Greater Mekong Subregion
Sixth Meeting of the Subregional Telecommunications Forum (STCF-6)
Hanoi, Viet Nam
27-28 October 2004

Summary of Proceedings

Introduction

1.   The Sixth Meeting of the Subregional Telecommunications Forum (STCF-6) was held in Hanoi, Viet Nam on 27-28 October 2004. The Meeting was co-organized by the Ministry of Posts and Telematics of the Socialist Republic of Viet Nam (SRV) and the Asian Development Bank (ADB).

2.   The STCF-6 meeting discussed the following: (i) Developments in the telecommunications sector in the GMS countries; (ii) Status of implementation of the Telecommunications Backbone flagship program; (iii) Status of implementation of the RETA 6004: GMS Telecommunications Policy Formulation and Capacity Building Project; (iv) Results of the joint capacity building program (with the International Telecommunications Union) under RETA 6004; (v) Results of the demand study for the rural access to the Information and Communications Technology in Cambodia, Lao POR, and Viet Nam; (vi) Future actions for other ongoing initiatives including the GMS Information Highway initiative and telecommunications training program provided by the Ministry of Information Industry (MII) of the Peoples Republic of China (PRC) for the GMS telecommunications officials; (vii) PRC experiences in rural telecommunication development as well as universal service obligation (USO); and (viii) Priority areas for the sector and the way forward. Attached, as Appendix 1, is the Agenda and Program of the Meeting.

3.   The participants included delegations from the Kingdom of Cambodia, the People's Republic of China (PRC), the Lao People's Democratic Republic (Lao PDR), the Union of Myanmar, the Kingdom of Thailand, and the Socialist Republic of Viet Nam. Representatives from the Asia- Pacific Telecommunity (APT), International Telecommunications Union (ITU), Japan Bank for International Cooperation (JBIC), UNESCAP, French Embassy and ADB also attended. The list of participants is attached as Appendix 2.

4.   The meeting was co-chaired by Madame Quan Duy Ngan Ha, Deputy Director General, International Cooperation Department, Ministry of Posts and Telematics (MPT), Socialist Republic of Viet Nam, and Mr. Urooj Malik, Director, Infrastructure Division (MKID), Mekong Department, ADB

I.   Opening Session

5.   Madame Quan Duy Ngan Ha warmly welcomed the participants to the meeting on behalf of the Government of Viet Nam. She noted that the GMS Telecommunications Forum is one of the important initiatives of ADB within the GMS Program framework. She said that the active participation of the GMS countries, together with other development partners, have contributed to substantial achievements in the cooperation program in the telecommunications sector. She

expressed the gratitude of the GMS countries to international organizations, particularly ADB for its support to the cooperation program in telecommunications. She stressed the importance of information technology for developing countries in realizing economic growth and narrow the digital divide with developed countries. She noted that developing countries face substantial challenges in building the information society, given poor infrastructure and the lack resources and investment capital for development. She said that international organizations such as ADB, APT and ITU will continue to play important roles in modernizing information infrastructure, enhanced by opportunities brought about by globalization and technology convergence. She concluded that the STCF has gained more importance in moving forward, cooperation initiatives in the GMS in particular the telecommunication and information technology sector. She wished everyone successful deliberations during the STCF-6 meeting.

6.   Mr. Urooj Malik warmly welcomed participants to the STCF-6 meeting, and thanked the Government of Viet Nam for the hospitality and excellent meeting arrangements. He noted that much has been achieved since the GMS Program began in 1992, to enhance connectivity and expand cross-border economic activities in the subregion, through various transport, power and telecommunications connections. The previous STCF meetings have laid the groundwork for developing the telecommunications sector by envisioning a modern, high capacity network based on optical fiber cable (OFC) transmission systems, and by recognizing that a well-designed sector policy and timetable for liberalizing the market are preconditions to the sector's development. He cited the accomplishments of the ADB funded TA project, RETA 6004: GMS Telecommunications Sector Policy Formulation and Capacity Building, particularly in developing the country reform program. He added that the said TA has a capacity building component being implemented under a joint ADB-ITU program. He thanked the PRC Government for its support for training courses in telecommunications technologies. He discussed the components of the Telecoms Backbone and ICT Flagship program and reviewed its status. While noting that high priority OFC routes have been completed through bilateral financing, he said that the Flagship program has re-focused towards using ICT infrastructure and software in assisting GMS governments to deliver fast, reliable and accessible social services to the poor. He added that the meeting would be asked to provide guidance on the thrusts of the Flagship program, key milestones for implementing policy reforms, and studies to harmonize/ integrate technical aspects of GMS networks. He concluded with the hope that the meeting would provide useful insights to quickly realize an efficient and interconnected GMS telecoms network that will help realize equitable and pro-poor growth in the region.

