



**Government of Pakistan  
Ministry of Information Technology and Telecommunication  
(IT and Telecom Division)**

**Year Book  
2015-2016**

## **FOREWORD**

Ministry of Information Technology and Telecommunications (MoITT) is entrusted to formulate policies aimed at improving National Information and Communications Technology (ICT) infrastructure and services, to transform Pakistan into a knowledge-based economy by ensuring provision of reliable and affordable Information and Communications Technology enabled services.

Rule 25 of the Rules of Business, 1973 requires every Division/Ministry of the Federal Government to prepare a Year Book on its activities and achievements during the year. The Year Book is prepared for information of the Cabinet as well as general public. The annual publication of this Year Book is also recognition of the public's right to information.

The Ministry of Information Technology and Telecommunications, therefore, in compliance with its responsibility has prepared its Year Book for the year 2015-16. The primary objective of this Book is to keep the public informed regarding the important activities undertaken by this ministry and organizations/companies/departments etc under its administrative control.

It is sincerely hoped that this Year Book will serve as a useful reference for public, researchers, and scholars interested in activities carried out by MOITT in this year.

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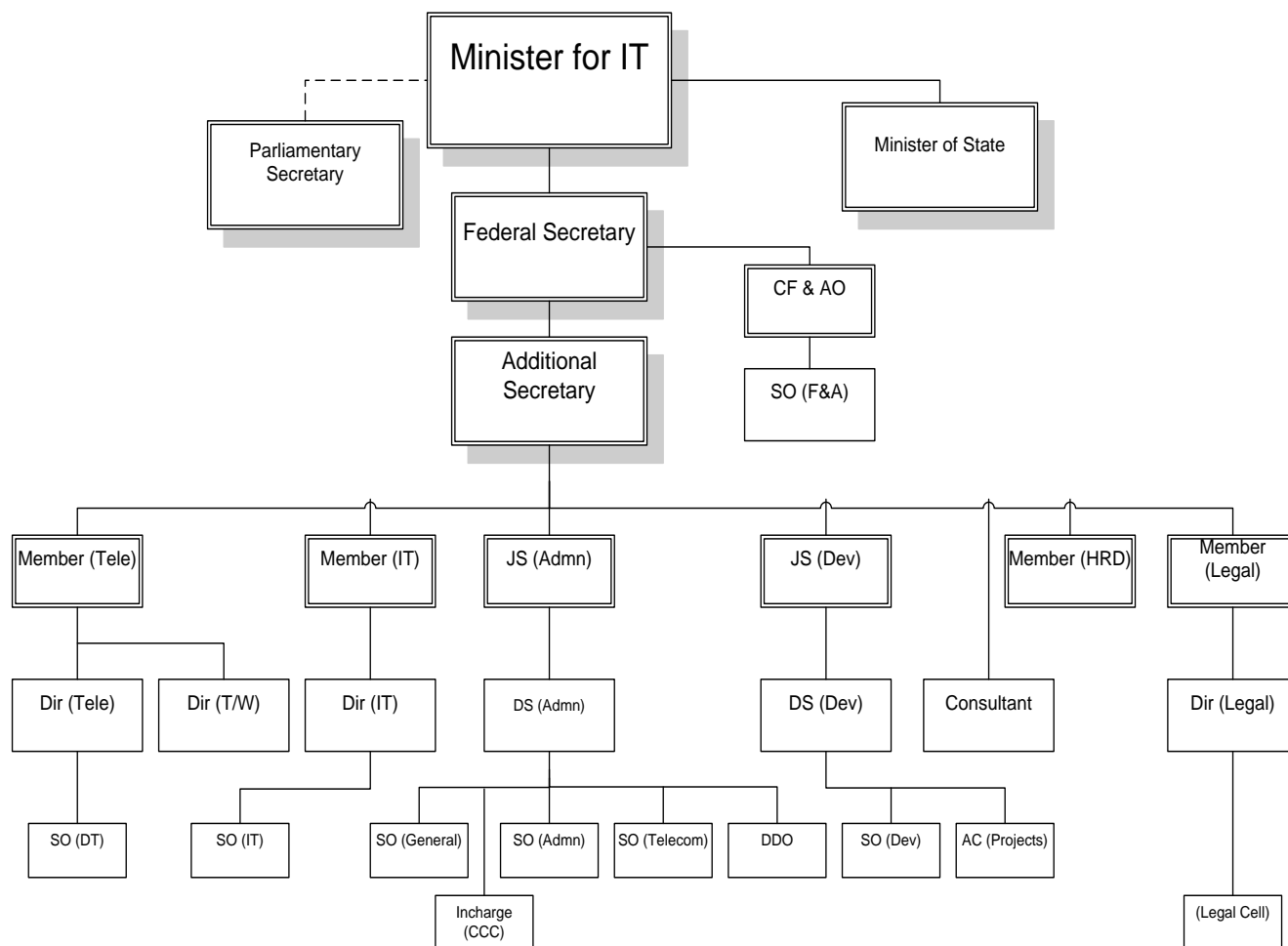
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Secretary IT

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**Organizational Chart and Functions of the Ministry of Information  
Technology and Telecommunication**

## ORGANIZATIONAL CHART



**Functions of the Ministry of Information Technology and Telecommunication:**

The Rules of Business 1973 (Sch II) have allocated the following functions to the Ministry of Information Technology and Telecommunications:

1. Preparation of an overall integrated plan as well as formulation of policy for the development and improvement of Information Technology and Telecommunications, including related infrastructure, in Pakistan.
2. Co-ordination with the Provincial Governments, autonomous bodies, private sector, international organizations and foreign countries in respect to Information Technology and Telecommunications.
3. Human resource development in the field of information technology and telecommunications.
4. Promotion of information technology applications.
5. Providing guidelines for the standardization of software for use within the Government.
6. Planning, policy making and legislation covering all aspects of telecommunication excluding radio and television and issuance of policy directives.
7. Matters relating to National Information Technology Board and Pakistan Software Export Board.
8. All matters relating to National Telecommunication Corporation (NTC), Telecommunications Foundation (TF), Special Communications Organization (SCO), Virtual University (V.U) and Electronic Certification Accreditation Council (ECAC).
9. The administration of the Prevention of Electronic Crimes Ordinance 2007, and the rules made there under.
10. Safeguard interest of Government of Pakistan in entities having public shares or government equity like PTCL, USF Co & Information and Communication Technology R&D Co.

**Administration Wing:**

Information Technology and Telecom Division has a total sanctioned strength of 151 officers and staff. The Division comprises Administration Wing, Telecommunication Wing, Information Technology Wing, Development Wing, Legal Wing and National Information Technology Board (NITB).

The administration wing is responsible for Human Resource Management and other administrative and logistical matters of the Ministry. These include HR related activities like appointments, promotions, discipline, capacity building, and other personnel matters. Another key feature is the coordination among all wings of the Ministry and with all Organizations under the administrative control of MoIT. Expenditure of funds as allocated in a financial year also falls under its jurisdiction including budgetary and expenditure controls, reconciliations with AGPR and re-appropriations. The Administration wing is also responsible for parliamentary business and coordinates with the two houses of the Legislature (National Assembly and Senate) and its various committees.

### **Activities during 2015-16:**

#### **Introduction of e-Filing system and Automation:**

During this year, MOITT achieved a major milestone when it switched over to e-filing and adopted important modules of the e-office application/suite. Training of staff members was carried out and a conducive environment was created to encourage all employees, IT skilled and un-skilled, to participate in this new work culture to improve and make efficient file submission and disposal system in the Ministry. Related support hardware for automation was provided to offices in this regard.

#### **Administrative and Financial Measures:**

Administration wing also reviewed/upgraded the delegation of financial powers document for efficient and transparent exercise of delegated powers. It also carried out re-structuring within the Wing and established a General Branch which did not exist earlier in MOITT to look after logistics and other services of the Ministry in a dedicated manner. A new “Council and Coordination Cell” (CCC) under the direct supervision of Deputy Secretary Administration was established to look after Parliamentary Business and other coordination issues in a dedicated manner. Vacancies of the post of Member HRD and Member Legal were filled along with vacancies of non-gazetted staff.

#### **Parliamentary Business:**

Parliamentary business included reply of starred and un-starred questions of National Assembly and Senate and briefs for meetings of standing committees and related sub committees were handled in this year by this Wing. Total 49 questions were received and replied during 2015-16. Out of 49 questions, 8 un-starred questions and 22 starred questions were received from National Assembly Secretariat, whereas, 11 starred questions were received from Senate Secretariat during 2015-16. Moreover, 10 meetings of the Standing Committees were held during 2015-16 including 5 meetings of the National Assembly and 5 of Senate Secretariat. These meetings were handled/coordinated by the Administration Wing.

## **Inter /Joint Ministerial Committees**

Inter-Ministerial meetings for preparation of agenda for Joint Ministerial Commissions (JMC)/Sessions between Pakistan and other countries is also dealt by Admin Wing through Foreign Affairs Division, Economic Affairs Division and Board of Investment. Proposals/MoUs/Agreements and other documents were submitted/signed/under process with different Countries in the field of Information & Communication Technology (ICT), Coordination with more than 70 Countries. Matters relating to Prime Minister's Directive, President Directive, and Secretaries Committee's meeting, Council of Common Interest (CCI) were also dealt by Admin Wing.

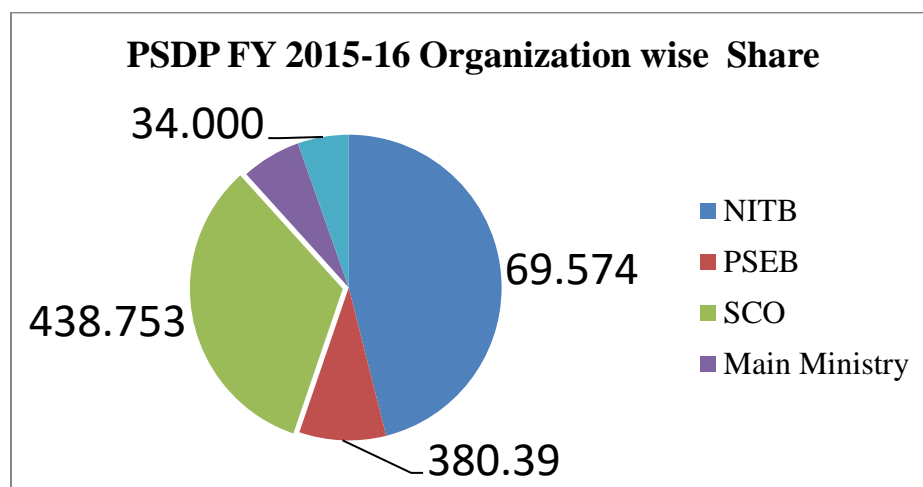
## Development Wing

The Development Wing deals with all PSDP work related to the Ministry of Information Technology and Telecommunication and the organizations/departments/companies/autonomous bodies under its administrative control. Examining and Processing of Public Sector Development Program (PSDP) schemes related to DDWP, CDWP & ECNEC. Focal Person of Project Monitoring and Evaluation System (PMES) is the Development Section in this Wing.

### Activities during 2015-16:

In Public Sector Development Program (PSDP) 2015-16, funds to the tune of Rs. 922.804 million were allocated to Ministry of Information Technology and Telecommunication for 15 PSDP schemes. The IT sector portfolio comprised 10 projects with an estimated amount of Rs. 475.964 million while the share of Telecom sector was Rs. 446.840 for 05 projects. During the year 2015-16, one meeting of Departmental Development Working Party (DDWP) was organized and nine (09) projects were placed for consideration of Departmental Development Working Party (DDWP). Four (04) projects were approved @ total cost of Rs. 179.0620 million. Development Wing also processed the cases of releases and adjustment of PSDP. Out of PSDP allocation of Rs. 922.804 million, the funds to the extent of Rs. 698.419 million were released during the financial year 2015-16. The following departments /organizations of MOITT benefitted from the PSDP programme as under:

SL	Name of Organization	No. of Projects	Allocation of PSDP 2015-16
1	Main Ministry	04	34.000
2	Special Communication Organization	04	438.840
3	Pakistan Software Export Board	02	380.390
4	National Information Technology Board	05	69.574
<b>Total</b>		<b>15</b>	<b>922.804</b>



In addition to the above, Development Wing also deals with the administrative and coordination matters of the following

1. National Information Technology Board (NITB)
2. Pakistan Software Export Board (PSEB)
3. Virtual University (VU)
4. Special Communication Organization (SCO)

**Telecom Wing**

Telecom Wing is a technical wing of IT & Telecom Division, providing input and support to the Ministry on all matters pertaining to telecommunications. The specific responsibilities of Telecom Wing are as follows:

- Formulation of telecom sector rules, policies and implementation frameworks.
- Evaluation of all proposed PSDP funded telecom projects submitted by attached departments of the Ministry before onward submission to DDWP/CDWP/ECNEC.
- Technical matters/issues pertaining to National Telecommunication Corporation (NTC), Special Communication Organization (SCO), Telephone Industries of Pakistan (TIP), Pakistan Telecommunication Employees Trust (PTET) and Telecom Foundation (TF).
- Evaluation/Resolution of Frequency Spectrum matters/issues in collaboration with Frequency Allocation Board (FAB).
- Evaluation/Resolution of technical matters/issues pertaining to telecom industry in collaboration with Pakistan Telecommunication Authority (PTA).
- Technical and administrative matters/issues pertaining to International Telecom bodies like International Telecommunication Union (ITU), Asia Pacific Tele-community (APT), World Trade Organization (WTO), Common Wealth Telecommunication Organization (CTO), South Asian Association for Regional Corporation (SAARC), International Mobile Satellite Organization (IMSO), International Telecommunication Satellite Organization (ITSO), IDA etc.
- Monitoring of Universal Service Fund (USF) and National ICT Research & Development Fund (R&D Fund) companies.
- Represents Government of Pakistan in joint Ministerial Conferences organized by various International bodies of the telecommunications sector.

Telecom Wing has taken a number of initiatives and made significant progress during the FY 2015-16. A major portfolio of the projects by the Ministry of Information Technology & Telecommunications (MoIT&T) is being implemented through National ICT R&D Company,

Universal Services Fund Company, Special Communication Organization, and National Telecommunication Corporation. These projects are discussed in detail under respective sections.

### **Policy Matters**

During the fiscal year 2015-16, the following policy initiatives were adopted:

#### **Telecommunications Policy 2015:**

The most significant achievement of the Ministry during the FY 2015-16 has been the issuance of the Telecommunications Policy 2015. The draft of the said policy was presented before the Economic Coordination Committee (ECC) of the Cabinet in August 2015. The draft was prepared after taking into account the feedbacks received from the stakeholders during various stages of consultations.

Subsequently, the Telecommunications Policy 2015 was approved by the ECC, under the provision of Section 8 of Pakistan Telecommunication (Re-organization) Act, 1996 (Amended 2006).

#### **Brief Overview of Telecommunications Policy 2015:**

The vision articulated in the policy is 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. The draft policy has included various new elements like competition framework, spectrum strategy, spectrum sharing, satellite communication, Over the Top (OTT) services, convergence etc., which were not present in earlier policies. It is expected that competition framework will make telecom market more efficient in terms of quality of service and choice of services available to the consumers.

Major new element of the new policy relates to provision of a wholesome treatment for frequency spectrum management in the country. The provisions like spectrum strategy, reforming, market mechanisms for more efficient use of spectrum coupled with provisions on infrastructure sharing will facilitate governing this scarce resource in a more efficient and market oriented manner which will ultimately benefit the users and spur further investments in the country. This policy also appreciates the phenomena of convergence related to delivery of diverse services belonging to the domains of telecom, media and data services. Roadmap for achieving convergence on both market and regulatory sides has been provided. Satellite communications and provision of bandwidth and retail broadband and telecoms through this medium have for the first time been addressed to structure and further grow the segment. Proper business flow under set parameters will provide more clarity to satellite telecoms based businesses while ensuring appropriate compliances. Enhanced and more innovative roles of Universal Service and Research & Development Funds are envisioned which are aimed at ubiquitous development of infrastructure and services across the country and promotion of demand driven and high impact research and innovation development activities in Pakistan. The Universal Service Fund (USF) will be utilized

for provisioning of telephony, internet, broadband services and establishment of tele-centers in underserved and un-served areas. Special projects to cater for specific needs of people related to telecommunication and ICTs will be undertaken. Provision of broadband access to education institutes and health care institutions is also made part of mandate of USF. Under this policy operators are enabled to deploy Wi Fi hot spots for public use.

