# 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 the 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. 5th 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

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# **Minutes of Meeting**

5<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 20<sup>th</sup> of January 2017 at 10:30 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. Ms. Tomoto Miyata, Project Formulation Adviser, JICA Bhutan Office
- 4. Mr. Krishna Subba, Program Officer, JICA Bhutan Office

### JICA HQ, Tokyo:

- 1. Mr. Tomoyuki Naito, Team Leader
- 2. Mr. Keitaro Tanaka, Planning Coordinator

#### GNHC:

1. Ms. Kuenzang Lham Sangay, DCD, GNHC

# DITT, MoIC:

1. Ms. Thaye Choden, ICT Officer

# 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, Corporate Planning & Strategy Division
- 5. Mr. Sangay Wangdi, General Manager, Finance & Accounts Division
- 6. Mr. Jambay Sither, General Manager, Operations Division
- 7. Mr. Penjore, General Manager, Marketing Division
- 5. Mr. Sonam Phuntsho, Project Manager
- 6. Mr. Karma Tshewang, Project Director

The Chief Executive Officer (CEO) of Bhutan Telecom welcomed all the members on behalf of Bhutan Telecom for the 5<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 and capacity development. Despite some of the counterparts of the FTTX project leaving the company, the CEO assured that the sustainability of the FTTX project was not at stake in any manner or form.

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This he said is due to the fact that BT now has similar FTTX networks deployed extensively throughout its network, the operation & maintenance of which are carried out by in-house resource.

The CEO reiterated the importance and positive impacts of the JICA grant aids for the development of digital domestic telecommunications during the 90's through which all Dzongkhags of Bhutan were connected both within the country and the outside world. He said that some of the items delivered through the grant aid in the 90's are still being used by BT which is a clear testimony of the long lasting benefits that JICA assistance have in general. Even for the current FTTX project, he said, the benefits from the trail network and the knowledge transfer, workmanship in particular, will have positive impacts as BT expands its FTTX networks to meet the high-speed broadband demand in the many years to come.

The CEO also expressed appreciations for the excellent support and inputs from Mr. Yamaguchi, both in the past and during his tenure as the Chief Advisor for the FTTX project.

The Chief Representative of JICA Bhutan Office thanked BT for arranging the 5<sup>th</sup> JCC meeting and congratulated BT and JICA Chief Advisor, FTTX Project for the successful completion of the project. The Chief, to put his opinion in context, cited a Japanese saying called 'SHUHARI', where SHU means following the tradition, HA means breaking the tradition and RI is coming up with new idea. He said BT seems to have now reached the RI realm. Having explained this, the Chief said that he has learnt many lessons from BT both as part of the current FTTX project and the ongoing request for grant for a 2<sup>nd</sup> mobile core, and he appreciated BT's giving him good lessons. He said that he would work on identification and implementation of future projects based on these lessons.

The Chief said that the main objective of JICA's investment through its TCP scheme is capacity development through knowledge transfers. In the context of BT's FTTX project for which he said the total investment was Nu. 100 million, he expressed concerns on some counterparts having already left the company even before the project was complete. With such attritions of the counterparts, he said, ensuring perpetual continuation of capacity development due to JICA engagements may become very difficult to attain.

On BT's request for JICA grant for 2<sup>nd</sup> Mobile Core, the Chief informed the meeting that JICA Bhutan Office has put in lots of efforts to convince the government of Japan based on which a preparatory survey team is already onsite. Having done that, he said, BT seems to be putting in place lots of new mobile infrastructure in and around Thimphu, which made him wonder if the JICA office has sent wrong information on the financial constraints BT has been facing.



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In general, the Chief said, JICA expects high support and cooperation from the implementing agency in the recipient country for any JICA engagements. He said he has concerns on the kind of self-help efforts by BT based on information that his office has gathered. Specifically, he said that his office has received information that the IT workshop which took place on the 30<sup>th</sup> of November 2016 as part of the FTTX project had to be single handedly coordinated and organized by JICA Chief Advisor for the Project, Mr. Junya Yamaguchi.

# Project Achievement update:

The project team updated the meeting on the various activities carried out during the project period and subsequent achievements as detailed below:

# 1. Project Progress and Activities: Mr. Sonam Phuntsho, Project Manager

The Project Manager highlighted on the key activities that were carried out to achieve the 3 main outputs of the project: i) Development of Technical manuals, ii) Development of O & M system for FTTX, and iii) implementation of trial work at Jakar. The meeting was informed that the development of manual, in particular, went through a series of versions the latest updates of which were made after the 2<sup>nd</sup> batch of training in Japan in April 2016. It was updated that the manuals were used as training materials during the in-house training in July 2016 and will be continued to do so in future in house trainings on the FTTX networks.

# 2. Project Activities by field staff: Mr. Rinzin Dorji

Mr. Rinzin Dorji presented in detail on the series of activities that the project team had carried out in achieving the 3 main outputs of the project. On the development of manual, it was highlighted that the team members started from ground zero and went through 6 different versions until the final copies were printed and distributed. The manual, he said, has guidelines on technical specifications of fiber cables, fiber network design and constructions, safety measures and management both during construction and operation & maintenance phases.

