project will create national asset of 155000 networked Post Offices. It involves development of scaleable, integrated and modular software covering all operations of the Department of Posts including Post Office Savings Bank, Postal Life Insurance, Mail Operations, establishment of the required IT Infrastructure including Data Centre, WAN Networking of the Departmental Post Offices, development of Rural Information Communication Technology (Rural ICT) in rural Post Offices and providing rural Post Offices with handheld devices which are Aadhaar enabled and will also act as micro-ATMs. The project will make the post office the focal point of delivery of social security and employment guarantee schemes including disbursement of wages under MGNREGS Schemes of the Centre and State under Direct Benefit Transfer, will provide biometric authentication of financial transactions ,provide multiple channels like ATM, mobile banking, net-banking for savings bank customer. It will provide an electronic and secure mode of money transfer particularly in rural areas.

**31.27 Telecommunication in India :** The popular meaning of telecom always involves electrical signals therefore, the history of Indian telecom can be started with the introduction of telegraph. The first experimental electric telegraph line was started between Calcutta (now Kolkata) and Diamond Harbour in November 1850. A year later the line was completed and opened for the East India Company's traffic. In 1881, a license was granted to the Oriental Telephone Company Limited of England for opening telephone exchanges at Kolkata, Mumbai, Chennai (Madras) and Ahmadabad and the first formal telephone service was established in the country. While all the major cities and towns in the country were linked with telephones during the British period, the total number of telephones in 1948 was only around 80,000. While certain innovative steps were taken from time to time, as for example introduction of the telex service in Mumbai in 1953 and commissioning of the first [subscriber trunk dialing] route between Delhi and Kanpur in 1960, the real transformation in scenario came with the announcement of the **National Telecom Policy in 1994**, the setting up of the **Telecom Regulatory Authority of India**, the opening up of basic telephone services to the private sector, the announcement of the **new ISP policy**, and the separation of the Department of Telecommunications into the Department of Telecom Services and the Department of Telecom Operations.

31.28 After March 2000, the government became more liberal in making policies and issuing **licenses to private operators**. The government further reduced license fees for cellular service providers and increased the allowable stake to 74% for foreign companies. This was a gateway to many foreign investors to get entry into the Indian Telecom Market. Because of all these factors, the service fees finally reduced and the call costs were cut greatly enabling every common middle class and below middle class families in India to afford cell phone.

**31.29 Recent Initiatives :** The Government approved **National Telecom Policy-2012** (NTP-2012) on 31<sup>st</sup> May 2012 which addresses the Vision, Strategic direction and the

various medium term and long term issues related to telecom sector. Amongst several objectives NTP-2012 are :

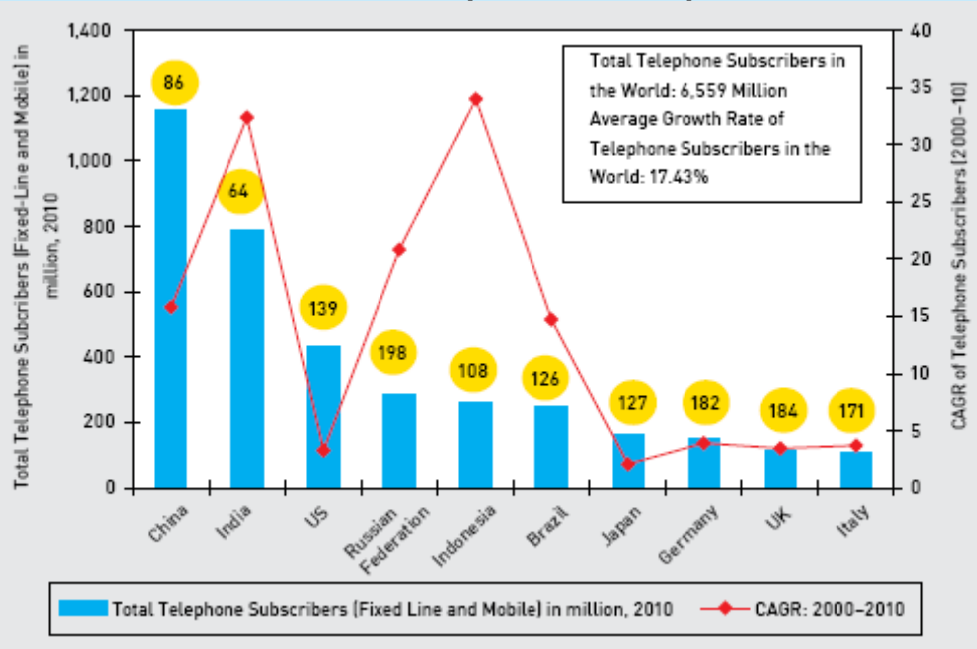
- Strives to create **One Nation - One License** across services and service areas
- Achieve **One Nation - Full Mobile Number Portability** and work towards **One Nation -Free Roaming**
- Increase rural tele-density from the current level of around 39 to 70 by the year 2017 and 100 by the year 2020
- To recognize telecom, including broadband connectivity as a basic necessity like education and health and work towards '**Right to Broadband**'.
- *Provide affordable and reliable* broadband-on-demand by the year 2015 and to achieve 175 million broadband connections by the year 2017 and 600 million by the year 2020 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand.
- Achieve substantial transition to **new Internet Protocol (IPv 6)** in the country in a phased and time bound manner by 2020

