

**Ministry of Communications (MoC)**

Five-Year Development Plan 1384-1389 (2005-2009)

**1 The Goal of the MoC's Efforts:**

In line with the economic goals of the Government, to increase the present annual revenue per capita of USD 200 to between USD 500-700 in 5 years time, MoC's strategy and policies will be to further develop the telecommunications market, maximizing the resulting positive impact on the economy.

**2 Objectives:**

Key performance indicators for the Telecom and IT sector have been identified and the targets for the Year 2005, 2007 and 2009 for these indicators are given in the table below:

<u>Indicator</u>	<b>2005</b>	<b>2007</b>	<b>2009</b>
Fixed Telephones Penetration	0.5%	2.00%	4.00%
Mobile Phones Penetration	3%	8.00%	16.00%
Internet User Penetration	.25%	3.00%	10.00%
Number of Cities/Towns/Villages connected	180	3000	6000
Cumulative Foreign Direct Investment (M US\$)	500	1000	2000
Telecom Direct Employment	6000	10000	15000
Indirect Employment	12000	25000	35000

**3 The 5 Core Activity Areas:**

In order to achieve the above objectives, the MoC has defined the following five core areas of activities:

**3.1 Regulation**

Accelerating the creation of a fully competitive and transparent regulatory and market environment, pursuing a strong legislative agenda and an ambitious licensing program

**3.2 Afghan Telecom**

Successfully removing the MoC from competition in the telecommunications services market by extracting its service operation activities and transferring them into new national telecommunications carrier (Afghan Telecom), to be launched and supported until an international partner can be found., while accelerating the deployment of pervasive telecommunications infrastructure in Afghanistan

**3.3 ICT**

Developing a fully functional Information Society in Afghanistan, supported by model eGovernment

**3.4 Capacity Development**

Institutional Reform and Human Capacity Development in the MoC

**3.5 Afghan Post**

Development of the Afghan Postal Sector for providing modern postal services, adoption of relevant legislation and Corporatization of Afghan Post.

## 4 The Current Status

### 4.1 Regulation

- The Telecom and ICT policy of the Ministry of Communications has been adopted.
- Draft Telecom Law has been prepared and presented to the Ministry of Justice and is currently under their review.
- Ministerial Decree was adopted to create the Telecom Regulatory Board (TRB) as the interim sector regulator, within the Ministry.
- TRB five-member Board was appointed and adopted several normative acts, including:
  - Rules of Procedure
  - National Numbering Plan (NNP)
  - National Frequency Allocation Table
- Licenses were harmonized with the draft Telecom Law and five (9) private internet service providers (ISPs) were authorized.
- Intensive recruitment of qualified staff was begun and 6 new entry-level management trainees were hired and received comprehensive substantive training.
- TRB operations began in earnest in May 2004, supported by two international experts plus three (3) additional domestic specialists.
- TRB launched a Public Consultation to set its agenda for the year ahead, including:
  - Local Fixed Service Provider Licenses (LFSP)
  - Telecom Development Fund (TDF)
  - Third GSM Services License
  - Unified Services License Regime
  - International Gateway Services.
- Significant private investment in the telecom market is mainly represented by that of the two (2) GSM service providers, AWCC and Roshan, and is in the order of US\$200M so far, making the telecom market the largest private market recipient of Foreign Direct Investment in Afghanistan. Revenues of the two (2) mobile service providers also largely drive the value of the Afghan telecom market, which is probably in excess of US\$150M for 2004, and therefore the largest private sector of the Afghan economy.
- The Law on Domestic and Foreign Private Investment, and the revision being drafted, guarantee safeguards and tax incentives for investors in the Afghan economy. However the telecommunications sector is excluded from the range of applicability of the law, and therefore telecommunications investors do not enjoy the safeguards and tax incentives foreseen in the Law.
- Raising money for investment is difficult given the country risk profile, and the lack of local banks offering large loans and stock markets.
- A new Law on Business Organizations is being drafted. The lack of a solid legal system represents a risk for foreign companies interested in investing in Afghanistan.

