

Transport and Communication

Connectivity is the buzz word for economic growth. Realizing the importance of transport and communication, the incumbent government has pinned top priority to the transport and communication sector during last four years.

China-Pakistan Economic Corridor (CPEC) envisioned as part of One Belt One Road (OBOR) / Maritime Silk Route initiative launched by China will link producers and consumers of Pakistan and China to 50 countries across the globe who came together in Beijing in May this year to study the spirit and philosophy of the whole concept. Economic powers from five continents are bracing themselves to join various mega projects on anvil under CPEC and OBOR.

Road Transport

The development of infrastructure pertaining to roads is critical to economy and socio-economic development of the country. It is not an exaggeration to suggest that growth of several other economic sub-sector sectors

depends on better roads network for timely availability of inputs and disposal of goods and services. The road infrastructure not only creates the demand of primary inputs including labour movement but also stimulates consumption pattern of society. A safe road transport system links farmers and producers to markets, gives a fillip to employment, inter-community trade, alleviation of poverty, and extension of industrial units to the rural areas. Recent economic development in the country resulted in increasingly pressure on the transport system, therefore, continuous expansion, maintenance, replacement and modernization is made in this sector.

During July-March FY 2017, total length of roads in Pakistan including GB and AJK is 264.401 thousand kilometres as compared to 263.356 thousand kilometres over the corresponding period of last year, the table given below represents the total length of both in low and high type in the country as given below:

Estimated Length of Roads in Provinces (kms)							
Years	Category	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	GB & AJK	TOTAL
2012-13	Total	107,805	81,385	42,980	29,655	1,590	263,415
	Low Type	33,090	24,685	13,140	20,525	470	91,910
	High Type	74,715	56,700	29,840	9,130	1,120	171,505
2013-14	Total	107,973	81,493	43,035	29,692	1,592	263,755
	Low Type	32,729	24,415	12,996	9,030	465	79,635
	High Type	75,214	57,078	30,039	20,662	1,127	184,120
2014-15	Total	107,992	81,543	43,072	29,742	1,593	263,942
	Low Type	32,428	24,215	12,846	8,930	460	78,879
	High Type	75,564	57,328	30,226	20,812	1,133	185,063

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Estimated Length of Roads in Provinces (kms)							
Years	Category	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan	GB & AJK	TOTAL
2015-16	Total	108,085	81,630	43,117	29,785	1,595	264,212
	Low Type	31,255	23,417	12,230	8,560	458	76,020
	High Type	76,830	58,213	30,787	21,225	1,137	188,192
(July-March)							
2015-16	Total	107,718	81,624	42,945	29,490	1,579	263,356
	Low Type	30,901	23,415	12,320	8,460	453	75,549
	High Type	76,817	58,209	30,625	21,030	1,126	187,807
2016-17	Total	108,155	81,681	43,151	29,817	1,597	264,401
	Low Type	31,270	23,425	12,336	8,580	459	76,070
	High Type	76,885	58,256	30,815	21,237	1,138	188,331

Source: National Transport Research Centre (NTRC)

National Highway Authority (NHA)

The National Highway Authority (NHA) is playing an important role in the development of economy and enhancing the national integration. Presently, NHA network comprises of 39 national highways, motorways, expressway, and strategic roads with total stretch of 12,131 kms. NHA existing portfolio consists of 50 on-going projects costing Rs 1,605.6 billion with Federal PSDP allocation for

2016-17 at Rs.178.5 billion, out of which Rs. 60.850 billion is as FEC and Rs.117.62 billion as local component. There are also 28 new schemes in PSDP 2016-17 with total estimated cost of Rs. 440.60 billion.

Rehabilitation

During last five years, NHA has rehabilitated/constructed the following length of roads over the country, province-wise break up of which is shown in the table given below:

Rehabilitated of roads					
Description	2012-13	2013-14	2014-15	2015-16	TOTAL
	Length ((kms))	Length ((kms))	Length ((kms))	Length ((kms))	Length ((kms))
Punjab North	160.85	151.00	170.41	106.45	588.71
Punjab South	59.70	76.82	120.39	91.50	348.41
Sindh North	35.90	81.08	73.45	7e55	260.98
Sindh South	45.00	33.00	33.00	70.00	181.00
Khyber Pakhtunkhwa	82.47	157.69	94.00	94.00	428.16
Balochistan North	7790	148.50	109.00	125.10	460.50
Balochistan South	25.80	69.00	38.00	66.00	198.80
Northern Areas	31.80	6000	62.97	40.12	194.89
Gilgib-Baltistan	0.00		0.00	25.00	25.00
M-1	74.90	18.00	48.00	30.00	170.90
M-2	-	-	-	-	-
M-3	-	40.00	16.70	20.00	76.70
TOTAL	594.32	835.09	765.92	738.72	3,934.04

Source: National Highway Authority (NHA)

Motorways

NHA has already completed three segments of Pakistan Motorway network viz M-1

(Peshawar-Islamabad), M-2 (Islamabad-Lahore) and M-3 (Pindi Bhattian-Faisalabad) on a virgin corridor bringing remote areas on mainline and boosting economic activities.

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NHA is now constructing M-4 (Faisalabad-Khanewal-Multan) and Karachi-Hyderabad Motorway (M-9) on Build-Operate-Transfer

(BOT) basis.

Detail of NHA Motorway network is presented in table given below:-

Motorways / Expressways			
Sr .No.	Motorways/Expressways	Length	Status
1.	M-1 (Peshawar-Islamabad)	156 Km	Completed
2.	M-2 (Islamabad-Lahore)	357 Km	Completed
3.	Havelian-Thakot	120 km	Ongoing
4.	Hazara Motorway (E-35)	59 km	Ongoing
5.	Hakla-D.I.Khan	285 km	Ongoing
6.	Sialkot-Lahore	88 km	Ongoing
7.	Lahore-Multan (M-3)	230 km	Ongoing
8.	Faisalabad-Gojra (M-4)	58 km	Completed
9.	Gojra-Shorkot (M-4)	62 km	Ongoing
10.	Shorkot- Khanewal (M-4)	64 km	Ongoing
11.	Khanewal-Multan (M-4 Ext.)	56 km	Completed
12.	Sukkur-Multan (M-5)	392 km	Ongoing
13.	Hyderabad-Sukkur (M-6)	296 km	Procurement under process
14.	Karachi-Hyderabad (M-9)	136km	Ongoing
15.	Pindi-Bhattian-Faisalabad	53km	Completed
	Total	2412Km	

Source: National Highway Authority (NHA)

Public Private Partnerships (PPP) Projects

NHA through its dedicated efforts in the last one year took a lead in the road infrastructure development through the private sector participation. NHA successfully attracted private sector investment and has

awarded/supported five (05) projects worth over Rs. 144 billion, which is more than the average annual Foreign Direct Investment (FDI) in Pakistan. Besides other benefits, the expected revenue earnings from these 5 projects is over Rs. 391 billion. Details of these projects are given in Table given below:-

Private Sector Investment				
Sr. No	Project Name	Length (Km)	Cost (Rs billion)	Status
1.	Overlay and Modernization of Lahore-Islamabad Motorway (M-2)	357	46	Completed
2.	Habibabad Bridge (N-5)	2	0.8	Completed
3.	Karachi-Hyderabad Motorway (M-9)	136	44	Ongoing
4.	Sialkot - Lahore Motorway	91.3	44	Ongoing
5.	Multan - Muzaffargarh - D.G. Khan (N-70)	80	9.3	Planned
	Total	666.3	144.1	

Source: National Highway Authority (NHA)

The Public Private Partnership (PPP) or Build, Operate & Transfer (BOT) is a mechanism through which private sector is responsible to arrange financing for the project. The private

party also bears the responsibility of design, construction, operation and maintenance of the project and in return the party is authorized to receive toll/other revenue for a certain period.

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Details of on-going PPP projects are given in Table-given below:

List of on-going Public Private Partnership (PPP) Projects			
S.No.	Project	Length (Km)	Project Cost (Rs.million)
1.	10 x Service Areas (M-2)	-	1,125
2.	Two Mini-Service Areas at River Haro (M-1)	-	260
3.	Overlay and Modernization of Lahore- Islamabad Motorway (M2)	357	46,007
4.	Habibabad Bridge (N-5)	2	831
5.	Karachi-Hyderabad Motorway (M-9)	136	44,251
6.	Sialkot - Lahore Motorway	88	43,847
TOTAL		583	136,321

Source: National Highway Authority (NHA)

China Pakistan Economic Corridor

In order to ensure smooth and efficient movement of goods and services along with passengers in a healthy environment, NHA is authorized to plan and develop China-Pak Economic Corridor (CPEC) connecting Khunjrab to Gwadar. Currently CPEC projects

worth Rs.700 billion related to NHA are on-going. Details of CPEC routes are as under:

Western Alignment: Khunjrab - Burhan (Hakla) - DI Khan (Yank) - Zhob - Quetta - Surab - Hoshab - Gwadar. Total Distance 2,463 Km
Current Status is as under:-

Western Alignment				
Sr. No.	From	To	Length	Status
1)	Khunjrab	Raikot	615	Completed
2)	Raikot	Thakot		Planned
3)	Thakot	Havelian	118	Ongoing
4)	Havelian	Burhan	60	Ongoing
5)	Burhan(Hakla)	Yank (D.I.Chan)	285	Ongoing
6)	Yank (D.I.Kharn)	Zhob	235	Under procurement / process
7)	Zhob	Quetta	331	Planned. Feasibility study & Design underway
8)	Quetta	Surab	211	Existing rehabilitated
9)	Surab	Hoshab	449	Completed
10)	Hoshab	Gwadar	193	Completed
Total Length			2497	

Source: National Highway Authority (NHA)

Central Alignment: Burhan (Hakla) - Pindigheb - Kot Addu - DG Khan - Rajanpur - Wangu Hills - Khuzdar Basima - Hoshab - Gwadar.

