



## **Land Mobile Radio Services Guidelines**

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## **1.0 138-174 MHz Band**

1.1 In the **138-174 MHz** band, the frequency ranges to be used for land mobile systems are:

- 138-144 MHz
- 148-149.9 MHz
- 150.05-156 MHz
- 157.425-161.580 MHz
- 162.025- 174 MHz

1.2 The ranges between the land mobile frequencies are assigned as follows:

- 144-148 MHz to the amateur radio service.
- 149.9-150.05 MHz to the mobile satellite service.
- 156-157.425 MHz and 161.580 – 162.025 MHz to the maritime radio service.

1.3 The **406.1 - 430 MHz** range and **450 - 470 MHz** range are both allocated for land mobile systems.

## **2.0 Recommended Licensing Process and Conditions**

2.1 The Spectrum Management Authority will assign channels for Land Mobile Radio (LMR) applications in accordance with the VHF and UHF Sub-Allocation Plan, and all licensing of new land mobile radiocommunication systems shall be conducted in accordance with this plan.

2.2 Any incumbent licensee that does not conform to the proposed frequency assignment plan shall be allowed to continue operation until such time that the Authority deems it necessary for them to align to this plan. The Authority shall consult with such licensees, in the development of a migration plan to effect this alignment.

### 3.0 VHF and UHF Sub-Allocation Plan

#### 3.1 VHF Sub-Allocation Plan

**Figure 1 — Plan for assignments of frequencies to land mobile radio service systems in the 138.0 – 151.8 MHz band**

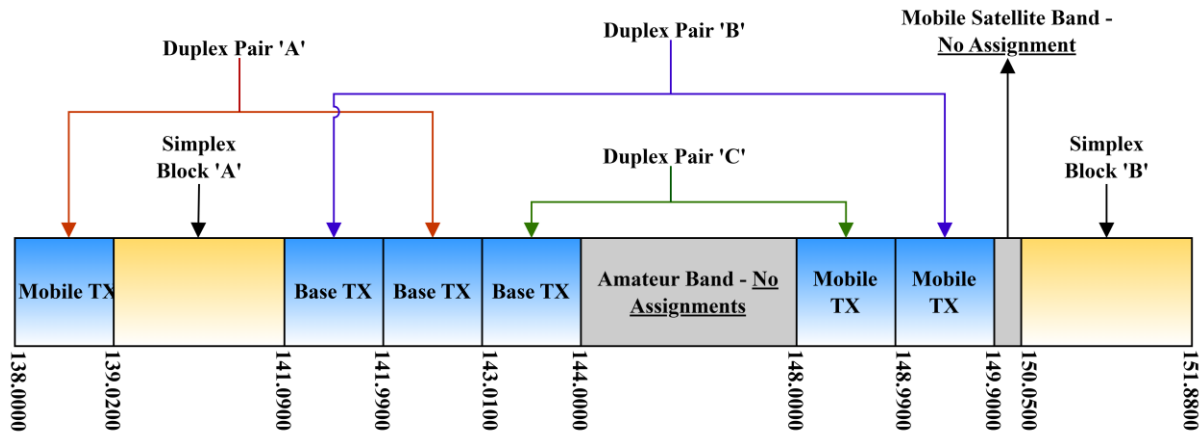


Figure 1: The figure shows the simplex and duplex paired frequency blocks for the frequency range 138 to 151.88 MHz.

For *Duplex Pair 'A'*, mobile station transmissions are within the range 138 to 139.02 MHz, whereas base station transmissions are within 141.99 to 143.01 MHz. Simplex Block 'A' are frequencies within the range 139.02 to 141.09 MHz.

For *Duplex Pair 'B'*, mobile station transmissions are within the range 148.99 to 149.9 MHz, whereas base station transmissions are within 141.09 to 141.99 MHz.

For *Duplex Pair 'C'*, mobile station transmissions are within the range 148 to 148.99 MHz, whereas base station transmissions are within 143.01 to 144 MHz.

