



MINISTRY OF TRANSPORT AND COMMUNICATIONS
POSTS AND TELECOMMUNICATIONS DEPARTMENT



STAKEHOLDER CONSULTATION PAPER

2300 MHz Spectrum Allocation Process

1. Introduction

The Ministry of Transport and Communications (MoTC) and its regulatory body, “Posts and Telecommunications Department (PTD)” are responsible organizations for the management of radio spectrum to ensure the efficient use of radio spectrum. As per provisions of the Telecommunications Law and Spectrum Rules, the Ministry has responsibility to manage and supervise the national frequency spectrum and satellite orbital position of Myanmar in accord with the International Telecommunications Conventions, and the Department has responsibility to allow person, departments and organizations the use of frequency bands contained in the National Frequency Allocation Plan by determining the terms and conditions.

With the development of mobile technologies especially in telecommunications sector, level of demands for radio spectrum to provide mobile cellular services and wireless broadband services has increased globally. In order to manage the radio spectrum efficiently, the Department issued a document entitled Spectrum Roadmap: Facilitate the Sustainable Growth of Industry (2022–2026) which outlined the plans for release of spectrum including 5G candidate bands. As described in the Spectrum Roadmap, 2300 MHz spectrum band is considered to release in 2022 in order to meet the needs of industry, and this spectrum band is widely used for both 4G LTE and 5G (NR) deployments around the world.

2. Allocation Process for the 2300 MHz spectrum band

Spectrum allocation is one of the most important factors influencing the performance of the telecommunication sector. Allocation has a direct impact on the level of competition, consumer satisfaction and long-run sustainability of the sector as a whole.

In Myanmar in accordance with Article 13 of the Spectrum Rule (2016): “The procedure for authorizing the right to use Radio Spectrum, the conditions for participation in the authorization of spectrum rights and the charges payable for spectrum rights are identified for each Radiocommunication Service below, and, without limiting the methods which may be used, may include any one or a combination of the following methods:

- i. by auction;
- ii. by tender;
- iii. by fixed price”

There are advantages and disadvantages in all methods. A spectrum auction/ tender should only be used when demands exceeds supply and needs more time to prepare and complicated. A direct allocation by fixed price would be faster, simple and time saving, and the Department supports a direct allocation by fixed price of spectrum for 2300 MHz spectrum band to the nationwide mobile operators.

3. Proposed pricing of 2300 MHz spectrum in Myanmar

The value or price of spectrum is determined by a range of factors, including the spectrum usage, changes in technology and its availability across spectrum users, Ministry’s spectrum allocation plans, etc.

Benchmarking involves using data from spectrum awards in both Myanmar and in other comparable jurisdictions to determine the likely price range of spectrum.

Benchmarking derives estimates of spectrum value from revealed willingness to pay for spectrum in other spectrum awards. The benchmarks are therefore based on prices that have been paid by specific buyers in Myanmar and other countries.

The final set price for 2300 MHz band spectrum will be consistent with the domestic and international pricing benchmarks. From the Ministry and PTD perspectives, market-based benchmarking method will be used to set the price of 20 MHz bandwidth (7.33 million USD per year) in 2300 MHz spectrum band.

And, for the payment terms, the proposed payment schedule of 2300 MHz Spectrum Licence will be as follows:

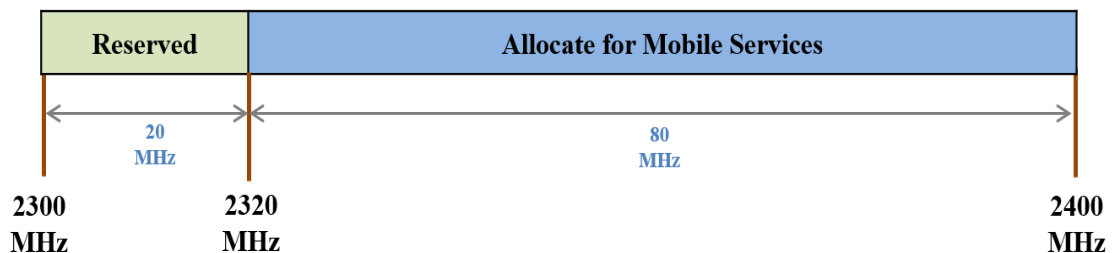
- i) A First Spectrum Licence Fees Payment, in an amount equal to thirty (30) percent of the Spectrum Licence Fee (i.e., Myanmar Kyat equivalent to US\$), on the effective date of its Licence;
- ii) A Second Spectrum Licence Fees Payment, in an amount equal to twenty (20) percent of the Spectrum Licence Fee (i.e., Myanmar Kyat equivalent to US\$), not later than 1st December 2023;
- iii) A Third Spectrum Licence Fees Payment, in an amount equal to twenty (20) percent of the Spectrum Licence Fee (i.e., Myanmar Kyat equivalent to US\$), not later than 1st December 2024;
- iv) A Fourth Spectrum Licence Fees Payment, in an amount equal to fifteen (15) percent of the Spectrum Licence Fee (i.e., Myanmar Kyat equivalent to US\$), not later than 1st December 2025;
- v) A Fifth Spectrum Licence Fees Payment, in an amount equal to fifteen (15) percent of the Spectrum Licence Fee (i.e., Myanmar Kyat equivalent to US\$), not later than 1st December 2026.

4. Proposed Band Plan for the 2300 MHz Spectrum Band

The proposed band plan for the 2300 MHz spectrum band (2300–2400 MHz) is set out in Exhibit 1 below. The 2300 MHz spectrum band is widely used for both 4G LTE and 5G (NR) deployments. In Myanmar, 20 MHz bandwidth of this spectrum band is reserved for government uses and 80 MHz bandwidth will be release to the nationwide mobile operators.

PTD will provide each of the mobile operators to acquire at least 20 MHz bandwidth on a first come, first served basis. If not exercised by one mobile operator, the spectrum will be assigned to the other operator who wants to acquire an additional spectrum. For term of Spectrum Licence, the duration of spectrum Licence should be co-terminus with the duration of operating Licence of each operator and the spectrum fee will be calculated based on the duration of the spectrum Licence with the same unit value of spectrum. The 2300 MHz spectrum Licence will expire on its end date and there is no expectation of renewal. The department (PTD) can decide at a later time whether to inter alia extend the Licences, auction the spectrum and/or a combination thereof in accordance with the applicable Law and Spectrum Rules.

Exhibit 1: Proposed 2300 MHz Band Plan for Release



5. Request for Comments

Consistent with the law, and the Spectrum Rules, the Department (PTD) is pleased to provide the mobile operators with an opportunity to comment on any aspect of this Stakeholder Consultation Paper and the attached draft Spectrum Licence.

Comments must be received in writing via email to spectrumresource.ptd@gmail.com by 17:00 hrs on 9 December 2022.