Telecommunications Policy 2015 is expected to boost the Telecommunications as well as ancillary ICT sector markets spur socio economic development and will act as a catalyst towards achieving knowledge based society with digital inclusion of all segments of our society.

### **Spectrum Issues**

#### **2015-16 Next Generation Mobile Services Spectrum Auction:**

A successful and internationally acclaimed spectrum auction for Next Generation Mobile Services (NGMS) in Pakistan was conducted by the Pakistan Telecommunication Authority (PTA) in April 2014. As a result, the broadband data (3G/4G) market grew phenomenally. In a short span of two and a half years since the service launch by the operators, the broadband penetration, which was only 3% in 2013, now stands close to 20%. The strong growth in the market segment continues and broadband penetration is targeted to be 38% by 2020.

In view of the noted rapid growth and escalating demand of mobile broadband services, PTA was entrusted to conduct a market assessment survey to ascertain the requirement and demand of spectrum. In light of PTA's report, approval was sought from the Prime Minister to constituted an Advisory Committee for "Auction of Unsold Next Generation Mobile Services Spectrum in Pakistan" to examine/evaluate the market assessment report of PTA, finalize the policy directive and oversee the auction process. Accordingly, the said Advisory Committee was notified by this Ministry on 7<sup>th</sup> December 2015.

After lengthy and due deliberations, the committee in consultation with Ministry of Finance decided to place 10 MHz of 850 MHz band on auction at a base price of USD 395 Million. A policy directive to this effect was issued on 26<sup>th</sup> April 2016, after seeking approval from the Prime Minister, which entrusted PTA for launching a transparent competitive second round of auction.

As a result of auction process, PTA received a single bid from M/s Telenor by the end of deadline for submission of bids. The situation was reviewed by the Advisory committee and after perusing all technical, commercial, and legal aspects, PTA was advised to proceed with the award in accordance with the prescribed process. Accordingly, after completion of all formalities, NGMS license for use of 10 MHz frequency spectrum in 850 MHz band was formally awarded to M/s Telenor on 27<sup>th</sup> July 2016 at the base price of USD 395 Million. Due to the award of this much needed spectrum block to the telecom industry the pace of broadband adoption in the country as well as the associated socio-economic benefits will gain further momentum.

**Spectrum Planning:**

MoIT&T in coordination with PTA and FAB has started the process to develop rolling spectrum strategy every year for the succeeding three years which is one of the deliverables of 2015 Telecom Policy. As part of this exercise, MoIT&T/FAB has acquired the consultancy services of ITU which has delivered its first report.

**Revival of Inter-Ministerial Committee on Cellular Jammers:**

MoIT&T has recently reinvigorated the Inter-Ministerial Committee (IMC) which was formed in 2006 to authorize the installation of jammers in the context of national security. With Secretary IT as its convener, the IMC has representation from various government organizations and it is the only body that can authorize the installation of cellular jammers.

During the current cycle, IMC has processed plethora of requests for cellular jammers, and after due diligence only granted Provisional NOC to M/s Engro Fertilizers and M/s PARCO, which are nation's critical fertilizing and refinery facilities.

MoIT&T also significantly contributed in revising the outdated Standard Operating Procedure (SOP) and addressing the interference in jails due to jammers.

**Re-verification of SIMs:**

In January, 2015, in the particular context of the development of National Action Plan (NAP) against terrorism, it was decided that SIMs which were issued prior to implementing Biometric Verification of SIMs (BVS) will be re-verified using BVS and all unverified SIMs will be blocked. The process was completed successfully in May 2015 and currently 114.9 million SIMs, issued and verified under BVS regime, are operational in the country.

**International Coordination Activities**

To facilitate international coordination and liaison, Ministry established International Coordination Unit (ICU) in April 2007. The unit has been established with an objective to ensure that Pakistan stays at par with the developed nations in international collaboration in telecommunication sector, while actively participating in international forums for ICT and Telecommunication matters. The unit has been actively involved in the coordination and liaison activities with international/regional organizations like International Telecommunication Union (ITU), Asia Pacific Tele-community (APT), Commonwealth Telecommunications Organization (CTO), International Telecommunication Satellite Organization (ITSO), International Mobile Satellite Organization (IMSO), United Nations General Assembly (UNGA) – Sustainable Development Goals (SDGs), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations Commission on International Trade Laws (UNCITRAL), United Nations Human Settlements Programme (UN-Habitat), Internet Cooperation for Assigned Names and Numbers (ICANN), GSM Association (GSMA), South Asian Association for Regional Cooperation (SAARC), Economic Cooperation Organization (ECO) etc.

**Ministerial Level Participation in International and Regional Events**

With proactive engagement of the Ministry, Pakistan is now a very significant and active player on global telecom and IT fora and professional goodwill and image of the country has improved manifold. MoITT is responsible to organize and develop country's view point on the various agenda items of World Radio communication Conferences. The WRC is the most significant inter-governmental conference related organized by ITU-R (ITU Radio communication Sector) to allocate/assign spectrum for almost everything in the planet that requires radio frequency for operations. WRCs take place once every three-to-four years.

MoITT made an exemplary effort in registering country's viewpoint at the regional Asia Pacific Telecommunity - APT) and ITU-R levels for the 2015 WRC event. MoITT headed a working group (WG) that comprised members of PTA, FAB, Space and Upper Atmosphere Research Commission (SUPARCO), Civil Aviation Authority (CAA), Maritime Security Agency (MSA), Pakistan Electronic Media Regulatory Authority (PEMRA) and Cellular Mobile Operators. The WG submitted viewpoint on fourteen (14) agenda items to APT, endorsed position of the country on Preliminary APT Common Proposals for WRC-15, and was involved in several multi-country initiatives. At the WRC-15 Pakistan's delegation also made significant contribution which resulted in the additional allocation of 100 MHz for IMT (International Mobile Telecommunications) and 300 MHz for fixed satellite service through footnotes for the country. And importantly, the delegation's due diligence successfully blocked neighboring country's attempt to obtain entire Ultra High Frequency (UHF) Band i.e. 470-698 MHz for IMT which would have severe impact on Pakistan's broadcasting, defense and other existing services.

During the fiscal year 2015-16, the Government of Pakistan was represented at the following major international and regional events at Ministerial level:

- a. World Radio communication Conference 2015 (WRC-15)
- b. United Nations' General Assembly High Level Meeting on World Summit on the Information Society (WSIS)+10 Review
- c. United Nations' initiative of Digital Technologies for Sustainable Urbanization Network (iTSUN)
- d. 3<sup>rd</sup> High Level Governmental Meeting (HLGM) of the 55<sup>th</sup> Internet Corporation for Assigned Names & Numbers (ICANN)
- e. United Nation Educational Scientific and Cultural Organization (UNESCO) and International Telecommunication Union (ITU) Policy Forum

- f. Inter-Ministerial Roundtable on Information and Communication Technologies (ICT) For Universal Health Coverage (UHC) at 69<sup>th</sup> World Health Assembly
- g. World Summit on the Information Society (WSIS) Forum
- h. GSMA Mobile World Congress

### **International Recognitions**

The efforts of Ministry of Information Technology and Telecommunication (MoIT&T) at the following international platforms have been acclaimed and recognized globally:

- a. United Nations' International Telecommunication Union's Gender Equality and Mainstreaming (GEM-TECH) Award
- b. A representative of MoITT has been elected as Chair of the UNESCAP professional group to drive the Asia Pacific Information Super Highway Program
- c. Pakistan became a member of iTSUN

### **Capacity Building Activities**

MoIT&T as well as public sector telecommunication entities, including Pakistan Telecommunication Authority (PTA), National Telecommunication Corporation (NTC), and Frequency Allocation Board (FAB) benefitted from various training opportunities offered by ITU and APT. During the fiscal year 2015-16, approximately 25 fellowships were secured by MoIT&T. Officers from MoIT&T, PTA, NTC, FAB etc. received trainings and represented Pakistan at various international seminars/workshops/forums. The officials of MoIT&T also participated in the training courses of the United States Telecommunications Training Institute's (USTTI) arranged and funded under the Commercial Law Development Program (CLDP) of the U.S. Department of Commerce.

### **Regulatory Framework for Disaster Management Using ICTs**

Ministry of Information Technology & Telecommunication, sought technical assistance from ITU on "Regulatory Framework for Disaster Management Using ICTs" on BDT Asia-Pacific Regional Initiatives of "Emergency Telecommunications". The ITU assistance under the ITU

Asia-Pacific Actions and Initiatives was helpful in shape of international best practices & research, statistical data availability and professional help to advice on development of an implementation framework for disaster management using ICTs.

A delegation of ITU visited Pakistan from 15th – 19th February 2016. During the field mission, several meetings were arranged between the ITU experts and different stakeholders /Government entities of Pakistan related to Disaster Management i.e. MoIT&T, Pakistan Telecommunication Authority (PTA), National Disaster Management Authority (NDMA), Frequency Allocation Board (FAB), National Telecommunication Corporation (NTC) and Mobile Telecom Operators. A workshop was also arranged on 18<sup>th</sup> February 2016 at PTA regarding Emergency Telecommunications and its relation with ICTs. ITU delegation also conducted a survey through a questionnaire during the meetings and workshop and gathered all the required information, which was needed for drafting a report on the framework.

After the completion of the mission, ITU forwarded a draft report on “Pakistan Emergency Telecommunication Regulatory Framework (PETRF)”, for review. The draft framework of ITU will be treated as a baseline document, which will be further refined by PTA, in consultation with relevant stakeholders, as envisaged in the Telecom Policy 2015.

**Information Technology Wing**

- Finalization of initial Digital Pakistan (former National IT Policy) has been prepared. The consultation with relevant stakeholder will be contacted in next Financial Year.
- Craft concept papers and policy frameworks documents with regard to new initiatives relating to the IT sector.
- Formulation technical input documents on behalf of the Government of Pakistan for International forums like ITU, for Internet Corporation for Assigned Names and Numbers ICANN etc.
- Analyze and give technical input to the PSDP projects of IT sector in consultation with respective take holders on draft PC-1s for the approval of the DDWP/CDWP/ECNEC.
- Assist National Information Technology Board (NITB) and Pakistan Software Export Board (PSEB) on issues related to sourcing and procurement besides providing guidance on architecture, standards and other matters.
- Provide strategic technical input to other Government departments in regards to their respective IT projects.

**Activities during 2015-16:**

IT Wing has made significant strides during 2015-16. The brief snap is as under:

- E-Commerce Regulatory framework document is in lingered on.
- National Information Technology Board (NITB) has been established to spur the growth of Information Technology through successful implementation of e-Governance and up building the capacity of human resources. In this regard, necessary setup has been taken for the implementation of CCOR decisions.
- Preparation and Evaluation stages of پاکستان CCTLD (Country Code Top Level Domain) Registry as per ICANN International Domain Names (IDN). Fast Track Program was successfully completed in the preceding years. In 2015-16, a meeting of the main technical meeting was convened, whereby; NTC has been given the mandate of registry manager for the پاکستان. Registry operations. The complete case for the nomination of NTC, being the IDN, CCTLD, Manager, in consultation with relevant stakeholders including community has been submitted to IANA/ICANA for their approval.
- Consultation/meetings with Academia, IT industry, civil society, person with disabilities, Telecom Industry for their value added input for the digital legalization policy.
- Consultation meeting with relevant stakeholder for the preparation IDN, CCTLD پاکستان. Operational policy guidelines to be reformed by the IANA.
- MoIT hosted a one day workshop on “Internet Governance and role of different stakeholders in Islamabad on February 19, 2015. Many Internet organizations working in this field like APNIC (Asia Pacific Network Information Center), ICANN (Internet Cooperation for Assigned Names and Numbers), and ISOC (Internet Society) participated in this one day event. The workshop reviewed and discussed the mission and functions of Internet organizations and analyzed the scope of their activities within the region, especially in Pakistan. Participants were invited from local community, academia, Information and Communication Technology (ICT) industry, Business community, telecom operators, regulatory authorities, law enforcement agencies, and other relevant GoP organizations.

- Overseeing of e-Office suite implementation across Federal Ministries/Divisions. This software has been implemented in MoIT and is ready to be rolled out in other Federal Ministries/Divisions in a phased manner. Currently, e-Office Suite is being rolled-out in Twenty five (25) Federal Ministries / Divisions which include Prime Minister's Office, National Assembly Secretariat, Ministry of Planning Development and Reform, Finance Division and others. The hard files have been cut over in FY 2015-16 and the only files movement in the Ministry of IT will be on e-Office.
- IT Wing worked closely with UET, Lahore to complete the hiring process of Sultan Qaboos IT Chair at UET, Lahore, the said hiring is completed.
- Established Information and Communication Technology Knowledge Transfer Platform (IKTP) forum to interact with IT Industry. Different session on IT matters was held.
- Charted a road map for transition of IPV6 in Pakistan. A test bed has been implemented at National University of Science and Technology (NUST) and Muhammad Ali Jinnah University (MAJU)/CUST. The universities are working on the said initiatives.
- Provided support to GOP's major initiatives on Information and Communication Technology for development in various sectors like education, health & National security and presented the Government of Pakistan's standpoint on IT, at bilateral and multilateral International Forum.
- Studied, evaluated and delivered input on various proposals received from the private sector and government agencies.
- The Server Room of Ministry of IT has been strengthened in order to provide 24/7 IT services to the Ministry Officers/officials.

### **LEGAL WING:**

Legal Wing at the Ministry of Information Technology & Telecommunications includes the following:

- Member (Legal)
- Director (Legal)
- Dy. Manager (Legal)
- Law Officer

Legal Wing is headed by Member Legal who is responsible for all legal matters including drafting of new laws and rules and upgrading of existing ones by making appropriate amendments in accordance with the policies declared by the Federal Government from time to time.

The Legal Wing is also responsible for drafting and vetting of contracts on behalf of Ministry of IT and its attached department/organizations, preparing draft comments regarding pending court cases for and against Ministry of IT and its all attached departments/organizations and giving legal opinions on different legal issues and propositions. Further, Legal Wing also provide assistance to the Attorney General Office, AAG Office and DAG office to defend MoIT in different cases in all courts across Pakistan including the Supreme Court of Pakistan.

Another responsibility of legal wing is to give inputs on the laws drafted by other Ministries and Divisions directly or indirectly related to IT and Telecom, such as laws being drafted by Intellectual Property Organization (IPO), Trade Facilitation Unit WTO Wing of Ministry of Commerce, and State Bank of Pakistan and Securities and Exchange Commission of Pakistan (SECP) etc.

MoIT has also finalized the draft Prevention of Electronic Crimes Bill, 2016. In numerous cases Legal Wing has defended MoIT specifically legal wing got vacated stay granted by Sindh and Lahore High Court in International Clearing House (ICH) case by filing CPLA in Supreme Court of Pakistan.

All court cases, legal policies matter, acts and bills are dealt by Legal Wing. Legal Wing used to deal court cases of its attached departments and in recent past financial year ended on 30-06-2016 cases of the following departments/organizations were dealt in different courts across the Country, where MoIT was mainly a Performa representative.

- i. National Information Technology Board
- ii. National Telecommunication Corporation.
- iii. Telephone Industries of Pakistan (Pvt) Limited.
- iv. Universal Service Fund Company.
- v. Research & Development Fund/GMT.
- vi. Telecom Foundation.
- vii. Pakistan Telecommunication Company Limited.
- viii. Pak Data Com Ltd. (PDCL).

#### **Courts Wise Breakup for the year 2015-16**

<b>Sr. No.</b>	<b>Courts</b>	<b>Cases registered</b>	<b>*Disposed Off</b>	<b>In progress</b>
1	Supreme Court of Pakistan	37	20	17
2.	Islamabad High Court	77	62	15
3.	Lahore High Court	43	35	08
4.	Sindh High Court	49	48	01
5.	Peshawar High Court	11	06	05
6.	Balochistan High Court	01	01	-
7.	Gilgit Baltistan Chief Court	03	01	02
8	Others Court. Cases	52	27	25
<b>Total</b>		<b>273</b>	<b>200</b>	<b>73</b>

**\*Disposed off: means para wise comments filed in the court and counsel also briefed.**

**ORGANIZATIONS/COMPANIES / DEPARTMENTS OF MINISTRY OF  
INFORMATION TECHNOLOGY AND TELECOMMUNICATION**

**NATIONAL INFORMATION TECHNOLOGY BOARD**

National Information Technology Board (NITB) is mandated with broad range of technical guidance and consultancy services to the public sector for identification of appropriate areas for automation; including design, development, and implementation. Besides this, it lends technical assistance to various Ministries/Divisions for their respective IT operations, infrastructure, general purpose and application specific trainings, e-Government projects. Federal Ministries/Divisions/Departments and Provincial Governments are having due advantage of NITB's technical services, consultancy and advice. Provision of these services to government organizations across Pakistan has resulted in a very positive impact on the working of the Government Offices, and quick delivery of information and services to public at a large scale.