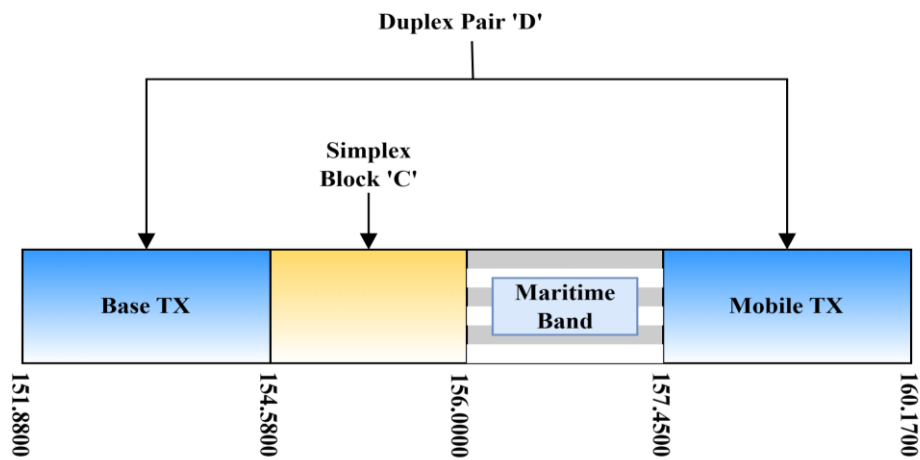
No assignments will be made in the Amateur Band from 144 to 148 MHz or in the Mobile Satellite Band from 149.9 to 150.05 MHz.<sup>1</sup>

Simplex Block 'B' are frequencies within the range 150.05 to 151.88 MHz.

<sup>1</sup> Radio Regulation **5.220**

The use of the frequency bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-15)

**Figure 2 —Plan for assignments of frequencies to land mobile radio service systems in the 151.88 -160.17 MHz band**



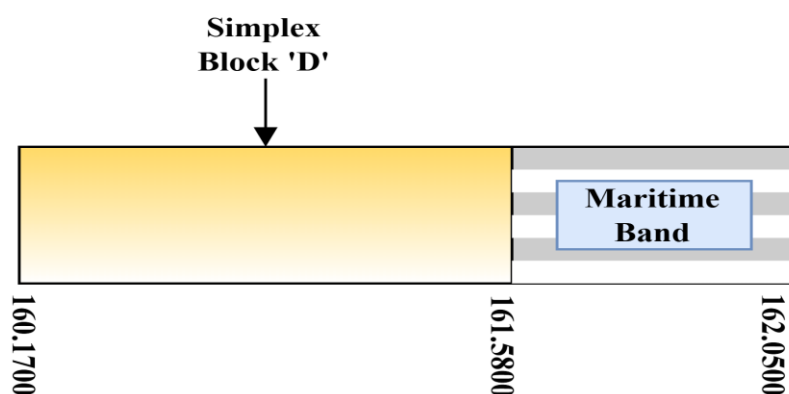
*Figure 2: This figure shows the simplex and duplex paired frequency blocks for the frequency range 151.88 to 160.17 MHz range.*

*For Duplex Pair 'D', mobile station transmissions are within the range 157.45 to 160.17 MHz, whereas base station transmissions are within 151.88 to 154.58 MHz.*

*Simplex Block 'C' are frequencies within the range 154.58 to 156 MHz.*

*The frequencies within the range 156 to 157.45 MHz are used for the Maritime Mobile Service.<sup>2</sup>*

**Figure 3 —Plan for assignments of frequencies to land mobile radio service systems in the 161.17 -162.05 MHz band**



*Figure 3: This figure shows the various frequency blocks for the frequency range 160.17 to 162.05 MHz.*

<sup>2</sup> Radio Regulation **5.226**

In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see **Article 31** and **Article 52**, and **Appendix 18**).

The band 160.17 to 162.05 MHz comprised of two blocks for the Simplex Block 'D' (160.17 to 161.58 MHz) and the Maritime Mobile Service Band (161.58 to 162.05 MHz).