Total Distance 2,417 Km.

Central Alignment from Khunjrab- Burhan (793 km) is common as Western alignment.

Central Alignment:				
Sr.No	From	To	Length(Km)	Status
1	Burhan (Hakla)	Pindigheb	61	Planned
2	PindiGheb	KotAddu	355	Planned
3	KotAddu	DG Khan	55	Planned
4	DO Khan	Rajanpur	49	Planned
5	Rajanpur	Wangu Hills	336	Planned
6	Wangu Hills	Khuzdar	113	Completion in September 2017
7	Khuzdar	Basima	110	PC-I Approved. (CPEC)

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Central Alignment:				
Sr.No	From	To	Length(Km)	Status
8	Basima	Hoshab	361	Completed
9	Hoshab	Gwadar	193	Completed
10	Total Length		1633	

Source: National Highway Authority (NHA)

Eastern Alignment: Khunjrab - Thakot -
Mansehra -Burhan - PindiBhatian - Faisalabad -
Multan - Sukkur -Shikarpur – Rato Dero -
Khuzdar - Basima - Hoshab-Gwadar.

Total Distance 2,686 Km.

Eastern Alignment from Khunjrab- Sultan (793 km) is common as Western alignment. Details of further section are as under:-

Eastern Alignment				
Sr. No	From	To	Length (Km)	Status
1.	Burhan	PindiBhattain	293	Planned
2.	PindiBhattain	Faisalabad	53	Planned
3.	Faisalabad	Multan	240	
	(i)Faislabad	Gojra	58	Completed
	(ii) Gojra	Khanewal	126	Ongoing
	(iii) Khanewal	Multan	56	Completed
4.	Multan	Sukkur	392	Ongoing
5.	Sukkur	Shikarpur	37	Completed (ADB)
6.	Shikarpur	RatoDero	49	Feasibility Study completed. Detail design in process
7.	RatoDero	Khuzdar	180	Completion by June 2017(M-8) Section
8.	Khuzdar	Basima	110	PC-I Approved. Detail design in process
9.	Basima	Hoshab	361	Completed
10.	Hoshab	Gwadar	193	Completed
	Total Length		1908	

Source: National Highway Authority (NHA)

A. Pakistan Railways:

Pakistan Railways has a definite edge over road transport for long haul and mass scale traffic movement both for passenger and freight in addition to providing a safe, economical and environment friendly mode of transport. An effective railway system of the country facilitates commerce and trade, reduces transportation costs and promotes rural development and national integration. The network of Pakistan Railways comprises of 7,791 route kilometers, 451 Locomotives (DL 439 + Steam 12), 1,732 passengers coaches and 15,948 freight wagons.

Earning of Pakistan Railways		
Fiscal Year	Earning (Rs. million)	Percent Change
2011-12	15,444	-
2012-13	18,071	17.0
2013-14	22,800	26.2
2014-15	31,924	40.0
2015-16	36,581	14.6
(July-March)		
2015-16	26,436	
2016-17	26,268	-0.6

Source: Pakistan Railways

Gross earning along with passenger traffic, freight carried and freight tonnes has improved by 14.6 percent, 4.5 percent, 38.9 percent and 44.6 percent respectively in FY 2016 over last

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year. During July-March 2016-17, the gross earning and freight tonnes remain lower by 0.6 percent and 3.2 percent respectively over the corresponding period of last year, while passenger traffic and freight carried improved by 7.0 percent and 4.7 percent respectively. The

details are given in the table. Government of Pakistan has allocated Rs. 41 billion in federal PSPD for the financial year 2016-17 for the development interventions in Pakistan Railways.

Passenger and Freight Traffic								
S.#	Subject	2011-12	2012-13	2013-14	2014-15	2015-16	July March	
							2015-16	2016-17
1	Number of Passenger Carried (Million)	41.100	41.957	47.690	52.951	52.192	39.55	38.950
2	Passenger Traffic Kms (Million)	16,093	17,388	19,778.560	20,288	21,201	16,333.18	17,470.35
3	Freight carried Tonnes (Million)	1.323	1.016	1.610	3.600	5.001	3.65	3.82
4	Freight Tonnes Kms (Million)	402	419	1,090.332	3,301.438	4,773.548	3,497.19	3,385.410
5	Gross Earning (Rs. Million)	15,444	18,070	22,800.217	31,924.757	36,581.865	26,436.00	26,268.070

Source: Pakistan Railway

New Initiatives

- i. Under the Public Private Partnership (PPP), Pakistan Railways has started several trains to cater to the needs of business community and general public.
- ii. Pakistan Railway has also involved private sector in the management and operation of terminal facilities including dry ports. Prem Nagar dry port Lahore is the first successful model of joint venture between Pakistan Railways and two private parties.
- iii. Up gradation of Mainline-1 (ML1) and construction of dry port and cargo handling facilities have been included as Early Harvest Projects (EHP) under China-Pakistan Economic Corridor (CPEC) and preparatory work on these projects has been initiated on fast track basis.
- iv. Framework agreement between the National Railway Administration, Government of the Peoples Republic of China and the Ministry of Railways, Government of the Islamic Republic of Pakistan on implementation for up-gradation of ML-I and Establishment of Havelian Dry Port of Pakistan Railways being signed.
- v. E-Ticketing has been introduced to facilitate customers.

C. Pakistan International Air Lines

Pakistan International Airlines Corporation (PIAC) came into existence in 1955 as Public

Sector organization. However, in April 2016 it was converted from a Statutory Organization to a Company governed by Companies 1984, through Pakistan International Airlines Limited (PIAL conversion) Act 2016.

Present PIA is passing through dire financial state. However, the present government is very keen to make itself reliant. Efforts are underway to improve the financial health of the Corporation by reducing its losses through various means and modes. Stringent action is being taken against corruption and mismanagement.

It is worth mentioning that despite facing difficulties, PIAC has been able to improve upon its performance with reduction to losses. Federal government's decision to reduce fuel prices has helped PIA in saving on its fuel cost significantly. Furthermore, PIA's seat factor also improved in comparison to previous years.

Presently, PIA operates to 50 destinations including 28 international and 22 domestic. It has a market share of 27percent in international and 65percent in domestic air travel market during 2016 which was 24percent and 46percent respectively during 2015.

Fleet Expansion

The decision of induction of fuel efficient narrow body aircraft not only supported the airline to improve its operations but also enabled in bringing efficiency and better control on fuel cost. During last two years there

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has been an increase of 63 percent from 22 to 36 in fleet.

PIAC have recently signed agreements for acquisition of 20 percent aircraft on dry lease i.e. 13 x A- 320 and 05 x ATRs- 72 prop-turbo, out of which 11 x A-320 and 05 x ATR-72 and 2 Boeing 777 have already joined PIAC's fleet and remaining two A-320 will join PIAC fleet very soon.

The average age of fleet has also been reduced presently to 10 years which will further reduce to 8 years after grounding of above 20 years old A-310.

Focusing on future performance, PIA is perusing aggressive to induct fuel efficient

narrow body aircraft i.e. A320 in order to overcome fleet constraints. As a part of route rationalization process daily flights to Quetta, Peshawar, Multan, Faisalabad etc have been resumed along with additional frequencies to Rahim Yar Khan, Bahawalpur and especially to Northern areas and Balochistan. Upon acquisition of more aircraft PIA will certainly avail opportunities to expand its network. Minimize technical delays through quality maintenance and fleet availability to improve on-time departures of aircraft.

The overall performance of PIA is given in the following table.

PIA Performance				
Indicators	Units	Year 2014	Year 2015	Year 2016
PIA Fleet	No. of planes	34	38	38
Route	Kms	389,445	367,251	382,057
Available Seat	million Kms	16,536	16,666	19,196
Passenger Load Factor	in percent	72	70.3	71.6
Revenue Flown	000 Kms	61,389	67,630	79,842
Revenue Hours Flown	Hours	101,556	111,455	131,838
Revenue Passengers Carried	000nos.	4,202	4,393	5,487
Revenue Passengers	million Kms	11,903	11,711	13751
Revenue Tonne	million Kms	1,241	1,191	1,375
Revenue Load Factor	in percent	52	48.9	49.2
Operating Revenue **	Rs. million	99,519	91,269	89,842
Operating Expenses **	Rs. million	11,048	121,222	125,961
Available Tonne	million Kms	2,396	2,435	2,798

Source: Civil Aviation Authority

* PIA financial year is based on calendar year i.e. January to December.

** Revenue and cost is based on un-audited accounts.

D. Ports and shipping

Pakistan National Shipping Corporation (PNSC)

At present, PNSC fleet comprises of 09 vessels of various type / size (05 bulk Carriers and 04 Aframax tankers) with a total deadweight capacity of 681,806 metric tons being the highest ever carrying capacity since its inception.