II.   Country Presentations: Ongoing Telecommunications Development Activities

7.   Mr. Malik introduced the members of the ADB Secretariat team, and invited the GMS representatives to make their respective country presentations, starting with Cambodia.

Cambodia

8.   H.E. Mr. Touch Heng, Undersecretary of State, Ministry of Post and Telecommunication (MPTC) of Cambodia, first presented the current status of the MPTC, showing its officials and organizational chart. He showed the network hierarchy (international gateways) and the telecoms sector's general characteristics in terms of number of subscribers, switching facilities, and satellite facilities. He showed a map of Cambodia indicating the current status of the fiber optic network. He then discussed the current status of telecommunications such as the number of fixed operators, mobile service providers, and internet users and providers. He presented

Cambodia's plan for the sector for the next five (5) years, which includes: (i) promoting investments in backbone infrastructure, particularly cable optic fiber networks; (ii) issuing national standard for construction, telecom service management and IT; (iii) establishing telecoms networks in major cities; (iv) strengthen communication networks via microwave or cable optic fiber; and (v) implementing open IT and telecom areas for private investment. He discussed the soft loan proposal for the GMS Telecom Backbone Network project for Cambodia's growth corridor, showing the north-south optic cable route diagram for the project. He explained the MPTC's telecoms policy and regulatory functions and provided Cambodia's plan for sector reforms, including the timeline, such as, among others: (i) approval of Sub-decree of Telecom Cambodia (January 2005); (ii) approval of Draft of Telecommunications Law (February 2005); (iii) establishment of Telecom Cambodia as a state-owned enterprise (April 2005); (iv) establishment of Universal Service Obligations policy (December 2005); and (v) establishment of the Telecom Authority (December 2005).

PRC

9.   Mr. Wang Jianchao, Director, Division of Foreign Economic and Trade Cooperation, Department of Planning, MII, PRC, presented a summary of current developments and future prospects of China's telecoms sector. He described China's rapidly growing telecoms market, whose total service revenue grew to 461 billion RMB in 2003, up 13.9% over 2002. He said of the over 500 million telephone users, the 269 million mobile users have now exceeded the 263 million fixed users. He noted that a more diversified telecom structure and industrial chain has taken shape, with booming demands for fixed, mobile and internet service, and growing importance of IP telephony, SMS and broadband. He said the size of telecom networks continued to expand with faster take up of broadband, while services further improved and the "Village Connected" project accelerated. He explained that efforts in telecom regulation focused on three aspects: (i) constantly improving telecom legislation, with progress in drafting of Telecom Law; (ii) continued reforms fostering market competition, in which there were at least two operators for every service market; and (iii) enhanced market regulation, with deepening of tariff management reforms and addressing disorderly price competition. The future development thrusts for China's telecom sector included harmonizing development of different regions, facilitating international cooperation, and following world telecom technical trends. Mr. Wang added that the sector is expected to maintain growth momentum in various fields: in the fixed field, given incentives for value added voice services; in the mobile field, with focus on new services to improve the mobile industrial chain; and in the multi-media field, involving enhanced legal system, wider IT application, pursuit of hot international technologies and accelerated standard setting.

Lao PDR

10.   Mr. Somlith Phouthonesy, Deputy Director General, Department of Post and Telecommunications, MCTPC, presented the current situation in telecoms in Lao PDR in terms of number of operators, market shares of fixed, Wireless Local Loop and mobile networks, and fixed line operators (number of subscribers and market shares). He briefed on the Rural Telecom project grant aid from Germany, with Phases I to V completed and in operation since 1996, and Phase VI (covering northern provinces) to start in 2005. He discussed the developments concerning wireless local loop. He showed the number of mobile subscribers and market share of operators. He presented two (2) maps of Lao PDR showing optical fiber cables and the coverage/ routes of the Enterprise of Telecommunication Lao phases 3 and 4. On IP

communications, he noted that six (6) internet service providers (ISPs) are operational in the country, but only two (2) are existing network operators. He showed the ISPs' characteristics in terms of link speed, internet link, number of users and gateway provider. He informed that the Lao National Assembly adopted a Telecommunication Act in April 2001, but decrees and regulations have not yet been finalized. He stressed that regulatory aspects of ICT would focus on accessibility, affordability and promoting linkages with neighboring countries. He concluded that the biggest challenge for the government is to foster development of ICT markets and its applications, and telecom operators are seen as driving forces in this regard.

