RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY COMMITTEE

Proposed Allocation of the 5250 – 5275 kHz Band to Radiolocation Service

Introduction

This paper seeks Members' views on the proposed allocation of the 5250 – 5275 kHz band ("the 5.2 MHz band") to radiolocation service on a secondary basis, on top of the existing allocation.

Background

- 2. According to the Radio Regulations of the International Telecommunication Union ("ITU"), in Region 3¹, the 5.2 MHz band is allocated to fixed service and mobile (except aeronautical mobile) service on a co-primary basis, and radiolocation service on a secondary basis. In Hong Kong, the 5.2 MHz band is allocated to fixed service on a primary basis only, but there is no utilisation of the band for the time being. More information on frequency allocations is given in the Hong Kong Table of Frequency Allocations².
- 3. The Office of the Communications Authority ("OFCA") has recently received an application for using the 5.2 MHz band for radiolocation applications. The proposed system will provide real-time information on ocean current and water surface wave of large sea area. Working in conjunction with similar systems in the areas, the proposed system would be used to monitor ocean hazards such as storm surge brought by tropical cyclones, big waves due to high winds associated with monsoons and tropical cyclones, and tsunami triggered by submarine earthquakes. Before the application could be processed, the allocation of the 5.2 MHz band in Hong Kong needs to be amended to allow for radiolocation service.

ITU divides the world into Region 1, Region 2 and Region 3 for the purpose of radio spectrum management. Hong Kong situates in Region 3.

The Hong Kong Table of Frequency Allocations can be downloaded from the following hyperlink: https://www.ofca.gov.hk/filemanager/ofca/common/Industry/broadcasting/hk freq table en.pdf

Proposed Frequency Allocation

- 4. As mentioned in paragraph 2 above, the proposed additional allocation of the 5.2 MHz band to radiolocation service on a secondary basis is in compliance with the ITU frequency allocation.
- 5. Having considered the demand of the 5.2 MHz band for radiolocation applications, its compliance with the ITU frequency allocation and that the secondary allocation status of radiolocation service would not hinder deployment of fixed service in the same frequency band in future, it is recommended that the 5.2 MHz band be allocated to radiolocation service on a secondary basis, on top of the existing allocation, as summarised in **Annex**.

Advice Sought

6. Members are invited to offer comments on the proposed allocation of the 5.2 MHz band to radiolocation service. OFCA will take into account Members' comments and make a recommendation to the Communications Authority for the aforesaid allocation to take effect.

Office of the Communications Authority January 2020

Annex

Existing and Proposed Allocation of the 5250 – 5275 kHz Band in Hong Kong

EXISTING	PROPOSED
5250-5275 kHz FIXED	5250-5275 kHz FIXED Radiolocation
Note: Services in "capitals": primary services Services in "normal characters": secondary services	