## 4.2 Afghan Telecom

- Corporatization Decree signed by the President, not published by Ministry of Justice.
- Bylaws and other incorporation documents drafted. Afghan Telecom created ad interim as a MoC Department, through a Ministerial Directive.
- Currently, the Infrastructure is very limited. There are about 90,000 digital telephone lines installed in 12 provincial capitals, mostly CDMA WLL. MoC has satellite links with twelve provincial capitals, giving voice connectivity. Internet has been provided to eight (8) Ministries at Kabul via facilities provided by the World Bank

## 4.3 ICT

- MoC has developed the ICT policy in November 2003, which enabled the ministry to choose the path for the development and promotion of the new technologies in the country.
- In order to enable Afghans to access the information MoC has come up with Internet regime which has resulted in 9 ISPs in the country.
- In order to enable the public to make use of internet MoC has also established 12 Tele-Kiosks which enables the public to use internet for their daily use.
- In order to reduce the bureaucracy and increase transparency in day to day administration of government organisations MoC has started the e-Gov project with pilot phase in MoC.
- MoC has also started the initial drafting of the structure of the National Data Centre, where all the data central to the government organisations will be hosted for better usage, availability and security.
- In order to bring synergy to the ICT activities led by government, donors and private sector, MoC has initiated the process for establishing the National ICT Council of Afghanistan, which will be a coordination body for all ICT related activities in the country.

## 4.4 Capacity Development

- There has been an enormous loss of skilled professionals from Afghanistan over the two decades of the civil war in Afghanistan. The government of Afghanistan recognizes the critical importance of embracing capacity building to achieve the nation's development and reconstruction goals.
- To properly achieve this goal, Ministry felt the need to do an overall assessment of its departments. Consequently; in 1382 all MoC departments were evaluated according to the plan. During this evaluation, we found many MoC employees with various educational backgrounds.
- Based on the assessment in 1382/2003 Ministry of Communications has realized the importance of having some short and long term trainings on project management, administration, financial, English Language and computer package. These areas were considered the most essential areas that play a vital role in building the capacity of the MoC employees.
- Thus, since 1382/2003 MoC has initiated many capacity building related trainings and programs to build the capacity of civil servants throughout the country.
- In addition to above, technical training in the area of digital switching, transmission, microwave, optical fiber, satellite, information technology, CDMA, project management, Teacher Training, Postal services has also been organised

- During years 1382-1383 MoC has established 16 ICT centers in Kabul, Mazar, Kunduz, Khost, Jalalabad and Kandahar where more than 3000 MoC employees and other civil servants were trained.
- Meanwhile, a lot of short term courses, seminars, workshops have been facilitated to the employees of MoC both on national and international level. Over 547 MoC employees attended the local trainings (i.e. English, Computer, Management, telecom and IT related trainings inside the country and over 138 employees were sent abroad for some short and long term trainings to further build their capacities in kind contribution of the international community.
- Worth mentioning, MoC has also managed to send its delegates to participate in international events and gatherings organized by APT, ITU, UPU etc.

#### **4.5 Afghan Post**

- There are 460 postal offices in the country and the postal sector owns property in a number of these locations, though it is mostly very badly damaged. These post offices comprise as follows:
  - central post offices: 34,
  - city post offices: 30,
  - district post offices: 388,
  - border post offices: 5,
  - airport post offices: 3.
- Human capital in the postal sector has been badly depleted and there is few skilled staff working in the sector of which the total number of permanent staff equals to 794 while the contractual ones equals to 846.
- Postal services operates at a very basic level (predominantly offering collection, processing, dispatching, delivering of letter post items and parcels, registering services and sale of postal stamps through these post offices ) in key provincial capitals.
- Coverage of the country is around 1 center per 60000 populations, which is well below the Universal postal Union (UPU) standard as of 1 centre per 24000 populations for the very poorest countries, and 1 per 3000-6000 population for developing countries.
- There are 9 Telekiosks in 9 post offices in Kabul city offering basic computer training and internet and e-mail services to the customers
- An agreement has been concluded with WESTERN UNION under which the money transfer services (inbound) through 5 post offices in Kabul city is provided and it will be extended to 6 provinces in a very near future.
- License have been given to 4 companies for providing postal and express courier services such as DHL, FEDEX, TNT and Bakhtar Post.