Myanmar

11.   Mr. Aye Kyaw, Deputy General Manager, Myanma Posts and Telecommunications (MPT), showed a map of Myanmar indicating its general telecoms characteristics (e.g., teledensity, auto switch, manual switch, etc.). He noted that MPT recognizes the role of telecoms in promoting economic growth and social equity, and has thus planned for expansion of the network and upgrading services. He indicated the number of fixed telephone subscribers using both manual and auto switches, and showed a succession of Myanmar maps indicating distribution of the following: (i) automatic radio telephone systems ARTS (TDMA-WLL); (ii) DECT systems (WLL); (iii) cellular mobile systems; (iv) CDMS telephone system; (v) GSM project; (vi) D-AMPS Systems; and (vii) microwave radio routes. He enumerated the number of switches (by type), international satellite links (country, system and number of channels), and domestic satellite stations. On status of fiber optic network, he noted that no long distance optical fiber has been installed, but some inter-exchange optical fiber is in use, as shown in maps of network/ cable status in Yangon and Mandalay. He gave the objectives of the proposed subregional telecommunications project, listed its components and provided the estimated costs involved on the Myanmar side. He then explained the situation in data communication/ internet use, international communication links, and future plans for national and international communications. He concluded that MPT faces limited funds for expansion of its network in some areas, and looks forward to regional cooperation to develop sound ICT infrastructure connected to the global digital network.

Thailand

12.   Ms. Chirapa Chitraswang, Adviser for Communications, Office of Permanent Secretary, Ministry of Information and Communication Technology provided the outline of her presentation. She first briefed on the policy and regulatory developments in Thailand, as follows: the establishment of the National Telecommunication Commission (NTC) and their initial task, prioritizing rules and regulations that they have to issue to level the telecommunication playing field; major policies on ICT, such as on smart cards, data protection law, cyber inspection project, ICT city, etc.; and ICT activities to bridge the digital divide, enhance accessibility and pursue HRD. She updated on the status of GMS telecommunications projects in Thailand, particularly the Telecoms Backbone Phase I project, Thailand's training assistance for GMS telecoms personnel, Transmission Backbone Network in Thailand. She provided background note on statistics of Thailand's telecoms sector, in terms of number of fixed and mobile subscribers, satellite facilities, telecom providers and internet users/websites. Finally, she elaborated on the plans for expansion in the future for 3G service using both WCDMA and CDMA2000 technologies.

Viet Nam

13.	Ms. Nguyen Thi Dao, International Cooperation Department, Ministry of Posts and Telematics (MPT), presented the overall ICT development situation in Vietnam since the last GMS meeting in Feb. 2001. She first updated the Forum with the current organizational structure reform of the ICT sector in Vietnam by the establishment of the Ministry of Posts and Telematics (MPT) on the basis of former DGPT, which reflects the current trend of technology convergence in State management administrative body. On the brief introduction of the current ICT situation, attention has been given to the achievements in rural telecommunication of Vietnam with remarkable coverage of up to 95.79% of villages nationwide. She also detailed the means and measures that have been taken to achieve that high result in tackling the USO of the Government, including the implementation of a Vietnamese model of expanding the Postal Service– Cultural Exchange points in rural areas (up to 6,847 points of operation). She enumerated the achievements by September 2004 in terms of telephone subscribers (9.6 million), mobile subscribers (4.3 million) and Internet subscribers (1.6 million direct and 5.5 million indirect) with bandwidth up to 1672 Mbps. She explained the objectives of the Infrastructure Development Plan (IDP) to 2010 which includes: (i) enhancing international/ domestic transmission capacity; (ii) achieving 100% districts having access to broadband services; (iii) developing optical networks to rural communes; (iv) reaching telephone density of 25 to 30 lines per 100 people; (v) increasing the Internet users by up to 40% of the population. Among policies and measures taken to achieve the 2010 IDP, she emphasized the: (i) priorities that will continue to be given to rural/ remote areas telecommunication development; (ii) participation of all economic sectors in ICT development, with attention given to enhancing International cooperation; and (iii) top priority given to HRD in the implementation process.

Comments

14.	Mr. Calvano, ITU, noted that rural telecom penetration remains an outstanding issue. He said the provision of infrastructure and funding to enhance connectivity in rural areas should be a major concern in the future. Mr. Norio Saito, JBIC, noted Viet Nam's success in rural penetration, and inquired about measures taken to achieve this success. Ms. Dao replied that rural telecommunications was given top priority for a long time, and remains so even while the telecom market has been liberalized recently. She cited as another factor of success, the cultural exchange program where at least one (1) point of contact is developed in a village, to be used as a means to contact other areas. Madame Ha agreed that VNPT's program for setting up a contact point in every village, contributed to Viet Nam's success, and added that VNPT is now preparing a project "Internet for Community" which will seek the support of the Government of Japan. Mr. Wu Guoxiang, UNESCAP, said that it is up to the countries to determine how they will proceed with rural telecoms development, but added it is important to consider emerging technologies such as broadband, in enhancing access and quality services in the future.