### 3. Activities carried out at the trial site, Jakar: Mr. Tandin Wangdi

Mr. Tandin's presentation covered various tasks that the project team had carried out while implementing the FTTX trial network at Jakar. Images of some of the fiber network components indicating status before and after the trial work were presented clearly demonstrating improvements in the 'after' images in terms of workmanship and safety.

As part of Mr. Tandin's presentation, the Chief Representative of JICA Bhutan Office asked him, amongst many improvements suggested by JICA experts, whether there were some that were initiated and suggested by the team members of BT. It was highlighted that majority of the improvements were suggested by JICA experts and BT team members implemented the suggestions in the field through which learning happened.





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The team leader from JICA HQ, Tokyo suggested to devise some means to keep track of the perpetuity of the learning. BT welcomed the suggestion and said that one of the ways would be through in-house trainings on the FTTX network during which the manuals would be used as teaching material.

BT CEO requested JICA to look into possibilities of ways and means to monitor and keep track of the perpetuity of the learning and other impacts of JICA assisted projects. JICA CR left no comment.

# 4. Overall achievements of the project: Project Director

It was highlighted that the overall goals and objectives of the project were achieved without any major obstacles. The achievements of the project, the Project Director said, was well in line with JICA's standard process of reviewing the achievements using DAC's 5 evaluation criteria. He also touched upon the growth trend of FTTX subscriptions and service coverage with due reference to the status just before the start of the JICA FTTX project in 2014 and the current status. It was highlighted that when JICA FTTX project started, BT's FTTX coverage in terms of Dzongkhag was just about 20% as against the current coverage in excess of 80%. Given such pace of growth in FTTX deployment in BT's network, it was assured that operation & maintenance of trial network at Jakar is not a concern. Despite some counterparts leaving the company, it was reiterated that sustainability of this FTTX project is not at stake since BT will keep investing year on year on FTTX networks to meet the demand for high-speed broadband.

On the investment front, the CEO said that as a telecom service provider, it was crucial to keep the customers happy through constant expansions and upgrading of the mobile network. These activities and efforts to improve quality of service are very expensive but have to be done given the competitive market conditions, the CEO said. He informed the meeting that the company is meeting the fund required for such network expansions and enhancements through loans from commercial banks. For network activities planned to happen in 2017, the CEO said that BT is processing for bank loan in excess of Nu. 450 million.

To inject some clarity on the project counterparts who left the company, BT informed that there are stringent HR policies through which the company tries to bond and retain its employees. It was also further clarified that BT's Performance Management System (PMS) has many incentives and rewards for the good performers but yet, when employees decide to leave, they leave regardless of whatever measures the company tries to put in place. It was informed that the counterparts who left the company have started their own business except for one who went to Australia for further studies. Attrition of employees due to better opportunities else where, the Project Director said, has always been a challenge for many companies, still is and will remain to be so.

The meeting was informed that BT has arranged replacement staffs to ensure that there were minimal impacts on the project as soon as the counterparts left the company.





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# 5. Suggestions/Recommendations by the Chief Advisor, FTTX Project

The Chief Advisor expressed his concerns on the possibilities of accidents that could happen while at work in the absence of standard safety process and discipline. He recommended BT to put in place standard safety process and make the field staff to practice them religiously and regularly.

He also explained to the meeting the basic difference between FTTC, FTTB and FTTH, and suggested that going for FTTH would be an ideal choice if the objective is to deliver high-speed broadband to users both in offices and homes.

# 6. Closing Remarks

Ms. Kunzang Lham Sangay, GNHC congratulated BT and the Chief Advisor of the project for the successful completion of the FTTX project. She thanked JICA for the assistance granted through its TCP scheme and re-iterated the impacts that the achievements would have on the overall Key Result Areas (KRAs) of the Royal Government's ICT policy in its continued efforts to making the delivery of public service more efficient. As rightly pointed out by JICA, she said that, it was very important that the implementing agencies in the recipient country, rendered the utmost commitment not only in achieving the intended objectives of the assistance but also to be able to sustain and carry forward the impacts.

BT CEO thanked JICA for all the support in the past and for this particular FTTX project and assured his full commitment in ensuring the perpetuity of the outputs and learning. He expressed his special thanks to the Chief Advisor, Mr. Yamaguchi for all his support and guidance. The CEO said, Mr. Yamaguchi has been like a father to many of BT employees and his presence would be highly missed in BT after his return to Japan.

The Project Director thanked all the participants for taking out time to be present for the 5<sup>th</sup> and final JCC meeting of the FTTX project. He expressed his special thanks and appreciation to the officials from JICA HQ, Tokyo for making time to be present for the JCC meeting and wished them a safe journey back to Tokyo. The director concluded the meeting by re-iterating BT CEO's remarks 'What BT is today is all because of JICA and its grant aid in the 90s', and expressed sincere hopes for future support.

The meeting was adjourned at 1300 hours.

Endorsed.

Chief Executive Officer Bhutan Telecom Chief Representative JICA Bhutan Office

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