## 5 Priorities for 1384 (2005):

### 5.1 Regulation

- Promulgation of the Telecom Law, which will establish an independent sector regulator, the Telecom Regulatory Authority of Afghanistan (TRAA) as well as the Telecom Standards Agency (TSA).
- Strengthening of the Frequency Management Unit (FMU) – which will become the Spectrum Management Office (SMO) once the Telecom Law is promulgated – including the build-up and training of staff, the purchase, installation and operation of the required monitoring systems.
- Revising existing Investment Law to expand protections to the telecom sector, or revising the draft Telecom Law to address this.
- Conclusion of interconnection agreements between all licensed telecommunications operators. This may require the TRB to arbitrate as foreseen in the GSM services licenses.
- Substantially increase license performance, monitoring and compliance and issue penalties and fines to enforce license terms and conditions.
- Recruit and train additional staff for the TRAA, TSA and SMO.
- Merging all three into a single institution.
- Tendering and assignment of additional GSM mobile services licenses.
- Tendering and assignment of Local Fixed Service Provider (LFSP) licenses.
- Plan, organize and launch a formal program of Ministry-led activities (at conferences, trade shows, meetings with foreign operators) to promote the Afghanistan telecom market as a target for investment.

### 5.2 Afghan Telecom

- Incorporate Afghan Telecom, appoint General Meeting and Board Members, appoint Management Team, develop a business plan, adopt budget and necessary corporate governance provisions. Transfer all telecom operating assets (equipment, etc.), rights and liabilities from MoC to Afghan Telecom.
- Launch prepaid voice and internet services.
- Construction of new buildings and renovation of existing buildings in Kabul and provinces for housing telecom and postal facilities
- Phase in new postpaid and prepaid billing systems, procure and introduce CRM and financial systems.
- Work on the detail design and tender of the national Optical Fibre Backbone project such that contract is signed by September 2005 and Kabul-Kandahar segment implementation starts during 2005.
- Define strategy and detail technical specifications for fixed network expansion of 6 major cities- Kabul, Kandahar, Herat, Mazar, Jalalabad and Kunduz
- Expansion of CDMA phone in existing cities and the 10 remaining Provincial Capitals. By end Mar, 2006, Afghanistan will have total of 285,000 wireline and WLL phones in Kabul and the 33 provinces.

- By September 2005, the Government Communications Network (GCN) Project of the MoC will provide voice, internet and video connectivity to all Ministries and all provincial capitals of Afghanistan.
- By September 2005, the District Communications Network (DCN) will be launched with some 60-100 districts connected and by end 2005, up to 178 district HQs of Afghanistan will be linked

### **5.3 ICT**

- To take the necessary steps to change the name of MoC to the “Ministry of Information and Communication Technologies”
- To Establish the ICT Directorate in the ministry
- To establish National ICT Council according to the ICT policy document.
- Develop the proposal for the establishment of a ICT village in the land belonging to MoC in Yakatoot
- To develop and implement e-Government in the Ministry of Communications
- To promote the cctld (.af) development
- To establish NIRA and AfgCERT
- To work out the requirements, analysis and design of the NDC (National Data Centre) in Kabul, this will include meetings with existing share holders of ACC (Afghan Computer Centre), finalising the status of the ACC as NDC, declaring the assets of ACC, renovation of the ACC building and arranging the telecom facilities at the site
- To establish Multipurpose Community Tele-centres (MPCTs) in 10 districts in collaboration with Afghan Telecom under District Communications Network project
- To complete the MS Windows and Office localisation program in partnership with Afghan Computer Science Association
- To encourage private sector to establish private academies like Cisco, MCSE, OCP.