31.30 To give impetus to the rural telephony, Government formed a **Universal Service Obligation Fund (USOF)** by an Act of Parliament. Government approved a project, at a cost of Rs 20,000 crore, for creating a '**National Optical Fiber Network**' (NOFN) to connect all the 2,50,000 Gram panchayats in the country through optical fiber.

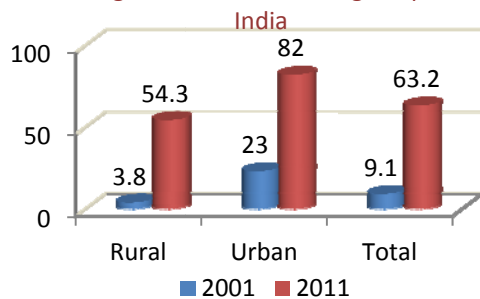
**31.31 Trends in Telecommunication Sector** : With a population of over 1.2 Billion, India has become one of the most dynamic and promising. Telecom markets of the world. In recent times, the country has emerged as one of the fastest growing telecom markets in the world. Indian telecom network is the second largest in the world after China. People are increasingly getting mobile and switching to technologies enabling the same. Consequently, the number of wire line phones in India has decreased from about 40.92 million as on 31<sup>st</sup> March 2004 to 28.5 million as on 31<sup>st</sup> March 2014 even though the wireless phones have increased manifold from 35.61 million to 904.5 million during the period. As on 31<sup>st</sup> March 2014 the country has 933.02 million telephone connections, including 904.52 million wireless telephone connections. Number of telephone subscribers had reached a record high of 965.5 million in June 2012 and had declined thereafter, largely due to disconnection of inactive mobile numbers. The share of wireless telephones in total telephones is 96.95% whereas the share of private sector in total phones is about 87.13 %. There has been continuous rise in the number of telephones of the private sector operators. The total number of telephones of the private sector increased from 767.91 million as on 01.04.2013 to 812.96 million at the end of the March 2014. On the other hand, the number of telephones of the public sector declined from 130.11 million to 120.05 million during this period. Operator-wise classification, reveals that PSUs still have a large share (more than three quarters) in the wire line segment. Private operators, on the other hand, have lions share (87%) in the wireless segment. With the dwindling wireline connections the private sector, now, dominates the Indian Telecom Sector

Item		At the end of March			
		2011	2012	2013	2014
Number of Telephones (in million)	Overall	846.33	951.35	898.02	933.02
	Wire line	34.73	32.17	30.21	28.50
	Wireless	811.60	919.17	867.81	904.52
	Rural	282.29	330.83	349.21	377.78
	Urban	564.04	620.52	548.80	555.23
Tele-density (Telephones per 100 persons)	Overall	70.89	78.66	73.32	75.23
	Rural	33.83	39.26	41.05	44.01
	Urban	156.93	169.17	146.64	145.46
%age share	Wireless	95.90	96.62	96.64	96.95
	Public	14.89	13.69	14.49	12.87
	Private	85.11	86.31	85.51	87.13
% age growth of Total Telephones-over previous year		36.22	12.41	(-)-5.61	3.90