**III.	Status of the Telecommunications Flagship Program and Findings of RETA 6004: GMS Telecommunications Sector Policy and Capacity Building**

15.	Mr. Woochong Um, Principal Operations Specialist, MKID, ADB, first provided a background of the telecommunications sector flagship program, which is one of the 11 flagship programs under the GMS Strategic Framework. He described the pre-1995 situation of satellite-based communication links, and noted that the 4th STCF (1999) envisioned a modern, high-capacity network (OFC) comprised of 13 transmission links and three (3) loops regrouped into

Phases I and II, that would connect the six (6) GMS countries to improve the reliability and robustness of domestic networks. He added that the 5th STCF stressed sector policy reform and capacity building as preconditions for physical investment. ADB responded with support for RETA 6004 (Telecom Sector Policy Formulation and Capacity Building), which involved among others, analysis of policy/ regulatory principles, country specific policy reform agenda (Cambodia, Lao PDR and Viet Nam) and ICT based capacity building. He showed a GMS map detailing the GMS optical fiber network envisioned for the subregion.

16.   Mr. Um then explained RETA 6004's objectives, scope, executing agencies (for CAM, LAO, and VIE), and the role of the Steering Committee (including meetings held). He discussed the specific RETA scope of work items and focused on the development of telecom sector policy guidelines, which involved laying the foundation for reform program, defining economic principles and setting regulatory objectives (general and country-specific), and defining the outputs. He noted the common threads and recommendations of the study, such as the need to restructure the industry, with government focusing on regulation, and the need to prepare for the WTO "Agreement on Basic Telecommunications." He summarized the provisions of the proposed reform program for Cambodia, Lao PDR and Viet Nam. Finally, he cited the remaining activities (under ongoing initiatives) to move the sector forward, such as the feasibility study for remaining infrastructure for Phases I and II, ICT services in remote locations (part of e-government initiative), automation of border control system, implementation of the reform agenda, and others such as the GMS Information Highway and Telecoms Training by PRC.

Comments (Moving Forward)

17.   Mr. Calvano suggested that provision of ICT services in provincial, rural and remote locations be given priority by the GMS countries. He said that improvements in the policy and regulatory frameworks would be crucial in promoting rural/ remote ICT services. Mr. Wu (UNESCAP) said that his division (Information, Communication and Space Technology Division) has been mandated to promote ICT services in rural, remote locations, including community-based ICT services and community e-centers. Mr. Narayan (APT) noted the substantial changes in the design of the envisioned telecoms network in the subregion. He said rapid technological changes would alter the economics of network development in the near future and this should be considered in determining future research and preparatory work for telecoms projects. He cited that concern for liberalization of the sector should permeate various framework agreements at the national, bilateral and regional levels. He said that APT would pick up on the action plans decided by the countries, and develop its program of assistance, including capacity building, to support such action plans.

18.   Ms. Loan (MPT, Viet Nam) expressed Viet Nam's commitment to liberalization of the sector as part of its efforts to secure WTO membership. She inquired about donors' plans for financing remaining physical infrastructure for Phases I and II. Mr. Um explained that the telecoms sector is moving very fast, and that while ADB was working on sector reform, GMS countries have been able to secure financing for various Phase I infrastructure components. Mr. Malik clarified that ADB would likely continue its work to accelerate the momentum of sector policy and legislative reforms. He added that ADB would work with other development partners in securing financial and other support for various future priority sector interventions. Mr. Um added that non-revenue generating initiatives with potentially significant pro-poor benefits (such as ICT services to the rural poor) could be considered for future ADB support. Mr. Calvano noted that a multilateral financing institution like ADB would have a more regional perspective in

undertaking feasibility studies for the GMS network infrastructure improvements. Mr. Narayan enjoined the GMS representatives to submit their ideas on the needed Phase I and II infrastructure and other investments, based on their priority requirements. Ms. Ha concluded the session by emphasizing the importance of cooperation in achieving sector development goals.