### **5.4 Capacity Building**

- To establish Cisco Academies in Balkh, Herat and Khost and ICT Training centres in 10 provinces, this will facilitate the training of public and government organizations in computers applications and networking in provinces.
- Expand the existing Telecommunications Training Center into an ICT Institute graduating degree level engineers
- Expand the Management and Technical Training Programs
- Drafting and Developing a set criteria for overseas trainings
- Sending Afghans to the international long and short term trainings
- Conducting Seminars, workshops, at national level
- Trainings to support the E-government process in MoC

### **5.5 Afghan Post**

- Construction of new post offices in Kabul city in the District No.6<sup>th</sup> (Darulaman post offices) and District no. 8<sup>th</sup> (Rahman Mina post office).
- Construction of central post offices in the provinces of Bamyan, Dykundi, Panjshir, Suripul and Takhar
- Feasibility study of introducing post code systems in Kabul city.
- Starting work on development of Postal regulations

## 6 Priorities for 1385-6 (2006-7)

### 6.1 Regulation

- Transformation to Unified Services License regime – all service providers may provide all services (fixed, mobile, telephony, data, internet protocol, video).
- Establishing the Telecom Development Fund (TDF) that will be charged with developing a plan to efficiently utilize the 2.5% tax now being levied on licensed service providers to subsidize the deployment of new infrastructure in rural and difficult terrain.
- Tendering and assignment of licenses for the utilization of the Telecommunications Development Fund (TDF) for the development of the rural market and other licenses foreseen in the *Policy*.
- Capacity building of provincial directors of Ministry of Communications to perform the regulatory duties on the provincial level.
- Complete liberalization of the telecom market and the adoption of an Authorization regime, in line with the most modern regulatory environments.
- Preparation and promulgation of Broadcasting Law in order to achieve best international practices.
- Creation of capital and loans markets (Ministry of Finance lead). Conduct a Public Consultation and adopt a Rule on Accounting Standards for Service Providers.
- Automate the frequency assignment process (including online application, electronic payment and real-time look-up of spectrum usage).
- Conduct a Public Consultation and adopt a Rule on Security, Surveillance and Data Protection.
- Conduct a Public Consultation and adopt a Rule on emerging technologies and services such as 3G, IMT-2000, Land Mobile Radio (ESMR), WiFi, UWB (Ultra Wideband) etc.
- Preparation and promulgation of new laws to enable Information Society Services, including:
  - Electronic Commerce Law
  - Electronic Signatures Law
  - Cybercrime Law
- Conduct a Public Consultation and adopt Rule on Number Portability.
- Initiate a forum with neighboring countries to address cross-border frequency coordination issues.
- Revisit the mobile satellite services license category (including GMPCS) and examine frequency sharing between mobile, fixed and satellite services.
- Initiate a review of legal-regulatory framework for compliance with WTO standards in anticipation of WTO accession.
- Commence a review of technical standards for compliance with regional and international norms.
- Conduct a Public Consultation and adopt a Rule on Amateur Radio.

### 6.2 Afghan Telecom

- Start the Afghan Telecom partner selection process.
- Start the consultations process for progressively privatizing Afghan Telecom.

- Complete the National Optical Fibre Backbone project which shall form a ring around the country extend along the national highways from Kabul-Ghazni-kandahar-Heart-Mazar-Pulikhumri-kabul and interconnecting to all neighbouring countries Pakistan, Iran, Turkmenistan, Uzbekistan and Tajikistan.
- Complete the DCN project so that all District Headquarters are linked up. This will provide voice and internet capabilities right up to district levels of Afghanistan.
- Link up additional 3000 villages and small towns using DCN terminals and establishing community telecentres
- Start the rollout of fixed telephone networks in the 6 major cities
- Expand the digital telephone network to 500,000 lines across the country.

### **6.3 ICT**

- Develop and launch a ICT Village (technology park to facilitate the development of software localization and stimulate high-tech R&D).
- To establish IXP (Internet Exchange Point)
- To promote and expand the MPCTs to the rest of the districts
- To implement e-Gov in all the Ministries and key government institutions up to province level. This will include e-Administration projects to improve the internal operations of the provincial offices, and to provide very basic, first step e-Services and information to citizens via a simple provincial government web site.
- To establish the ECA (Electronic Certification Authority)
- Develop a comprehensive E-Government law that includes provisions for data privacy, digital signatures and authentication, and secure financial transactions
- To establish an e-Government Resource Center that would serve as a repository of best practices, case studies, publications, and technology examples for government at all levels
- To establish Software House in each of the 5 major cities of the country
- To promote e-commerce
- To procure, develop and host the required Hardware, OS and Application Software in the NDC and connect it to the government institutions and bring NDC in to full operation
- To work out the requirements, analysis and design and establishment of 2 RDITC (Regional Data and IT Centres) in 2 of the major cities of the country, these will be connected to NDC, Kabul. These centres besides the hosting of data will also give IT support to the regional government institutions
- To establish IT Parks each in 5 of the major cities of the country, which will attract international expertise and afghan expatriates
- To invite International hardware manufacturing companies like Intel, Acer, Dell and such others to invest in the country
- To establish hardware maintenance centres each in 5 of the major cities of the country
- To invite international software development companies like Microsoft, oracle and such others to Afghanistan.