**Activities during 2015-16****e-Governance**

NITB is committed for the provision of e-Governance infrastructure and services in Pakistan under the administrative guidance of Ministry of Information Technology. "e-Office Replication at All Divisions of Federal Government (EOR)" is one of its flagship initiatives and a leap forward in this connection. It is an essential component of the "E-Government Strategy and Five year plan" which is approved by the National E-Government Council (NEGC) and the Federal Cabinet. It is also a component of the MTDF Implementation Plan for IT & Telecommunication sector. It is to ensure:

1. Increased Efficiency and Effectiveness of the Government
2. Increased Transparency and Accountability in decision making
3. Enhanced delivery of public services to Citizens efficiently and effectively

It will improve Pakistan's ratings in international e-Government index. Office automation of Federal Government Divisions/Organizations, and Provincial Organizations through E-Office Application Suite would ensure easy and secure access to the relevant information for decision makers and the general public. It shall greatly enhance the capability of government to respond quickly to the local and foreign stakeholders.

Strategically it carries various benefits like improvement in availability of data by utilization of technology and information systems in disposal of day to day business of the Ministries and administrative processes. Improve inter communication of Ministries. Promote automated solutions, such as HR, Inventory Management, Finance, Project Management, document imaging and workflow to create a more dynamic workplace and decrease obstacles in completing tasks. One of the major benefits is that it will promote standardization across the federal government that will eventually trickle down up to province and even district level.

NITB has fulfill the prerequisite steps for the successful e-Government implementation like creation of awareness among top management of Federal Government organizations through seminars & forums, requirement gathering, analysis, and e-Readiness assessment through formal survey of all the Federal Government. In last two years, following major activities have been taken for successful roll-out of e-Office Suite in Federal Government:

- Provision/access of e-Office application through PTCL Data Center

- Requirement Gathering and Gap Analysis of Ministries for identifying e-Office users by adopting survey methodology.
- Nomination of Focal Persons in Federal Government Divisions to form close liaison between NITB and all Federal Ministries / Divisions.
- Testing of Intranet connectivity of Federal Government Ministries/Divisions
- Departmental Capacity Building for Training of Federal Employees on e-Office.

### **Finalization of Multi Ministry e-Office**

To enable the application for Multi Ministry interaction, changes were identified and finalized; keeping in view the target assigned by the senior management of this Ministry Inter-Ministry communication features including, dispatching files, issuing letters, R&I, information sharing is added in the Multi-Ministry Application. On the directives/ recommendations of Minister of State for IT, another remarkable value addition is made in the Executive Dashboard of the Application; which shall now reflect the real time financial and administrative progress, not only of the Ministry/Division, but also of its attached departments and subordinate offices.

### **Requirement Gathering and Analysis**

Accurate assessment of needs and requirements (e-Readiness) is the foundation of success to roll-out the e-Office in Federal Ministries/Divisions. Therefore, due importance has been given to requirement gathering and analysis by adopting survey methodology.

### **Nomination of Focal Persons**

Focal Person plays critical role for successful roll-out of e-Office Application. Principal Accounting Officer (PAO) (Secretary of Division) is the owner of all e-Government initiatives in his/her Federal Ministry/Division. The PAO is assisted by a Focal Person (nominated by him, not less than BPS-20/21) who is to supervise and implement the e-Government activities on his behalf.

### **E-Government Intranet Connectivity amongst Federal Government Ministries/ Divisions**

Federal Government Divisions are connected with the Data Center through optical fiber Intranet. Sub-activities for the connectivity include but are not limited to identification of all the locations of Federal Government Divisions to Conduct Optic Fiber Cable (OFC) Survey, survey of Seventy three (73) Locations of Federal Government Divisions to check the availability of OFC, identification and provision of required active equipment.

### **Implementation of e-Office in Federal Ministries/Divisions**

On the basis of aforementioned activities, e-Office/e-Filing System is successfully implemented in various Federal Government Ministries/Divisions/Offices/Secretariats including Prime Minister Office, National Assembly Secretariat, Senate Secretariat, Cabinet Division, Establishment Division, Establishment Division, Foreign Affairs Division, Planning Division, Finance Division, Interior Division, Ministry of Information and Telecommunication, Economic Affairs Division, Railways Division, Ministry of Science & Technology. 100% Switch Over to e-Office Application in Ministry of Information Technology has been achieved. Configuration of e-Office Application in 15 Ministries/Divisions has been completed. More than 3500 Federal Government employees have been trained on e-Office Application. A prototype PC-1 has been circulated for the up-gradation of IT infrastructure to meet the requirements for the usage of e-Office application at Federal Ministries/Divisions. Considerable progress has been made by the Ministries/Divisions for the revamping of their IT infrastructures. Replica of the real system is

provisioned to all organizations for training purpose to have on hands experience before actual implementation.

### **In House System and Software Development**

NITB has developed different software and applications for various Federal Government Ministries/Divisions/Organizations:

- NITB in consultation with different divisions/Ministries/departments/ prepared different agency specific applications that includes web applications, websites, and desktop application.
- Data migration of human resource legacy systems of Establishment Division into e-Office has been completed.
- NITB has provided available resources to kick-off the activities in the said Divisions.

### **Prime Minister Internship Program**

It is a centralized online system dealing with the Applicant (Internee), Employer, Verification Departments & Stakeholders and Monitoring Entities including Prime Minister's Office, M/o Inter Provincial Coordination (IPC) etc. and their placement in different categories within minimum stipulated time connecting online. The system is to facilitate and boost the image of Government Departments jointly dealing with the online system. Through this system following government departments/stakeholders verify the applicant's data in terms of Age, Name, Degree, Diploma etc.

- National Database & Registration Authority ( NADRA ), for Applicant verification
- Higher Education Commission (HEC), for Applicant's Degree verification.
- Different Institutes in Federal & Provincial Governments, for Diploma verification.
- Different Bank for Applicant's Account

### **Personnel Management Information System (PMIS)**

Personnel Management Information System manages the personnel data of all government officers groups regarding to their career planning. It is being developed with in consultation with senior management of Establishment Division. This system is to be integrated with e-Office/e-Filing System.

### **Overseas Complaint Management System**

This complaint management system is part of the Information and Communication Technology monitoring and evaluation system at Federal Ombudsman Secretariat and provides the services 24/7. It plays the role of communication bridge between the complainant and the Federal Ombudsman and maintains online complaints and the resolution of the queries both settled and unsettled and weekly basis intimation/reporting to the complainant. [www.overseas.federalombudsman.gov.pk](http://www.overseas.federalombudsman.gov.pk) it has helped in clearing a large number of pending complaints. The system has three (03) interfaces:

- Online complaint registration (for citizens)
- Dashboard for Federal Ombudsman
- Portal for relevant agency/organization

**Water & Power Complaint Management System**

This Complaint Management System addresses the public complaints regarding various electricity supply distribution companies in the country working under the control of Ministry of Water and Power and provides the services 24/7. Record of the online complaints through system is maintained and it plays the role of Communication Bridge between the complainants and maintains online complaints. [www.mowp.gov.pk](http://www.mowp.gov.pk) it has helped in resolving large number of public complaints in the minimum possible time.

**Investors Management Information System**

Investors Management Information System has been developed for Board of Investment (BOI) to facilitate the local and international investors. The Investors are registered online through the website [www.conference.boi.gov.pk](http://www.conference.boi.gov.pk). BOI verifies these investors and sends them confirmation through web portal to attend the conference. The portal share investors related data with the investor's community. These investors provide the requisite information regarding their visa, hotel accommodation, conveyance etc. through this system. Moreover, this system provides various dynamic reports for analysis and decision making for the Senior Management of BOI.

**Processing of CDA Water Billing& Property Tax**

There are more than 70,000 consumers for which the software has been developed in-house by NITB. The earning of the systems is more than 1.8 million per annum. Presently, the said software system has been handed over to the beneficiary organization along with indigenous capacity building of human resource.

**Processing of Fifteenth Census of Federal Government Civil Servants.**

The software for the Establishment Division, Pakistan Public Administration Research Centre (PPARC) has been developed in-house by NITB. The 15<sup>th</sup> census has been started and this application is being developed in the open source web technology with extended features and requirements. Presently, the said software system has been handed over to the beneficiary organization along with indigenous capacity building of human resource.

**Information and Communication Technology Training**

The dynamic changing global Information and Communication Technology advancement has necessitated devising a comprehensive plan for Human Resource Development in Information and Communication Technology to cater for the overall requirements of the Public as well as Private Sector. NITB has arranged training program with the existing facilities by developing various IT training modules.

In last two years NITB organized aforementioned courses within their own premises. More than **7000** employees of various Departments have been trained.

**Development Projects**

National Information Technology Board (NITB) is endeavoring to implement the e-Government Programs of Federal Government of Pakistan in accordance with "IT Policy 2000", and E-Government Strategy and 5-Year Plan". The program is being implemented through its different projects in various Federal departments, organizations, and Divisions. In connection thereof, provision of basic Information and Communication infrastructure (ICT) has already been provided to the Divisions.

### 1.1 Hospital Management Information

System has been deployed in the following hospitals along with installation of networking facilities:

- 1) Pakistan Institute of Medical Sciences, Islamabad
- 2) Children Hospital Complex, PIMS, Islamabad
- 3) CDA Hospital, Islamabad
- 4) Sheikh Zyed Hospital, Lahore (Ongoing)

Based on “One Patient One ID” NITB has planned to host HMIS at a centralized location (National Data Centre) and serve all the Federal Hospitals.

### 1.2 Land Revenue Records Management System in Rural Areas of Islamabad

The aim of this project is to computerize the record which is maintained by the revenue officers and various related departments all across the Islamabad Capital Territory (ICT) in the form of registers. Scanning and indexing of 112/112 Mauzas. Data entry of 48/112 Mauzas. Data validation of 29/112 Mouzas was completed. Now as per directives of the PM Office, the said project has been handed over to beneficiary organization.

### 1.3 Automation of Prime Minister’s Secretariat Phase-II

The Project targets automation of all business processes executed by various sections / wings of the Secretariat. The development and deployment of Prime Minister's Office website [www.pmo.gov.pk](http://www.pmo.gov.pk) has been completed. The website is fully functional. The in-house deployment of the software modules Grievance Management System, Fund Management System, Case Management System and Visitor Management System is completed. All the modules are deployed and fully functional. The ICT infrastructure (i.e. LAN/WAN Connectivity, digital devices, security equipment,) was upgraded. State of the art security solution (SIEM) is being implemented to counter cyber-attacks.

### 1.4 Online Tracking System for Cargo Handling, Freight Wagons and Locomotives

Pakistan Railways has approximately 26,000 freight wagons and 100 locomotives which are involved in the transport of cargo. ICT-based solution was developed to track the Locomotives/Freight Wagons so as to enable Pakistan Railways to efficiently manage its cargo handling business. The said project is duly handed over to the beneficiary organization.

### 1.5 Online Recruitment for Federal Public Service Commission

A fully functional Online Recruitment System has been deployed to enable online management of applications for the positions advertised by FPSC for General Recruitment and CSS exams. The system automatically receives online applications, allocates seats according to the quota system keeps record of candidates’ results and posts interview schedules online. The system including hardware and software is now being upgraded as per new requirements of beneficiary agency.

**NATIONAL TELECOMMUNICATION CORPORATION****INTRODUCTION:**

National Telecommunication Corporation (NTC) has been established under Pakistan Telecommunication (Re-organization) Act, 1996 to provide secure and reliable telecom services to Federal / Provincial Government departments and institutions as the Federal Government may determine. For this purpose, NTC focuses to build, operate and maintain telecommunication system throughout Pakistan to fulfill the telecom needs of Government departments.

NTC faced great challenges since its inception. It started its operations with only five old vintage TDM based exchanges and analogue systems including obsolete Microwave and Co-axial cable network/system. With these meager resources, it was extremely difficult to cope with the tenacious demands and the high expectations of its designated customers. However, NTC has been successful in providing secure and reliable telecom services to public sector organization.

**MISSION:**

*“To provide secure and reliable Telecommunication Services to Government Departments/Organizations all over Pakistan.”*

**STRATEGIC PERFORMANCE:**

After establishment in 1996, NTC started to concentrate on developing its own infrastructure. Within few years, it aligned itself with emerging technological advancements by deploying Fiber Optic systems in long haul (4,117km) and metropolitan areas (1,517km) along with around 150,000 digital lines exchanges. Besides this, Special projects implemented like Pakistan Educational Research Network (PERN), Positioning of PAKSAT to secure and occupy the allocated Space Slot (2003), 15,000 ports DSLAMs, induction of GPON technology and MPLS (2008-09) were also successfully implemented. In order to keep itself abreast with technological advancements, NTC prepared a comprehensive plan to migrate its legacy TDM exchanges with latest IP based Next Generation Network (NGN) technology. Through this migration project, approx 54,000 Telephone and 14,000 Broadband ports have been developed which makes 35% replacement of TDM network.

After rigorous efforts and fast development plan, NTC network has been expanded from 54 districts to 84 districts/cities where both voice and broadband services have been extended. Telecom Services being provided to the customers include but not limited Intranet, e-mail, web-hosting, VPN, video conferencing, DSL and other customized services.

NTC is also initiated and played role in strategically important projects such as Safe City Islamabad, National Data Centre Project and equipping through sharing of resources by signing contracts with CMOs, PTCL, DHA, Multinet etc. under Public Private partnership. Moreover, Enterprise Resource Planning (ERP), security systems, Office Automation and biometric attendance have also been made operational to enhance efficiency and transparency. Present plans also include construction of regional office building at Peshawar, whereas buildings at HQ, Islamabad, Lahore, Quetta and Karachi are already in place.

In order to meet the future challenges, NTC has already started to prepare for meeting the upcoming demand of Internet of Things (IoT), Smart cities, Smart appliances, Smart meters etc. To play its role and facilitate CPEC, laying of OFC infrastructure along the CPEC Road alignment from Shikarpur to Gwadar and the establishment of Submarine Cable Landing Station at Gwadar have also been planned. The Gwadar Landing station will provide alternative route to existing Submarine Cable Landing station at Karachi. Besides revival of existing Coastal Highway (OFC) from Karachi to Gwadar is also being planned to provide telecom services at Gwadar and various other cities and Garrisons along the Coastal Highway. These projects once completed will completely change the outlook of NTC

#### **OPERATIONAL PERFORMANCE:**

#### **EFFORTS TO ENHANCE NTC SUBSCRIBER BASE:**

- To enhance NTC customers, a proactive policy adopted. MoIT, Cabinet Division and other heads of various Government Departments all over Pakistan including Armed Forces, have been approached to avail NTC services instead of Private Operators, highlighting the Govt. Directives and security implications.
- NTC officials were tasked to reach out to corporate clients/ Heads of various Government departments to avail ICT services only from NTC.
- As a result of these efforts, corporate clients from various Govt. departments such as PITB, PAF-Kamra, ANF, Forensic Science Laboratory, Neelum Jehlam Project Office, Punjab University, Cantonment Board, Army Kharian Cantt, NIBGE, Rescue-15, PIAES Nilore, NACTA, PINSTECH, PMD, AGI, NARC, World bank etc. started showing interest in getting Telecom Service from NTC.

