

### Minutes of Meeting

Meeting: 2<sup>nd</sup> Joint Coordination Committee (JCC) meeting of the Project for Optical Fiber Techniques in Telecommunications Engineering funded by JICA under TCP

Date: January 9, 2015.

Time: 10:00 AM

Venue: Bhutan Telecom Conference Hall, Thimphu

Members Present:

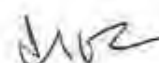
1. Ms. Yumiko Asakuma, Chief Representative, JICA Bhutan Office
2. Mr. Takano Sho, Representative, JICA Bhutan Office
3. Ms. Tomoto Miyata, Project Formulation Adviser, JICA Bhutan Office
4. Mr. Krishna Subba, Program Officer, JICA Bhutan Office
5. Mr. Kiran Kumar Pradhan, Engineer, DITT
6. Mr. Tshewang Gyeltshen, Chief Executive Officer, Bhutan Telecom
7. Mr. Junya Yamaguchi, Chief Adviser, JICA Expert team
8. Mr. Sonam Rinchen, Project Manager, Bhutan Telecom
9. Mr. Karma Tshewang, Project Director, Bhutan Telecom

The Chief Executive Officer (CEO) of Bhutan Telecom welcomed all the members on behalf of Bhutan Telecom for the 2<sup>nd</sup> JCC meeting. The CEO thanked JICA and the government of Japan for assisting Bhutan Telecom in particular in the development of telecom infrastructure from the past projects. He said what Bhutan Telecom is today is all due to JICA and its assistance in the form of various telecom projects both in the past and the present.

On behalf of the Chief Representative of JICA Bhutan Office, Mr. Takano Sho, thanked Bhutan Telecom for arranging the 2<sup>nd</sup> JCC meeting. Mr. Takano said that JICA is very happy to note that its assistance in the development of telecom network in Bhutan has seen positive outcomes. He said telecommunication service has been and still is one of the key facilitators of any developmental activities and would go a long way in helping the Royal government of Bhutan in achieving its ICT goals.

Project Progress update

The project team informed the meeting that the progress of the project was well on track. Following achievements and changes were highlighted:

1. Output 1: Development of 3 technical manuals

The meeting was informed by the project team that draft version of all 3 manuals (Design/Construction, Quality Inspection & Safety Management) were ready. It was further informed that the printing of the manuals would be done only towards the end of the project so that any changes during the implementation can be incorporated. The meeting suggested to circulate the draft manuals to all the relevant users for feedback.

2. Output 2: O&M System for FTTX

Since the achievement of this output has some dependency on the output 1 and output 3, the meeting was informed that as on date, there was no progress to update on it. On the timeline for this output, Bhutan Telecom requested JICA to see whether assignment of the GIS expert, which is one of the components of this output, can be brought forward to sometime in 2015 from 2016. This change in the timeline if possible would help Bhutan Telecom with its GIS projects planned for 2015. Bhutan Telecom also further requested JICA to explore possibility of extending the scope of this output taking into account that there is a need for a GIS based monitoring system for national fiber networks.

JICA acknowledged the requests put forth by Bhutan Telecom but there was no assurance that the requests could be accommodated. JICA in general JICA felt that it may be better to implement as per the initial scope and based on the genuine requirements, explore possibilities on extending the scope.

3. Output 3. Experimental work at 2 trial sites (Paro & Jakar)

The meeting was informed that the short-term experts have provided on-site technical guidance at Paro, which included four FTTC sites. It was also informed that the experts in close consultation with Bhutan Telecom engineers completed the site survey and detailed design for Jakar.

As part of this output, the experts had also compiled problems pertaining in particular to quality of construction of telecom cables and recommendations for improvement were presented to the Bhutan Telecom Management during the annual & budget meeting on the 24<sup>th</sup> of November, 2014 in Phuentsholing.