PNSC during nine (09) month July-March 2016-17 contributed to the economy as under:

- a. Group after Tax Profit of Rs 1,381 million has been achieved during this period against Rs 1,364 million in the same period last year showing an increase of 1.25percent.
- b. Earnings per share for the group increased to Rs 10.46 from Rs 10.33 in the corresponding last period.
- c. Despite the pressure and major financial crunch faced by the global shipping industry with the fall in Average Freight Rate Assessment (AFRA), world scale and bulk freight rates internationally, PNSC

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achieved better results by focusing on more profitable ventures besides retaining its repute as one of the major contributors to sea borne trade in Pakistan.

- d. PNSC made substantial growth in revenue of 45percent and 24percent in the area of foreign tanker and slot charter business respectively, thereby offsetting losses incurred on dry bulk segment.
- e. Direct operating expenses decreased to Rs.6,607 million (including Rs 3,019 million from PNSC) from Rs.6,734 million (including Rs 3,183 million from PNSC).
- f. PNSC's Finance cost reduced to Rs 255 million from Rs 465 million in the same period last year as PNSC started reaping the benefit of swapping and negotiating the expensive loans acquired in 2010 & 2014 at three months KIBOR plus spread of 2.2 percent and 1.6 percent with significantly reduced level of spreads at 0.4 percent and

0.5 percent respectively. These reduced level of spreads also enhanced the loan repayment capacity of the Corporation that also positively supports our gearing structure.

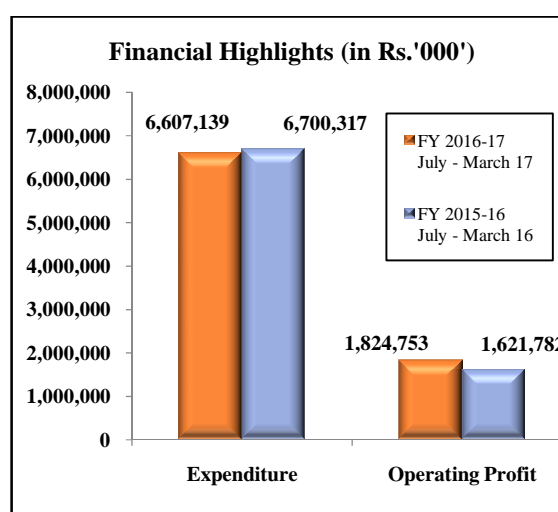
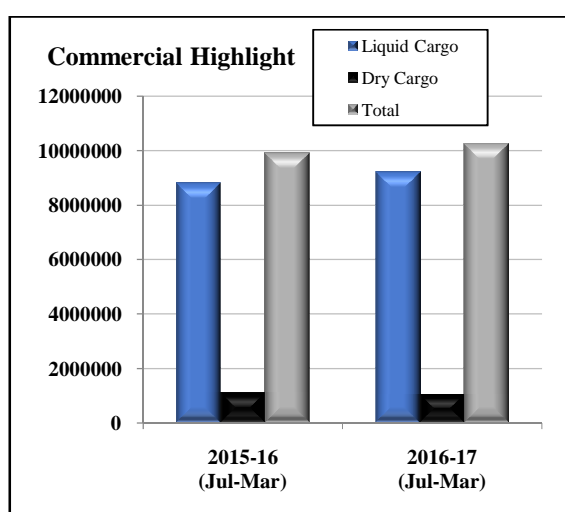
Owing to the effective and efficient management of risks, consistent historical performance and optimal capital structure, PNSC has upgraded long-term credit rating of PNSC (Group) from AA- to AA indicating very strong capacity for timely payment of financial commitments.

Commercial and Financial Performance of PNSC:

The Commercial and Financial performance (un-audited/provisional) of last four years and FY 2016-17 covering nine months activities from 1st July 2016 to 31st March 2017 along with compared with corresponding previous period of PNSC are given in the following tables:-

Commercial Performance of PNSC					(million tonnes)	
Cargo Lifted	2012-13	2013-14	2014-15	2015-16	July - March	
					2015-16	2016-17
Liquid Cargo	10.7	15.4	14.7	11.8	8.8	9.2
Dry Cargo	2.5	2.5	1.5	1.2	1.1	1.0
Total	13.3	17.9	16.2	13.0	9.9	10.2

Source: Pakistan National Shipping Corporation (PNRC)



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Financial Performance of PNSC					(Rs. in billion)	
Financial Results	2012-13	2013-14	2014-15	2015-16	July - March	
					2015-16	2016-17
Revenues	12.3	15.7	15.5	12.5	9.6	9.1
Expenditures	8.9	12.3	12.5	9.00	6.7	6.6
Profit before Taxation	3.4	3.4	3.2	2.5	2.9	1.8

Source: Pakistan National Shipping Corporation (PNRC)

Future plans of PNSC:

In line with the domestic requirements of Pakistan, PNSC plans to add more oil tankers to its fleet. The dry bulk market is showing signs of recovery and PNSC strive to keep vessels deployed at best available rates.

As a step forward in ferry service venture, PNSC has been granted a license by Ministry of Ports and Shipping and will soon start its service on commercially viable terms and upon clearance from all concerned. PNSC is also exploring new opportunities like Oil Storage facilities to cater the growing domestic needs and for improving operational efficiencies.

PNSC plans to enter in new ventures with upcoming refineries. Furthermore, under CPEC, many coal fired power plants are expected to be operated in coming next two years. PNSC is aiming to venture for the transportation of the coal which is expected to be imported from foreign countries through PNSC's own bulk carriers.

Karachi Port Trust

Karachi Port vested in a Trust was established in 1887 with affairs and management to be run by trustees. The port presently handles 60percent of the country's trade through its operations within the port limits defined by the federal government. Karachi Port Trust (KPT) is committed to provide the country a modern, competitive, user friendly port and a transshipment hub of the region with hinterland connectivity. The cargo handled at KPT improved by 15.3 percent in FY 2016 over FY 2015. The trend continued in FY2017. During July – March FY 2017, the cargo handled

data suggested a growth of 6.7 percent over the same period last year showing improved economic activity. Exports through KPT has grown by 8.2 percent however imports declined by 2.2 percent during July- March 2016-17 as compared with previous year corresponding period. The cargo handled by KPT during previous years is given below;

Cargo Handled at Karachi Port Trust			
(in 000 tonnes)			
Period	Exports	Imports	Total
2011-12	11,674	26,201	37,875
2012-13	12,150	26,700	38,850
2013-14	11,007	30,343	41,350
2014-15	10,422	33,000	43,422
2015-16	9,786	40,259	50,045
(Jul-Mar)			
2015-16	7,299	29,217	36,516
2016-17	7,462	31,560	39,022

Source: Karachi Port Trust

KPT has following salient features.

1. Test Operations

Test operations of the country's biggest port, the Pakistan Deep Water Container Port, has commenced from dated 09-12-2016 when the first container ship was accommodated at its berth No. 4. The new port is located at the Keamari Groyne East of Karachi Port, and has the capacity to cater for mother ships. This new port is expected to play a major role in the CPEC. In the first phase of development, the terminal operator has constructed berths No.3 and 4 while berths No.1 and 2 are left for completion under second phase. The terminal operator has already brought in equipment, including five ships to shore gantry cranes and a power station with a generation capacity of 28 megawatts is also made available. The port has

the capacity to handle 3.1 million Twenty-Foot Equivalent Units (TEUs) a year and have a storage yard to accommodate 550,000 TEUs per year.

2. International Exercises 2017

KPT provided complete facilities to the international naval fleets participated in the Aman 2017 exercises taken place in the warm waters of Arabian Sea off the coast of Karachi from 10th – 14th February 2017. It was a naval exercise in which KPT provided safe berthing and un-berthing to all the fleets participating in the exercise along with pilotage. The participants underwent variety of drills including search and rescue operations, gunnery drills, anti-piracy demonstrations, replenishment at sea and maritime counter terrorism demonstrations. Pakistan has in the past held such exercises every alternate year since 2007 and these have only been meant to demonstrate the allied capabilities of nations on a platform to fight terrorism and other maritime threats. Marine Pollution Control Department (MPCD) of Karachi Port participated in oil spill drills organized by Pakistan Navy. Pakistan Navy organizes Barracudda exercise drills every year in which all the stakeholders of oil business participates with an aim to make themselves ready for spill disaster. The aim of the exercise is to mobilize oil combating resources.

KPT plays leading role in this exercise as its Marine Pollution Control Department (MPCD) has all the modern day equipment and trained workforce. KPT Tugs also participates in the event for roping of the inflated boom to combat spills carried out near Karachi Anchorage area.

3. Environmental Health and Safety (EHS) Policy

The Environmental Health and Safety Management System (EHSMS) is a project funded by World Bank for the implementation of EHSMS in KPT. The objective of Environmental Health and safety (EHS) study is to develop and implement EHSMS in KPT. This will support the design and implementation of an environmental management system to implement a structured

program of continual improvement in environmental performance that follows procedures drawn from established international business practices and principles of quality management systems.

Two sessions of EHSMS course are conducted regularly every month at KPT Staff College.

4. The Crisis Management Cell

KPT inaugurated on 04-05-2017 a Crises Management Cell (CMC) which has linked three main departments – Port Safety, Port Security Force and the Marine Pollution Control Department. The cell is to improve port performance through synergizing Efforts, Resources, Information and Coordination (ERIC) in a proactive manner to lessen the safety and security risks. It provides monitoring of safe and secure berthing of vessels taking place with monitoring of weather forecasts. The facility is backed up by system that enables it to perform marine pollution activities, to perform monitoring through CCTV cameras and to ensure availability of port security force for crisis management cell.