### India's Position in Telephone subscriptions 2010



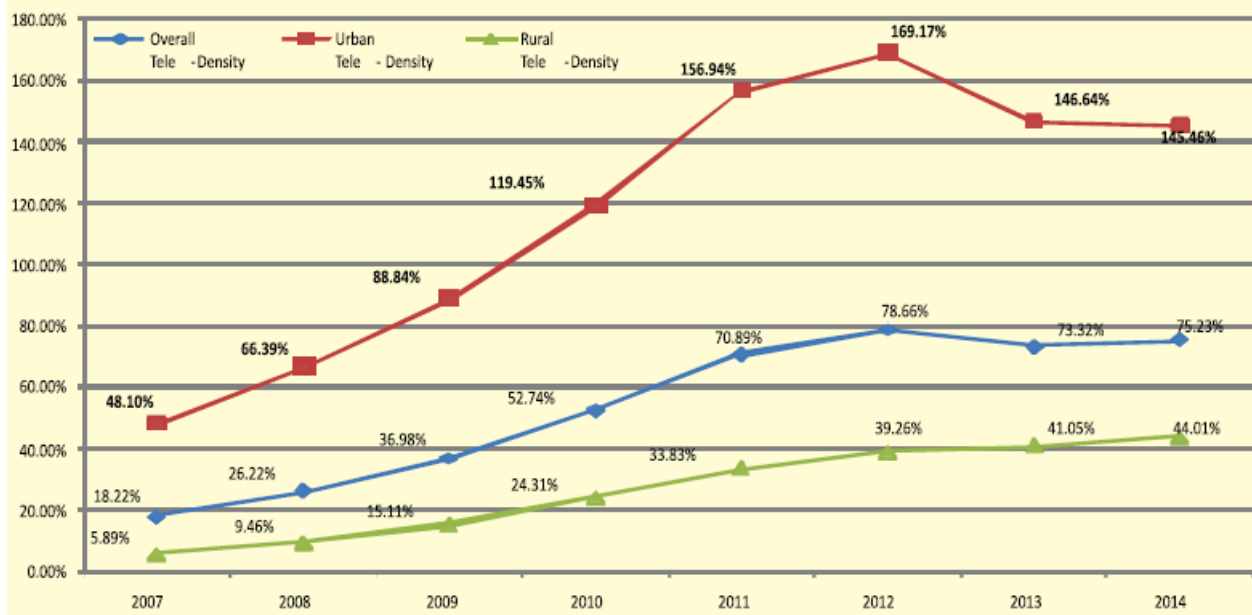
### Percentage of household having telephone in India



As per the recent census conducted in 2011, the percentage of households having telephone facility has improved significantly. The same stood at about 63 percent during 2011 compared to 9.1 % households who had telephone as per census 2001.

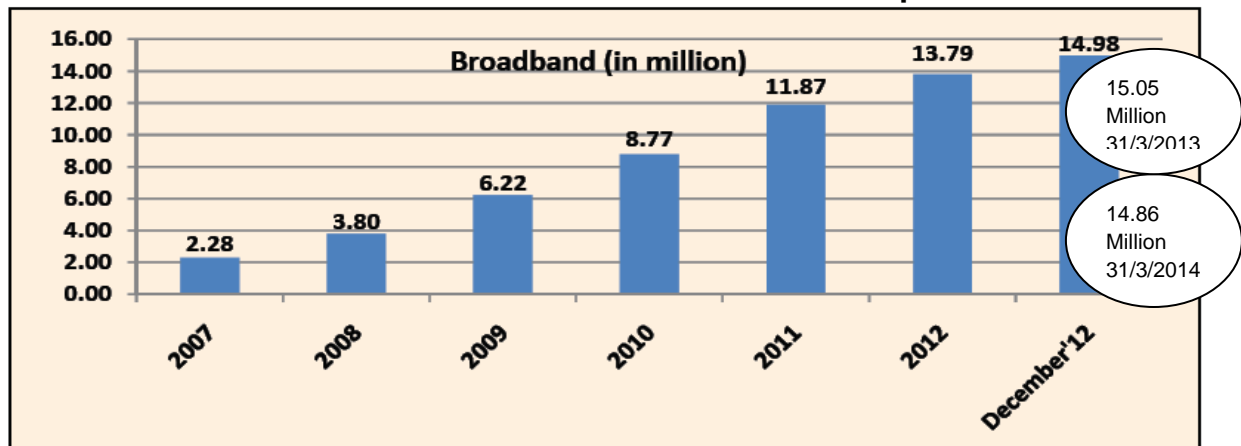
**31.32 Tele density** (number of telephones per 100 populations) is showing noticeable improvement over the years. It has increased at all India level from 2.86 in 2000 to over 75 in 2014. Despite of rapid penetration of phones in rural areas , the rural-urban differential persists with Urban tele-density being 145% compared to rural tele-density with about a third of the value at 44%. All the four metropolitan cities viz Delhi, Mumbai, Chennai & Kolkata have more phone than persons and Delhi leads with about 2 phones per person . Even the states of Tamil Nadu , Punjab & Himachal Pradesh recorded teledensity over 100 during 2014 with 111, 107 & 106 phones per 100 people .Karnataka, Kerala & Gujarat with teledensity over 90 also had about one phone per person.

