# 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

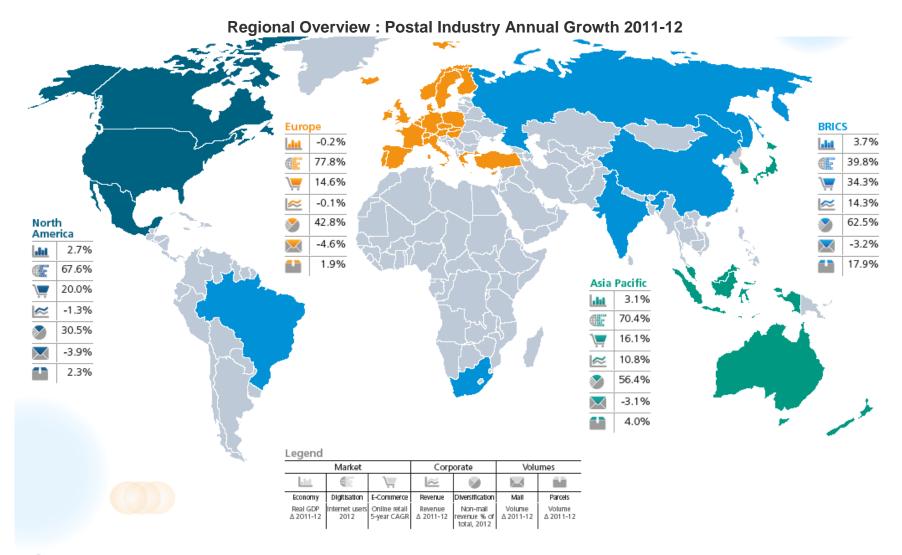
per cent of the world's population must collect their mail. In Africa, that figure reaches 44 per cent, compared to 29 per cent in Arab countries and about 4 per cent in industrialized countries. Almost 3 per cent of the world's inhabitants are without postal services. This includes 13 per cent of the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

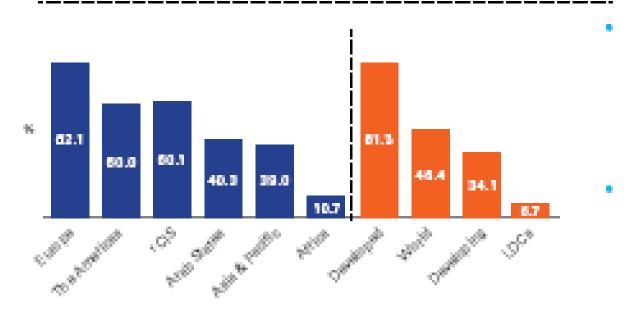


Telephones per 100 people – IMF Database (2009-13)

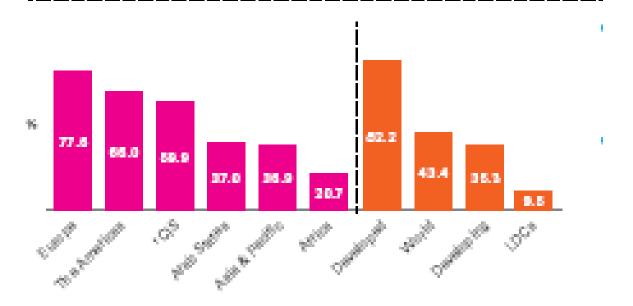
31.11 Growth in ICT Market: As per International Telecommunication Union (ITU) estimates, "This year governments are making their final assessment of the UN Millennium Development Goals (MDGs), which global leaders agreed upon in the year 2000. Over the past 15 years the ICT revolution has driven global development in an unprecedented way. Technologicalprogress, infrastructure deployment, and falling prices have brought unexpected growth in ICT access and connectivity to billions of people around the world. In 2015 there are more than 7 billion mobile cellular subscriptions worldwide, up from less than 1 billion in 2000. Globally 3.2 billion people are using the Internet of which 2 billion are from developing countries. ICTs will play an even more significant role in the post 2015 development agenda and in achieving futuresustainable development goals as the world moves faster and faster towards a digital society. Our mission is to connect everyone and to create a truly inclusive information society, for which we need comparable and high-quality data and statistics to measure progress." 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 guarters 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** Globally 3.2 billion people will be using the Internet by end 2015, of which 2 billion will be from developing countries. 4 billion people from developing countries remain offline, representing 2/3 of the population residing in developing countries Of the 940 million people living in the least developed countries (LDCs), only 89 million use the Internet, corresponding to a 9.5% penetration rate. By end 2015, there will be more than 7 billion mobile cellular subscriptions, corresponding to a penetration rate of 97%, up from 738 million in 2000 Between 2000-2015, global Internet penetration grew 7 fold from 6.5% to 43%. Mobile broadband is the most dynamic market segment; globally, mobile broadband penetration reaches 47% in 2015, a value that increased 12 times since 2007 • The proportion of households with Internet access at home increased from 18% in 2005 to 46% in 2015 Fixed-broadband uptake is growing at a slower pace, with a 7% annual increase over the past three years and reaching 11% penetration by end 2015.