5. Preparation of ten years business & strategic development plan

A loan agreement for World Bank financing was signed. One of the components of this loan is preparation of ten years business plan and strategic development plan of the Port.

Future Plans

i. Re-Construction of Berths 15 To 17 A

KPT had started second phase of re-construction of old berths from 15 to 17A since 2012. Accordingly, M/s Ssangyoung & Dangyoung of Korea was awarded the work after bidding and Supervision Consultants are M/s Atkins of UK. 99.3percent work had been completed so far, and its overall completion is expected by June 2017.

ii. Construction of Elevated Port Expressway

To address the traffic forecasts and congestion at the port a 4 & 6 lane, elevated port expressway shall be constructed up to cater for

port traffic generated from Pakistan deep water container port. The elevated expressway would also facilitate the coal yard, east and west wharves.

iii. Karachi Harbour Crossing

The objective of KHC is to improve port traffic, and to enable further growth of port and hence national foreign trade businesses. The objective to be achieved by this project is integrated with the overall plan of the national transport sectors for providing necessary support in the process of economic development of Pakistan. Since the volume of maritime cargo is increasing rapidly, the KPT intends to reorganize certain facilities and extend cargo capacities in the port area. The development of the port of Karachi, especially major projects such as the deep water berth at Keamari Groyne or cargo village in the western backwater will change both the cargo flow and transport capacity between the different port terminals. The project will be implemented in three phases, as under:

1. In phase – I: The KHC Bridge from DWCP/Clifton to connect Mauripur Road.
2. In phase –II: The Bridge will be connected to Haskwbay/LDA Scheme.
3. In phase –III: The Bridge will be connected to beaches/Manora.

The estimated cost of the project is USD 1000 million (approx.) which will be recovered from toll tax or PPP basis. Moreover, the completion period is 4 to 5 years.

iv. Cargo Village / Industrial Park

Karachi Port Trust envisions expanding its facilities for a wider global market. An ambitious plan is underway for expansion of the Karachi Port opening up new vistas of investment opportunities. These include a comprehensive plan for extension of infrastructure with particular emphasis on the present regime of cargo handling / storage / dispatch constraints. New areas are being opened up within the range of the Karachi port limits for further development.

The cargo village and industrial park will be located in the northern part of the western backwaters, west of Karachi fish harbour and

south of the Macchar and Mohammadi Colony. The cargo village and industrial park shall utilize 530 hectares which means that more than 20 percent of the total area of the Western Backwaters shall be reclaimed. The location of Cargo Village offers good approach to Lyari Expressway and ICI- Bridge, therefore, it is planned to connect Karachi Harbour Crossing with Karachi deep water port directly in near future.

v. Oil Pier-I

The recent Oil Pier 1 has to be demolished and new pier catering for the recent and future needs shall be constructed.

Salient Features for New OP-1 Facilities

The minimum requirement of new facility is to be designed to handle tankers between 16,500 dwt and 75,000 dwt having capacity of 8 million tons per annum (or as per future requirements), with a draft to cater to tanker ships of this dwt. The design of the new structure shall be based upon recognized international standards. The berthing facility shall have the minimum distance of 300 m (or as per future requirement). The allied accessories i.e dolphins, mooring hooks or any other structure must be compatible, durable, and capable to cater for future needs.

The common user pipelines shall be installed on the jetty to handle at least but not limited to the following liquid products.

- i. Crude oil
- ii. Furnace oil
- iii. POL (Diesel, Petrol, Jet fuel etc)
- iv. Naphtha
- v. Molasses
- vi. Edible oil/Non-edible oil and tallow.

The pipeline connections shall be provided in accordance with the recommendations of the Oil Companies International Marine Forum (OCIMF). Independent and self-sufficient fire-fighting facilities shall be installed. Fire monitors shall be remote controlled. A facility shall be provided to facilitate access to the moored vehicle.

vi. Environmental Friendly Multi-Purpose Bulk Handling Terminal

- To encourage the policy of Public Private Partnership an Environmental Friendly Multi-Purpose Bulk Handling Terminal at East Wharf is proposed.
- Facilities that may be provided by the concessionaire should include bulk handling cranes with bagging units, conveyors, silos and other auxiliary facilities
- Consultant for feasibility study hired (M/s NESPAK).
- Commercial operation to commence by 2019.

vii. Construction of Periphery Road Along China Creek

Karachi Port Trust intends to develop a protective bund (sea wall) and road along the periphery of China Creek.

Port Qasim Authority

Port Qasim handled 26.677 million tonnes of total cargo during the financial year 2016-17 (July-March) as against the corresponding period 2015-16, reflecting an increase of 12.2 percent. This increase of 12.2 percent, is

attributed to increased handling of Petroleum Oil Lubricants (POL) imports, Chemicals, Containerized cargo, LPG and LNG. Out of 26.677 million tons, the liquid cargo was 12.639 million tons (47.4percent), containerized cargo was 10.704 million tons (40.1percent) & remaining 3.334 million tons (12.5percent) was miscellaneous types of dry bulk/ break bulk cargo.

Port Qasim Authority handled 0.871 million TEUS (Twenty-Foot Equivalent Units) of container traffic July-March 2016-17, the growth in container traffic during the nine months of FY 2016-17 is 7percent over the July-March 2015-16

Imports:

The volume of import cargo during July-March 2016-17 stood at 21.604 million tons, showing 19.4 percent higher than 18.092 million tons handled during corresponding period.

Exports:

The exports handled 5.072 million tons during the current financial year 2016-17, as compared to 5.677 million tons handled during corresponding period 2015-16, registering a decline of 10.6 percent.

Commercial activities			(Million Tonnes)
Period	Import	Export	Total
2012-13	17.754	7.047	24.801
2013-14	18.076	7.699	25.775
2014-15	21.608	8.405	30.014
2015-16	25.857	7.464	33.321
(July- March)			
2015-16	18.092	5.693	23.785
2016-17	21.604	5.072	26.676

Gwadar Port

Gwadar is the first port on the south western Arabian Sea coastline in Baluchistan,- about 635 km from Karachi and 120 km from the Iranian border by road. Gwadar Port is located just outside the Strait of Hormuz, near the key shipping routes from Arabian Gulf to Far East and Europe. Gwadar Port is a strategic warm-

water, deep-sea port and phase-1 of the port has been developed jointly by Government of Pakistan and the Government of the Peoples Republic of China with a total cost of US\$ 288.0 million, the port was inaugurated in March, 2007.

The Port is fully functional with three multipurpose berths, each 200 meters in length

dredged to 14.5 meters in depth alongside the berth, handling a ship of 50,000 dwt capacity. By 2055, it is anticipated that Gwadar Port will be the largest site of its kind in Pakistan, with a 50 km sea front and 10,000 hectares of port backup area.

On 16th May, 2013, the port’s Concessional Rights were transferred from Port of Singapore Authority (PSA) to the new operator viz, M/s China Overseas Ports Holding Company Ltd (COPHCL). The new operator has started “recovery “of existing available infrastructure and equipment at the port. COPHCL submitted operational plan of the port in consultation with Gwadar Port Authority (GPA), which suggests a framework for the Port Business Plans as per the Concessional Agreement.

In December, 2008 the Economic Coordination Committee (ECC) of the Cabinet decided all bulk cargo comprising urea, wheat and coal shall be imported through Gwadar Port.

Since 2008, Gwadar Port has handled around 6.329 million metric tons of dry bulk cargo comprising of wheat and urea by 201 ships. Till date the port operations are given below;

July-March 2017	Quantity (000 Tones)
Total Import	53,320
Total Export	1,925
Total:	55,245

The government-to-government CPEC agreements have created bright prospects for optimum utilization of Gwadar Port to harness the benefits of regional trade connectivity of Western China, Central Asian Republic (CARs) and Afghanistan.

To resolve the port connectivity with the highway network, “Gwadar Port Eastbay Expressway” project has now been agreed upon for funding under CPEC. The proposed expressway will connect the Gwadar Port with the Makran Coastal Highway, passing along the east bay of Gwadar City, with a total length of 18.98 Km, including 4.3 Km along-the-shore and 14.6 Km on-shore sections. A double track

rail link along the expressway is also part of the project.

Gwadar Port Free Zone

Federal government through PSDP has provided funds for acquisition of land to be handed over to the Concession Holder for establishment of Gwadar Port Free Zone (FZ). This would be the first Zone in Pakistan, spread over an area of 9.23 sq. km, adjacent and North West of the port. The land acquisition process has been completed and its execution has started since 2015. With the development of FZ the port throughout will enhance significantly and at the same time the Company is going to establish a large exhibition centre adjacent to the port for display of Chinese and Pakistani products.

Investment Opportunities

Gwadar port, offer opportunities to prospective investor for development of infrastructure such as storage, warehouses, hotels, marine workshops, container freight stations, seafood, dates processing and export and offices spaces for banks, clearing agents, ship agents.

Chinese investors have taken keen interest in establishing “Marine Silk Route” and establishment of heavy industries in the industrial zone as per the Gwadar Port Master Plan (2006).

Communication

Information and Communication Technology Sector

The dynamically evolving Information and Communication Technologies (ICTs) hold crucial importance globally as one of the key sectors in terms of powering economies, acting as a catalyst of change and enablement across all other sectors.