4. Bill of materials for Jakar

The meeting was informed that the bill of materials for Jakar based on the detailed design was prepared and submitted to JICA for endorsement. It was highlighted that due to change in the trail site from Mongar to Jakar, the quantity of materials has almost doubled due to site conditions at Jakar. The meeting was also informed that while most of

### Minutes of Meeting

3<sup>rd</sup> Joint Coordination Committee (JCC) meeting of the Project for Optical Fiber Techniques in Telecommunications Engineering funded by JICA under TCP was held on the 14<sup>th</sup> of December 2015 at 11:00 AM in the Bhutan Telecom Conference hall. The following members attended the meeting:

JICA Bhutan Office:

1. Ms. Yumiko Asakuma, Chief Representative
2. Mr. Takano Sho, Representative, JICA Bhutan Office
3. Ms. Tomoto Miyata, Project Formulation Adviser, JICA Bhutan Office
4. Mr. Krishna Subba, Program Officer, JICA Bhutan Office

DITT, MoIC

1. Mr. Sonam Phuntsho, Chief, Infrastructure Division

Bhutan Telecom (BT):

1. Mr. Tshewang Gyeltshen, Chief Executive Officer, Bhutan Telecom
2. Mr. Junya Yamaguchi, Chief Adviser, JICA Expert team
3. Mr. Pushpa Mani Pradhan, Director, Technical
4. Mr. Chimmi Dorji, Director, Business
5. Mr. Jichen Thinley, General Manager, Operations
5. Mr. Sonam Rinchen, Project Manager, Bhutan Telecom
6. Mr. Karma Tshewang, Project Director, Bhutan Telecom

The Chief Executive Officer (CEO) of Bhutan Telecom welcomed all the members on behalf of Bhutan Telecom for the 3<sup>rd</sup> JCC meeting. The CEO thanked JICA and the government of Japan for assisting Bhutan Telecom in particular in the development of telecom infrastructure from the past projects. He said, what Bhutan Telecom is today, is all due to JICA and its assistance in the form of various telecom projects both in the past and the present. The CEO said that the FTTX project funded by JICA was timely and apt given the worldwide trend that subscribers are becoming more and more data hungry.

The CEO also highlighted the fact that technology is changing very rapidly making it very difficult for a small company like BT to cope up with the trend. He said that mobile technology in particular is evolving so fast that BT has not even been able to put infrastructure in place to make the mobile service resilient to disasters and other natural calamities. The CEO also remarked on the excellent support and inputs from the Chief advisor, Mr. Yamaguchi and expressed appreciation and high hopes for continued support in future.




The Chief Representative of JICA Bhutan Office thanked Bhutan Telecom for arranging the 3<sup>rd</sup> JCC meeting. She said that while the FTTX project is faring well as per plan, it is important nonetheless to review and update progress. The Chief said that JICA is very happy to note that its assistance in the development of telecom network in Bhutan has been one of the most successful projects. Telecommunications, she said, is no more a luxury item as it used to be in the past. She said it has now become a basic necessity for any developmental activities and the key facilitator for recue operations in the events of disasters and emergency situations. Given this fact, she said, JICA is in the process of changing its focus on the areas of assistance, and given the encompassing nature of telecommunications service, viewed mainly from the disaster point of view, JICA is positively looking forward to supporting telecom projects.

Referring to the current FTTX project, the Chief said, it was motivating to see BT taking proactive roles and full ownership of the project. Such participatory attitude and proactive involvement of the assistance recipient agency, she said, is always welcomed and encouraging.

The Chief also recalled memories from early 60's when JICA assistance was introduced to Bhutan for the first time spearheaded by late Dasho Nishoka. She said while JICA assistance in Bhutan was started in 1964, major enhancements in the assistance started from 1986, and from there on, the strength of ties between Bhutan and Japan have only become stronger. To mark this strong ties between the two countries, she said, JICA is contemplating on holding an event in 2016 to celebrate 30 years of JICA assistance to Bhutan.

### **Project Progress update**

The project team informed the meeting that the progress of the project was well on track. Following achievements and changes were highlighted:

1. Output 1: Development of 3 technical manuals

The meeting was informed by the project team that draft versions of all 3 manuals (Design/Construction, Quality Inspection & Safety Management) were updated based on the inputs/feedbacks of the JICA short-term expert and with the knowledge gained from the training in Japan and the experience from the trail works at Jakar. The project team also briefly presented to the meeting on the look and feel of the manuals and their contents.

