



## **Short Brief of Technical Profile of BTV**

Bangladesh Television (BTV), Public Service Broadcaster (PSB) and a state-owned national TV station. Being a PSB, BTV continues to make significant contribution to accelerate socio-economic changes, promote national integration and accelerate scientific idea among the people. It contributes to disseminate knowledge, education and information for public awareness about means of population control, family welfare, environmental sustainability, ecological balance and measures for women and children welfare. Besides education and entertainment, its mandate is to ensure the equitable dissemination of information to the mass people and contribute to the nation's socio-economic development of Bangladesh. It telecasts various program comprising drama, documentaries, musicals, education and information, including 9 News bulletins in English and Bangla daily. The vision of the present Government is to make "Digital Bangladesh" by 2021 and BTV is working on it.

BTV has established on 25th December 1964. With the passage of time, Bangladesh Television has emerged as a powerful and effective mass media. BTV has 16 Terrestrial Transmission stations located all over the country. About 97% geographical area of the country has come under Transmission coverage. Its main Centre is located in Dhaka, the capital city of Bangladesh and transmits 20 hours program terrestrially and 24 hours through satellite daily. Chittagong is a sub-Centre, transmits 6 hours locally produced separate programs daily.

In 2004, BTV has started worldwide Broadcast through its satellite based earth station BTV world. BTV has been transmitting its programs 24 hours through satellite since 5th November 2012. Coverage area of BTV National, BTV World and Sangsad Bangladesh Television are from Japan to the East, Australia to the South, and Cyprus to the West and CIS country to the North.

About 92% of its content is self-produced and the rest are imported. For the greater interest of the nation 78% of the total program include issues like agriculture, health and population, children and women, education and human rights etc. Its content mix comprises 20% news, 30% development and educative, 35% cultural and entertainment and other program 15%. BTV also telecast national important program, Cricket, Football and other important sports events live form venue.

BTV has started Digital Video Broadcasting-Terrestrial (DVB-T) Test transmission from 3 stations with 3.5 KW r.m.s transmitting power in the VHF Band-III. Sangsad Bangladesh Television has started its transmission on 25<sup>th</sup> January 2011 (both satellite and digital terrestrial) by using the equipment of Bangladesh Television. It covers the Sangsad session and Development activities of Government.

BTV has also started IPTV & Web TV Broadcasting in 2013 and Mobile TV Broadcasting through 3G SIM in 2014. At present BTV has eight studios in Dhaka Station for program production, three Outdoor Broadcasting (OB) Vans and DSNG has been using for live telecast. BTV Chittagong has introduced a separate satellite test transmission on 16<sup>th</sup> June 2015 and regular transmission has start on 31<sup>st</sup> December 2016.

Under the framework of the digital broadcasting project a roadmap for the transition to digital terrestrial television in Bangladesh has been prepared by ITU. To Accomplish that roadmap Bangladesh Television has taken a project name: "Establishment of Nationwide Digital Terrestrial Television Broadcasting of Bangladesh Television) 1<sup>st</sup> Phase)".

## **Rationale of the Project:**

Most of the Transmission, Recording and Editing equipment of BTV were installed in 1999. To develop the technology of recording and transmission of BTV, a survey was done by Basic Design Team of JICA, Japan in the middle of 1993. On the basis of that survey report a large Drama studio, a Small talk studio, Master Control Room (MCR) and related other facilities were upgraded and replace the old equipment in the year June 1995 to June 1999 in the name of project “BMRE of Dhaka station”. From June 1999 to till today, the aforementioned studio and master control room are workable with a minor modification. Almost basic equipment is remaining unchanged. In the view of the performance a electronic equipment life is 20 years. To cope with the change of the TV technology is day by day. Due to this reason BTV must be modernized, digitalized and fully automated to face the challenge of harmonization. So the central broadcasting system shall be converted into IT based modern, digital and fully automated system. There will be a storage, graphics system and full automation for programs. Important programs and news can be reserved into central storage.