**Figure 4 —Plan for assignments of frequencies land mobile radio service systems in the 162.05 - 174.0 MHz band**

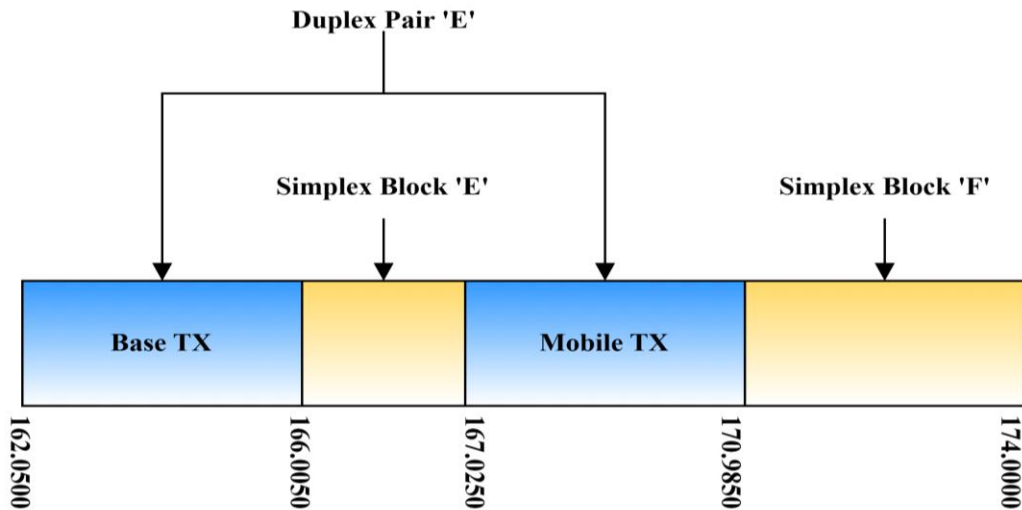


Figure 4: This figure shows the simplex and duplex paired frequency blocks for the frequency range 162.05 to 174.0 MHz.

For Duplex Pair 'E', mobile station transmissions are within the range 167.025 to 170.985 MHz, whereas base station transmissions are within 162.05 to 166.005 MHz.

Simplex Block 'E' are frequencies within the range 166.005 to 167.025 MHz.

Simplex Block 'F' are frequencies within the range 170.985 to 174.0 MHz.

### 3.2 UHF Sub-Allocation Plan

**Figure 5 —Plan for assignments of frequencies to land mobile radio service systems in the 406.1 - 421 MHz band**

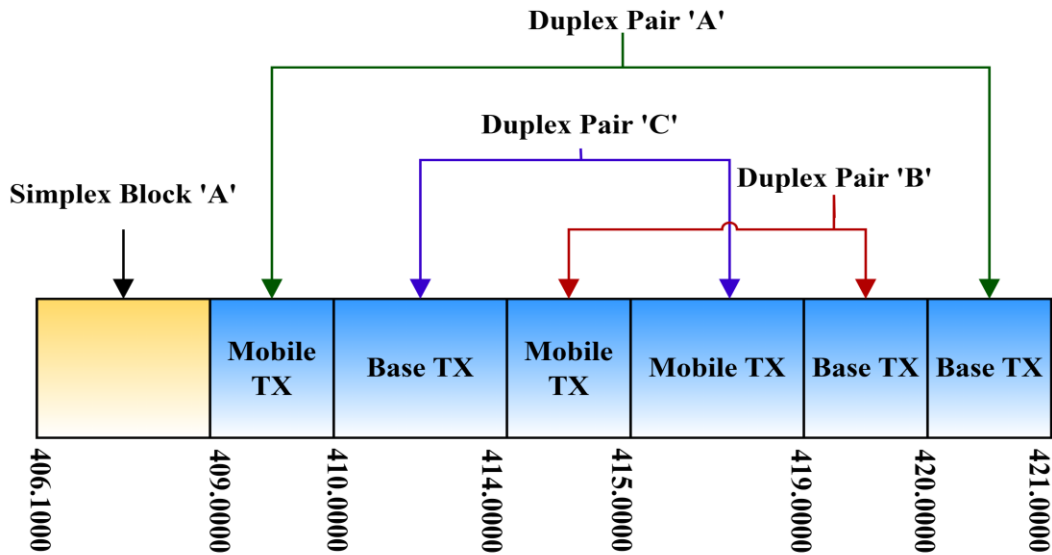
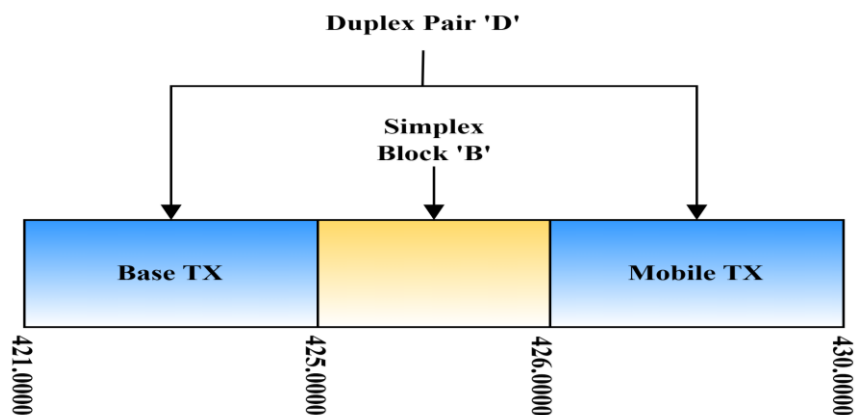


Figure 5: This figure shows the band plan for assignment of frequencies to land mobile and fixed services in the band 406.1-421 MHz.