### Percentage of households with Internet access

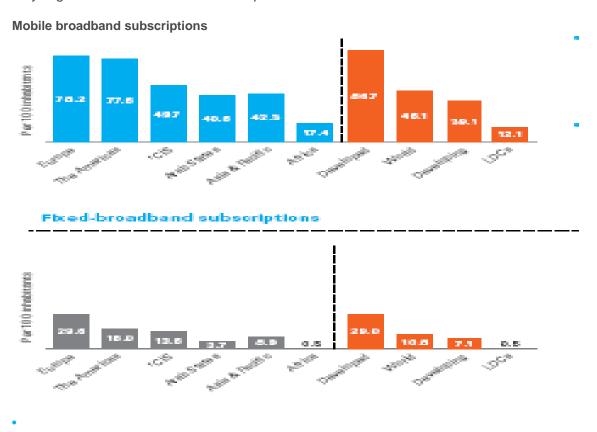


## Percentage of Individuals using the Internet



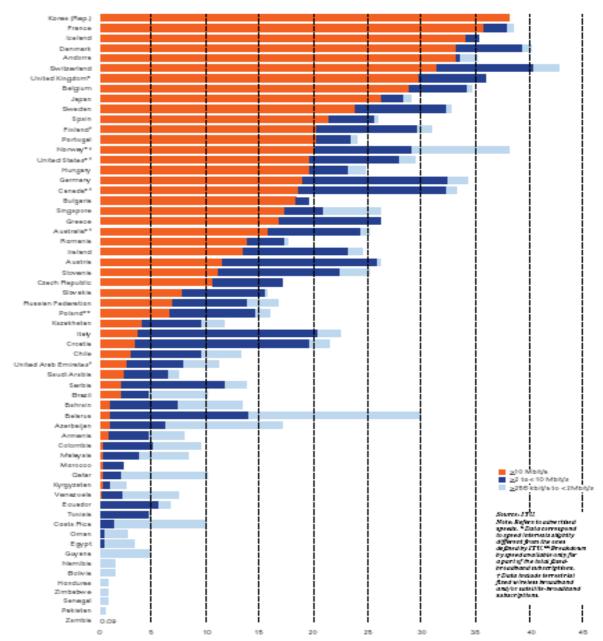
31.13 The proportion of the population covered by a 2G mobile-cellular network grew from 58% in 2001 to 95% in 2015. By end 2015, 34% of households in developing countries have Internet access, compared with more than 80% in developed countries. In least developed countries (LDCs), only 7% of households have Internet access, compared with the world average of 46% Internet penetration in developing countries stands at 35%; LDCs lag behind with only 10%. In Africa, one in 5 people use the Internet today, compared to almost 2 in 5 people in Asia

& Pacific, and 3 in 5 people in the CIS. Mobile-broadband penetration levels are highest in Europe and the Americas, at around 78 active subscriptions per 100 inhabitants. Africa is the only region where mobile broadband penetration remains below 20%