IV.   Presentation on Joint ADB/ ITU ICT Based Capacity Building Program

19.   Mr. Michael Calvano, Head, ITU Regional Office for Asia and Pacific, noted that the ITU-ADB joint training program was the first successful collaborative pilot project for capacity building for ICT policy makers in the Mekong subregion. He presented the objectives and scope of the project and explained the project's methodology called "blended learning" which was a combination of workshops and e-learning. He cited the values of blended learning as a method more effective in skill/ awareness building, retention of key learning, and building closer interaction between trainer and participants. He elaborated on the methodology which included: (i) setting up a Human Capacity Development Committee (HCDC) in each country; (ii) use of teleconference/ e-mail sessions with each HCDC and set up of Executive Learning Teams (ELTs); and (iii) conduct of workshops/ online learning in each country. He further justified the use of Learning Management System (versus mere website), which ensures privacy, allows for social learning, tracks student participation and offers online support from trainer, among others. Real Time Online Collaboration and Presentation tool was used for more "high touch" support from trainers, and to help discipline students, among others. The common topics agreed by all three (3) HCDCs in each country were classified into network policy issues and internet resource management.

20.   Mr. Calvano said that the workshop and e-learning ended with presentations and tests to ensure effective learning. Some of the challenges faced were: (i) finding common dates and topics; (ii) logistics, e.g., finding/ funding facilities with proper bandwidth/ computers; and (iii) language and accent differences. Students' feedback on the relevance, efficacy and sustainability of the program were obtained. The majority especially liked the self-paced learning and the second workshop. Among recommendations were: (i) to include needs analysis of e-learning challenges/ requirements; (ii) to consider ITU/ ADB funding to cover bandwidth and computer availability; (iii) bandwidth and application testing period be included in preparation time; and (iv) trainers should have blended learning background. He concluded by stating that this was a success given the objectives that were met, the positive feedback, and the timely and within budget implementation.

Comments

21.   Mr. Um provided further clarification on the implementation of the training program and sought feedback from the training participants present in this meeting. Dr. Nguyen Than Phuc (Viet Nam) reflected on the gains from the program and suggested preparing participants for such online type of training programs. Mr. Calvano agreed to this but added that the ITU-ADB program has indeed adopted steps to prepare participants for the blended format. Mr. Lay Mariveau (Cambodia) suggested increasing the face-to-face workshops, which are very useful and less affected by external factors; he asked ITU and ADB for extending support for similar training programs. Mr. Somlith noted that many of the problems arose not from the trainors but were caused externally, such as poor connections and heavy workload of trainees. Mr. Malik said that there is a need to sustain such type of training for institutional development, but the

issue that remains is how to sustain and integrate this in the ITU chain. In terms of loan projects, he stressed the need for investments in physical infrastructure to be integrated with HRD initiatives. He added that the positive feedback on the usefulness of the training program would guide the design of future capacity building work.

V.   Findings of the Demand Study for ICT Based Basic Service Delivery

22.   Mr. Lars H. Bestle, Consultant, provided the context of the study, which covered three (3) countries (Cambodia, Lao PDR and Viet Nam), and involved preliminary assessment and exploratory fact-finding missions. He said that there is indeed a need to improve basic social services in rural and remote areas of the three countries, given that basic social services do not reach the people most in need. He stressed that action is required, and that ICT possesses untapped opportunities for putting people at the center of service delivery, such as improving health and education, strengthening agriculture and small-scale enterprises, and increasing incomes. He gave as an example the Bhoomi kiosk in India, which is a farmer friendly mechanism to access/ update land records with ICT.

23.   He gave the current situation in the three (3) countries, citing the shared lack of infrastructure in Cambodia and Lao PDR, and the fast-growing telecom market, but with increasing urban-rural disparities in Viet Nam. He said that demand for ICTs in rural and remote areas of GMS hinges on information starvation and little awareness about ICTs in these areas. He stressed that there are opportunities for harnessing ICT to improve basic social services in rural Cambodia, Lao PDR and Viet Nam. Among opportunities he cited in the subregion were: (i) upgrading skills through distance education; (ii) telemedicine and access to health information; (iii) system for market information; (iv) agriculture/ fishery extension; and (v) land management administration.

24.   Mr. Bestle then provided the various prospects and recommendations in each of the three countries, such as for example: extensive decentralization plans with commune councils (Cambodia); extensive plans of connecting all rural provinces with OFC plus (Lao PDR); and synergies with health, education and e-commerce for rural enterprises (Viet Nam). He cited the key challenges that should be addressed, such as the infrastructure obstacles, enabling pro-poor policies, human capacity building, and enterprise development. He added that ICT is not the magic bullet but could strengthen the underlying processes of basic service delivery, such that achieving the MDGs for the subregion is in doubt without radical approaches offered by ICT. He advanced the following recommendations to promote ICT for poverty reduction: (i) develop a GMS pilot ICT scheme; (ii) strategize toward poverty reduction; (iii) embed pilot scheme in development strategies; (iv) carefully assess information needs; (v) identify killer applications; (vi) create community telecenters; (vii) implement infrastructure according to needs; and (viii) learn from Viet Nam's current experiences.