2. Output 2: O&M System for FTTX

The project team updated that all relevant information on the network components of the trail work have been updated in the current GIS system. It was informed that enhancement works on the GIS system will be done after arrival of the short term GIS expert sometime in June/July 2016.

3. Output 3. Experimental work at 2 trial sites (Paro & Jakar)

The meeting was informed that the trial works at Jakar has been successfully completed with the onsite help of the JICA short-term expert. The meeting was also informed that the JICA short-term expert conducted 4 days of training to the BT engineers and technicians involved in the implementation of the trail work.

The meeting was also informed that the Chief Advisor of JICA FTTX project presented the completion report of the trail work at Jakar to the Bhutan Teelcom Management during the Annual & Budget Meeting on the 24<sup>th</sup> of November 2015 in Phuentsholing.

4. Bill of materials for the project

The meeting was informed that except for the fusion splicer van and GIS equipment, major tools and test equipment have been delivered.

5. FTTX trainings

The meeting was informed that the 2<sup>nd</sup> FTTX training in Japan is scheduled to take place sometime in April 2016. While as per the project, only 5 persons are to attend this training, the Chief Advisor said that discussions are in progress with JICA on the possibility of increasing the slots to 7 persons. This request for increase in slots, he said, was to try to get maximum benefit by involving more people.

6. 4<sup>th</sup> JCC meeting

JCC members agreed to convene the 4<sup>th</sup> coordination meeting sometime in August 2016.

The Director, Technical Department of BT thanked JICA for all the assistance, both in the past and present, and reiterated the fact that what Bhutan Telecom is today, is all because of JICA assistance. He also thanked all the members for taking out time to be present for the 3<sup>rd</sup> JCC meeting.

The meeting was adjourned at 1250 pm.

Endorsed.

  
25/12/15  
Chief Executive Officer  
Bhutan Telecom

  
Chief Representative  
JICA Bhutan Office

### Minutes of Meeting

4<sup>th</sup> Joint Coordination Committee (JCC) meeting of the Project for Optical Fiber Techniques in Telecommunications Engineering funded by JICA under TCP was held on the 11<sup>th</sup> of August 2016 at 11:00 AM in the Bhutan Telecom Conference hall. The following members attended the meeting:

JICA Bhutan Office:

1. Mr. Koji Yamada, Chief Representative
2. Mr. Takano Sho, Representative, JICA Bhutan Office
3. Mr. Krishna Subba, Program Officer, JICA Bhutan Office

GNHC:

1. Ms. Kuenzang Lham Sangay, DCD, GNHC

DITT, MoIC:

1. Ms. Uden Sharpa, Infrastructure Division

Bhutan Telecom (BT):

1. Mr. Tshewang Gyeltshen, Chief Executive Officer
2. Mr. Junya Yamaguchi, Chief Adviser, JICA Expert team
3. Mr. Chimmi Dorji, Director, Business
4. Mr. Jichen Thinley, General Manager, Operations
4. Mr. Sonam Phuntsho, Project Manager
5. Mr. Karma Tshewang, Project Director

The Chief Executive Officer (CEO) of Bhutan Telecom welcomed all the members on behalf of Bhutan Telecom for the 4<sup>th</sup> JCC meeting. The CEO thanked JICA and the government of Japan for assisting Bhutan Telecom both in the past & present, and expressed high hopes that JICA will support Bhutan Telecom in future in the form of telecom infrastructure development and capacity development. The CEO said that he was happy to report that the progress of BT's FTTX project funded by JICA is good and he appreciated the knowledge transfer that the JICA experts have done through various hands-on trainings, workmanship in particular.

The CEO expressed his regrets for not being able to attend the training session by JICA Chief Representative during the recent FTTX in-house training for BT technical team. The CEO also expressed appreciations for the excellent support and inputs from the Chief Advisor, Mr. Yamaguchi.