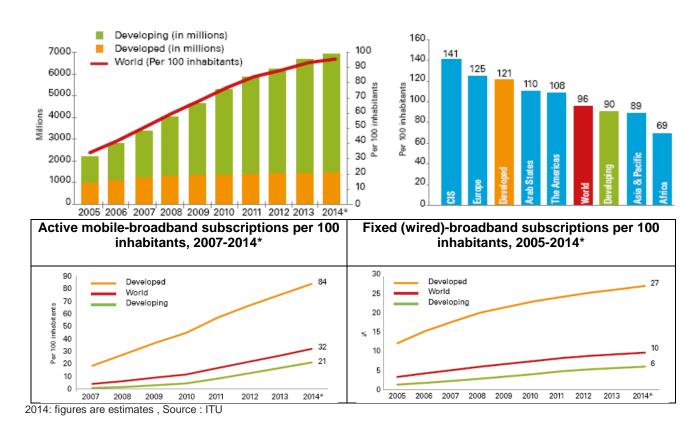
- **31.14** Fixed-broadband penetration remains at less than 1% in LDCs. Africa and the Arab States stand out as the regions with the fewest fixed-broadband subscriptions per 100 inhabitants, at less than 1 and less than 4, respectively.
- **31.15** In 2014, in 111 countries, the price of a basic (fixed or mobile) broadband plan corresponds to less than 5% of average GNI per capita, thus meeting the Broadband Commission target. The global average price of a basic fixedbroadband plan (52 PPP\$) is 1.7 times higher than the average price of a comparable mobile-broadband plan (30 PPP\$). In developing countries, average monthly fixed broadband prices (in PPP\$) are 3 times higher than in developed countries; mobile broadband prices are twice as expensive as in developed countries. Fixed-broadband uptake remains slow in developing countries and particularly in LDCs, where penetration rates are now at 7% and less than 1%, respectively.
- **31.16** While the prices of fixed broadband plans dropped sharply between 2008 and 2011, especially in developing countries, they have been stagnating since then and even increased slightly in LDCs.

#### Differences in broadband speed persist



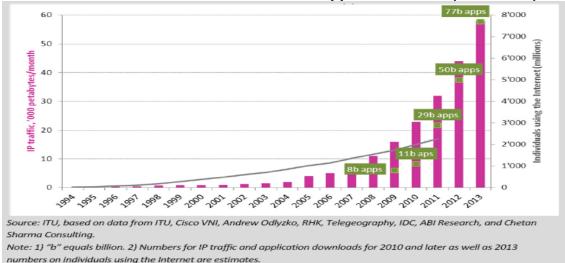
Fixed-broadband subscriptions per 100 inhabitants, by speed, early 2014 (selected countries)

**31.17** 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.



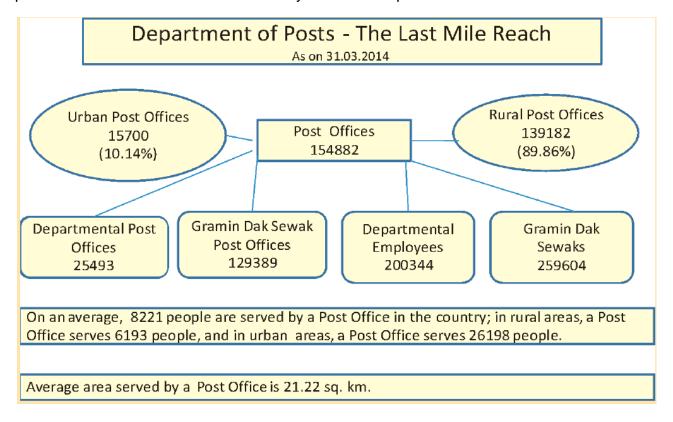
Triggered by the growing number of Internet connections over mobile and fixed platforms, monthly Internet protocol (IP) traffic has skyrocketed from the modest 1 petabyte two decades ago, to an estimated 44'000 petabytes in 2012. These tremendous volumes are driven by growth in the number of connected 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. 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)



- **31.19 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 1st 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.
- 31.20 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.
- **31.21 Performance**: India Post has the largest postal network in the world with 154882 post offices across the length and breadth of the country as on 31 March 2014, of which 139182 (90%) are in the rural areas. Mail is collected from more than 5.34 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.