Comments

25.   Mr. Phuc asked what is meant by killer applications. He also asked which facilities (e.g. speaker system, internet, telephone) would be most useful for Viet Nam's rural areas. Mr. Wu commented that community information centers might play an important role in delivering such development ICT services to rural areas, and said that different models should be explored to increase their sustainability. Mr. Calvano said that developing ICT services to rural areas should be bundled along with policy reforms, infrastructure development and capacity building, and that

financial and other support for these may have to be shared among various agencies. Ms. Chirapa expressed appreciation for the ICT demand study, especially one of the recommendations on creating community telecenters. She noted that poor, ethnic communities that reside in rural areas are most in need of better access to services, and using ICT to enhance such access will definitely reduce poverty. Mr. Wang shared that the experience with China's rural telecommunications development could provide useful lessons and said that a later presentation would elaborate on this.

26.   Mr. Bestle clarified that killer applications are those meant to change the way we do business. He cited that one possible killer application for Viet Nam is e-commerce for promoting rural products (e.g. peanuts) both for export and domestic markets. He reminded that killer applications could be identified by agencies working directly with people in the field. He also said that what is currently happening in Viet Nam would provide useful lessons for the other GMS countries. Mr. Malik concluded with a note that proper packaging of hardware (e.g. infrastructure) and software (e.g. training, policy reforms) initiatives would be crucial in realizing maximum benefits from the ICT sector for socio-economic development.

27.   Mr. Malik enjoined the participants to think about important initiatives, which could be discussed during the session on priority initiatives and the way forward.

VI.   Other Ongoing Initiatives: Presentation of GMS Information Highway

28.   Mr. Wang Jianchao briefed on the origin of the initiative to build the GMS Information Highway (IH). He then gave the importance of the GMS IH in socio-economic development of the GMS, which helps promote infrastructure construction, accelerate ICT development, improve service quality, and narrow the digital divide. He added that the GMS IH would help facilitate ASEAN integration. He then briefed on the initial result of the Senior Officials' meeting on the GMS IH held in Kunming in mid-September 2004 with participation of telecoms administrations of GMS countries. The delegations reached a consensus on the draft Memorandum of Understanding on the Joint Cooperation in Pushing Forward the Construction of the Information Highway in the Greater Mekong Subregion, which defined the principles, contents and working mechanism of cooperation, and provided for creation of a Steering Group (composed of telecoms administrations) and Implementation Group (composed of dominant operators in the subregion). The six parties agreed to finish the examination and approval procedures within their respective countries before the end of October 2004, so that the Ministers of the six countries can sign the MOU during the East Asia Leaders Summit in November 2004. The said Senior Officials' meeting also unanimously agreed that the Implementation Group would discuss the plans presented by the enterprises, and work out a detailed plan for building the GMS IH, after the MOU is signed.

29.   Mr. Zhang Tao, Network Manager, China Telecommunications Corporation, provided the importance, role and significance of the GMS IH initiative. He showed a chart highlighting the large increase in capacity forecast in the GMS in 3-5 years. He showed basic population and economic information on each GMS country and contrasted this with telecom service penetration for fixed, mobile and internet service, which showed scope for future growth. He presented China Telecom's proposal based on ADB's earlier TA study, as follows: (i) transmission construction for Phase I in 2005-2006, and Phase II in 2007-2008; (ii) transmission network covering major cities in each country, with four loops to form target network; (iii) combine existing international cable system; and (iv) subregional international exchange center

to contribute capability to all countries. He showed a GMS map indicating target network scheme under an information express, and showed the geographic coverage of major loops- the northwest, southwest, northeast and southeast loops. He went over the existing connections and detailed the remaining work for Phases I and II. He then enumerated the general principles of cooperation and discussed the form of cooperation envisioned under the GMS IH MOU.

30.   Mr. Zhang detailed the future activities, which included, among others, the signing of the cooperative letter of intent with respective projects, joint feasibility study and developing technical/ commercial solutions. He then described the elements of the China-Myanmar Cross Border System implementation and China-Laos Cross Border System implementation and showed a figure on the subregion backbone network of CT. He proceeded to describe the subregional internet network, which will involve installing the international IP router gateway to connect with other operators to form the GMS internet. He then listed the opportunities for service cooperation for each service- international voice, international bandwidth, international IP, and e-commerce, e-government and e-society applications.

31.   Mr. Zhang provided China Telecom's qualifications as China's participating operator in the GMS IH and gave the company's subscriber base for various services and financial performance as of end of 2003. He gave China Telecoms international strategy and described what the company currently has in terms of high capacity transmission network, loyal customer base and stable revenues, and what the company hopes to have in terms of closer partnership with the GMS countries, a completed GMS IH within five (5) years, international service in cooperation with operators from each GMS country, and strengthened regional economic environment.