- NTC has also announced an incentive of Rs. 200 per connection to its own staff such as Technicians and lineman etc for enhancement of subscriber base. The details of numbers (Increase/Decrease) is as under:

F.Y. 2015-16					
Regions	Targets	Presence as on 1st July 2015	Increase	Decrease	Presence as on 30th June, 2016
North	8737	53285	9824	9186	53923
Central	5385	34386	12050	10734	35702
South	6724	34003	7075	5345	35733
<b>Total</b>	<b>20846</b>	<b>121674</b>	<b>28949</b>	<b>25265</b>	<b>125358</b>

#### BROADBAND / DSL CONNECTIONS:

Working Connections			
Regions	1 <sup>st</sup> July, 2015	Increase	30 <sup>th</sup> June, 2016
North	8127	510	8637
Central	3682	1042	4724
South	3275	1376	4651
<b>TOTAL</b>	<b>15084</b>	<b>2928</b>	<b>18012</b>

#### DE-HIRING OF CO-LOCATIONS / MEDIA:

De-Hiring	2015-16
Media (E1)	35
Co-locations	8

Copper Pairs	303
Optical Pairs	1

**PUBLIC PRIVATE PARTNERSHIPS:**

In pursuance to its mandate and in conformity with Telecom Policy 2015, NTC signed agreements with various Telecom Operators in private sector under Public Private Partnerships. The purpose of such venture is twofold (a) to provide the latest ICT services to its subscribers and (b) explore possibilities to enhance subscriber's base, which resultantly expand the revenue base of NTC.

An overview of agreements is placed below:

**M/S MOBILINK**

The agreement with M/s Mobilink is to extend various packages for voice calls, SMS and 3G data services including provisioning of Smart Phone sets as part of the package of Government officials. The agreement also supports to address Mobicash solutions to Government departments like distribution of salaries/pensions and other relief funds desired to be distributed by the Government of Pakistan.

**M/S CMPAK**

It aims at to extend 4G LTE data services to NTC customers at geographical locations where NTC footprints are not available.

**PTCL**

NTC has rich history of professional collaboration with PTCL being emerged from single company and have similar nature of network in fixed domain. In line with Telecom Policy, 2015 NTC and PTCL have joined hands for extending NTC services through PTCL platform/network.

**DHAI-R**

The agreement extends the Telecom Services to NTC subscribers residing in DHAI-R through shared network. The same role model will also be extended to other DHAs locations in the country provided it is meritorious in terms of resources allocation and customer potential.

**M/S LMKT-GOSMART**

The mobile application will provide mobility to their existing NTC subscribers who will be able to use their fixed line services using the mobile application (GoSmart) anywhere using internet. Gosmart is a value-added service that enables a subscriber to receive and make phone calls using landline number via cell/mobile phone.

- Make and receive landline calls from your mobile phone anytime, anywhere.
- Calls can be made using WiFi/3G/4G media.
- Make audio calls and audio conference.
- Make video calls with GoSmart contacts.
- Receive calls on your landline even when away from home or office.
- Ensure safe and secure connections.
- Enjoy low cost international calls.
- Can be used during international travelling thus no international roaming charges.
- Government address book can be available through this application.
- Find contacts using the Government phone directory feature.
- Save important contacts to your buddy list.
- Text Messaging and files share including images, files & videos.

It will encourage NTC subscribers to use their Landline/ Fixed number, which will ultimately enhance RPU/NTC revenue.

**FINANCIAL PERFORMANCE:**

The Financial performance of the Corporation for the financial year 2015-16 is given here under:

<b>Particulars</b>	<b>2015-16 (Provisional/Un-audited)</b>
Revenue	2,985.20
Operating Cost	3,056.89
<b>Operating Profit/(loss)</b>	<b>(71.70)</b>
Other Income	334.10
<b>Profit before bank Charges</b>	<b>262.40</b>
Bank Charges	5.81
<b>Profit/loss before Taxation</b>	<b>256.60</b>

Net Budgeted (loss) as per Budget Estimates 2015-16 was projected at Rs. 99.10 million which is converted into Profit. Net profit before Taxation for the F.Y. 2015-16 was calculated Rs. 257 million. It shows that after recovery of loss of Rs. 99 million the actual recovery during the year is Rs. 356 million.

#### DEVELOPMENT ACTIVITIES:

During this Financial Year **15** x Development Projects have been approved by NTC Development Working Party (DWP) amounting to **Rs. 827.901 Million**. After approval from DWP and endorsed from NTC Management Board these projects are under execution as per time lines.

#### UTILIZATION OF ADP:

F.Y.	Budget (Rs.)	Actual expenditure	% Completion
2015-16	1,193	906	76%

#### MAJOR ONGOING DEVELOPMENT ACTIVITY:

Following are the major approved and ongoing projects for F.Y. 2015-16 for establishment of Telecom Infrastructure:

- Establishment of state of the art National Data Center with Cloud Services at Islamabad to host Government data at one platform and to improve security of data amounting Rs. 399.5 Million. The establishment of National Data Centre is the one hand with cater for E-Government need for hosting of Govt. data at a secure platform on the other hand enhance the revenue base of the Corporation by strengthening the financial health of the Corporation.
- Country Code Top level Domain (CCTLD) (پاکستان) NTC has taken the responsibility for managing, registering and administrating (پاکستان) domain name. NTC will host its domain space, including operations of DNS, registration and maintenance of (پاکستان) domain names. It will enable Pakistanis to register Domain names in Pakistani local languages and it will provide a platform for local content development in Pakistani languages. With this project, Internationalized Domain Names (IDN) Country Code Top level Domain (CCTLD) project will become a national registry. In this way, NTC

will become a face for (پاکستان) domain name like many other countries in the world, under ICANN Authority.

- c. Up-Gradation of TDM SDH to NG SDH STM-64 at Rawalpindi / Islamabad amounting to Rs. 74.6 Million.
- d. Up-Gradation of legacy TDM Technology exchanges to NGN/IP based exchanges at following locations to provide state of the art telecom services to NTC subscribers:-
  - i. MSU Pak Capital Karachi amounting to Rs. 179.697 Million.  
(Telephone connections = 6168 and 493 DSL connections).
  - ii. NTC Exchange Garden Town Lahore amounting to Rs.74.536 Million.  
(Telephone connections = 1898 and 207 DSL connections).
  - iii. MSU I-C, Islamabad Partial Migration.

#### **FUTURE/PLANNED PROJECTS:**

Projects have been initiated for establishment of NTC Telecom infrastructure at 03 x Colonies of PAF Kamra, 06 x Sites at Sindh (Tando Allah Yar, Tando Muhammad Khan, Mityari, Quaid-e-Awam University of Engineering, Science, & Technology Nawabshah, Ghotki, and Kandhkot), 03 x sites at Punjab (Pak Patan, Hafizabad, and Khushab), 03 x Sites at KPK (Swabi, Haripur, and Havelian).

**Universal Service Fund****a. Progress during FY 2015-16:**

Like several other countries, in order to spread telecom services to all unserved or under-served (usually remote and difficult) areas of the country, Pakistan Telecom (Re-organization) Act 1996 (Amended 2006) created a Universal Service Fund (USF) in Pakistan. Since its establishment, USF has designed different programmes to fill the gaps in existing telecommunication infrastructure coverage. Under these programmes, USF subsidizes setting up of infrastructure to make it possible for licensed telecom operators to provide services in un-served or under-served areas, on normal commercial terms. This process is transparent as the projects are awarded to successful Service Providers through open competitive bidding process.

In fiscal year 2015-16, USF continued its progress towards providing basic telephony and data services in rural areas, broadband services in 2<sup>nd</sup>/3<sup>rd</sup> tier cities and towns, optic fiber to connect un-served tehsils across the country and spreading the benefits of e-services throughout the country.

**b. Programmes:**

- **Rural Telecom Programme**

This hallmark programme of USF is designed to provide basic telephony and data (Internet) services to the unserved Mauzas across the country. After issuance of 3G/4G licenses by the Federal Government, this programme has been redesigned to include the broadband equivalent data (internet) services as a compulsory component. For new projects, powering of telecommunication site through Solar Energy has also been made a part of each project

Till the end of financial year 2015-16, a total number of **4,297** previously un-served muzas have been provided with basic telephony and data services (Total number of contracted muzas = **7,710**). All of these mauzas are remote and fall in rural areas. Before USF initiatives, people in these areas had to walk many miles to make even a single phone call.

- **Broadband Programme**

USF Broadband programme aims to deliver the social and economic benefits of ICTs to the masses through affordable broadband, thus helping to achieve Government's objective of breaking the poverty cycle and eliminating the social divide. This programme was designed to establish necessary telecommunication infrastructure and to provide broadband internet services to the urban areas of 2<sup>nd</sup> and 3<sup>rd</sup> tier cities. Additionally shared access points called Broadband Centers are also created for community as well as educational institutions likes schools, colleges and libraries.

Till the end of FY 2015-16, in Broadband program, subsequent to establishment of Broadband Infrastructure, **774,000** broadband connections (Total number of contracted broadband connections = **490,250**) have been provided along with establishment of **1,328** Educational Broadband centers (EBCs) (total number of contracted EBCs = **1,439**) and **366** Community Broadband centers (CBCs) (total number of contracted CBCs = **410**).

- **Optic Fiber Cable Programme**

USF is promoting development of telecommunication services in un-served and under-served rural areas of Pakistan to make basic voice telephony and data services, available throughout the country. Under this programme USF targets to provide unserved Tehsil Headquarters and Major Towns with Optical Fiber Connectivity. Optical Fiber Connectivity provides cost effective, reliable and scalable backhaul medium over which Voice and Data (Internet) traffic is carried from one location to another.

In Optic Fiber Program, more than **5,094** kms of optic fiber cable has been laid to connect un-served tehsils and towns till the end of FY 2015-16 (Contracted length of optic fiber cable = **6,785** kms).

- **Special Projects**

Various special projects have also been launched to provide benefits of modern ICT services to marginalized segments of population:

- USF implemented a project in FY 2015-16 for establishment of computer labs in 12 Pakistan Sweet Homes (orphanages) of Pakistan Baitul Maal. USF aims to demonstrate that the provision of ICT equipment can facilitate in extending the benefits of ICTs for educational purposes.
- USF, among other things, aims to utilize Information & Communication Technologies (ICT) in delivery of IT and e-Services in un-served and under-served areas so that underprivileged people living in such areas can get benefits of modern ICT services. In FY 2015-16, a contract to establish 50 computer labs has been signed. These labs will be established in Women Empowerment Centers being run by Pakistan Baitul Maal. Pakistan Bait-ul-Mal through Women Empowerment Centers (WECs) is building the capacity of women across Pakistan. The aim of the project is to provide equitable learning opportunities and a conducive learning environment to women in these centers so that they can be transformed into active and economically productive citizens of the global village.
- Establishment of Telecentres is an initiative being launched by Universal Service Fund to provide and expand the benefits of ICT facilities to the people in rural areas. This will also help bridging the digital divide between the rural and urban areas.

Telecenter will be a community resource center that will provide public with access to telecommunication services, primarily for the people in the un-served and under-served rural and semi-urban areas of Pakistan. Each Telecenter will be connected to internet through high speed broadband, powered through renewable energy, equipped with computers and other essential network elements (printer/scanner/copier/fax, etc), located at an easily accessible location, and provide essential services & e-services.

### Statistics

<b>Project Statistics for Rural Telecom Programme till the end of FY 2015-16</b>	
Contracted number of muzas	7,710
Muzas covered till the end of FY 2015-16	4,297

<b>Project Statistics for Broadband Programme till the end of FY 2015-16</b>	
Contracted number of Broadband connections	490,250
Broadband connections provided till end of FY 2015-16	774,000
Contracted number of EBCs	1,439
EBCs established till the end of FY 2015-16	1,328
Contracted number of CBCs	410
CBCs established till the end of FY 2015-16	366

<b>Project Statistics for Optic Fiber Programme till the end of FY 2015-16</b>	
Contracted length of optic fiber cable	6,785
Optic fiber cable laid till the end of FY 2015-16	5,094

c. Pictures









Pakistan Software Export Board (PSEB) is a body of the Ministry of Information Technology with the mandate to facilitate and promote Pakistan's IT Industry locally and internationally to grow IT exports. PSEB has been facilitating IT industry through a series of projects, programs and initiatives in international marketing, domestic facilitation, human/intellectual capital development, infrastructure development, company capability development, as well as promotion of innovation and new technologies. PSEB's governance structure consists of a 7-member Board of Directors including members from both government and industry. PSEB organizes its activities and its internal organization around **International Marketing, Infrastructure Development, Domestic Business Facilitation, Projects, Finance, and Data Node operations**. The aforementioned departments are funded through four sources of funding: A grant budget provided by the Ministry of Information Technology, registration fees contributed by PSEB member companies, funds generated through bandwidth provided to the IT companies, and PSDP "Public Sector Development Program" financed projects. PSEB does not produce its own software products or sell software developed by Pakistani Companies.

PSEB works extensively with public and private organizations, local and international trade associations, consulting firms, investors, venture capital firms, experts and media to bolster the local IT Industry and enhance cooperation with global IT Industry, associations and institutions. PSEB's core functions are summarized below:

- Undertake research and study regarding the state of Pakistan's Information and Communication Technology (ICT) sector, and propose strategies for sustainable development of Information Technology Industry.
- Analyze and take measures which have the potential of enhancing exports of IT Products and Services from Pakistan.

- Register IT companies in Pakistan and extend maximum facilitation to them. Act as a one-stop shop to cater to the needs of a prospective or existing IT company. Serve as a bridge between government and local IT companies.
- Convert buildings in good condition with sufficient space for IT companies to Software Technology Parks (STPs) after signing agreements with their landlords.
- Provide internet service at affordable rates to IT companies inside STPs.
- Plan, finance, and build new state of the art Software Technology Parks (STPs) in Pakistan.
- Arrange for Pakistan's IT companies to exhibit at domestic and international IT events to generate new leads and new opportunities for business by subsidizing space cost for them.
- Provide protocol, hosting and matchmaking facilities for foreign delegates and investors. Establish a web portal for customers, investors and companies, and prepare and disseminate marketing collateral.
- Build capacity of IT companies by subsidizing costs of quality, security and other international certifications.
- Build capacity of IT graduates by sponsoring their internships in different IT companies.

### **QUICK FACTS ABOUT THE INFORMATION TECHNOLOGY INDUSTRY:**

Pakistan has a vibrant and growing IT industry with more than 2,000 IT companies and more than 200,000 IT professionals with education and experience in latest IT tools and technologies. Pakistani IT companies are providing services to many large multinationals as their clients. Many international IT firms have established offices in Pakistan including IBM®, Intel®, Cisco®, Microsoft®, Oracle®, SAP®, Teradata®, Mentor Graphics®, Bentley®, S&P Global®, Ciklum® and many more indicating strong confidence of the international players in the competence of Pakistan's IT workforce and encouraging investment policies of the government.

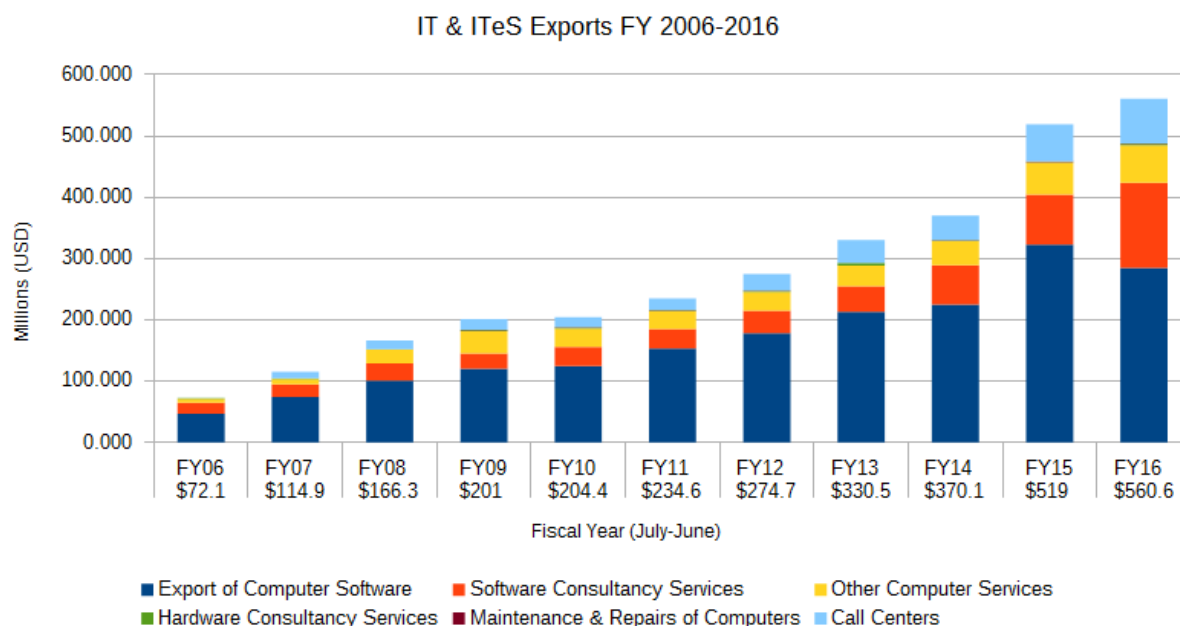
Pakistani IT companies have world's largest companies amongst their clients including Halliburton®, Motorola®, GE®, BMW®, Toyota®, Daimler Chrysler®, AT&T®, Vodafone®, e-Bay®, Pepsi®, Deutsche Telecom®, DHL®, KPMG®, ABN Amro®, NYSE®, British Petroleum®, Petronas®, Caltex®, Sears®, Telenor®, and many more.