## **Targets of the Project:**

To Expand and upgrade PSB and improve the quality of Programme and News Production. As per direction of ITU, BTV will migrate digital broadcasting within 2020. So, before migrating digital broadcasting the target is to change the central system all analogue equipment to digital equipment which is included in this project.

## **Outcomes of the Project:**

- Set up an I.T based Modern technology, Updated Program and News Operation systems in Bangladesh Television through inter connectivity and output signal will be capable of full HD and Digital.
- Social, cultural and economic multiple effects through skill acquisition and transference

## **Outputs of the Project:**

- TV Program and news telecast will disseminate Government development efforts on Education, Health, Population control, Agriculture, Industry and also contribute to promote culture activities.
- Latest technology in TV broadcasting will be established.

## **Main objectives of the project are**

- Establish a 4 separate channels of MCR with Modern, Digital & Automatic system to replace the old and worn out equipment system of Dhaka TV station in BTV.
- Three (03) Studio full modernizations to produce digital oriented programme.
- To improve transmission video and audio quality, quality of Programme and News Production as per need of the Viewers.
- To set up an IT based modern technology, updated program and news operation systems in Bangladesh Television through inter connectivity and output signal will be capable of full HD and Digital.
- To Procure Automated System equipment of Master Control Room (MCR), Central Apparatus Room (CAR), Ingest Room, Media Asset management (MAM), Automated Video Server System, Non Linear Editing Suite, Authenticate to Access System, Technical Data Monitoring System, Store Management System of BTVs Engineering Store, Harmonization of Central Air condition System.
- To contribute revenue in the exchequer through advertisement & sponsoring programmes.
- Reforming the existing Cooling System with highly precise temperature control for MCR System and Studio.
- Important programs and news will be reserved into central storage.
- A survey will conduct after completion of 1<sup>st</sup> Phase, 2<sup>nd</sup> phase will start according to the survey report of the 1<sup>st</sup> phase according to survey report 2<sup>nd</sup> phase of project will drive.

## **Technical facilities of Dhaka Station for Program Production:**

### **Main Building: Studio-06 (Six)**

- Shaheed Firoj Qaiyum Chowdhury Studio
- Shaheed Monirul Islam Studio
- Shaheed A.F.M Siddique Studio
- News Studio (Old)
- Shaheed Akmal Khan Studio
- BTV World (Studio)

### **Extension Building: Studio-04(Four)**

- News Studio
- Drama Studio
- Talk Studio
- Audio Recording Studio

### **Master control Room: 01**

### **Edit Panel: 20 (Non-Linear)**

### **OB VAN & DSNG:**

- Bosch, Germany OB VAN- 4 Camera
- Thomson, France OB VAN- 6 (2- RF ) Camera
- Korean Broadcasting Service (KBS) OB VAN - 4 Camera
- BTV has 2 (Two) Digital Satellite News Gathering (DSNG) unit i.e. one is fly way based and one is vehicles based. Important national live Programs transmit through that DSNG.

### **Central Air Conditioning System: BTV has Central Air Conditioning System.**

**Scope of Work of Consultant:** The project shall be able to provide modernize and upgrade the news & program production recording, editing, broadcasting and storage. The study should embody a detailed yield a comprehensive report on automated broadcasting aspects of the project. The main objective of the assignment is given below:

- Advise and assist regarding the technological fulfillment.
- Ensuring that it will be a well-defined structure and a clear mission.
- Consultant will be prepared workflow with Equipment list and also recommended different type of Brand & model name of each equipment/module.
- Consultant is also responsible for building the system capacity regarding proposed Equipment.
- Devise an organizational chart defining the concern technical personnel functions and a reporting mechanism.
- Strengthening the technical personnel professional capacity through the training and workshops/seminars.
- The Proposed System shall have a guideline and Vision to adopt future technology
- Existing Studio and Lighting equipment up gradation and Harmonization.
- The Proposed System shall have a guideline for establishing virtual Studio.
- Reforming the existing system to modern system.
- The Proposed System shall have a guideline and Vision to use BTVs Old system Cassette and tape.