The band 406.1-409 MHz (Simplex Block A) is for single frequency operation. The bands 420-421 MHz paired with 409-410 MHz (Duplex Pair A), 414-415 MHz paired with 419-420 MHz (Duplex Pair B) and 410-414 MHz paired with 415-419 MHz (Duplex Pair C) are for dual-frequency operation.

For dual-frequency operation, the base station transmitting frequencies are in the bands 420-421 MHz and 410-414 MHz while the corresponding mobile station transmitting frequencies are in the bands 409-410 MHz and 415-419 MHz, respectively.

**Figure 6 — Plan for assignments of frequencies land mobile radio service systems in the band 421 - 430 MHz band**



*Figure 6: This figure shows the spectrum availability and associated sub-allocation in the band 421-430 MHz frequency bands allotted to Jamaica.*

*In general, the band 425-426 MHz (Simplex Block B) is for single frequency operation. For paired frequency operations, base station transmissions are in the band 421-425 MHz and mobile station transmissions are in the band 426-430 MHz (Duplex Pair D).<sup>3</sup>*

<sup>3</sup> Radio Regulation **5.270**

Additional allocation: in Australia, United States, Jamaica, Philippines, the bands 420-430 MHz and 440-450 MHz are also allocated to the amateur service on a secondary basis.

**Figure 7 — Plan for assignments of frequencies land mobile radio service systems in the 450 - 470 MHz Band**

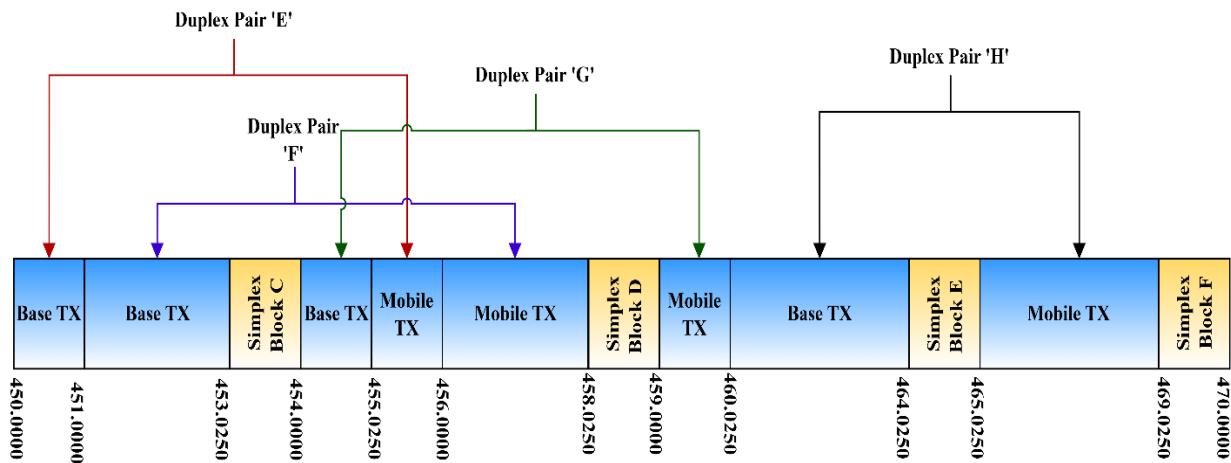


Figure 7: This figure shows the band plan for assignments of frequencies to land mobile and fixed services in the band 450-470 MHz.

The bands 453.025-454 MHz (Simplex Block C), 458.025-459 MHz (Simplex Block D), 464.025-465.025 MHz (Simplex Block E) and 469.025-470 MHz (Simplex Block F) are for single frequency operation.

The bands 450-451 MHz paired with 455.025-456 MHz (Duplex Pair E), 451-453.025 MHz paired with 456-458.025 MHz (Duplex Pair F), 454-455.025 MHz paired with 459-460.025 MHz (Duplex Pair G) and 460.025-464.025 paired with 465.025-469.025 MHz (Duplex Pair H) are for paired operation.

Base station transmissions for paired operation are in the bands 451-453.025 MHz, 454-455.025 MHz and 460.025-464.025 MHz while the corresponding mobile station transmissions are in the bands 456-458.025 MHz, 459-460.025 MHz and 465.025-469.025 MHz, respectively.