Ministry of IT, through Pakistan Software Export Board, continues to support all credible private sector initiatives aimed at bolstering the local IT industry and to attract 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, 100% equity ownership allowed to foreign investors, 100% repatriation of capital and dividends allowed, and 7-year tax holiday for venture capital funds.

Pakistani IT companies have received recognition and awards at International events such as Asia Pacific Information and Communication Technology Awards (APICTA). Since 2010, Pakistan has won 30 gold or silver awards at APICTA in different categories including e-Learning,

e-Health, e-Government, security, supply chain management, startup, media, and financial applications. This is a testament to the immense IT potential of Pakistan.

## IT REMITTANCES



### Amount in Millions US \$

Year	IT Remittances (Million USD)	Estimated IT Exports (Billion USD)
FY2013-14	\$370	\$1.5
FY2014-15	\$519	\$2.1
FY2015-16	\$560	\$2.3

There has been a consistent growth in IT remittances over the last decade at a Compound Annual Growth Rate (CAGR) of around 23%. There has been a 51% growth in IT remittances over the last two years. According to a study conducted by Bearing Point, IT exports are estimated to be four times remittances because IT companies keep majority of their foreign earnings abroad to finance the operational costs of foreign office and staff and international sales and marketing. Hence, Pakistan's IT exports are estimated to have crossed \$2.3 billion a year at present and goal is to cross at least \$5 billion by 2020 and \$10 billion by 2025. Annual freelancing revenue is around \$100 million and annual domestic revenue is around \$500 million. Hence, total revenue of IT industry is estimated to be around \$2.8 billion a year at present.

In addition to exports, around \$150 million was invested in different Pakistani technology startups in 2015-16 including daraz.pk, careem, zameen.com, etc. demonstrating the confidence of foreign investors in Pakistan's IT Industry.

### **INTERNATIONAL MARKETING**

PSEB's International Marketing Department regularly undertakes initiatives to:

- Promote Pakistan as an attractive destination for outsourcing of IT related work.
- Improve perception of Pakistan's IT Industry in different international markets.
- Enable and facilitate interaction of Pakistan based IT companies with key international stakeholders such as investors and potential clients.
- Enhance IT industry specific co-operation and collaboration between Pakistan's public/private sector entities and international counterparts.
- Support and encourage all private sector initiatives that have the potential of playing a role in bolstering Pakistan's IT industry, foreign exchange earnings and improving Pakistan's share of global IT market.

### **INTERNATIONAL EXHIBITIONS & DELEGATIONS**

PSEB actively facilitates new business development for Pakistani IT companies. Exhibitions and trade fairs are an excellent platform to interact with relevant stakeholders (investors, buyers, sellers, and decision makers) at both public and private sector entities. Significant subsidies are extended to IT companies by PSEB to enable them to exhibit in key International IT exhibitions. For this purpose, PSEB constructs a Pakistan Pavilion which is utilized by the selected IT companies to market their respective products and services. Having a Pakistani IT Pavilion in key exhibitions projects Pakistan as a viable, feasible destination for IT outsourcing and investment and enables Pakistani companies to generate new leads for outsourcing, partnership, and investment. Since 2008, over 210 companies have been facilitated

by PSEB through financial subsidies to exhibit in local and international IT exhibitions. Many companies have generated good leads from these international exhibitions which convert to outsourcing, partnership, or investment opportunities later. Sales cycle from lead generation to proposal to signing of contract varies from 6 to 12 months.

### **International Exhibitions during 2015-16**

<b>Event</b>	<b>Country</b>	<b>Date</b>	<b>IT companies</b>	<b>Leads generated</b>
Gitex Dubai	UAE	Oct-15	14	150
China Hi Tech Fair	China	Nov-15	6	98
Mobile World Congress 2016	Spain	Feb-16	5	74
CeBIT	Australia	May-16	13	105
Pak US Business Opportunities Conference	USA	Jun-16	25	35
<b>Total</b>			<b>63</b>	<b>462</b>

During 2015-16, PSEB participated in five international events with sixty plus IT companies generating more than four hundred leads. Some of the leads have converted to deals of more than \$450,000 (PKR 47.25 million).

Local exhibitions provide an ideal platform for Software and Information Technology firms to showcase their respective expertise, interact with prospective customers and other stakeholders. In 2015-16, PSEB and member companies participated in local IT exhibitions which included ITCN Karachi, BYTES Islamabad, and RCCI Awards, Rawalpindi. PSEB also sponsored different industry events including PASHA ICT Awards, Lahore and Telecom & ICT 2016, Islamabad.

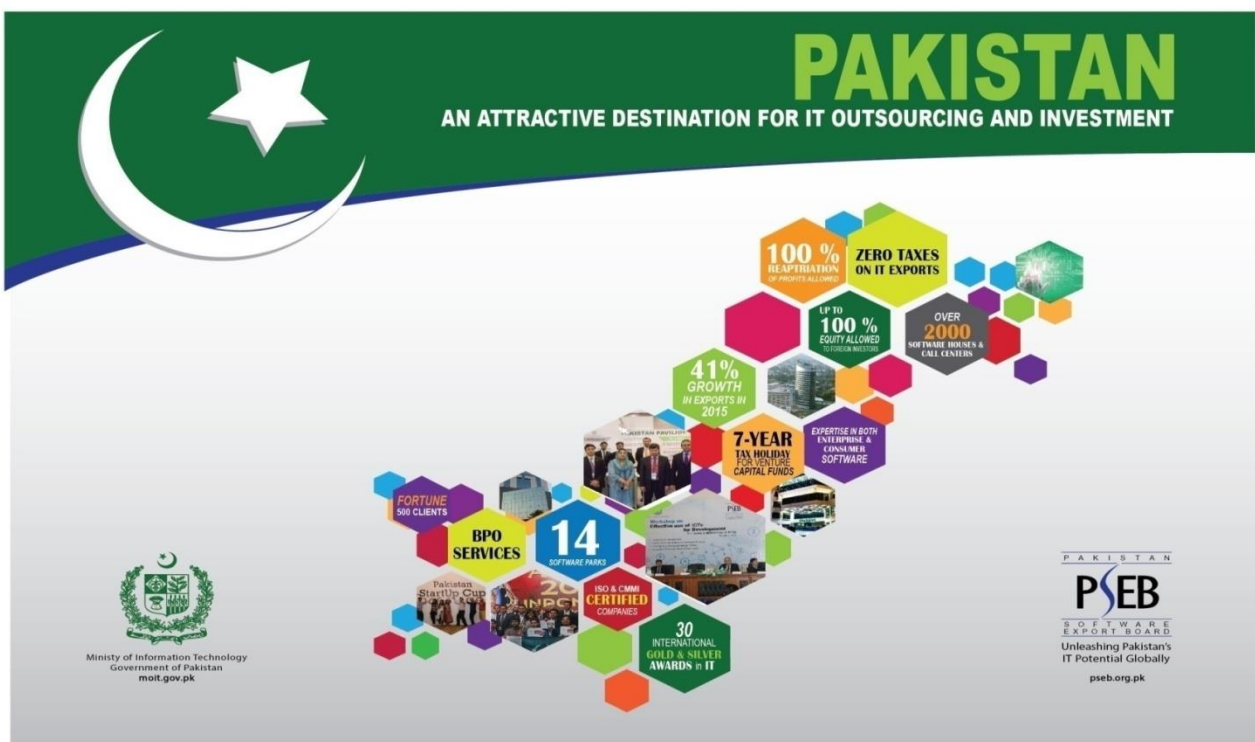
PSEB supports and encourages outbound delegations comprising of local IT industry representatives to create linkages with foreign IT companies. These delegations have represented

Pakistan's IT industry in many important markets such as the USA, UK, Canada, China and Malaysia over the past decade. In June 2016, a large delegation comprising of senior representatives of Pakistani IT companies and PSEB, led by Federal Minister of Commerce visited the United States for US Pakistan Business Opportunities Conference in New York. The conference attracted many representatives from US companies as well as US-based Pakistani entrepreneurs.

### **ONLINE MEDIA MARKETING, MARKETING COLLATERAL, PUBLIC RELATIONS**

The use of online media is important for marketing Pakistan's IT sector to foreign customers and investors and to improve perception of Pakistan in key IT outsourcing markets as a viable destination for delivering high quality software and services. PSEB has a comprehensive website with a complete directory including areas of expertise and contact info of more than thousand companies which are registered with PSEB. Social Media Channels such as Twitter, Facebook, YouTube and LinkedIn are being utilized to enhance both awareness and image of Pakistan's IT industry.

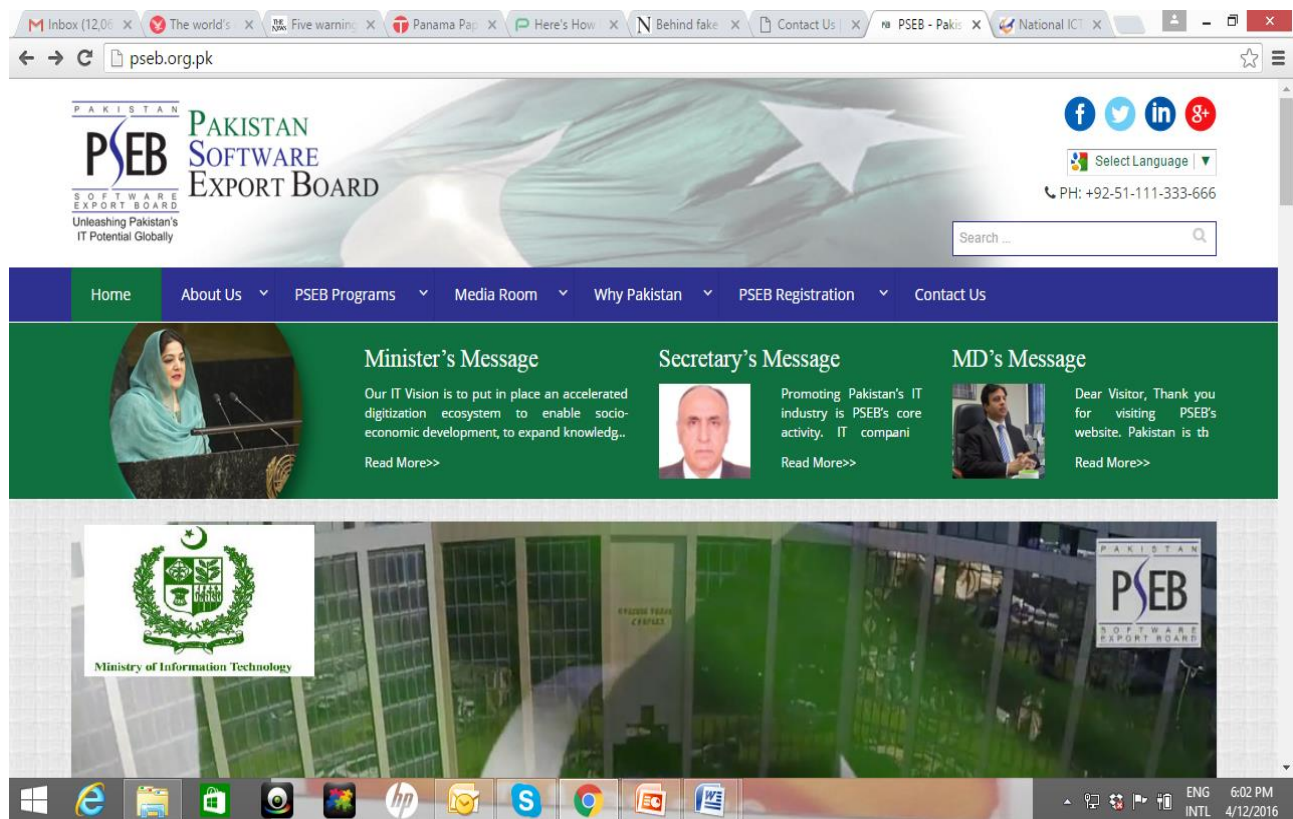
PSEB has created marketing collateral such as brochures, documentary, and presentations to project Pakistan's IT industry as a viable, feasible destination for IT outsourcing and investment. The brochure has been distributed at both international exhibitions as well as at local events.



Cover page of PSEB's brochure

**PSEB's DOCUMENTARY:**

PSEB developed a comprehensive video documentary titled “The Rising Tide” with the objective to market Pakistan’s IT Industry. The video highlights success stories of Pakistan’s IT industry, areas of expertise of Pakistani companies in software development and BPO services, and includes testimonials of both foreign and local stakeholders about Pakistan’s IT industry. The video has received very positive reviews and has gone viral on social media. The video can be watched on the home page of PSEB’s website.

**PSEB WEBSITE:**

PSEB’s website at [www.pseb.org.pk](http://www.pseb.org.pk) provides up-to-date information to PSEB member companies, website visitors, and foreign customers of Pakistan’s IT industry. The website has different sections including PSEB’s different industry programs, why Pakistan is a good option for outsourcing, news and media, company directory, and online registration forms for companies. The website is playing a vital role in creating awareness regarding achievements of Pakistani companies in a wide array of verticals.

PSEB website received a comprehensive overhaul in 2015-16 with a new design and new features including online registration for companies, a counseling center, company directory, and collateral which can be downloaded from the website including documentaries. Through the company directory, IT companies can now showcase their profile, areas of expertise, success stories as well as promotional information on products, and services. The website received more than 215,000 hits during 2015-16.

### **PSEB'S PARTICIPATION IN FOREIGN IT EXHIBITIONS & DELEGATIONS IN 2015-16**

#### **GITEX Dubai, October 2015**





**Mobile World Congress, Spain, February 2016**



PSEB delegation at CeBIT Australia, May 2016



**4<sup>th</sup> Pakistan US Business Opportunities Conference in New York, June 2016****DOMESTIC FACILITATION**

Domestic Business Facilitation Department is primarily responsible for registration and facilitation of IT and ITeS companies. As of June 2016, more than 1200 IT companies including 600 plus software houses and 500 plus BPO service providers have active registration with PSEB. Annual revenue from company registration crossed PKR 20 million in 2015-16. Islamabad, Rawalpindi, Lahore, and Karachi are the hubs of IT in Pakistan followed by secondary cities including Peshawar, Faisalabad, and Multan.

Registration of IT companies was previously handled manually by PSEB. This process has now been fully automated and moved online to PSEB's website. Companies have praised the online registration and renewal process because it has streamlined the process for both PSEB and member companies.

PSEB actively engages with IT industry and other stakeholders from the private and public sectors through meetings, seminars, conferences, exhibitions, newsletters, and emails to get feedback on different issues facing the industry. Domestic Department co-organized/sponsored and supported several major domestic events during the year including P@SHA ICT Awards in Lahore, Business Acceleration Program (BAP) of MIT Enterprise Forum of Pakistan (MITEFP) in Karachi, RCCI ICT Awards 2016 in Rawalpindi, Open Source Summit 2015 in Islamabad, and Telecon 2016 in Islamabad.



**MD PSEB receiving speaker's shield from Governor Punjab at RCCI ICT Awards, April 2016**

PSEB held workshops on entrepreneurship in Islamabad, Peshawar, and Karachi to coach IT Startups and SMEs on business planning and best practices in collaboration with MITEFP and leading CEOs from the IT industry as guest speakers. PSEB also organized an Industry Meet up with Minister of IT in April 2016 to discuss industry issues, taxation, government's expectations & KPIs, as well as IT policy.



**MOIT/PSEB meet up with IT industry, April 2016**

## **INFRASTRUCTURE DEVELOPMENT**

PSEB has leased 47.7 acres of land in Chak Shahzad Islamabad to build a state-of-the-art IT Park in Islamabad. The project titled “Site development and construction of boundary wall at PSEB’s site for establishment of IT park at Chak Shahzad Islamabad” was launched in 2015 for securing the land proposed for the new IT park. Almost 30% of the work has been completed by PWD so far and remaining work will be completed before June 2017.

