# Assignment Computer Networking

Course:CSE361

Submitted to

**Dr. Sadia Sultana** 

Associate Professor CSE, SUST

Submitted by

Md. Mazharul Islam 2019331075

#### Assignment No: 1

### Topic: Summary of cellular broadband providers of Bangladesh

Bangladesh has a competitive mobile market with four major operators: Grameenphone, Banglalink, Robi, and Teletalk. All of them offer 3G and 4G services using various network bands. According to the latest data from the Bangladesh Telecommunication Regulatory Commission (BTRC), as of August 2021, Grameenphone had the highest market share with 47.5%, followed by Robi with 30.9%, Banglalink with 20.6%, and Teletalk with 1%. The table below shows the network bands and technologies used by each operator:

- **Operator Name: Grameenphone**
- Network Bands:900/1800 MHz (2G), 2100MHz (3G), 1800/2100 MHz(4G) Technologies:GSM, UMTS, HSPA+, LTE
- 2.
- **Operator Name:Banglalink**
- Network Bands:900/1800 MHz (2G), 2100MHz (3G), 900/1800/2100MHz (4G)
- Technologies:GSM, UMTS, HSPA+, LTE
- **Operator Name:Robi**
- Network Bands:900/1800 MHz (2G),900/2100 MHz (3G),1800/2100 MHz (4G)
- Technologies:GSM, UMTS, HSPA+, LTE

Operator Name:Teletalk

Network Bands:900/1800 MHz (2G), 2100MHz (3G), 1800/2100 MHz(4G)

Technologies: GSM, UMTS, HSPA+, LTE

**Source:**BTRC Monthly Report August-2021, Grameenphone Network Coverage, Banglalink Network Coverage, Robi Network Coverage, Teletalk Network Coverage, Google

## Assignment No: 2

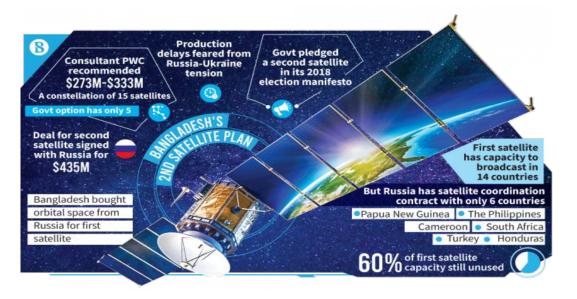
#### **Topic: Summary of satellites of Bangladesh**

Yes, Bangladesh has its own satellite, called **Bangabandhu-1**, which is the first Bangladeshi geostationary communications and broadcasting satellite. It is named after the father of the nation, Bangabandhu Sheikh Mujibur Rahman. It was manufactured by Thales Alenia Space and launched on 12 May 2018 by a SpaceX Falcon 9 rocket.

Bangabandhu-1 carries 40 Ku-band and C-band transponders with a capacity of 1600 megahertz and a predicted life span of more than 15 years. It provides a wide range of telecommunications services, such as direct-to-home TV, radio, telemedicine, education and internet access, to Bangladesh and its neighboring regions, including Nepal, Bhutan, Sri Lanka, the Philippines, Indonesia and some parts of India. It also helps Bangladesh to achieve independence and recognition in the space sector, as well as to boost its economy and create jobs.

Bangladesh also plans to launch its second satellite, **Bangabandhu-2**, in 2023, which will have more advanced features and capabilities than Bangabandhu-1. It will cover more areas in Asia, Africa and Europe, and offer more services such as maritime communications, disaster management, e-governance and e-learning. It will also have a higher bandwidth and a longer lifespan of 20 years.

Besides its own satellites, Bangladesh also leases satellite capacity from other countries or organizations for various purposes. For example, Bangladesh uses the services of Thaicom-4 (IPSTAR) satellite for broadband internet access in rural areas. It also uses the services of Intelsat-10 (PAS-10) satellite for digital TV broadcasting and VSAT communications. Bangladesh also cooperates with other countries such as China, India and Japan for satellite data sharing and space research.



Source:Bangabandhu-1 - Wikipedia: Bangabandhu Satellite-1 - Thales Alenia Space: Bangladesh to launch second satellite in 2023 - The Daily Star; Google.