Comments

32.   Ms. Chirapa informed that Thailand has already approved the GMS IH initiative and would be ready to sign the MOU later this year. Mr. Mariveau expressed that Cambodia also has no objection to the GMS IH initiative. He noted that GMS IH development for Cambodia would need to coordinate with ADB, since this could overlap with the programmed ADB assistance to build the connection between Cambodia and Lao PDR, and between Phnom Penh and Siem Reap. Mr. Somlith said that Lao PDR is also ready to sign the GMS IH MOU. Mr. Saito said he would like to see more integration of the GMS IH initiative's infrastructure components with the policy/ regulatory aspects. Mr. Wang clarified that China will coordinate with ADB on the related soft aspects of the GMS IH.

33.   On Cambodia's query as to why the telecoms project in Cambodia was moved back, Mr. Um clarified that there was a need to undertake the sector reform study before proceeding with the investment. Considering the progress in the telecom sector in recent years, it was explained that the countries now need to assess the priority of the telecom sector against other sectors, and incorporate it into the ADB's country programming exercise, which is ongoing. Governments may also consider other sources of financing which could be coordinated as part of the GMS Program framework. He stressed that it would be important to think of various modalities of financing telecom projects, considering the scarcity of ADB's ADF resources for the GMS countries.

VII. **Discussion and Confirmation of Priority Areas and the Way Forward**

34. Based on the discussions, Mr. Um summarized the proposed priority areas and the way forward to be carried out in close cooperation among the development partners including ADB, ITU, APT, UNESCAP and others.

   a. Implementation of sector reform agenda:
      - Legislation
      - Guidelines for ICT (not just telecoms)
      - APT to help facilitate in establishment of GMS Program for sector/ policy reform, including USO/ USF
      - ADB/ APT/ ITU/ UNESCAP to coordinate follow-up discussion among donor/ international agencies for cooperation

   b. Infrastructure Development
      - Phases I and II- governments to set priority on telecom sector and identify subproject financing from appropriate sources
      - Other routes including JBIC assistance to Cambodia
      - Information Highway- clearly define the scope and implementation plan

   c. ICT Initiatives
      - Content Development- ICT for rural areas
      - Application Development- enhancing development effectiveness of other sectors using ICT
      - ICT Application Delivery/ Mechanisms such as Community Information Centers or e-centers

   d. 7th Subregional Telecommunications Forum (STCF-7)
      - Time: Late 2005
      - Venue: Discussions with PRC to be confirmed

DAY 2

35. Madame Quan Duy Ngan Ha opened the day 2 session and invited representatives from PRC to present on: (i) the telecoms training program for GMS telecoms officials; and (ii) the Chinese experience on telecom development in rural areas.

VIII. **Other Ongoing Initiatives: Telecommunications Training Program Provided by Ministry of Industry and Information (MII) of PRC for GMS Telecommunications Officials**

36. Mr. Li Yalin, Official, Division of Foreign Economic and Trade Cooperation, Department of Planning, MII, PRC, noted that the training program was raised by PRC Premier Zhu Rongji during the First GMS Summit in 2002 and was welcomed during the 12th GMS Ministerial Meeting in Dali in 2003. He gave the objectives of the program, which include: (i) sharing telecoms development and administration experience; (ii) establishing cooperative relationship among telecoms officials of GMS; and (iii) promoting long-term bilateral and multilateral cooperation among GMS members. He gave the timing and venues of the first and second sessions of the program. On funding, he explained that ADB would cover international tickets while MII would cover in-country costs such as venue, lecturers, meals, hotels, etc. He said

participants include three (3) officials from each GMS country. He then listed the contents of the first session of the training which include, among others: (i) outline of PRC telecoms industry and telecoms network development; (ii) construction, operation, and management (COM) of modern telecom backbone; (iii) COM of modern telecom access network; (iv) introduction of telecom techniques and products of fixed telecoms network; and (v) innovation and development of China telecom, reform and reconstruction of telecom industry. He added that during the program, GMS senior officials would have opportunities to exchange opinions and thoughts with experts from Chinese telecoms and manufacturing enterprises. He concluded with a brief on the China Institute of Communication (CIC), which would supervise the program.