### **IT Park in Islamabad**

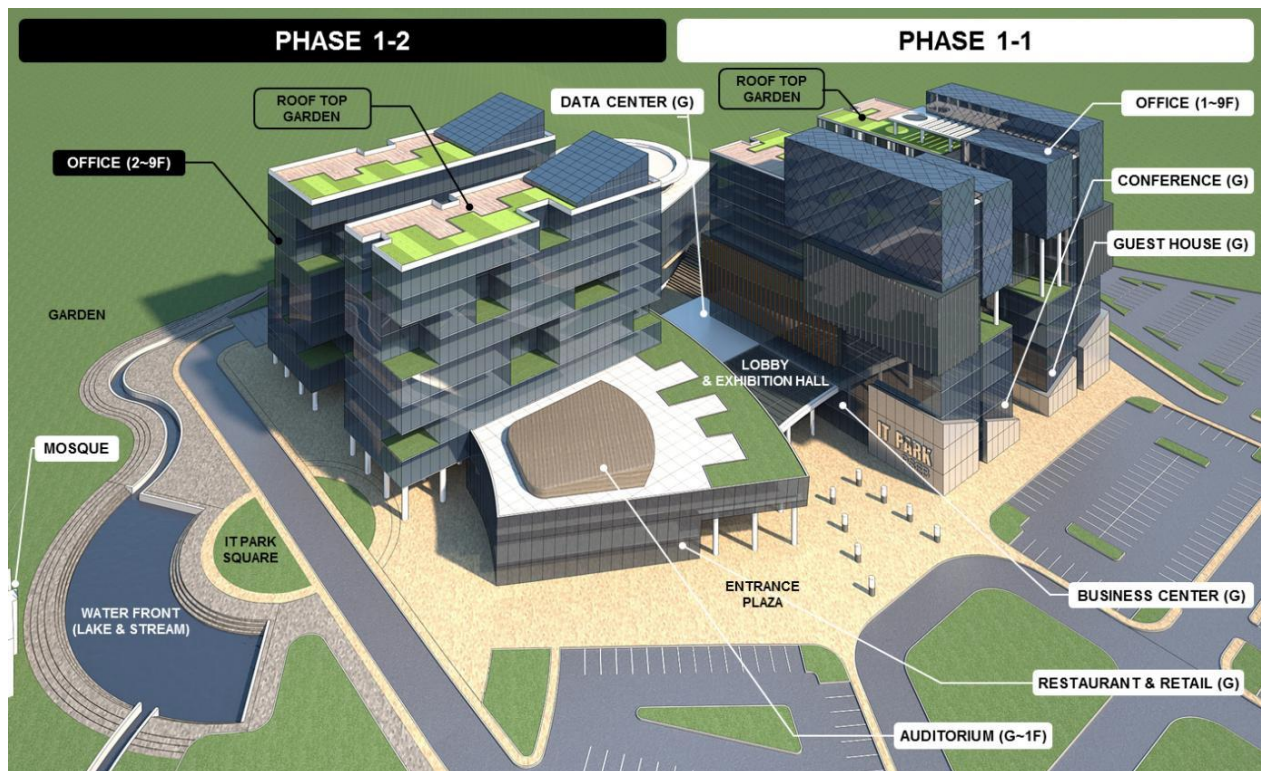
PSEB will be building a new IT Park in Islamabad under financing from Korea Exim bank through the Economic Development Cooperation Fund (EDCF). Feasibility study of IT Park has been completed by Korean consultants and PC-1 has been submitted to Planning Commission for approval from CDWP.

**Scope of the project:**

The site for proposed IT Park is located at Kuri Road, Chak Shahzad, Islamabad spread over 47.7 acres of land. The construction of IT Park will be done in two phases on 14.9 acres of land first. Project details are as follows:

- Land area = 60,247 m<sup>2</sup>
- Gross Building Area = 45,000 m<sup>2</sup>
- Gross Floor Area (including underground parking) = 61,000 m<sup>2</sup>
- Parking (Ground + basement) = 1,160 cars
- The building will accommodate 100~120 IT companies and approximately 4800-5000 IT workers.
- Total project cost = US \$ 88,253,911/-
- EDCF portion = US \$ 76,310,697/- (project loan to be repaid in 40 years)
- PSDP portion = US \$ 11,943,214/ = PKR 1,265,980,684/- (1USD=Rs. 106)

According to Korea Exim bank, loan agreement is expected to be signed by October 2016. This will be followed by tendering and selection of design consultant (3-4 months). Consultant will then create complete design and BOQ for the IT Park (8-9 months) followed by another 3-4 months for tendering and selection of contractor. According to the Korean consultants, construction is expected to take 2.5 years. Hence, expected time for beginning of construction is end of 2017/early 2018 and expected time for completion of IT Park is middle of 2020.

**Building Layout of proposed IT Park in Islamabad:****IT Park in Karachi:**

PSEB has acquired 6 acres of land from Civil Aviation Authority at Jinnah International Airport Karachi for establishment of IT Park. Lease agreement was signed between CAA and PSEB in October 2015. After tendering process has been completed, PSEB will start feasibility study for IT Park in Karachi during 2016-17.

**IT Park in Lahore:**

PSEB had made partial payment for leasing land from CAA for a new IT park near Lahore airport. However, CAA has informed PSEB that Government of Punjab has disallowed new construction near Lahore airport. However, Government of Punjab has connected PSEB with Lahore Knowledge Park Company (LKPC) for land for IT Park. LKPC is doing land valuation for leasing with a consultant and will share size, price, and location of land with PSEB after exercise has been completed.

**Details of Current STPs signed by PSEB:**

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. At present, there are 12 buildings which have been converted to STPs by PSEB by signing agreements with their landlords that they will keep rent affordable for IT companies and will

provide backup power to companies inside the STP. PSEB has setup a data node at each of these STPs to provide internet bandwidth to IT companies inside STPs. A list of operational STPs is as follows:

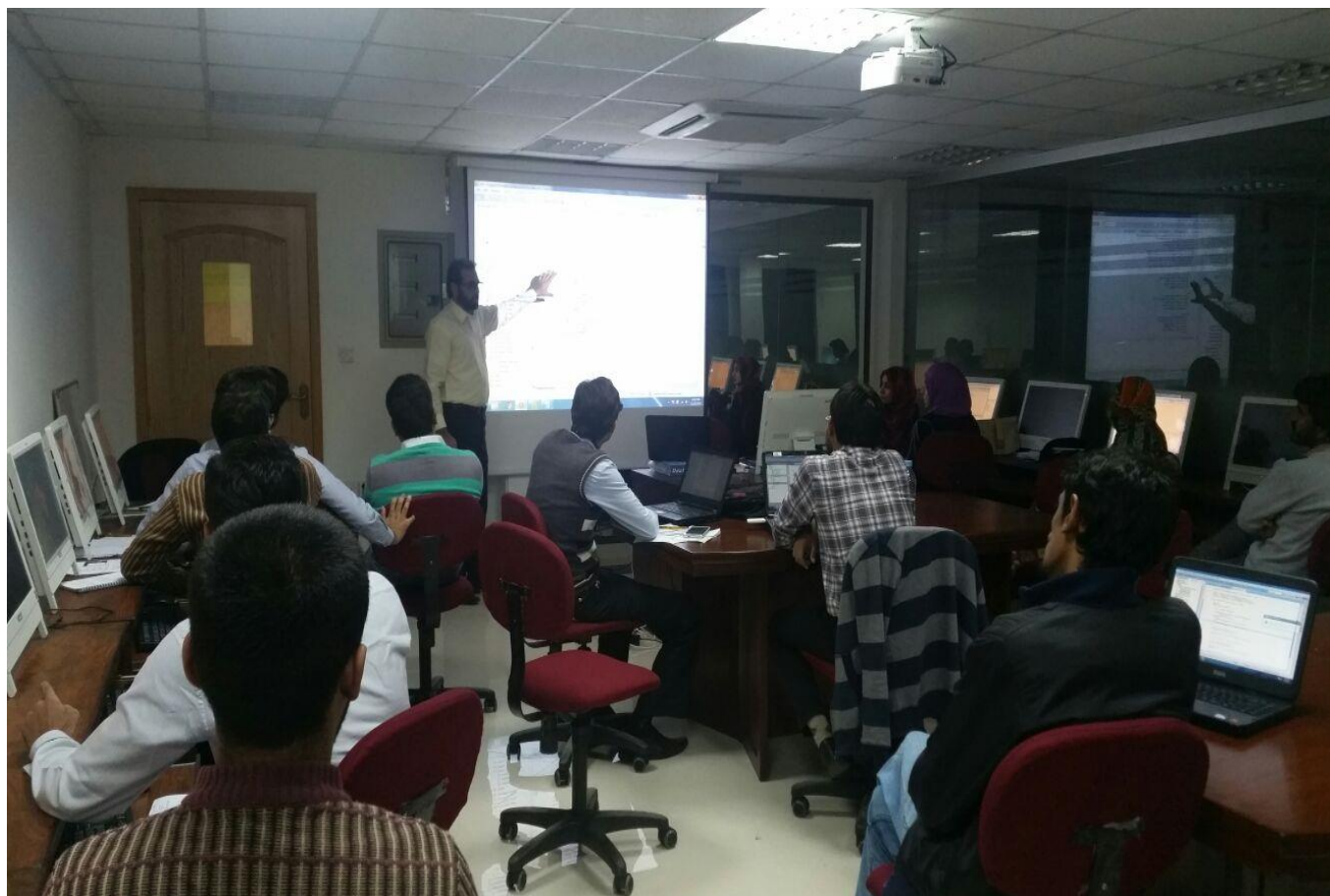
Sr. No.	STP Name	Rentable Space (Sqft)	Companies Working in STP
<b>Lahore</b>			
1	Aiwan-e-Iqbal Complex Lahore	80,000	6
2	NetSol IT Village	43,000	1
3	Imran House	28,378	2
4	JGC-Descon Engineering	34,000	1
5	Shaheen Complex Lahore	150,000	10
6	AHIL Complex	24,692	9
7	TRG	31,960	1
<b>Sub Total (A)</b>		<b>392,030</b>	<b>30</b>
<b>Islamabad</b>			
8	Awami Markaz	82,405	24
9	Evacuee Trust Complex	173,856	15
10	Rose Center	30,000	1
11	KSL	81,000	12
<b>Sub Total (B)</b>		<b>367,261</b>	<b>52</b>
<b>Karachi</b>			
12	Tariq Center	61,646	12
<b>Sub Total (C)</b>		<b>61,646</b>	<b>12</b>
<b>Total Space of All The STPs (A + B + C)</b>		<b>820,937</b>	<b>94</b>

Hence, at present, there are more than ninety IT companies who have offices inside these STPs.

### **PROJECTS:**

Following activities have been undertaken by the Projects department of PSEB in 2015-16:

- PSEB placed 400 ICT graduates in the IT Industry on 4-month internship. 60% of these interns were hired.
- PSEB trained 100 ICT graduates in Game Development, Android Application Development, iPhone programming, and frameworks programming (J2EE + J2ME) in Karachi, Lahore & Islamabad
- Training of 05 CMMI Auditors
- PC-1 titled “Enhancing IT Exports through Industry Support Programs” was approved by the CDWP in February 2016



**IPHONE AND ANDROID APPLICATION DEVELOPMENT TRAINING, LAHORE****TRAINING OF CMMI AUDITORS, Washington DC, USA, September 2015****TECHNICAL/DATA NODE DEPARTMENT**

PSEB Data Node Department is managing data nodes in Software Technology Parks in Lahore, Karachi, Islamabad, Peshawar and Abbottabad to facilitate IT companies with bandwidth and colocation services. These operations work successfully round the clock offering technical support to IT companies on a 24x7 basis. PSEB is providing 604 Mbps bandwidth to 130 IT companies in different STPs at present. Some achievements of data node department during 2015-16 are as follows:

- 1- Generated annual revenue of more than PKR 45 million.
- 2- Offered colocation as an additional service to reduce operational costs of IT companies.
- 3- Established technical infrastructure to launch PSEB Counseling Center for IT graduates, entrepreneurs and startups.
- 4- Migrated PSEB's network to IPv6 CIDR (Classless Inter-Domain Routing), the next generation Internet Protocol, and offering this IPv6 enabled network to IT companies also.
- 5- Reduced bandwidth tariff by 35% to make internet bandwidth more affordable for IT companies.

**PLANS FOR 2016-17:**

During 2016-17, PSEB plans on growing annual IT remittances by at least 30%. For this purpose, PSEB will hold seminars in different cities to guide IT companies for reporting their remittances on a regular basis. PSEB will also participate in different international exhibitions with IT companies to generate new leads and business for these companies. PSEB will also reward the top IT exporters of Pakistan last year through an awards ceremony. PSEB will launch its certification program for CMMI, ISO 27001, and ISO 20000 and will certify more than forty companies. PSEB will also place 1,500 IT graduates as interns at different companies. After loan agreement has been signed with Korea Exim bank for new IT park in Islamabad, PSEB will tender and select design consultant for detailed design and BOQ for the IT park. Based on budget approval, PSEB will conduct feasibility study for a new IT park in Karachi. PSEB's goal is to cross \$1.25 billion in annual remittances and \$5 billion in IT exports by 2020.

**SPECIAL COMMUNICATIONS ORGANIZATION (SCO):**

1. SCO has completed 40 years of continued devotion to the cause of expanding comprehensive ICT services to the people of far-flung & most rugged areas of AJ&K and Gilgit-Baltistan. During this journey, SCO has always strived for improved communication environment in AJ&K and Gilgit-Baltistan. The quality of communication facilities being extended to the local populace are comparable to those being provided in mainland.

2. SCO being Significant Market Player (SMP) has the unique honor of providing all types of communication, i.e Landline, GSM, CDMA, WLL, Internet (dialup & broadband) and Digital Cross Connect (DXX) to the people of AJ&K and GB. SCO has also progressively enhanced its transmission media capacities through Optical Fiber Cable (OFC), supplemented by Satellite & Microwave networks and presently in phase of launching 3G/ 4G services in AJ&K.

3. SCO, during the last one year remained committed in expanding state of the art telecomm facilities to the people residing in remote areas of AJ&K and GB. The progress made by SCO over the past one year has been in conformity to our commitment of providing quality telecom services and extension of digital technology from voice to data to our valued customers. Following four projects, have been completed during FY 2015-16:-

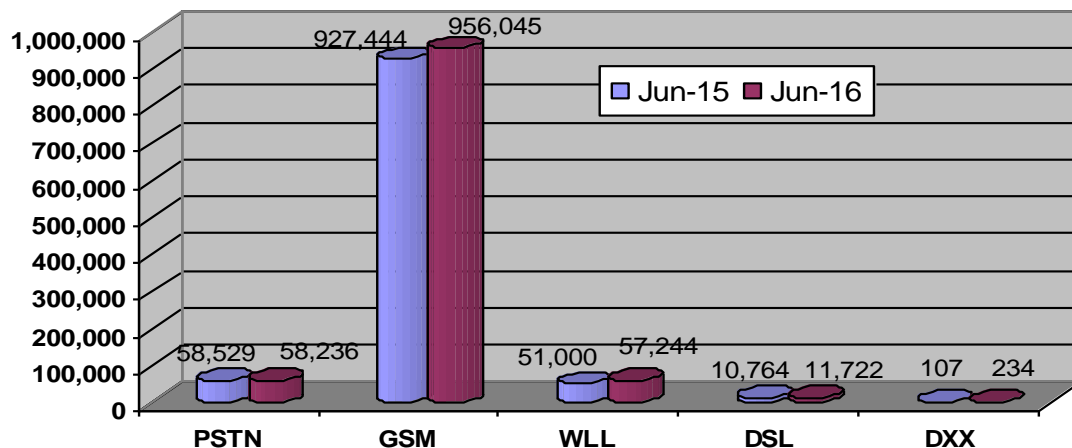
- a. Expansion of GSM Services in Gilgit-Baltistan
- b. Provision of GSM services in Neelum District of AJ&K
- c. Provision of Broadband Internet Services in AJ&K
- d. Provision of Broadband Internet Services in Gilgit Baltistan

#### 4. Achievements during FY 2015-2016.

Some of the milestone achievements are appended below:-

##### a. Subscriber Growth.

Overall subscriber growth from year 2015 to 2016 is as under:-



##### b. Declaration of Significant Market Player (SMP).

PTA has declared SCO as SMP in AJK / GB. The status of SMP is awarded to high ranking telecomm operator in different services offered in a particular region. It is indeed recognition of overall performance of the SCO and the services rendered to the people of AJ&K / GB.

