Country Experience On

Satellite Service Regulatory Framework

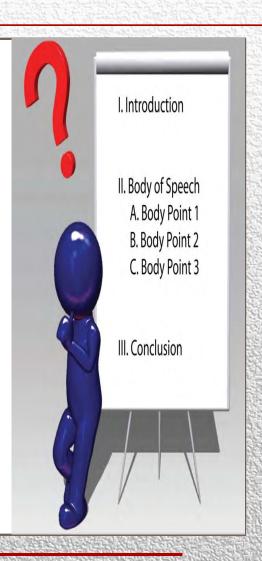






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Brief about Participant

MD. ASADUZZAMAN

Senior Assistant Director

Bangladesh Telecommunication Regulatory Commission(BTRC)

Currently working with this Vision In Deputation From: Year 2009

Preparatory Functions and Supervision in Launching a Communication and Broadcasting Satellite Project



Bangabandhu Satellite Launching Project

A vision to launch country's first Satellite in the orbit.



Regulatory Framework-Overall

Policies

National Telecom Policy (1998) National ICT Policy (2009)

Broadband Policy (2008)

ILDTS Policy (2007, 2010 Rev)

Policy Makers

MoPT & IT

MoICT

MoF

Planning Commission

Licensing Framework

SMC IGW

ICX IIG

BWA NIX

VSP ISP

NTTN

VSAT

IPTSP

ITC

Laws

Telegraph Act (1885)

BTA (2001) Revised 2010 Wireless Telegraphy Act(1933)

ICT Act (2006)

Regulator



Regulations/ Guidelines

Interconnection Regulation 2004

National Numbering Plan 2005

Infrastructure
Sharing Guideline

Licensing Regulation 2004

VAS Guideline

NFAP



Regulatory Framework-Broadcasting Service

Method of Broadcasting Framework **Terrestrial** Ministry of ➤ Issue the License Satellite Television Television Information (MoI) ➤ Regulate Contents > Frequency Allocation ➤ According to ITU Guideline **BTRC** FM Radio Community Radio and NFAP regulate the assigned frequency

Regulation

Terrestrial Television

Satellite Television

FM/ Community Radio

- According to the law of Bangladesh terrestrial television broadcasting BTV is using 174-230 MHz spectrum in VHF band.
- In NFAP, 522-698 MHz spectrum is reserved for terrestrial television broadcasting. As such, this spectrum can be allocated for digital terrestrial broadcasting in future.
- According to NFAP, frequency is assigned from BTRC to the licensee, 6/9/12 MHz uplink frequency from **5.85-6.425** GHz band.
- According to NFAP, frequency is assigned from BTRC to the licensee from **87.5 to 108** MHz



Regulatory Framework-Broadcasting Service

Spectrum Assignment Procedures

Applied to BTRC



Preliminary Examined by BTRC



Approval From Spectrum Management Committee (SMC)



Assigned for Test Transmission



Finally Assigned the Spectrum

- The interested entities can submit the application following the procedures to the Commission.
- According to Spectrum Assignment Procedures BTRC examined the Required Documents and getting Required Fees.
- BTRC place the application to the Spectrum Management Committee (SMC) for their opinion.
- The SMC recommends the proposal to the Commission.
- According to the decision of the commission the spectrum is assigned to the applicant.
- Assigned frequency for 7 (seven) days test transmission.
- The licensee submit the test transmission report.
- Inspection team of BTRC will inspect the broadcast method of the organization.
- The Commission, upon inspection report, will award the License to **Operate Radio Communications Equipment**.



Regulatory Framework-Satellite Communication





Initiatives towards Launching of Satellite

Preparatory Functions and Supervision in Launching a Communication and Broadcasting Satellite Project

- Taking Consultancy Services and Overall Supervision of manufacturing towards launching of Satellite.
- ■Project Started from 2011 and End to 2018

Bangabandhu Satellite Launching Project

- Launching country's first ever communication and broadcasting satellite.
- •Minimize digital divide by providing broadcasting and telecommunication services.
- ■Introduce profitable and promising new services including Direct to Home (DTH) throughout the country.



Summary of Preparatory Project

Project Title Preparatory Functions and Supervision in Launching a Communication and Broadcasting Satellite Project

Project Cost • 19 million USD (approx.)