**31.22** The number of post offices as on  $31^{st}$  march 2014, in urban areas , has declined compared to that on  $31^{st}$  march 2008 , while compared to the previous year number of rural post offices increased :

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	
2013-14	15700	139182	

31.23 Maximum number of Post offices are in Uttar Pradesh (11%) followed by Andhra Pradesh (10%) Maharashtra (8%) and Tamil Nadu (8%). Likewise the largest number of letter boxes is in uttarakhand (13%) Uttar Pradesh (13%) followed by Maharashtra

- (9%), Andhra Pradesh (9%), Tamil Nadu (8%). Compared to 2013-14, the number of letter boxes in UP during 2014-15 decreased drastically (20.6 % decrease), while the decrease in Maharashtra was marginal (about 3 %).
- **31.24 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 26088.2 million during 2013-14. The decline is most prominent in case of unregistered articles as the use of postcards decreased from 3441.2 million in 2000-01 to 5507.9 million in 2013-14 and unregistered letters decreased from 8438.8 million to 2961.7 million. The number of Speed Posts increased to more than 11 times during the period from 37.8 million to about 369.9 million & Express Posts also increased to about 4 times to reach about 10 million in 2013-14.
- 31.25 Although over the years 2000-01 to 2013-14, the number of Money Order has declined from 10.96 crores to about 4 crores, the amount issued under Money Order has increased from 5851.8 crores to 12240.8 crores. Usage of Money Orders, however is still quite prevalent in southern states. In 2013-14, total number of Money Orders issued was highest in Tamil Nadu, followed by Rajasthan & Karnataka, each accounting for more than 1 Cr money orders (3.9, 3.03 & 2.5 Cr respectively) . In terms of amount of money issued through money orders also, states of Tamil Nadu, Rajasthan & Karnataka led , each with money orders issued worth more than 1500 Cr (Rs 3529 Tamil Nadu, Rs 2553 Rajasthan and Rs 1804 Karnataka)
- 31.26 Post Office Savings Bank Post Office Savings Bank (POSB) has a customer base of more than 349.13 million account holders as on 31.03.2014. Savings Bank facility is provided through a network of 1.54 lakh 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. 6150215.62 million as on 31.03.2014. In order to ensure quality of service under MGNREGS, the Department of Posts allots funds to Postal Circles annually for enabling various administrative activities in response to the statutory obligations of MGNREG Act. Department of Posts has taken the responsibility to disburse the wages through Post Offices by opening Post Office savings bank accounts for MGNREGA beneficiaries. The Scheme is operational through 96735 Post Offices as on 31st March, 2014. The number of accounts and amount of wages disbursed through Post Offices under MGNREGA has steadily grown over the years. During the period from April, 2014 to December, 2014, Rs. 61478.71 million have been disbursed through 65.3 million accounts. In order to ensure quality of service under MGNREGS, the Department of Posts allots funds to Postal Circles annually for enabling various administrative activities in response to the statutory obligations of MGNREG Act. Over the years, Ministry of Rural Development has reimbursed Rs. 5477.1 million for the above activity. In 2012-2013, more than Rs. 8137.9 million have been disbursed through POSB accounts and more than 32000 million have been paid through Money Orders. In the year 2013-2014, Rs. 14944.7 million have been disbursed through POSB accounts and Rs. 40849.9 million through Money Orders. During the year 2014-2015, Rs. 12770.8 million have been disbursed through POSB

accounts and Rs. 31673.5 million through Money Orders by October, 2014. Nearly 64.23 Million MGNREGA accounts were opened upto 2013-14 and an amount of Rs 114034 million was disbursed during the year, taking total amount disbursed since 2008-09 to over 408.2 billion . During the period 2012-13, Rs 120141 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.

- **31.27 International Money Transfer Service:** The Service enables instant international money remittance to customers in India sent from around 195 countries on a real time basis. India Post has been operating this Service in association with Western Union from 9943post office locations and MoneyGram through 6070 post office locations.
- **31.28** 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 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 and 133.5 million in 2013-14 and 166 Million in 2014-15 Rs 1103122.7 Million deposit in the Post Office Saving Banks. .
- **31.29 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 has been raised from Rs. 2.0 million to Rs. 5.0 million from December, 2014 and in RPLI from Rs. 0.3 million to Rs. 0.5 million from January, 2012. The status of PLI / RPLI Funds as on 31.03.2014 and the business procured during the year 2013-2014 is as under:

	PERF	ORMANC	E OF	POSTAL	LIFE	
	INSUF	RANCE /	RURAL	POSTA	L LIFE	
INSURANCE						
	Name	No. of	Sum	Aggregate	Aggregate	
	of Plan	Policies	Assured	No. of	Sum	
		procured	(₹ in	Active	Assured	
			million)	Policies	(₹ in	
					million)	
	PLI	433182	161293.9	5406093	1022760.8	
	RPLI	871462	67123.9	15014314	794664.6	

31.30 Total Revenue earned by the postal departments from various services increased by 14.56 % to Rs 107304.16 million during 2013-14 compared to 2012-13, which was less 4.01% from the previous year whereas the net expenditure(expenditure – recoveries) increased only by 9.54 % resulting in decrease of deficit by .87 %.