##### d. Serving under served / un served area.

Exclusive coverage of SCO network in nearly 232 locations at present amply highlights the significance and importance of SCO's role in the area. Particularly, the most sensitive and under-served / un-served areas along Line of Control in AJK and far flung valleys in GB are only being served by SCO.

##### e. Socio-economic Uplift of the Area.

SCO has positively contributed in socio-economic uplift of the people of AJK / GB through following:-

- (1) Internet access at 800 educational institutions.
- (2) Voice / data facilities at 370 hospitals / healthcare facilities.
- (3) Voice / data services to Govt functionaries at more than 3000 locations
- (4) E-Banking and ATM services to over 170 financial institutions / banks.
- (5) Extension of voice / data services at 150 tourist locations.
- (5) Provision of telecom services at all crossing points in AJ&K and Sust Dry Port in GB.

## **Revenue Targets:**

SCO has successfully achieved overall assigned revenue targets above 100% in the last year.

## **5. Progress of Development Activities**

### **Expansion of GSM Services for Gilgit Baltistan.**

To meet the growing demand of SCO services, SCO planned Upgradation of GSM Core Network and Expansion of 100,000 subscriber base by adding 30 new BTS in remote areas of Gilgit Baltistan. Core network upgraded upto 350,000 subscriber capacity and 30 Software Defined Radio (SDR) BTS sites have been installed and commissioned alongwith civil infrastructure. Due to continuance efforts and hard work of SCO team the project has been completed.



b. **Expansion of Optical Fiber Network in AJ&K and Gilgit Baltistan:**

SCO has developed state of the art telecom infrastructure across the entire length and breadth of the area. Already laid 3,200 km OFC network extending telecom services in the area is highly significant. SCO is providing transmission and co-location facilities to other operators at 130 locations. A project is under implementation to address the ever increasing demand of high capacity bandwidth to extend latest telecom services to the local populace of AJ&K and GB. During last year 336 Km OFC was laid in remote and far-flung areas of AJ&K and Gilgit Baltistan.



c. **Construction of Cross Border OFC System between China and Pakistan for International Connectivity of Voice / Data Traffic.**

On completion of all pre-implementation formalities of Pak-China OFC Project, the project has been kicked off wherein work is being executed on various segments from Rawalpindi to Khunjrab simultaneously. This is the first ICT project being executed under CPEC umbrella. Due to its inherent potentials, it has a key role in supporting other projects being undertaken under CPEC. The ground breaking of the project was done by Honorable Prime Minister of Pakistan on 19 May 2016. The project has broad socio-economic dimensions especially for underserved regions by creating job opportunities for locals of the area while adding to the overall economic prosperity of remote locations.



d. **Provision of GSM Services in Neelum District of AJ&K:**

In order to provide GSM services a project “Provision of GSM facilities at 15 new sites in Neelum District of AJ&K” was planned which was approved on 11 April 2014. Project has been completed by installation of 1x BSC and 15 New GSM BTS sites in Neelum Valley.



e. **Launching of NGMS (3G/ 4G) Services in AJ&K:**

In order to upgrade existing GSM (2.5G/ 2.75G) network to Next Generation Mobile Services (NGMS) 3G/ 4G network in AJ&K, a project was approved by CDWP in Feb 2016. After tendering formalities / selection of vendor, SCO has signed a contract for launching NGMS 3G/4G in AJ&K. By execution/ implementation of project, the long outstanding demand of 3G/ 4G services by populace of AJ&K will be fulfilled and SCO will be able to provide quality mobile services to the people of AJ&K.



f. **Provision of Broadband Internet Services in AJ&K.**

SCO launched its broadband internet services in AJ&K in 2007. A project for expansion of broadband internet services in AJ&K was approved by DDWP. Project has been completed on 30 June 2016. A capacity of 3000 broadband subscriber has been enhanced in 30 cities / towns of AJ&K.

g. **Provision of Broadband Internet Services in GB.**

SCO was launched its broadband internet services in Gilgit Baltistan in 2008. A project for expansion of broadband internet services in Gilgit Baltistan was approved by DDWP which was launched in FY 2015-2016. Project has been completed on 30 June 2016, a capacity of 2000 broadband subscriber has been enhanced in 23 cities / towns of Gilgit Baltistan.

**National ICT R&D Fund****Vision**

To transform Pakistan's economy into knowledge based economy by promoting efficient, sustainable and effective ICT initiatives through synergic development of industrial and academic resources.

**Introduction**

The Company was established in 2006 by the Ministry of Information Technology, under Section 42 of Companies Ordinance. National ICT R&D Fund has taken up a challenging task of capacity building in the arena of ICT and nurturing it towards sustained development of a R&D culture in Pakistan. Joint Industry-academia research is one of the key vehicles used to promote innovation in the ICT industry and to promote a research culture in the academic institutions of Pakistan.

National ICT R&D Fund has the mandate to fund sound technical ICT centric R&D proposals. The organization believes in an accurate mobilization of its resources where emphasis is given to achieve technical excellence, innovation and its diffusion and positive impact on the economic growth of the country and for the benefit of the society at large.

**Technical R&D Projects Thematic Areas**

The Company has funded a diverse range of technical R&D projects within the ICT spectrum since its inception. The broad categories within which these projects reside are as under:-

1. Telecom Network Management Systems
2. Intelligent Mobile Devices
3. Innovative Services for Telecom Networks
4. SME Productivity Enhancement
5. e-Learning
6. Citizen Security
7. e-Health

**Funded Technical R&D Projects**

For the year 2015-16, Company has approved 15 Technical R&D Projects worth PKR 230.10 million. The projects have been approved in the following thematic areas:-

S. No	Description	No of Projects	Approved Budget (PKR million)
1.	Education	02	45.74
2.	Health	04	76.37
3.	Security	03	48.39
4.	Telecommunication	03	28.51
5.	Other	03	31.09

**Prime Minister's National ICT Scholarship Program (PM NICTSP)**

Since 2007, National ICT R&D Fund is implementing National ICT Scholarship Program (renamed in 2011 as Prime Minister's National ICT Scholarship Program) across all provinces of Pakistan including FATA and Gilgit Baltistan. The program was approved by ECNEC in February 2008 for a period of five years (2007-2011), as per parameters listed in the approved PC-1, for the total budget of PKR 2,414.84million in financial collaboration with PSDP (GoP).

About 4,761 fully-funded 4 year ICT-related undergraduate degree scholarships have been offered to the talented and deserving students of Pakistan under this program in top universities of the country. The program also includes the "Training of Teachers", "Principal's Orientation

Workshop" and "Foundation Training Program" components, through which teachers are provided refresher training in their respective subjects and in turn students are trained in the techniques to effectively solve MCQ-based university entrance exams, thereby giving them a level playing field with students belonging to metropolitan areas. It should be noted that the PC-1 of this program expired in June 2012.

The program was extended by the Board of National ICT R&D Fund for another 3 years i.e. 2012-14, whereby 500 scholarships have been approved for each subsequent year:

**Year-Wise Program Achievements**

<b>Program Summary</b>				
<b>Year</b>	<b>Training Imparted</b>			<b>Scholarships Offered</b>
	<b>Principals</b>	<b>Teachers</b>	<b>Students</b>	
<b>2007</b>	-	<b>700</b>	<b>6,100</b>	<b>390</b>
<b>2008</b>	-	<b>436</b>	<b>7,200</b>	<b>550</b>
<b>2009</b>	<b>200</b>	<b>600</b>	<b>9,000</b>	<b>737</b>
<b>2010</b>	<b>200</b>	<b>600</b>	<b>11,000</b>	<b>580</b>
<b>2011</b>	-	-	-	<b>918</b>
<b>2012</b>	-	-	-	<b>500</b>
<b>2013</b>	<b>169</b>	<b>509</b>	<b>7,008</b>	<b>548</b>
<b>2014</b>	<b>152</b>		<b>9,018</b>	<b>538</b>
<b>Total</b>	<b>721</b>	<b>2,845</b>	<b>49,326</b>	<b>4,761</b>

**Province – Wise Scholarship Allocation**

Province	2007	2008	2009	2010	2011	2012	2013	2014	Total
AJ&K	-	-	-	-	-	-	21	18	39
Balochistan	21	29	75	51	40	36	51	51	354
Fata	6	5	16	12	10	2	26	17	94
Federal Capital	-	-	-	-	-	1	-	4	5
Gilgit Baltistan	-	-	17	12	12	1	11	16	69
KPK	37	86	122	92	123	76	83	80	699
Punjab	219	305	350	295	529	270	256	251	2475
Sindh	107	125	157	118	204	114	100	101	1026
<b>Total</b>	<b>390</b>	<b>550</b>	<b>737</b>	<b>580</b>	<b>918</b>	<b>500</b>	<b>548</b>	<b>538</b>	<b>4761</b>

More than 2,500 scholars were studying under the program during the FY 2015-16. Out of these 2,500 students 1,418 scholars have successfully graduated during the FY 2015-16 and contributing in the economy or pursuing their higher qualification in national and international universities. 22 students of 2011 intake have graduated with distinctions:

Batch	1st Position	2nd Position	Total
2011	16	6	22

**National Grassroots ICT Research Initiative (NGIRI)**

National Grassroots ICT Research Initiative is aimed at assisting those undergraduate students of public and private sector universities who are enrolled in degree programs related to Information and Communication Technology (ICT) disciplines and have initiated their Final Year Projects (FYPs). The financial assistance under the program is aimed to enable students undertaking FYPs for building prototypes and working models in order to increase their creativity, innovation and hands-on engineering and development skills.

The program was launched in February 2012. The program is supporting the undergraduate students in order to increase their creativity and hands on experience by development of prototype/working model of their FYPs. Till date, four phases of the program has been rolled out and its details are as follow:-

Year	Participating Universities/DAI's	No of FYPs evaluated	No of FYPs approved	Amount Disbursed (PKR million)
2011-12	68	785	272	15.268
2012-13	78	1016	418	31.7
2013-14	72	1247	430	25.133

2014-15	75	1324	436	29.59
<b>Total</b>		<b>4372</b>	<b>1556</b>	<b>101.691</b>

Similarly, many of our funded FYPs have been awarded national accolades and have been recognized for their creativity and innovation.

For the year 2015-16, before continuing with the next phase, the BoD in its 41<sup>st</sup> meeting resolved, that PAC should reassess the program and provide its consideration for approval of BoD. Accordingly, the program with various modifications was presented to Project Appraisal Committee (PAC) for review in its 22<sup>nd</sup> meeting held in March 2016, wherein, the program was approved for one further year with total cost of PKR 37million including the cost elements for holding National Level competition. After its approval, the program was rolled out at the earliest. 1167 FYPs have been received which have further been forwarded to 34 Evaluators for further evaluation and making recommendations of FYPs for funding.

### **National Incubation Center**

In order to give impetus to innovation and promotion of ICT centric entrepreneurship in the country, National ICT R&D Fund under the auspices of Ministry of IT envisaged the National Incubation Center Project. National Incubation Center is a fully funded initiative of National ICT R&D Fund being outsourced to Mobilink as implementation partner.

The National Incubation Center is being established at National IT Board Building, located in H-9 sector of Islamabad. This would be the first and largest Incubation Center in the country funded by Federal Government. Total approved budget of the project is PRK 564million for the duration of 5 Years. The Incubation Center will be established in second half of the year 2016 and will start its operations subsequently.

### **Prime Minister's Scholarship Program for Talented Students of Baluchistan**

National ICT R&D Fund is also providing funding for the first three batches (2011-12, 2012-13, 2013-14) of 'Prime Minister's Scholarship Program for the Talented Students of Baluchistan' for a period of five years (class 8th to class 12th). The batch enrolled in 2011-12 has recently concluded its term and has graduated. Batches for 2012-13 and 2013-14 are currently being provided funding and will conclude terms in the next 2 years respectively. The total project funding is 675 Million Rupees. Scholarship covers tuition fee, boarding and lodging, bi-annual travel charges, stipend, books and stationary, uniforms and miscellaneous expenses. The scholarship award is applicable only to the students of 30 districts of Baluchistan.

Program is being executed by the Company in collaboration with Capital Administration and Development Division (CADD) and Education Department, Government of Baluchistan. Total disbursements made under the program stand at PKR 370million (approx). Below table shows the total number of students enrolled in various institutions across the country:-

S. No	Institution Name	Students Enrolled/Studying-FY 2015-16
1	Abbottabad Public School	12
2	Army Burn Hall College for Boys, Abbottabad	18
3	Balochistan Residential college Loralai	3
4	Baqai Cadet College Karachi	21
5	Cadet College ChohaSaiden Shah, Chakwal	28
6	Cadet College Hassanabdal	2
7	Cadet College Kohat	15
8	Cadet College Larkana	10
9	Cadet College Palandari, AJK	15
10	Cadet College Pasroor, Sialkot	12
11	Cadet College Petaro	17
12	Cadet college Pishin	1
13	Cadet College Sanghar	15
14	Fazlehaq College, Mardan	24
15	Heavy Industries Taxila Education City	42
16	Islamabad College for Girls	56
17	Khayaban Public School International, Lahore	17
18	Lawrence College, GhoraGali, Murree	14
19	Military College Jhelum	1
20	PAF public school Lower Topa	1
21	Pakistan International School & College, Abbottabad	9
22	Pakistan International School & College, Gujranwala	21
23	Pakistan Steel Cadet college	11
24	Pak-Turk International Schools & Colleges Islamabad	5
25	Public School Rashidabad, Tando Allah Yar	2
26	Sadiq Public School, Bahawalpur	17
27	The Chand Bagh School, Mureedkay	25
28	USWA Cadet College, Sihala, Islamabad	10
<b>Total</b>		<b>424</b>

**Establishment of Virtual University Campuses in Remote Areas of Pakistan**

This project was approved to fill the educational gap between urban & rural areas by establishing Virtual University (VU) campuses in remote areas of Pakistan. This project will have great socio-economic benefit by creating a pool of qualified professionals, especially IT professionals in underserved areas of the country, which is a national need. Total approved budget of the project was PKR 163million. The project has been completed and campuses in following locations have been established are operational:-

1. JalalpurPirwala (Purpose built campus)
2. Makhdoom Rashid (Rental campus)
3. QadirpurRaan (Rental campus)
4. Bahawalnagar (Rental campus)

**Establishment of ICT Blocks**

Establishment of ICT Blocks in pre-existing universities/institutions was approved for the benefit of the students and faculty of the respective university/institution through crowd-sourcing and related ICT activities that would ultimately enable them to develop and enhance the ICT knowledge to become active resource for the R&D initiatives in the country.

The project was approved for following universities/institutions with an approved budget of Rs. 20 million each:-

1. Lahore College for Women University, Lahore
2. The Islamia University, Bahawalpur
3. Aitchison College, Lahore

The ICT Blocks at Lahore College for Women University and The Islamia University of Bahawalpur have been completed and operational.

**Conclusion**

National ICT R&D Fund is committed to significantly enhance the ICT related research and development capacity of its stakeholders in meaningful ways. Company believes in an efficient mobilization of its resources where emphasis is given to achieve technical excellence, innovation which ultimately has a positive impact on the economic growth of the country and for the benefit of the society.

**TELECOM FOUNDATION****Background:**

Telecom Foundation (TF) was established in 1991 as Charitable Trust under Endowment Act, 1890 through S.R.O. No.1194 (1)/91 dated 04 November 1991. Main objective of the formation of Telecom Foundation was to provide welfare amenities like financial assistance/stipends to students and subsidized education to children of the beneficiaries i.e. in service and retired employees of Pakistan Telecommunication Company Limited (ptcl), National Telecommunication Corporation (NTC), Pakistan Telecommunication Authority (PTA), Frequency Allocation Board (FAB) and their subsidiaries.

Telecom Foundation has been undertaking telecommunication projects and other commercial ventures to generate funds to support its welfare activities. The Foundation is governed by a Board of Governors with Secretary IT as its Chairman.

**PERFORMANCE AND ACHIEVEMENTS:****1. Education:**

Telecom Foundation is running a chain of School Systems (12 Nos.) in different cities of Pakistan wherein beneficiary students are getting education on subsidized fee. Efforts have been made to improve quality education for which qualified teachers have been engaged. As present 2590 students are enrolled in TF School Systems with 278 teaching and non-teaching staff. The students of high schools have passed matriculation examinations with flying colors.