Main Component Foreign consultancy Services for launching country's first Satellite

Foreign Consultancy Firm • Space Partnership International (SPI), USA

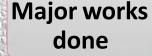


Overview of Preparatory Project

- Getting Consultancy services from Foreign Consulting Firm
- Satellite System design
- Technical Specifications preparation for Satellite Design
- Tender document Preparation for Procuring Satellite System
- Overall Supervision to Manufacturing of the Satellite
- Technical monitoring during implementation till the IOT

Major Tasks

- Market Analysis and Feasibility Studies.
- Business Plan.
- Framework for implementing an 'Operating Company'.
- Preparation of tender documents along with technical specifications.
- Finalizing Orbital Slot at Intersputnik 119°E.
- Frequency Coordination is on going.
- Tender Floating through International Open Tendering Method





Summary of Satellite Launching Project

Project Title Bangabandhu Satellite Launching Project

Project Status Got Approval of the Government (Executive Committee for National Economic Council) on 16 September 2014

Project Cost • 380 million USD (approx)

Mode of Financing

44% Government Own Fund

Main Component • 56% Project Aid (Tenderer's / Bidder's Financing)

Tender Floating for Satellite System Procurement

Forming a International Standard Operating Company



Overview of Satellite Launching Project



Manufacturing of Proposed Bangabandhu Satellite with 40 Transponder

- Monitoring and Testing in the time of Manufacturing
- Monitoring and Evaluation in the stage of Launching
- Launching the Satellite and Putting in Orbit
- In Orbit Testing and Monitoring
- Satellite Network Testing and Acceptance
- Ground Segment and associated facilities Preparation
- Ground Station Testing and Acceptance
- Insurance
- Set up of an institutional arrangement for operating the satellite systems

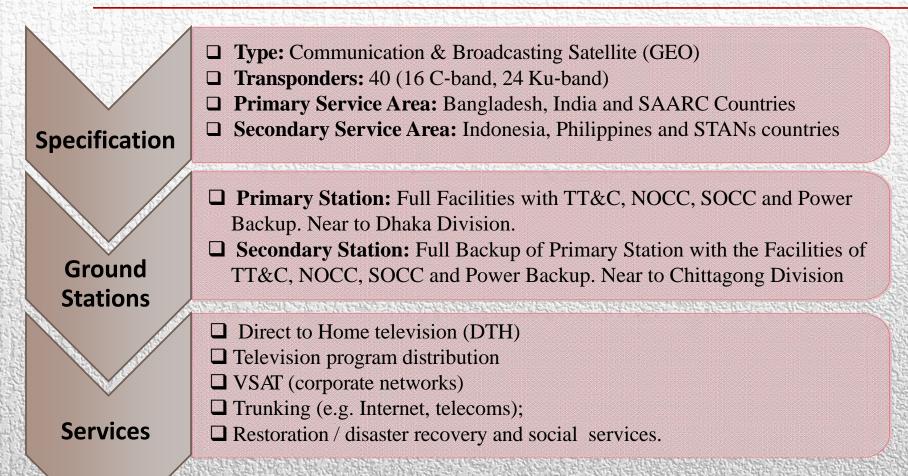
Major works done

Major Tasks

- Floating RFP to Procure Satellite System through Open Tendering Method
 End of 1st Q
- Evaluation Of the Submitted Tender Documents is On Going
- Hope to Sign the Contract with Prime Contractor within October, 2015