### **6.4 Capacity Building**

- Creation of a fully equipped, computerized English and Computer lab
- Creation of a Modern Postal Academy
- Creation of Technical libraries in ICTI/MoC and ICT publications
- Creation of online testing system for ICTI/MoC
- To Expand ICTI to five other major cities in addition to the capital
- Trainings to support the E-government process in MoC

- Establishment of more specialized professional courses that would target a specific function or department in the MoC, and would go beyond the more general management training implemented.
- Executive Management: This could be offered to Managers and Directors, to cover such strategic topics as: strategic planning, change management, leadership skills, and organizational performance measurement, i.e. almost a "mini-MBA".
- Human Resource Management: This would be primarily targeted at the personnel department, might be open to managers and above. It could cover general best practices and principles of Managing the Human Resource as well as Organizational Development and employee career planning.
- Customer Management: This is very important for customer services and is certainly a cornerstone of e-Government. MoC employees right now are dealing face to face with customers and could benefit from some training and exposure to customer service principles.
- Contract Management: There are a number of departments that are involved in drafting and issuing contracts with vendors for services or procurement of materials. Per the Planning Department, these "deals" sometimes go bad because of the poor quality of the contract. This would be a good training course for any department involved in the contracting process. It could also be part of a larger training on "procurement" in general.

## 6.5 Afghan Post

- Improvement of the quality of traditional postal service,
- Rehabilitation of existing postal centers and expansion to meet the UPU standards i.e. 1 center per 24000 inhabitants,
- Reestablishment of mail delivery service and move to meet UPU service standards target, mail delivery time ranges from D+1 in inter cities to D+7 for remote villages/ intra-cities
- Introduction of new service including financial services ( money order and saving banks )
- Time certain services that is EMS, tracking and tracing systems.
- Public – access Telecommunications services ( internet , fax , telephone ) and ,
- Development of Post code major cities of Afghanistan
- Drafting of legislation for the postal sector
- Start the process of corporatisation of Afghan Post.
- Establishment of a postal regulator

## 7 Priorities for 1387-8 (2008-9)

### 7.1 Regulation

- Examine the possibility of liberalizing the entire electronic communications sector to also include private broadcasting.
- Conduct a Public Consultation and adopt a Rule on ENUM.
- Conduct a Public Consultation and adopt a Rule on Environmental Safety (including Radiation and Disposal of ICT Technology).
- Investigate non-telco frequency allocation and assignment, including maritime mobile services such as Global Maritime Distress & Safety System (GMDSS), aeronautical mobile services and radio-determination services.
- Conduct a Public Consultation and adopt a Rule on free-to-air optical and other non-traditional network infrastructure technologies.
- Initiate an investigation into radio-astronomy and associated frequencies, applications and services – possibility of making Afghanistan a regional center for remote earth sensing data collection and analysis.
- Expanded activities to reflect the growth and complexity of the telecom market as it develops.

### 7.2 Afghan Telecom

- Link up additional 3000 villages and small towns bringing the total to 6000, using DCN terminals and establishing community telecentres
- Continue the rollout of broadband fixed/wireless telephone networks in the 6 major cities
- Expand the digital telephone network to 1000,000 lines across the country.
- Interconnect all provincial capitals to the National Optical Fibre Ring using optical fibre or microwave
- To provide infrastructure and other facilities for establishing the international gateways in Afghanistan.
- To provide infrastructure and other facilities for establishing BPOs (Business Processes Outsourcing) centers in Afghanistan and work out a revenue sharing model for such BPOs.
- To invite major telecom players in the world to have their Call Centers in Afghanistan.
- To connect the telecom infrastructure of all the provincial capitals with the infrastructure down the chain, available up to district levels.
- To have at least two (2) Public Call Offices (PCOs) in every village with a population greater than 2000.
- To increase the density of PCOs in cities and townships, to have at least one (1) PCO within one (1) square kilometer (km) of area.