**2. Skill development programs:**

- a. Telecom Foundation is conducting skilled development programs in its Training Centers located in different cities with the following objectives:
  - To create awareness of emerging disciplines through skilled development courses.
  - To produce professionals in the following fields:
    - i. Telecommunication.
    - ii. Electronics.
    - iii. Electrical.
    - iv. Computer and IT related disciplines.
- b. About 2700 students were trained in TF Training Centers during the last three years in the following fields:
  - i. Optical fiber cables jointing & transmission.
  - ii. Mobile set repairing.
  - iii. Wireless local loop.
  - iv. GSM technology.
  - v. CCTV.
- c. TF also conducted training projects for National Vocational & Technical Education Commission (NAVTEC) (Prime Minister Training Programs) for 1400 un-employed

youth of the country. Another training program of about Rs.4 million is for 100 students is successfully running.

### 3. Business activities:

Telecom Foundation is currently registered with Pakistan Engineering Council in Category CB with a limit of Rs.3,000 million for construction/ operation of engineering works, telecommunication installation, external telecommunication works and general civil works under CE10, EE03, EE07, EE08 & ME01. Telecom Foundation undertake business and commercial ventures mostly in cable laying projects to generate adequate resources to carry out its welfare activities. Despite general recession prevailing in the country, TF has been able to procure some projects through competitive bidding during the last three years. Brief detail of projects obtained/ undertaken by TF is given below:

(Rs. in Mill.)

▪ NTC OSP/OFC Network (Faisalabad to Lahore & Qila Sheikhpura Sargodha).	7
▪ UG Cable laying at PAF Base Mushaf Sargodha	3
▪ NTC OSP Network at Aziz Cross GT Road, Gujranwala	6
▪ OSP/OFC Network for Orange Train Package-I &II LHR & OFC & OSP work at PAF Base Lahore	33
▪ OSP/OFC Network at Faisalabad.	2
▪ Optical Fiber & Copper Access Network & other related Work in different locations at Karachi	28
▪ Construction of Boundary Wall of Islamic International University Islamabad & Construction of IST Bldg. ISB	44

### 4. Projects in hand:

Detail of projects in hand are given at Annexure.

### 5. Financial:

Due to low business volume and provisions for receivables/losses of subsidiaries, the Foundation remained in losses upto 2010-11, but it has posted profit during last three years. Despite recession in telecom development market the Foundation sustained its operations. The Foundation is heavily dependent upon rental income of its main building to meet operational expenses and running twelve schools. The Foundation was over borrowed in past, but it has paid back loans. The Foundation is making effort to tab new business.

TELECOM FOUNDATION  
DETAIL OF PROJECTS IN HAND

Annex

Sr.No.	Name of Projects (Telecom)	Value of Contract (M)	Date of Contract Started	Date of work completion	completion %ages
1	Re-location of NTC OSP/OFC Network damaged due to Construction of both locations i.e. Faisalabad Lahore & Qila Sheikhupura Sargodha Road under NTC MSU Qila Sheikhupura	7.30	10/5/2015	05-08-2015 on providing of NOC/ROW Permission	80%
2	Laying of UG Cable Network from MDF to Cabinet No.505 (OC ENGG Residence) at PAF Base Mushaf, Sargodha	3.03	10-05-2016	09-07-2016	100%
3	Relocation / Replacement of NTC Network due to Construction of Fly Over at Aziz Cross G.T.Road, Gujranwala	5.71	02-06-2016	90 Working Days	50%
4	OSP/OFC Network for Orange Train Package-I, Lahore	17.76	20-05-2016	Within 5 weeks of each section on providing of NOC/ROW by NTC	25%
5	OSP/OFC Network for Orange Train Package-II, Lahore	10.71	20-05-2016	Within 5 weeks of each section on providing of NOC/ROW by NTC	40%
6	OSP/OFC Network at Madina Town Faisalabad	1.85	20-08-2016	19-11-2016	To be started shortly
7	OFC Network at Ayub Research Institute Faisalabad	0.47	15-08-2016	14-09-2016	100%
8	OFC & OSP work at PAF Base Lahore	4.2	14/11/2016	13/01/2017	100%
9	Laying, Testing & Commissioning of Optical Fiber & Copper Access Network at Cantt, CTH, West Wharf and Garden Exchange Areas for Establishment Of Multi Services Access Gateways At Karachi.	19.54	3/13/2014	09/30/2015	100%
10	Provisioning, laying, testing and commissioning of communication facility for WTR Building at PAF Base Faisal Karachi	2.86	11/3/2015	12/8/2015	100%
11	Re-Routing of PVC Duct / UG Cable at MPA Hostel Sir Ghulam Hussain Hidayatullah Road Cantt Karachi	0.23	11/26/2015	12/26/2015	100%

**PAKISTAN TELECOMMUNICATION EMPLOYEES TRUST**

Pakistan Telecommunication Employees Trust (PTET) is established under the Pakistan Telecommunication (Reorganization) Act, 1996 to disburse pension to PTCL pensioners. Detail of achievements and progress are as under:

1. For pensioners' facilitation, PTET has extended the facility to draw pension besides Pakistan Post, i.e. through:

- Scheduled banks
- Branchless / Mobile banking - Upaisa shops

Accordingly, over 6,300 pensioners have opted to draw pension through Scheduled banks, as at 30 June 2016.

2. To validate credentials of pensioners and physically verify them, PTET started a Country-wide Physical Verification Drive in November 2015. This project covered 40,263 pensioners in 80+ cities and towns.

Following were additional benefits of verification:

- ◆ Correction of ID card numbers
- ◆ Collection of cell phone numbers
- ◆ Updated addresses
- ◆ Updated list of family members

3. For automation and digitization of pensioners' records, PTET has:

- a) Automated pension payments system; and
- b) Scanning and digitization of pensioners file

4. PTET has also launched a universal access number, a helpline for pensioners' facilitation, with dedicated staff available to cater for pensioners' queries.

5. A text message facility has been initiated for better communication with pensioners. This will help in faster communication with our pensioners.

6. Urdu/English versions of PTET websites are revamped for pensioners' facilitation. The website also contains view-only information for pensioners.

**TELEPHONE INDUSTRIES OF PAKISTAN**

Telephone Industries of Pakistan (TIP) was established in 1953 with the collaboration of Govt. of Pakistan, T&T Department (70% Shareholding) and Siemens AG Germany (30% Shareholding), with the objective of manufacturing telecommunication equipment for T&T Department, the major shareholder of TIP. Six out of eight Directors on the Board of TIP were nominated by T&T Department and two were nominated by Siemens AG.

2. For about 50 years, TIP successfully supplied telephone exchanges and sets to T&T Department as per orders placed by them and contributed more than 60% of telephone network of T&T Department /PTCL. However, due to change in technology, PTCL suddenly switched to New Generation Network (NGN), without giving any technology switchover/upgrade plan, finances and directions to TIP to enable it to acquire the new technology. Meantime GoP had decided to detach TIP and CTI from PTCL privatization transaction. In this scenario PTCL stopped placing order on TIP for telephone exchanges/telephone sets. Resultantly TIP has suffered accumulated losses since the year 2003, due to decreased sales as a result of change in technology. Sales for the year 2015-16 is nil due changes in technology and TIP has no orders of Sale.

3. In view of the decrease in sales and financial losses, the GoP has supported TIP as a going concern and has shouldered the responsibility of contribution towards ERE related expenditure. In the year 2015-16, GoP provided TIP Rs. 478/- million for this purpose.

4. Other income for the year 2015-16 are as under:-

	<u>Rs. in Million</u>
a- Rental income	36
b- Misc sales of Telephone sets/other sales (15-16)	<u>14</u>
<b>Total</b>	<b>50</b>

5. There are regular 274 employees and workers in TIP while there were 132 contingent paid / temporary staff as on 30-06-2016. These personnel In order to check continued losses due to no work and to reduce un-necessary expenditure burden falling under the ERE Head, un-necessary workforce was reduced.

6. Despite its continued state of financial loss, TIP has managed to hold itself and has continued to make efforts to streamline issues and overcome its problems in order to give a better image of the company. TIP has been able to continue to maintain its ISO 9000: 2001 Certification which is valid up to 2017.

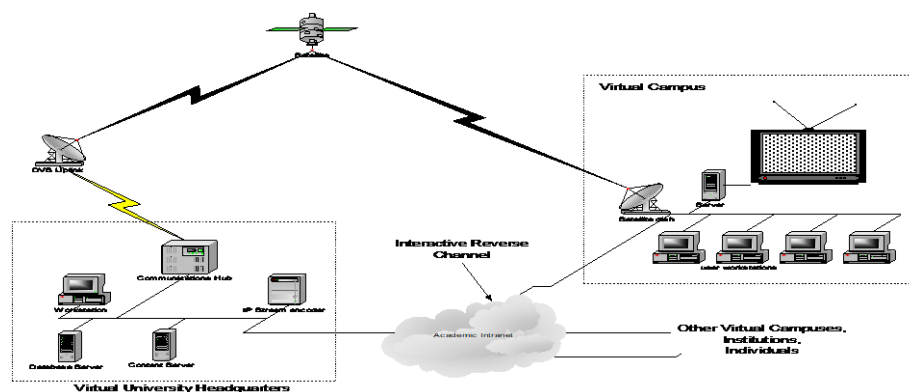
**Virtual University of Pakistan****Organizational Structure:**

The University was established vide Ordinance No. LII of 2002. The honorable President, Islamic Republic of Pakistan is the Chancellor of the Virtual University of Pakistan. The Board of Governors is the apex body of the University, responsible for the general supervision and control of administrative, academic and financial affairs and the power to lay down the policies of the University.

The Rector is the Chief Executive and Academic officer of the University who is responsible to ensure that the provisions of the Virtual University's Ordinance, the Statutes, the Regulations and Rules are faithfully observed in order to promote teaching, research, administration, general efficiency and good order of the University. Authorities of the University include the Executive Council, Academic Council, Boards of Studies, Advanced Studies & Research Board, Selection Board, Finance & Planning Council etc.

**Introduction:**

The Virtual University, Pakistan's first distance learning university based on modern Information and Communication Technologies (ICT), was established by the Government as a public sector, not-for-profit institution with a clear mission: to provide extremely affordable world class education to aspiring students all over the country. Using free-to-air satellite television broadcasts and the Internet, the Virtual University allows students to follow its rigorous programs regardless of their physical locations. It thus aims at alleviating the lack of capacity in the existing universities while simultaneously tackling the acute shortage of qualified professors in the country. By identifying the top Professors of the country, regardless of their institutional affiliations, and requesting them to develop and deliver hand-crafted courses, the Virtual University aims at providing the very best courses to not only its own students but also to students of all other universities in the country and abroad. Operational Diagram of the Virtual University of Pakistan is given below.



**1. Academic Programs:**

The Virtual University is offering number of academic programs as listed below and the number is constantly increasing with the introduction of new areas of study. List of programs initiated during the year 2014-15 [Fall 2014 & Spring 2015] along with total number of programs offered by the University is given in table below:

Sr. No.	Programs/Level	No. of Programs new Initiated during the Year 2014-15	Total No. of Programs at various level
1	M.Phil /MS Programs	2	4
2	2-year Master Programs	5	16
3	4-year BS Programs	0	16
4	2-year Bachelor Programs	0	7
5	B.Ed. (One year)	1	1
6	2-year Associate Degree Programs	10	10
7	Post Graduate Diploma Programs	2	14
8	Specialization Certification	0	6
9	Deficiency Semesters	1	3
10	Zero Semester	2	3
<b>Total</b>		<b>23</b>	<b>80</b>

**2. Students' Detail:**

Detail of overall students admitted, graduated, and active during the period is given in table below.

Sr. #	Year	No. of Students Admitted	Pass Out	Overall Students
1	2014-15 [Fall 2014 & Spring 2015]	17208	2981	92364

\* Spring 2015 semester is in progress

**3. No. of Courses Developed:**

Detail about courses developed during the period is as under:

Sr. No.	Courses Developed During the Period		Total No. of Courses Developed
	2014-2015		
	Developed	Under Development	
1.	23	13	23

**4. VU Education for Pakistanis Residing Abroad:**

The University is transmitting its course contents on satellite television which are being seen in other parts of the world especially middle east and surrounding region. Course contents are also placed on VU website, open courseware website, as well as on YouTube/vu; dailymotion/vu which are accessible through Internet. Given the quality and affordability and ease of access, VU Programs have become very attractive for expatriate Pakistanis. The Virtual University of Pakistan has extended its services to foreign countries as well in order to provide opportunity to Pakistanis and their children to seek admission into its various degree programs. In foreign countries where VUTV transmission is not available, students can attend lectures through DVDs, VULMS, open courseware (<http://ocw.vu.edu.pk>) or on YouTube (<http://www.youtube.com/vu>). Admitted students may avail the facilities to study at home. However, their examinations are monitored through webcam and state of the art computer based examination system. Presently 1577 overseas Pakistani students residing in the countries listed below are benefiting from VU:

Continent	Countries
Asia	Afghanistan, China, Hong Kong, Singapore, South Korea, Taiwan, Sri Lanka, Japan, Indonesia, Kazakhstan, Kyrgyzstan, Uzbekistan, Palestine, Philippines
Middle East	Bahrain, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, UAE, Yemen, Iraq, Turkey
Europe	Austria, Belgium, Czech Republic, Denmark, Spain, Germany, Sweden, France Finland, Italy, Ireland, Norway, Switzerland, Netherlands, Cyprus – Northern, New Zealand, Portugal, United Kingdom
North America	Canada, USA, Haiti
Africa	Jamaica, Sudan, Botswana, Egypt, Libya, Sierra Leone, Rwanda, South Africa
Australia	Australia, Fiji Islands, Vanuatu

**5. Virtual University Campuses:**

Presently, there are over 170 Virtual Campuses (including PVCs + VU owned Campuses) in over 100 cities spread all over Pakistan. These campuses provide the required infrastructure for undertaking courses and to conduct proctored examinations.

Wherein, VU has established its own 29 campuses at Abbotabad, Badin, Bahawalnagar, Bahawalpur, D.G. Khan, Faisalabad, Ghotki, Gujar Khan, Gujranwala, Hyderabad, Islamabad, JalalpurPirwala, Jhelum, Karachi, Lahore, MakhdoomRasheed, Multan, Muzaffargarh, Nankana Sahib, Patokki, Peshawar, QadirpurRaan, Quetta, Rawalpindi, Sahiwal and Sukkur. These campuses also act as satellite administrative centers for VU students. Summary of Virtual Campuses established during the period is as under:

Sr. No.	No. of Campuses established [July 2014- June 2015]		Total No. of Campuses
	PVCs	VU Own Campuses	
1.	1	1	168

**6. Convocation:**

During the period Virtual University hold its 6<sup>th</sup> Convocations for 6272 graduates respectively. The sixth event of 6<sup>th</sup> Convocation, Lahore was held on August 5, 2015 to cater Capital and Punjab territory students. The President of Pakistan and Chancellor Virtual University of Pakistan, His Excellency Mamnoon Hussain conferred degrees to the graduating students during the 6th Convocation of VU at Pak-China Friendship Centre.

**7. Linkages and Collaboration:**

During the period Virtual University of Pakistan has established linkages and MoUs with national and international universities for improvement of education standards in the country. During the period, VU has signed MoUs with University of Gujrat, University of Sargodha, Pakistan Institute of Management, Karachi, Islamic Online University, The Gambia and Forman Christian College (FCC), Lahore. The University is spearheading and coordinating an IDRC (Canada) funded project on Distance Learning Technologies in Asia wherein research work in many countries including Japan, Mongolia, Malaysia, Indonesia, Vietnam, Cambodia etc. is being carried out under the supervision of VU. Virtual University of Pakistan provides infrastructure facilities for Pre-Services Training Program for TVET teachers in collaboration with University of the Punjab, Lahore and Kaiserslautern University, Germany.

**8. Major Accomplishments:**

Following were few major accomplishments of the University during the period:

<u>Sr. No.</u>	<u>Major Accomplishments</u>	<u>Year</u>
1.	VU partnered with University of the Punjab, Lahore and Technical University Kaiserslautern, Germany to launch B.Ed. in Technical Education	Sep-14
2.	Deployment of VU Learning Management System (VULMS) to Concordia Colleges	Sep-14
3.	University started Degree Programs in Life Sciences	Sep-14
4.	Launch of VU Journal	Sep-14
5.	Launch of Global Languages website	Nov-14
6.	Initiation of Ph.D. Programs	Sep-15