The Chief Representative of JICA Bhutan Office thanked BT for arranging the 4<sup>th</sup> JCC meeting. He also further thanked BT and JICA Chief Advisor, FTTX Project for the opportunity to deliver a lecture to the FTTX trainees of BT on how JICA is leveraging on ICT in achieving its SDG goals. The Chief said it is crucial to take advantage of ICT to reduce cost in whatever small ways in our efforts to implement developmental activities. He said ICT would play a major role, in particular, in a country like Bhutan with rugged terrain.

The Chief also stressed and reiterated on the major aspects of JICA assisted programs. Specifically, he highlighted capacity development as being one of the crucial aspects with major emphasis on technical and core managerial capacity developments. He said that the main objective has to be knowledge transfer through JICA engagements and the recipient country would need to provide an enabling environment to ensure perpetual continuation of capacity development.

On the FTTX project, the Chief remarked that he was very happy to note the good progress that the BT CEO alluded in his opening address.

### **Project Progress update**

The project team informed the meeting that the progress of the project was well on track. Following achievements and changes were highlighted:

#### **1. Output 1: Development of 3 technical manuals**

The meeting was informed by the project team that all 3 manuals (Design/Construction, Quality Inspection & Safety Management) were ready for printing. It was also informed that the manuals were used as textbooks for the recent FTTX in-house trainings for the 17-member technical trainees of BT.

#### **2. Output 2: O&M System for FTTX**

The project team updated that enhancement works on the GIS system was done by the GIS short-term expert. The GIS expert also assessed and provided guidance to the 2 BT GIS engineers in addition to his guidelines on GIS manual and data collection methods.

#### **3. Output 3. Experimental work at 2 trial sites (Paro & Jakar)**

The project team highlighted on how the splicing van which was delivered as one of the components of the project, is put in use by BT while implementing fiber networks. Pictures demonstrating the use of the splicing in the field were also shown

#### **4. FTTX trainings**

The meeting was informed that 7 officials were sent to Japan as part of the 2<sup>nd</sup> FTTX training which took place from 6-16 April 2016. The main objective of this training was to learn about the latest in the FTTX technologies and how these technologies are being deployed in the Japanese broadband market.

#### 5. 5<sup>th</sup> JCC meeting

JCC members agreed to convene the 5<sup>th</sup> coordination meeting sometime in December 2016.

#### 6. IT Workshop/Seminar

The Chief Advisor of the FTTX Project, Mr. Yamaguchi presented the draft proposal on the IT Seminar. The main purpose of this Seminar, he said, was to report on the outcome of the JICA funded FTTX project while at the same time bringing together various ICT players to interact and share information on the activities that they are engaged in.

On the resource persons, Mr. Yamaguchi informed the meeting that there will be 2 experts from NTT-R&D and NTT-East Japan. He also informed the meeting that the Chief Representative of JICA Bhutan Office will deliver a special lecture on the application of ICT in the developing countries. On the resource persons from Bhutan, the meeting agreed to explore and call for papers from various ICT players and select a few for presenting during the workshop.


While the draft agenda suggested that the Honorable Minister for MoIC will deliver the Key Note Address, the meeting felt this should be left open since the Minister may or may not be available.

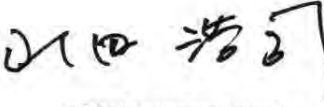
The meeting agreed to tentatively set the date for this workshop on 30<sup>th</sup> of November 2016. The meeting also suggested that this workshop should have a proper and appropriate theme. It was agreed that the Chief Advisor of the FTTX project in close consultation with other members in BT will propose a theme for the workshop and circulate for feedback/comments.

The Project Director thanked JICA for all the assistance and expressed sincere hopes to get continued support in future. He also thanked all the members for taking out time to be present for the 4<sup>th</sup> JCC meeting.

The meeting was adjourned at 1210 hours.

Endorsed.

  
Chief Executive Officer  
Bhutan Telecom

  
Chief Representative  
JICA Bhutan Office