Ministry of Information Technology and Telecommunication (MoIT&T) is maximizing its efforts for expanding both IT & Telecom sectors in tandem. Consequently, the Information Technology sector is exhibiting accelerated progress with total IT turnover of USD 3.1 billion, including both exports and

domestics revenue (Source: PSEB; assessment by Bearing Point's Study). Through enabling policies and auction spectrum for next generation mobile services, the Broadband penetration has jumped from a mere 3.7 million to 40.7 million. The IT and Telecom sectors are expanding and generating new jobs as businesses utilize modern ICT technologies such as e-commerce, e-banking, e-health, e-education, and business related to IT applications.

Telecommunications Policy 2015

The present government introduced Telecommunications Policy 2015 for availability of universal, affordable and quality telecommunication services provided through open, competitive and well managed markets which can be used by people to the benefit of the economy and society. Policy received international acclaim and the Government of Pakistan (MoIT&T) won the "Government Leadership Award 2017" at GSMA's Mobile World Congress Event held in Barcelona, Spain during Feb-March 2017.

Policy Directive for the Auction of Unsold Next Generation Mobile Services (NGMS) Spectrum in Pakistan

A Policy Directive for auction of unsold 2x10 MHz of frequency spectrum in 1800 MHz band was issued on 27th March 2017, whereby Pakistan Telecommunication Authority (PTA) has been entrusted to undertake transparent auction process. The base price for the said spectrum has been set as USD 295 million and all existing cellular mobile operators (CMOs) as well as new players are eligible to participate in the auction.

Digital Pakistan Policy 2016-17

Taking into account the increasingly transformed role of Information Technology across all sectors of socio-economic development, accelerated digitization and a holistic knowledge based economy; Digital Pakistan Policy 2016-17 is being formulated to rapidly transform the IT and related sectors of economy.

This policy will serve as the foundation of a holistic Digital Ecosystem with advanced concepts and components for the rapid delivery of next generation digital services, applications and content. It will also provide opportunities for local entrepreneurs and firms to acquire core competencies, experience and credibility and better position them to compete at the international level. During June 2016- March 2017, extensive stakeholders' consultations including Inter-Division, as per rules of business, were undertaken in the form of meetings, workshops and seminars. Presently, MoIT&T is in the process of submission of said policy document to ECC for its approval.

Establishment of پاکستان- internet registry: The Internet Assigned Numbers Authority (IANA) has approved the Establishment of پاکستان- internet registry for Pakistan. MoIT&T in-consultation of relevant stakeholders, is in the process of planning to file a case for the re-delegation of national registry ".pk" as per the ICANN aforesaid standard procedures. In this regard, a strategy has been devised and work on the requisite steps is in progress whereby a multi-stakeholders Main Technical Committee on the National Internet Registries has been notified.

E-Commerce

E-Commerce is a major tool towards positive development of the Country and MoIT&T, being an enabler towards IT & Telecommunication Sector, has taken the initiative to formulate an Inter-Ministerial Committee (IMC) for a fast-track implementation of this critical policy matter. Accordingly, regulations regarding System Operators (PSO) and Payment System Providers (PSP) have been approved. Also, Pakistan's ranking on the Financial Action Task Force (FATF) list has improved from Grey to White, which will enable entry of credible international players like PayPal.

Presently, MoIT&T, in-consultation with relevant stakeholders, is in the process of formulation of e-commerce regulatory framework for the proliferation of e-commerce eco-system to safeguard the users and

merchants' trust and will resolve longstanding barrier to growth of Pakistani e-commerce. The initial draft is being finalized through stakeholders' consultation. Once finalized, the same shall be incorporated in National E-Commerce Policy.

Data Protection is the key to nurture innovation. Currently one of the biggest challenges to e-Commerce and IT Eco System in general is the lack of data protection Framework. With this in view, MoIT&T is working on the formulation of a legal framework for protection of personal data of individuals in Pakistan. The framework is expected to clearly lay out the privacy rights of individuals and responsibilities of data processes in order to ensure greater legal certainty in this area.

E-Governance

MoIT&T, through NITB, is in the process of rolling-out the e-Office suite in the federal government to ensure efficiency, accuracy, effectiveness, good governance, transparency and accountability in decision making and delivery of efficient and cost effective public services to the citizens of Pakistan. In this regard, the access of e-office suite software has been provided to more than 25 Ministries/Divisions and attached departments whereby more than 5000 staff has been trained on the said e-governance system and fiber optic ring has also been established.

In a recent development, the e-office suite has been shifted to NTC's National Data Center. Currently, the MoIT&T, in-consultation with relevant stakeholders, is in the process of rolling-out the e-office suite in the provinces through a Public Private Partnership model in collaboration with local IT industry.

Prevention of Electronic Crimes Act

To build confidence and trust while using ICTs, the MoIT&T had proposed "Prevention of Electronic Crimes Bill" which was enacted by the parliament as "Prevention of Electronic Crimes Act (PECA)". The said Act is holistic in nature and establishes criminal liability of on-line offenses. The Act aims to curb unauthorized access to critical infrastructure

information system and data, while ensuring the confidentiality and privacy of citizens' information/data.

An Inter-Ministerial Committee, headed by the Minister for Law, is working for putting in place the implementation mechanism under PECA.

Telecom Sector Snapshot

Through the enabling policies of the MoIT&T, the telecommunication sector in the country has not only witnessed steady growth, but has also contributed to the national exchequer.

Telecom Sector Analysis

Telecom sector has shown positive growth during the first two quarters of FY 2016-17. Total teledensity reached 72.36percent at the end of March, 2017 compared to 70.81percent at the end of last fiscal year. The prime driver of increase of teledensity is the growth in cellular mobile subscribers.

Telecom Revenues

Revenues from telecom sector reached an estimated Rs. 234.9 billion during the first two quarters of FY 2016-17. The commercial launch of 3G and 4G LTE services has opened new opportunities for revenue generation for the mobile operators. Availability of 3G and 4G services has enabled development of new applications and data base services, and people of Pakistan are quickly adapting to these new technologies and services.

Telecom Sector Contribution to the National Exchequer

Telecom sector is a significant source of revenue generation for the national exchequer. During the first two quarters of the FY2016-17, telecom sector contributed estimated Rs. 53.76 billion to the national exchequer in terms of taxes, regulatory fees, initial and annual license fees, activation tax, and other charges.

IT Exports & Remittances

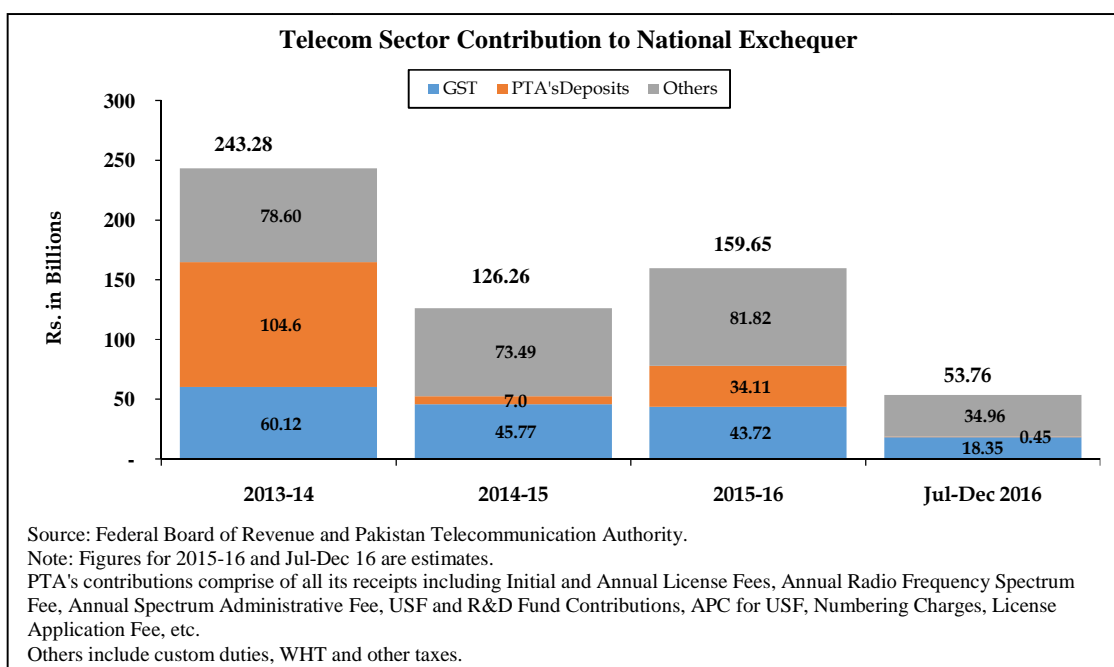
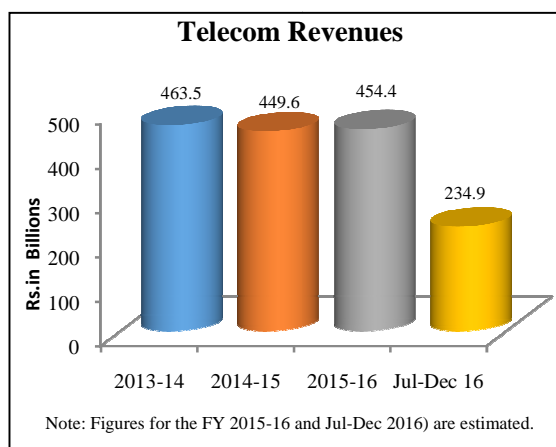
There has been a consistent growth in IT remittances over the last decade at a compound annual growth rate (CAGR) of around 23

Pakistan Economic Survey 2016-17

percent. There has been an impressive growth rate of approximately 97 percent in IT remittances over the last four years. Hence, Pakistan's IT exports are estimated to have crossed \$2.8 billion a year at present as per estimation standard of Bearing Point. Annual domestic revenue is around \$500 million. Hence, total revenue of IT industry is estimated to be around \$3.3 billion a year at present.