### 7.3 ICT

- To implement e-Gov in all the government institutions up to district level. This will include e-Administration projects to improve the internal operations of the district governments, and to provide basic, first step e-Services and information to citizens in the district via a simple district government web site.
- To promote the implementation of basic web sites for municipal government for every provincial capital city that will provide citizens with easy access to rudimentary e-Services and information.

- To evaluate and select for analysis, design, and pilot implementation at least one cross-functional e-Administration project that would significantly enhance the efficiency of all government ministries at the national level. For example, “e-Procurement” that could serve as a single procurement site and process for all ministries.
- To promote and develop the NDC and the 2 RDITC
- To work out the requirements, analysis and design and establishment of 3 RDITC (Regional Data and IT Centres) in the remaining 3 major cities of the country
- To promote the ECA
- To initiate the process of designing and implementing E-Services in 5 of the major cities of Afghanistan e.g e-Health, e-Education, e-Banking e.t.c
- To give access to internet up to village level for villages with population >2000
- To establish at least one MPCT in a village with population >2000
- To establish IT Parks each per province
- To promote the existing software houses and establish at least 1 software house in other provinces
- To establish hardware maintenance centres at least 1 per province
- To establish internet cafés up to village level by using the telecom infrastructure under development and by attracting private sector on revenue sharing bases

#### **7.4 Capacity Building**

- To expand Technical libraries and ICT publications to other key cities in addition to the Capital
- To support the existing ICTI and expand to other provinces
- Creation of ICT centers all over the country to facilitate short and long term courses to technician level
- To establish at least one ICT training center which will provide hardware and soft ware training per village with population greater than 10000
- By 2009, every MoC employee will have received minimum of one training by the MoC capacity building unit.
- Introducing of a formal employee training and career tracking function within the personnel department. Most well functioning personnel departments track the training given to each employee in the organization.
- To develop the “ideal” training plan for MoC

#### **7.5 Afghan Post**

- Construction of Kabul city new post office building in Chemtala, Chaldukhtaran, Dashtbarchi and Shahrak Sabz, Qala Wahid, Charahi Qamber and Khair Khana).
- Construction of Provinces new city post offices building in Kandahar (Chauk Kandahar, Manzal bagh and Qul ordu)
- Construction of new city post office building in Nangarhar, Herat and Mazar.
- Construction/Renovation of airport post office building in Mazar, Herat Kandahar, Kunduz, Faizabad, Cheghcheran
- Rural post offices in districts are already included in Afghanistan Stabilisation Programme project.
- Expansion of the range of the services through further alliance and partnership with potential partners.
- Start the process of selection of a strategic partner and or privatization of Afghan Post

**Abbreviations**

B2G	Business to Government (electronic commerce)
G2G	Government to Government (electronic commerce)
G2C	Government to Consumer (electronic commerce)
ADB	Asian Development Bank
ATL	Afghan Telecom Limited
BPO	Business Process Outsourcing
ccTLD	Country Code Top Level Domain (internet addressing)
CDMA	Code Division Multiple Access
DCN	District Communications Network
FDI	Foreign Direct Investment
GCN	Government Communications Network
IGS	International Gateway Service
FMU	Frequency Management Unit
HQ	Headquarters
ICT	Information & Communications Technology
ISP	Internet Service Provider
IT	Information Technology
ITISP	International Transit ISP
LFSP	Local Fixed Service Provider
MoC	Ministry of Communications
MoJ	Ministry of Justice
MPTC	Multi-Purpose Tele-Centres
PRR	Priority Reform and Reconstruction
SMO	Spectrum Management Office
TDF	Telecommunications Development Fund
TSA	Telecommunications Standards Agency
TRAA	Telecommunications Regulatory Authority of Afghanistan
TRB	Telecommunications Regulatory Board
TTC	Telecommunications Training Centre