REVENUE AND EXPENDITURE DURING 2012-2013 AND 2013-2014						
(₹ in million)						
Particulars	Actuals	Actuals	% age Inc(+)/			
	2012-2013	2013-2014	Dec(-) over			
			previous year			
Revenue						
Sale of Stamps *	6490.56	6706.68	3.33			
Postage Realised in Cash	27521.09	31617.14	14.88			
Commission on Money Orders and Inland	5148.73	6068.91	17.87			
Postal Orders, etc.						
Remuneration for Savings bank/ Saving	50316.02	59152.68	17.56			
Certificates Work						
Other Receipts **	4188.58	3758.75	(-) 10.26			
Total Revenue	93664.98	107304.16	14.56			
Expenditure						
General Administration	8419.55	9420.83	11.89			
Operation	95554.46	102425.13	7.19			
Agency Services Others ***	4430.20	4722.93	6.61			
	46407.29	51398.17	10.75			
Total Gross Expenditure	154811.50	167967.06	8.50			
Less Recoveries	6887.67	5931.87	(-) 13.88			
Net Expenditure	147923.83	162035.19	9.54			
Deficit (Net Exp – Revenue)	54258.85	54731.03	0.87			

<sup>\*</sup> This includes sale of Postage stamps, service stamps.

**31.31 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

<sup>\*\*</sup> This includes service charges retained by the Department of Posts from sale of Passport Application Form, Passport Fee Stamps, Central Recruitment Fee Stamps, receipts from other Postal Administrations, etc. Sale of stamps includes sale of Postage stamps, service stamps.

<sup>\*\*\*</sup> This includes expenditure on Audit and Accounts, Civil Engineering, Amenities to staff, Stationery and Printing, etc.

Administration for the year 2008-09. The scheme has been operating since 2008. By the end of 2013-2014, 21600 post offices (Phase I to Phase VII) were being monitored under 'Core Operations' and 2615 post offices were covered under 'Look & Feel'.

- The Government has approved the Department of Posts' IT Modernization 31.32 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; and 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.
- 31.33 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 dialling] 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.
- **31.34** 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.

**31.35 Recent Initiatives :** The Government approved **National Telecom Policy-2012** (NTP-2012) on  $31_{\rm st}$  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
- **31.36** 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.
- **31.37 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 31st March 2004 to 26.60 million as on 31st March 2015 even though the wireless phones have increased manifold from 35.61 million to 969.53 million during the period. As on 31st March 2015, the country had 996.13 million telephone connections, including 969.53 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 97.13% whereas the share of private sector in total phones is about 89.15 %. 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 812.96 million as on 01.04.2014 to 865.68 million at the end of the March 2015. On the other hand, the number of telephones of the public sector declined from 120.05 million to 105.33 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 (97%) 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	20	)12	2013	2014	Dec,15
	Overall	846.33	951	.35	898.02	933.02	971.01
	Wire line	34.73	32.17		30.21	28.50	27.00
Number of	Wireless	811.60	919	.17	867.81	904.52	944.01
Telephones (in million)	Rural	282.29	330	.83	349.21	377.78	398.73
(III IIIIIIIIIII)	Urban	564.04	620	.52	548.80	555.23	572.28
Tele-density	Overall	70.89	78	.66	73.32	75.23	77.59
(Telephones	Rural	33.83	39	.26	41.05	44.01	46.14
per 100 persons)	Urban	156.93	169	.17	146.64	145.46	147.75
	Wireless	95.90	96	.62	96.64	96.95	97.22
%age share	Public	14.89	13	.69	14.49	12.87	10.85
	Private	85.11	86	.31	85.51	87.13	89.15
% Growth of Total <b>Telephones</b> over previous year 36.22		12	.41	(-)5.61	3.90	4.07*	
Percentage of household having telephone in India  100  82  63.2  50  Rural Urban Total  As per the recent census conducted 2011, the percentage of household having telephone facility has improve significantly. The same stood at about 63 percent during 2011 compared 9.1 % households who had telephone as per census 2001.				nproved at about pared to			
■ 2001 ■ 2011							