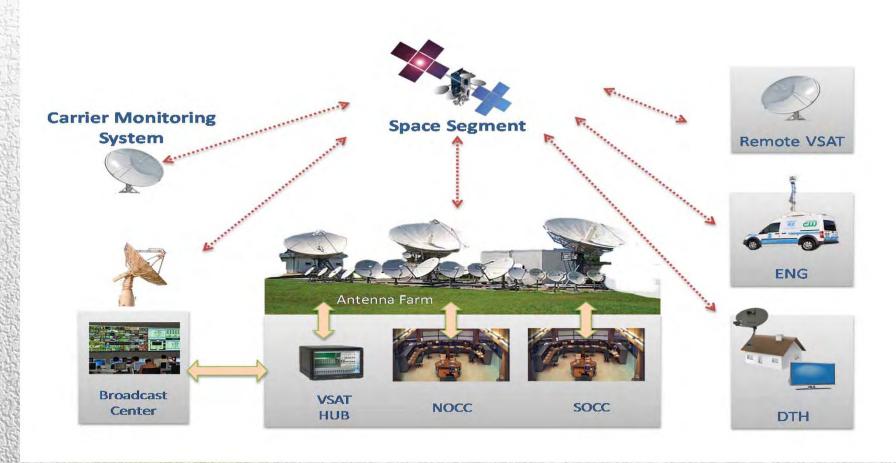


Baseline Characteristics of Proposed Satellite



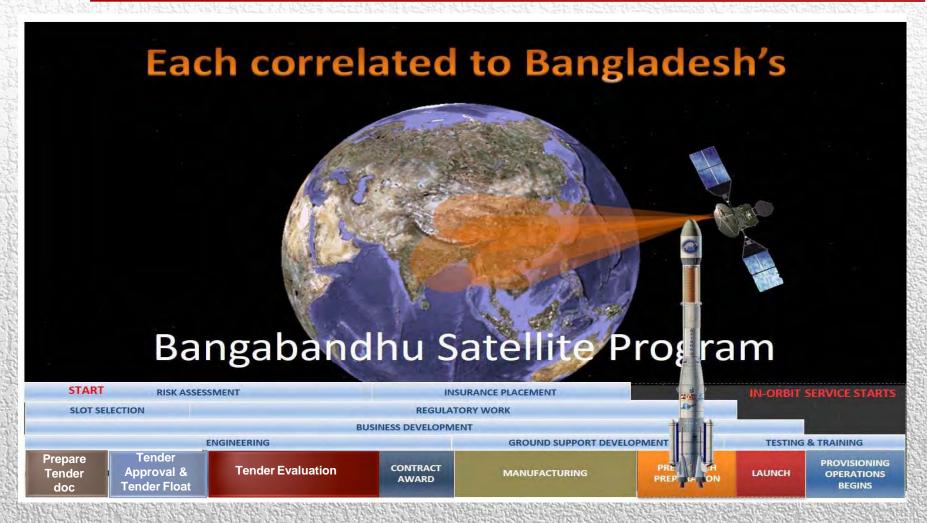


System Concept of Proposed Satellite-Big Picture





Time Frame of Satellite-Target Launching





Regulatory Framework-Orbital Slot Filing

Slot	Frequency Band	Filing information	Coordination Status
102 E	C-band, C-band (Planned), Ku-band, Ku- Band (planned) and X-band filing	BDSAT-102 E November, 2010 BRIFIC 2690/22.03.2011 Modified filling: November 2012 BRIFIC No 2732/13.11.2012	Comments received, responded for Coordination
69 E	C-band (Planned), Ku-band (planned) Filing	BANGSAT-30B-69E-B June2012 BRIFIC 2722/26.06.2012	Comments received, responded for Coordination



Regulatory Framework-Orbital Slot Filing

Slot	Frequency Band	Filing information	Coordination Status
74 E	Allotment: BSS Modified: BSS Extended	BANGSAT-74E-A (BSS Planned) BANGSAT-74E-B, Extended BR IFIC 2757	Comments received, responded for Coordination
133 E	Allotment: FSS	BANGSAT-30B-133E-A BR IFIC 2737 BANGSAT-30B-133E-B BRIFIC 2737/5-2-13	comments received, responded for Coordination



Policy and Regulation on Satellite Services

Services Satellite Regulatory Framework For Satellite Launching Related Activities Activities is ongoing targeted to Launching the First Communication and Broadcasting Satellite for The Nation-Target Date-December 2017

Framework For Operating Company

• Activities is ongoing to form a International Standard Satellite Operating Company.

Spectrum Re-arrangement ■ To provide the Interference and Harmful Free Satellite Service in the Nation Spectrum Re-arrangement procedures is on going according to NFAP Plan.

DTH Guideline

- Already Prepared a Draft DTH Guidelines and very soon it will be opened for Public Consultation.
- Already Published The Direct to Home (DTH) Services Customer Premises Equipment (CPE) Directives, 2015

Landing Right Policy

■ Already Prepared a Draft Landing Right Policy and very soon it will be upload for Public Consultation.



Risk and Challenges

Risk

- Maintaining the BIU date Consistent with Bidders Offer
- Failure to meet the launch schedule
- Launch failure
- Regulation/Policy Re-framing.



Challenges

- Formation of an International Standard Satellite Operating Company
- Effective Regulatory Framework
- Re-assignment of spectrum for satellite Services
- Landing Rights and successful coordination
- Facilities for Ground Stations
- Achieving the targets as per business plan



Expectation of Achievement

The revolution that is taking place in Bangladesh is in conformity with the Millenium Development Goal

Target to Achieve by

2015

- **►** Signing With Selected Bidders
- ► Finalizing DTH Guideline
- ► Finalizing Landing Right Policy
- **▶** Successful Completion the Coordination of 119E
- ► Completing The Preliminary work on Company Formation

of peace and prosperity

ector the arner and

Make **Telecom** sector the largest revenue earner and contributor to GDP



Requests

Bangladesh elected as Council Member of ITU for 2011-2014 and Also 2015-2018

Supporting the role of ITU in guiding World Telecom & ICT Sector to its desired destination

Need More Collaboration and Cooperation From ITU Member Countries in the Field of Satellite Communication And Broadcasting Services



Q and A

Thank You





For any Query:
asad@btrc.gov.bd
satellite@btrc.gov.bd