Foreign Direct Investment (FDI) inflow in the ICT Sector (IT & Telecom)

The reported FDI inflow in the ICT sector for the period July 2016-March 2017 is USD 55 million.



Telecom Investment	US\$ million				
	2012-13	2013-14	2014-15	2015-016	Jul-Dec 2016
Cellular	570.4	1,789.7	977.6	659.4	262.0
LDI	1.9	1.8	12.2	6.3	2.3
LL	16.1	14.2	3.9	54.0	23.3
WLL	11.9	10.0	7.2	0.0	0.0
Total	600.3	1,815.6	1,001.0	719.7	287.6

Note: Jul-Dec 2016 figures are estimates.

Source: Ministry of Information Technology and Telecommunication

In terms of overall investment in the telecom sector, the momentum that was started in FY 2012-13 for the up-gradation of telecom networks for 3G and 4G LTE services has

continued. Telecom operators have invested a significant amount of US\$ 287.6 million during Jul to December, 2016. The main driver behind this investment is the cellular mobile sector

which has invested US \$262 million during the first two quarters of FY2016-17.

Cellular Subscribers

By the end of March 2017, the total number of mobile subscriptions in Pakistan reached 139.11 million with the net addition of 5.9 million subscribers during the July, 2016 to March, 2017 of FY 2016-17. Biometric re-verification of SIMs last year had an adverse impact on the cellular subscriber base. However, the industry has survived through the tough period and continues to regain subscribers at a fast pace.

3G and 4G LTE Subscribers

3G and 4G LTE subscribers have reached 39.88 million by March2017, registering an increase of 10.3 million subscriptions to 3G&4G LTE networks in 09 months (July 2016-March 2017). More coverage and reduced tariffs will further increase the pace of3G and 4G LTE subscriptions.

Broadband Subscribers

Broadband subscriber base showed strong growth during2016-17. At the end of March 2017, broadband subscribers stood at 42.36 million as compared to 32.29 million at the end of last fiscal year depicting 31percent growth over the last nine months. The number of net subscriber additions in the period stood at 10 million.

Local Loop Subscribers The subscriber base of local loop segment has reached 3.11 million at the end of December 2016 as compared to 3.26 million as of June, 2016. FLL subscriber base has been relatively steady as 2.72 million subscribers (Dec, 2016) are reported as compared to 2.79 million (June 2016). WLL subscriber base also dropped to 0.39 million during the first two quarters of the FY 2016-17 as compared to 0.47 million at the end of June 2016. The closure of PTCL’s WLL connections and mobile substitution effect has resulted into gradual decline of the local loop subscriptions.

Telecommunication (Overall)			
Financial Year	Telephones (FLL & WLL)	Broadband Connections (3G, 4G & Fixed)	Mobile Phones
2013-14	5,217,046	3,795,923	139,974,754
2014-15	3,930,596	16,885,518	114,658,434
2015-16	3,264,883	32,295,286	133,241,465
2016-17(July-March)	3,067,911	42,369,872	139,108,964

Ministry of Information Technology and Telecommunication

Information Technology Snapshot

The Ministry of IT & Telecom continues to support all credible private sector initiatives aimed at bolstering the local IT industry and attracting foreign investment. Government realizes that it has an important role in terms of providing a conducive environment to IT industry through infrastructure and HR development. Government’s incentives for IT industry include:

- Zero income tax on IT exports till June 2019
- 100percent equity ownership allowed to foreign investors
- 100percent repatriation of capital and

dividends allowed

- 7 year tax holiday for venture capital funds.

Innovation and Entrepreneurship in ICTS

i. National Incubation Centers

The government has a vision of accelerated digitization and transformation of Pakistan into a knowledge based economy to spur economic growth through innovation and entrepreneurship. In order to provide opportunities to young entrepreneurs and talented youth of Pakistan and equip local Pakistani IT industry with infrastructure, mentorship and all allied facilities, National Incubation Centers (NICs) are being established.

Primary goal of the project is to transform innovative ideas of talented young teams into viable and self-sustainable start up companies by providing necessary training, mentorship and facilitation. The Center for Islamabad has been successfully launched after its establishment at NITB building in H-9 Islamabad. The project has been awarded to “M/s Pakistan Mobile Communication Limited (PMCL)” with an overall budget of Rs. 564.8 Million. Taking into account the wealth of talent in other cities of the country, it is imperative that similar centers be established in other parts of the country as well where the ICT human resource is skilled and has potential to develop new and innovative products with the aid of expert guidance and mentorship.

Currently, the process is in place to select partners for the establishment of National Incubation Centers in all provincial capitals of the country i.e. Karachi, Lahore, Peshawar and Quetta. With all these centers in place we can trust that momentum of nurturing innovation will gear up to capitalize the true potential of budding innovation.

ii. Establishment of Innovation Centres

The establishment of ICT Innovation Centres holds paramount importance for achieving socio-economic development in the country. In this regard, during July 2016- March 2017, necessary measures were undertaken to initiate the preparation of RFPs for the following innovation centres:

- **FinTech (Financial Technology)**– This innovation center will have the potential to disrupt financial sector with innovative solutions like smart payments/processing systems, security solutions, P2P lending solutions and tax solutions based on Blockchain technology, etc.
- **Internet of Things (IoT)** - IoT Innovation Centre (ITIC) will enable startups in the IoT domain. It will provide access to state of the art infrastructure, commercialization support and indigenization and international collaborations, etc.

- **Robotics** -Robotics Innovation Center (RIC) which will be a cross-disciplinary innovation institute dedicated to innovation in products, services and end-user experience that maximizes the benefits of robotics across different verticals including Agriculture, Security, Biomedical, Industrial automation, Automobiles etc. The main objective of this Robotics innovation center is to enable start-ups to transform their ideas into commercially viable products.

Peoples Development Programs

i. HR Skills Need Assessment

A comprehensive study for ICT HR Skill Need Assessment has been planned to profile the skills gaps between demand and supply, get an inventory of the capacity to deliver the required trainings (local and international) and prepare comprehensive training delivery plan. In this regard, the RFP has been prepared and is under final stages of approval

ii. Digital Skills Training Program for Freelancing

A national level digital skills training program for freelancing is being planned in which 1 million individuals will be trained in next five years. This will be done through collaboration with hundreds of educational institutes across the country. Preliminary working has been done and the program is expected to start in next few months.

iii. ICT for Girls

- The “ICTs for Girls” program is aimed at spurring the socio economic uplift of Girls through Digital Learning. As part of this program, 150 digital labs are being established throughout Pakistan at the women empowerment centers at a cost of Rs. 300 million. Through this program thousands of girls are being trained at state of the art computer labs under the coaching and training program of Microsoft that include computing skills, coding skills, and communication skills, coupled with coaching from industry experts.
- The Second wave of this program, at a cost of Rs 600 million, is being launched to train

over 110,000 girls per year at 245 girls schools of Islamabad. Through this mega project, the ultimate objective is to increase the employability potential of the women.

iv. National ICT Internship Program

- Unemployment of ICT educated graduates is a major challenge being faced by Pakistan. Further, the potential employers/companies are many times reluctant to hire these unemployed and fresh ICT graduates due to cost and related risks involved.
- In this regard, the National ICT Internship Program has been envisioned to provide opportunities to unemployed ICT youth to get professional experience as well as potential for future job placement. Further it shall also encourage ICT companies in utilizing ICT youth by mitigating risk these companies face in providing this opportunity to these graduates by paying for internees' stipends.
- The aim of this project is to impart training by placing 3,000 ICT graduate in ICT companies and IT departments of public and private sector organizations for a six months' paid internship. A stipend of Rs.15,000/- per month will be paid to an intern. A total of 30percent quota is being reserved for girls and 2 percent quota is being reserved for disabled candidates. Funds to the tune of Rs.284 million shall be provided over the 17 months duration of the program.

Infrastructure Development

i. Broadband for Sustainable Development

To connect the unconnected in the unserved and underserved areas of the country projects are being rolled out for the provision of 3Gtelephony and broadband services for unserved areas of Baluchistan and KPK. The total worth of these projects is Rs. 12.6billion approximately. These would serve a population of over 2 million in the areas including Khuzdar, Chagi, Awaran/ Lasbela, Kohistan, Washuk, Kharan and DeraBugti.

Khuzdar Lot

A subsidy of Rs. 2.4 billion has been allocated to serve 772 unserved mauzas of Khuzdar district having a total population of 300,000. In this regard, Rs. 438 million have been disbursed from July 2016 till March 2017.

Chaghai Lot

A subsidy of Rs. 1.3 billion has been allocated to serve 99 unserved mauzas of Chaghai and Maskhel districts having a total population of 140,000. In this regard, Rs. 243 million have been disbursed from July 2016 till March 2017.

waranLasbela Lot

A subsidy of Rs. 2.3 billion has been allocated to serve 269 unserved mauzas of Awaran and Lasbela districts having a total population of 200,000. In this regard, Rs. 466 million have been disbursed from July 2016 till March 2017.