IX.   Presentation of Chinese Experience on Telecommunication Development in Rural Areas

37.   Mr. You Wuyang, Specialist from China Academy of Telecommunication Research, (CATR), MII, PRC, provided a brief status of development of telecommunication in the rural areas, showing trends in penetration rates in rural areas, and proportion of villages with telephone connections. However, he stressed that the gap between urban and rural areas was still conspicuous, as fixed penetration rate was only a third of that of urban areas. He then discussed the history of universal service in China, and noted the efforts in new construction and maintenance in universal service. He added that while the central government instituted policies and regulations, local governments provided financial support and other incentives, which increased village connections by 10% annually. He listed various kinds of technology used in universal access and criteria for selection, and discussed typical technology for various rural settings. He stressed that fixed wireless access for remote areas, the SCDMA WLL System, is now used widely in rural areas. He said that at start of 2004, MII required that each administrative village be installed at least two telephones, and assigned the 40,000 administrative villages among the six (6) operators. The first phase (experimental stage) resulted in connecting 700 villages, and the second phase targeting 14,664 villages has begun. He cited the underlying success factors which are: (i) rapid economic development of China; (ii) competition in telecoms; and (iii) central government leadership and active participation of local governments. As next step, he stressed that the tendency for universal service in PRC is to establish the USF, and MII would focus on the following: (i) publicizing statutes about universal service; (ii) communicating with stakeholders; and (iii) establishing management institution for universal service. The government and operators agreed that USF is the best way to address the problem of China's rural telecom industry.

Comments

38.   Madame Ha noted the strong involvement of PRC's central government in promoting rural telecom development. She inquired about the source of funding for rural telecom development program. Mr. Wang clarified China's telecoms industry was earlier controlled by the Ministry of Posts and Telecoms (MPT), which was both government and enterprise. However, he believed that rural telecom development is largely a government undertaking. Mr. Calvano asked whether China's western development strategy is reflected in its telecom development program. Mr. Wang said that the western part has lower telephone density due to weaker economy and relatively higher cost of providing infrastructure. He said that demand in the west is expected to increase markedly, and this will be met through the USF approach.

39.   Ms. Chirapa sought information on how operators would be managed in pursuit of universal service obligation (USO). Mr. Wang replied that USF would be implemented to pursue the USO at the appropriate time. He noted that implementation of USF should take into account not only the cost of infrastructure and maintenance, but also the cost effectiveness of technology. Mr. Um sought more information on the problems encountered in rural telecoms development. Mr. Wang replied that since connecting to rural areas would have little or no financial return, government should mainly undertake this activity. Mr. Wu asked about Thailand's experience in USO, particularly in provision of voice and internet services. Ms. Chirapa explained that organizational and policy changes in Thailand government's supervision of the telecoms sector, is expected to impact on USO implementation. Mr. Narayan suggested holding a workshop on USO and USF to address the participants' interest, and suggested including this in the list of priorities and way forward.

40.   Mr. Aye Kyaw noted that contributions from telecoms operators and suppliers could be tapped to augment government resources for rural telecoms development. Mr. Mariveau briefed on Cambodia's experience in pursuing USO, noting that mobile operators have provided access to rural users while achieving financial return at the same time. Mr. Wang noted that overall development of the telecoms sector would eventually lead to increased coverage of rural areas. Mr. Somlith explained Lao PDR's rural telecoms policy and noted that USF has not been set up yet. H.E. Mr. Touch Heng noted that in the case of Cambodia, mobile access was much more significant than cable access for rural areas. Madame Ha closed the session by enjoining the participants to use the e-mail in exchanging new ideas/ information on USO/USF developments.

X.   Discussion and Adoption of the Summary of Proceedings

41.   The STCF-6 participants reviewed the draft minutes and after incorporation of suggested changes, the body therefore approved the minutes of the STCF-6 meeting.

XI.   Closing Session

42.   Madame Ha stated that the meeting has concluded successfully and that it has provided a good opportunity for exchange of views and experiences in ICT and telecoms development. She said it is time to transform the agreements in this meeting into actual activities to promote ICT and improve its access to the people. She said that the Ministry of Posts and Telematics of Viet Nam is honored to host the meeting and thanked ADB, the GMS representatives and the international organizations for the successful conduct of the meeting. She wished everyone an enjoyable and pleasant stay in Hanoi.

43.   Mr. Um thanked everyone for actively participating in the fruitful discussions during the meeting. He stressed that the meeting is timely in view of the coming GMS Ministerial Conference. He noted that the GMS telecommunications sector has come a long way in the past ten years, but noted that there is scope for further work in the sector. He thanked all the presenters for helping get the discussions going. On the way forward, he noted that the GMS Information Highway initiative encompasses many GMS telecoms initiatives and said that ADB will work closely with PRC on this. He thanked the following: the Government of Viet Nam for the excellent hosting; ITU, APT, ESCAP and JBIC for contributing to the substantive discussions; and the Secretariat for facilitating the meeting logistics and arrangements. He hoped the meeting could be organized next year to follow up on the progress of initiatives in the sector.