**31.38 Tele density** Tele-density, which denotes the number of telephones per 100 population, is an indicator of telecom penetration in the country. Tele-density in the country, which was 75.23% as on 1<sup>st</sup> April, 2014, increased to 77.59 per cent at the end of December 2014. The rural tele-density increased from 44.01 per cent to 46.14 per cent during this period. Urban tele-density,however, registered an up and down trend and later maintained the pace from 145.46 percent to 147.75 per cent during this period. Among the Service areas, Tamil Nadu (116.96per cent) had the highest tele-density followed by Himachal Pradesh (111.78 per cent), Punjab (105.13 per cent), Karnataka (96.35 per cent) and Kerala (95.21 per cent). On the other hand, the service areas such as Bihar (48.28 per cent), Assam (51.90 per cent), Uttar Pradesh (58.65 per cent), Madhya Pradesh (58.77 per cent), West Bengal (58.84 per cent), Odisha (65.24 per cent) and Jammu and Kashmir (73.67 per cent) have comparatively low teledensity. Among the three metros, Delhi Service Area tops in tele-density with 235.62 per cent

tele-density, followed by Kolkata (146.86 per cent) and Mumbai (145.86 per cent). The chart below indicates the trend in tele-density over the years.

#### Trends in Teledensity



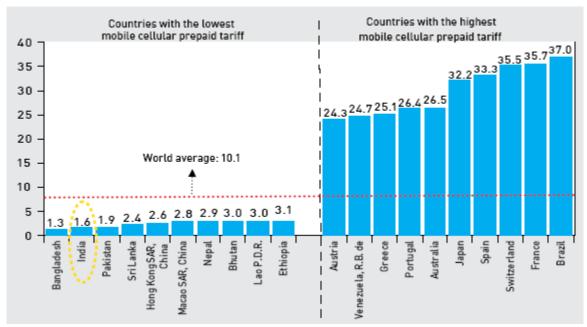
**31.39** As per TRAI, there were 75.73 million broadband subscribers as on 30<sup>th</sup> September 2014. Wireless subscriptions at 60.61 million accounted for the major part of broadband subscribers. Number of Broadband connections as on 31<sup>st</sup> march 2014 was 60.87 million which included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

**31.40 RURAL WIRE-LINE BROADBAND SCHEME**: For providing wire-line broadband connectivity upto village level in rural and remote areas, USOF signed an agreement with BSNL under the Rural Wire-line Broadband Scheme to provide wire-line broadband connectivity to rural & remote areas by leveraging the existing rural exchanges infrastructure and copper wire-line network. The speed of each of the broadband connections shall be at least 512 Kbps. Under this scheme, BSNL is to provide 8,88,832 wire-line Broadband connections to individual users and Government Institutions and set up 28,672 kiosks by the year 2015. The estimated subsidy outflow will be \$ 1,500 crore in 9 years time. As on 30th November 2014, a total of 639572 broadband connections have been provided and 14469 kiosks have been set up in rural

and remote areas. The subsidydisbursed till 31.12.2014 under wire-line broadband scheme is \$ 381.50 crore.

**Growth in Wireline Broadband Subscription** 16.00 14.98 13.79 Broadband (in million) 14.00 11.87 15.05 12.00 Million 10.00 8.77 31/3/2013 8.00 6.22 6.00 14.86 3.80 4.00 2.28 Million 2.00 31/3/2014 0.00 2012 2011

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



Source: World Development Indicators

31.41 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, 2014-15, Department of Posts, Ministry of Communication & IT.
- Annual Report, 2014-15, Department of Telecommunications, Ministry of Communication & IT.
- Trends in Telecommunication reform 2013, Transnational aspects of regulation in a networked society & World in 2015 ICT Facts & Figures, International Telecommunication Union.
- Websites of Universal Postal Union, International Post Corporation, International Labor Organization, World Bank.