Kohistan Lot:

A subsidy of Rs. 3.5 billion has been allocated to serve 1,283 unserved mauzas of Kohistan, Batagram, Mansehra, Torghar, Haripur and Abbotabad districts having a total population of 880,000. In this regard, Rs. 662 million have been disbursed from July 2016 till March 2017.

During current financial year, 759 mauzas have been provided with Telephony and mobile internet services. It is expected that approx. 350 more mauzas will be provided with the USF services by the end of this year. To cover the long standing demand for Telecom and Broadband coverage in FATA, Universal Service Fund(USF) projects will be launched in the coming fiscal year, thereby expanding connectivity and coverage to the whole of the country.

ii. Telecentres

- To minimize the information and communication gap (the digital divide) between the rural and urban communities, 500 Universal Telecentres are being established through the USF across the country.
- Each Telecenter will act as a resource center that will provide public access to

ICT services primarily for the people in unserved, under-served areas of Pakistan. In FY 2016-17, for 10 Telecenters, Rs. 230 million have been allocated.

Establishment of Information Technology Parks

- The Software Technology Parks (STPs) are a major factor in facilitating the IT companies and play a major role in the development of the IT industry. STPs house IT companies and professionals and act as software factories generating software and IT exports for the country every year
- A new state of the art IT Park in Islamabad is being established under financing from Korea Exim bank through the Economic Development Cooperation Fund (EDCF), spreading over an area of 47.7 acres of land. The construction of IT Park will be done in two phases on 14.9 acres of land. Cost estimate for first phase is USD 88.25 million for which loan agreement has been signed. It is expected that construction of IT Park will be completed by 2020.

F. Electronic Media

Pakistan Electronic Media Regulatory Authority

Pakistan Electronic Media Regulatory Authority (PEMRA) is a regulatory body established in March 2002 through an Ordinance to facilitate and regulate growth of Electronic Media in the private sector. The law was subsequently revamped as PEMRA Amendment Act-2007. The initiatives of the authority have contributed towards development of electronic media and generation of employment opportunities in the country.

Economic Contribution

Due to the government's investment friendly policies the country has witnessed a remarkable growth particularly over the last four years. This overall national growth has contributed significantly in the development of the electronic media industry in the private sector. According to estimates there has been a cumulative investment of approximately U.S \$4.0 billion in the electronic media industry in

Pakistan. Electronic media sector has generated direct employment for more-than 250,000 people of diversified skills and qualifications. With the current growth rate of more than seven percent per annum, it is estimated that the cumulative investment in the electronic media industry will surpass U.S \$5.0 billion by the end of the current financial year. This expansion in investment would have multiplier effect on increasing job opportunities for skilled media personnel and journalists, expanding work of media production houses, advertising agencies and proliferation of the performing arts.

A Milestone in Distribution Service Licensing

A land mark towards technological advancement in the history of Pakistan was achieved by the Authority in year 2016-17 in order to bring Pakistan at par with the other countries of the region in the field of electronic media. Bidding of DTH licenses is a feather in the cap of the present government which was only possible due to trust of the investors on the investment friendly policies of the government resulting in investment of US \$ 200 million. Besides creation of thousands of job opportunities, due to award of DTH licenses and to make it a success, it is inevitable to grant hundreds of new satellite TV channels and landing rights permissions, at least to an initial total of ranging from 150 to 250 channels which again would be a source of investment and job opportunities in the media sector.

Bidding for Award of FM Radio Licenses

The Authority also conducted bidding during the current 2016-17 for award of 52 FM Radio licenses in 50 cities across Pakistan which concluded at Rs. 253.690 million. Award of FM Radio licenses would also result in investment and job creation in the country besides ensuring free flow of information and encouragement of local talent.

Licensing Status

The Authority has so far issued the following number of licenses:

Transport and Communications

Licensing during 2016-17

Number of Licenses issued during 2016-17		
Sr. No.	Category	Number of licenses
1.	FM Radio Licenses	07
2.	Cable TV Licenses:	144
3.	Landing Rights Permission to TV channels	05

Source: Pakistan Electronic Media Regulatory Authority

Financial Contributions

PEMRA has deposited the following year wise amounts in the Federal Consolidated fund:

Financial contribution in national exchequer			(in Rupees)
Financial Year	Fines & Penalties	Surplus	Total
2012-2013	2,986,800	8,337,636	11,324,436
2013-2014	1,894,750	205,537	2,100,287
2014-2015	22,746,500	20,077,535	42,824,035
2015-2016	6,588,000	481,304	7,069,304
2016-2017	16,764,500	-	16,764,500
Total	46,150,550	29,102,012	80,082,562

Source: Pakistan Electronic Media Regulatory Authority

Pakistan Television Corporation Limited

Pakistan Television Corporation Limited (PTV) is the only public sector broadcasting channel which telecast national & international programs in big cities and also remote and economically backward areas of the country in order to keep the people of remote areas to aware about the current affairs of the country as well as the whole world. It also provides different entertainment, education and sports programs to the people enabling them to uplift their socio-economic conditions, to eliminate the existing disparity.

At present 7 multiple channels are broadcasting its different programs through PTV Home, PTV News, PTV Sports, PTV Global, PTV National, PTV Bolan and PTV World. The only PTV English News channel in Pakistan telecasting the information about Pakistan domestically as well as internationally.

AJK Television

PTV has established a TV channel in AJK with one TV center at Muzaffarabad and four Rebroadcast Centers at Kotli, Rawalakot, Bagh

Number of Licenses issued		
Sr.No	Category	Number of licenses
1.	Satellite TV Channels	91
2.	Landing Rights Permission to TV Channels.	24
3.	FM Radio Licenses	215
4.	Cable TV Licenses	4,110
5.	Internet Protocol Television (IPTV)	01
6.	Mobile TV (Content Provision) Service Licensing	05

Source: Pakistan Electronic Media Regulatory Authority

and Bhimber. AJK Television is also transmitting regional Kashmiri programs.

Rebroadcast Stations

PTV has planned to complete 7 Rebroadcast Stations (RBS) in following areas during 2016-17.

Punjab

Rebroadcast Stations at Kotli Sattian & Mian Channu.

Sindh

Rebroadcast Station at Badin and National News Bureau Larkana.

Khyber Pakhtunkah

RBS Buneer, RBS Pooran and RBS Astore.

Digitalization of PTV signals with collaboration of Govt. of China

During the visit of Chinese president to Pakistan an MOU has been signed between NDRC on behalf of Government of China and Ministry of Information, Broad costing and National Heritage on behalf of Government of

Pakistan to harvest benefit of the project of digital terrestrial multimedia Broadcasting (DTMB) technology. In the first phase a Digital terrestrial multimedia Broadcasting (DTMB) technology pilot project for transition / migration to Digital transmission system for PTV's terrestrial network has been established at RBS Murree by M/S ZTE corporation for demonstration of PTV Terrestrial network. If this DTMB pilot project validated qualitatively and quantitatively Govt. Of Pakistan will adopt the project of DTMB under Grant-in-aid from Government of China.

Number of registered TV sets holders as on December 31, 2016 are 16,544,603.

Pakistan Broadcasting Corporation

Pakistan Broadcasting Corporation (PBC) is one of the most important and effective electronic media, for the projection of government policies and aspirations of the people of Pakistan at home and abroad. PBC is not a commercial undertaking. It was not established to earn profit from its broadcasts. It aims to provide information, education and entertainment to the masses through radio news and programmes of high standard. It also counters adverse foreign propaganda and negative perceptions. Radio is playing significant role in promoting Islamic Ideology and national unity with the principles of democracy, freedom, equality, tolerance and social justice. It promotes national and local languages, culture and value. It also helps in discouraging sectarianism, provincialism and terrorism.

Performance/Achievements During the current financial Year 2016 - 17

- PBC Stations/Channels extended wide range publicity and coverage to the National Action Plan. Achievements and sacrifices of Pakistan Army and other Law Enforcement Agencies in fight against militants, extremists and anti-state elements were highlighted with full spirit as a

national cause.

- PBC continued the comprehensive campaign to extend full support of the entire nation to the Pak Army in anti-terrorism Operation against Terrorism. This campaign is still going on-air in the following formats, from all Stations/Channels (MW/SW/FM) National Networks of PBC:
 - i. Slogans
 - ii. Talking Points in Compering
 - iii. Pep Talks
 - iv. Interviews
 - v. Impressions/Comments
 - vi. Discussions
 - vii. Features
 - viii. Debates
 - ix. Patriotic Songs
 - x. Promotional thematic Songs

Women Programme "Sukhi Char"

This special National Hook Up programme of 50 minutes duration is dedicated to women and family welfare. Awareness about women & children health, education, security, social & legal rights and women empowerment is disseminated on national network.

Introducing New Radio Formats

New Radio formats like radio shows, youth shows, morning/ evening/ night chitchat shows with phone-in, SMS/ phone request show, popular music & light musical programmes have been launched from FM-93, FM-94 and FM-101.

14th August 2016 – Azadi Show:

14th PBC broadcast special programmes in Urdu and all regional languages, special programmes in connection with Independence Day — 2016 from V^t to 14th August, 2016 from all Stations and channels. These programmes included talks, features, documentaries, national songs, interviews of workers of Pakistan Movement, extracts from speeches of Quaid-e-Azam Muhammad Ali Jinnah, dramas, special azadi

shows and Mushaira.