**Trends in Teledensity**

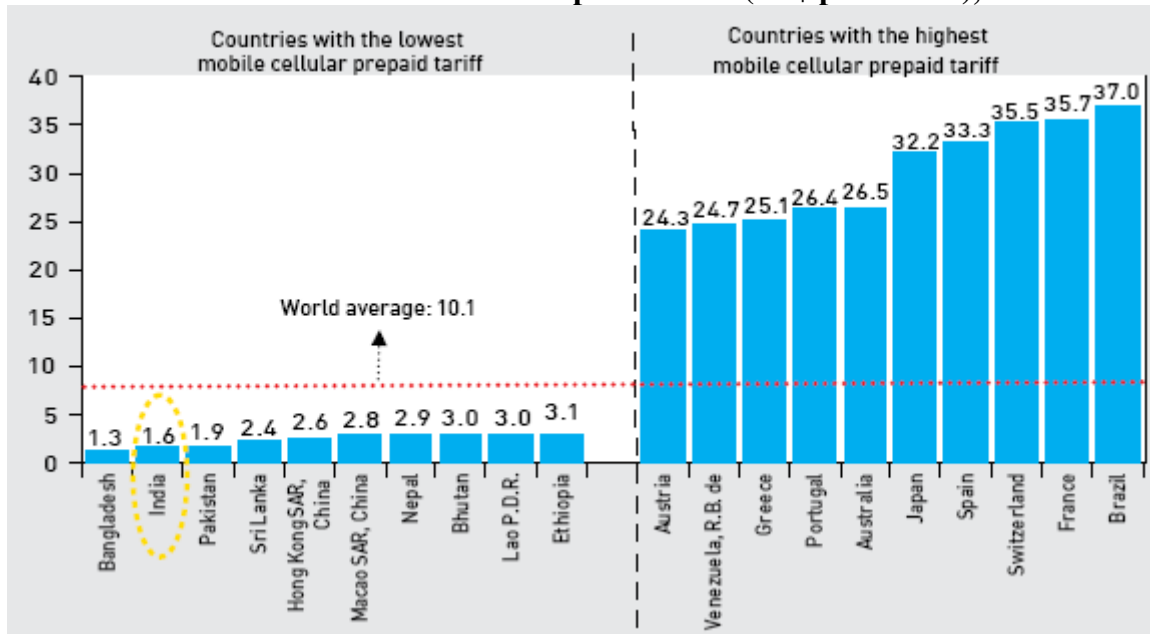


**31.33** As per TRAI, there were 75.73 million broadband subscribers as on 30<sup>th</sup> September 2014 . Wireless subscriptions at 60.61 million accounted for the major part of broadband subscribers. Number of Broadband connections as on 31<sup>st</sup> march 2014 was 60.87 million which included 46.01 million wireless subscriptions.

**Growth in Wireline Broadband Subscription**



### India's Position in Mobile Cellular Prepaid Tariffs (US\$ per month), 2008



Source : World Development Indicators

**31.34 Source of Data :** Ministry of Communication & IT is the nodal central agency for Indian Postal & Telecom Sector. Department of Posts & Departments of Telecommunications under the Ministry publish various statistics related to their domain. Telecom Regulatory Authority of India (TRAI) compiles and publishes monthly data on subscriptions related to telephones and broadband, tele density, market share of service providers etc .

#### References :

- Annual Report, 2013-14, Department of Posts, Ministry of Communication & IT.
- Annual Report, 2013-14, Department of Telecommunications, Ministry of Communication & IT.
- Trends in Telecommunication reform 2013, Transnational aspects of regulation in a networked society & World in 2014 – ICT Facts & Figures , International Telecommunication Union.
- Websites of Universal Postal Union, International Post Corporation, International Labor Organization, World Bank .