Increase in Transmission Hours of Saut-ul-Quran Channel

The transmission hours of Saut-ul-Quran Channel have been enhanced from 5 hours to 19 hours in 2015-16. 15 new channels of Saut-ul-Quran have been established in 2016-17 this number will be increased up to 40 by 2019-20.

Enlarging FM-101 Network

This year, 10 FM-93 Stations have been converted into FM-I 01 to enlarge the network of 9 FM-101 stations to 19 in order to produce more opportunities for procurement of commercial business for PBC. As a result, listening of PBC has also been increased.

New Programmes/Songs Launched		
1.	Total number of New Programmes launched in Urdu and 23 Regional languages	78
2.	Total number of New Talent/Voices introduced	202
3.	Total Number of Major Programme Activities	845
4.	New Songs Recorded in Central Productions Units of PBC	64

Source: Pakistan Broadcasting Corporation

Pakistan Post Office

Counter Automation System

Over One hundred GPOs including renovated post offices / sub offices throughout Pakistan have already been provided with counter computerization facility for the better service quality to the customers through a LAN based system.

Centralized Software Solution for Financial Services²

An Industry standard off-the-shelf solution “Riposte Essentials” from M/s Escher Group has been implemented. Currently Electronic Money Order Service (EMOs), Online Computerized collection of all utility bills through Centralized Software Solution & BISP Services has been implemented at the 83 automated GPOs. While rollout of Military Pension Payment System at 82 GPOs and 03 HPOs have been implemented too. However, Savings Bank, PT Records and Child Support Programme are in customization stage which will soon be implemented in 83 GPOs.

- In order to facilitate the poor patients across the country and provide them high quality facilities for medical treatment, the Prime Minister of Pakistan launched "Prime Minister Sehat Card Scheme" last year. The afore-cited Sehat Scheme has been in

progress in Punjab, AJK, Gilgit-Baltistan & Balochistan and will soon be extended to the remaining parts of the country. All Stations of PBC comprehensively highlighted the significance of this scheme. Publicity of Prime Minister Health Card Scheme is still underway.

Computerized Pension Payment System

Pakistan post is disbursing pension to more than 1.55 million pensioners of defence forces. During the year 2014-15, it paid an amount of Rs.102 billion to pensioners through its wide network of Post offices, while during the year 2015-16 the amount paid to pensioners stood at Rs. 113 billion.

During the past two years Pakistan Post took a number of steps to improve the efficiency in this field. The operations of Military payment were shifted to computers from 2003 on LAN basis but during the last two years the data of all defence forces pensioners has been shifted on Centralized Software System which has added value to our services. Its major benefits are as under:-

- Payment of Pension is computerized in all the General Post Offices through Centralized Software Solution (CSS).

- Data of all General Post Offices (GPOs) migrated to centralized server, based on centralized server and database architecture.
- Payments are updated on real time basis.
- Software is capable of handling any number of transactions.
- Availability of room for further extension to more locations.
- Sharing of information with all stakeholders on MIS.
- Ensures real-time monitoring.
- Facilities instant electronic reconciliation.
- Enables enhancement of the services in future through.
 - ☞ ATMS
 - ☞ Readable Cards
 - ☞ Bio-metric integration
- Enables pensioner to draw pension from any (GPO) and eliminated chances of double payment.
- Reduction in number of complaints.

Benazir Income Support Programme (BISP)

A complete web-enabled tracking and monitoring system for disbursement of funds for Benazir Income Support Programme (BISP) has been evolved that includes continuous processing, monitoring and reconciliation of the specialized money orders scheme. The same is implemented at all 83 automated GPOs throughout Pakistan. Over, 48.4 million money orders have been issued up to 31st March, 2017 and an amount of around Rs. 133.817 billion has been disbursed.

During the first nine months (July-2016 to March-2017) of the current financial year 2016-2017 total 511.060 BISP Money Orders along with required funds for Rs. 2.337 billion were received from BISP authorities, out of which 96 percent Money Orders amounting to Rs.2.275 billion have been paid within prescribed period of time.

Achievements of Saving Bank

Pakistan Post is doing savings Bank work as an agent of Ministry of Finance on commission under Savings Bank Act 1873. Finance Division is paying commission on Savings Bank work @ 0.5percent. Savings Certificates are issued under Post office National Savings Certificates Act 1917 and National Savings Certificate Ordinance 1944. Seven thousand five hundred post offices are providing the following Savings Bank services to the people of Pakistan:-

- Savings Bank Ordinary Accounts.
 - Special Savings Accounts.
 - Defence Savings Certificates.
 - Special Savings Certificates.
 - Regular Income Certificates.
- a) The progress of Saving Bank during the period 2015-16 is shown as under:-
- i. Total number of Accounts..... Rs.930,338.
 - ii. Total closing balance on
30-06-2016..... Rs.167,745.545 (M)
 - iii. Total commission on
30-06-2016..... Rs. 1,016.153(M)
- b) 7500 Field Offices of Pakistan Post play a vital role in mobilization of financial resources through Savings Bank Schemes. Saving Bank is also being shifted from manual work to CSS which will add the value of the business.

Western union money remittance business:

During the first nine months (July-2016 to March-2017) of the current financial year 2016-2017, Pakistan Post has received the foreign remittances amounting to US \$ 50.062 million equivalent to Rs. 5,240.880 million.

International Postal Services.

- Pakistan post has mail links with all countries of the world except Israel. Exchange of mail is carried out under rules and regulations of the Universal Postal Union. Direct mail links exist with 107 countries and rest of the mail is exchanged

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by utilizing the transit facilities of intermediary countries.

Dues for imbalance of international mail received from and dispatched to other countries.

(a) Achievements in International Postal Services

- Pakistan post dispatches more volume of mail than it receives for delivery. Thus it always remains net-creditor. Pakistan Post received an amount of Rs.30.783 million during the period from July 2016 to February 2017 on account of Terminal

(b) First Micro Finance Banking (FMFB)

Pakistan Post has earned Rs. 8.1 million during the period July, 2016 to March-2017 through commission on disbursement / recovery of First Micro Finance Bank (FMFB) Loans and services / space provided to the Bank operators. Details break up is as under:-

Sl. No	Description	Rs. (in million)
01	First Micro Finance Bank (FMFB) Loan Disbursed	718.496
02	First Micro Finance Bank (FMFB) Loan Recovered	622.715
03	PPO Commission on Disbursement, Recoveries and rent Charges	7.762
04	Total Revenue Earned	8.106

Postal Life Insurance (PLI)

The updates on Postal Life Insurance for the period from July, 2016 to February, 2017 is given below:-

Fresh Policies

No of Fresh Policies Issued..... 10,875
 Fresh Premium Income..... 266.833Million
 Sum Assured 4,487.673Million

Policies in force

No of Policies..... 438,616
 Premium Income 3,322.259Million
 Sum Assured..... 73,909.410Million

(c) PHILATELY:-

The following Commemorative Postage Stamps have been issued during 2016-17

1.	Issuance of Commemorative Postage Stamp on Abdul Sattar Edhi (Philanthropist)	14-8-2016	Rs. 20/-
2.	Issuance of Commemorative postage stamp on centenary of the D.G.T.R. House (old custom house) Karachi	6-9-2016	Rs. 8/- each design
3.	Issuance of Commemorative Postage Stamp on Platinum Jubilee Habib Bank Limited	23-9-2016	Rs. 8/-
4.	Issuance of Commemorative Postage Stamp on Pakistan and Belarus Joint Issue	5-10-2016	Rs. 20/- each design
5.	Issuance of Commemorative Postage Stamp on 50 Years of Establishment Diplomatic Relations Between Pakistan and Singapore Joint Issue	18-10-2016	Rs. 8/- each design
6.	Issuance of Commemorative Postage Stamp on 100 Years Celebrations of The Rotary Foundation	20-11-2016	Rs. 8/-
7.	Issuance of Commemorative Postage Stamp on Sesquicentennial Celebrations Lahore High Court	26-11-2016	Rs. 8/-
8.	Issuance of Commemorative Postage Stamp on Celebration of National Voters Day Election Commission of Pakistan	7-12-2016	Rs. 8/-
9.	Issuance of Commemorative Postage Stamp on Dinshaw Byramji Avari (Philanthropist)	18-12-2016	Rs. 8/-

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10.	Issuance of Commemorative Postage Stamp on National Stamps Exhibitions 'Pakistan 2016, Karachi.	30-1-2016	Rs. 8/- each design
11.	Issuance of Commemorative Postage Stamp on International Year of Sustainable Tourism for Development-2017	1-1-2017	Rs. 10/- each design
12.	Issuance of Commemorative Postage Stamp on 13 th ECO Summit at Islamabad.	1-3-2017	Rs. 8/- each design

No. of Post Office as on 2016-17

The requisite summary of Rural & Urban Post Offices is Pakistan Post FY 2016-17 is as under:-

Urban	Rural	Total
2, 046	9, 450	11, 496

Conclusion

Recognizing the importance of transport system for the economic development, the government has emphasized on the construction of new

roads, rehabilitation of the existing system and attracted private sector for investment through public private partnership. CPEC is one of the mega project of the present government for creating links with the rest of the global economies which will not only provide regional connectivity but will promote peace, harmony and prosperity among all the neighbouring states. Provision of most modern communication system to the people of Pakistan and transfer of technology will also go a long way for the economic well being of the country.