

**RADIO SPECTRUM AND TECHNICAL STANDARDS ADVISORY
COMMITTEE**

Proposed Spectrum Release Plan for 2016-18

Introduction

This paper proposes updates on the spectrum release plan (“SRP”) for its coming release that covers 2016 – 2018.

Background

2. An SRP is published by the Communications Authority (“CA”) annually to inform the industry about the potential supply of spectrum through an open, competitive bidding or tendering process in the following three years. The SRP is updated every year on a rolling basis or as required taking into account the latest developments. The last SRP was published in March 2015 that covered the potential supply of spectrum for 2015 – 2017.

3. To update the SRP in a timely manner, the Office of the Communications Authority (“OFCA”) monitors the availability of spectrum for assignment for non-government use, having regard to international development on spectrum allocation, regional spectrum allocation decisions, technology and equipment availability and proposals from the industry. The recent findings of OFCA are given below.

Trend of Spectrum Allocations

1427 – 1518 MHz Band

4. The International Telecommunication Union (“ITU”) recently held the World Radiocommunication Conference 2015 (“WRC-15”) in Geneva in late November 2015. Among other things, the frequency band 1427 – 1518 MHz was identified for use, on a worldwide basis, by administrations wishing to implement International Mobile Telecommunications (“IMT”). The decision would be effective on 1 January 2017. Nevertheless, as the ITU studies on frequency sharing between mobile services and other relevant services in the 1427 – 1518 MHz band are not yet completed, WRC-15 has tasked the ITU Radiocommunication Sector to continue the related studies.

5. In Hong Kong, the allocations of the 1427 – 1518 MHz band are as shown below (services printed in capitals are primary services) –

- (a) 1427 – 1429 MHz : To be planned
- (b) 1429 – 1466 MHz / 1480 – 1518 MHz : FIXED
- (c) 1466 – 1480 MHz : BROADCASTING, MOBILE

There are existing fixed links operating in the 1429 – 1466 MHz / 1480 – 1518 MHz bands whereas the 1466 – 1480 MHz band is currently vacant.

6. Whether spectrum in the 1427 – 1518 MHz band may be allocated to the mobile service in Hong Kong is subject to further study and hinged on the availability of harmonised IMT band plans and their associated equipment support. OFCA will keep in view the development to see whether spectrum in this band can be made available for allocation to the mobile service for IMT and provide the relevant information in the future SRP update.

Other Bands

7. For the frequency band 798 – 806 MHz, i.e. UHF TV channel 62, it has been assigned to Radio Television Hong Kong (“RTHK”) and is being used for full operation of RTHK’s digital terrestrial television service. Regarding the frequency band 2570 – 2620 MHz, the 2575 – 2615 MHz sub-band has also been assigned for government use, with 5 MHz blocks above and below the band edges reserved as guard bands not available for assignment. The frequency bands 798 – 806 MHz and 2570 – 2620 MHz will no longer be opened for bidding or tendering. As such, the corresponding entries will be deleted from the SRP.

Way Forward

8. A draft of the updated SRP (with changes compared with the last version highlighted in red colour) is given at the Annex. Same as the SRP for 2015-2017, there is no spectrum available for release as per the updated SRP for 2016-2018.

9. The updated SRP is scheduled to be released in early 2016.

Advice Sought

10. Members are invited to offer comments on the draft SRP at the [Annex](#).

Office of the Communications Authority
February 2016

Draft Spectrum Release Plan for 2016 – 2018**Introduction**

As part of the implementation of the Radio Spectrum Policy Framework announced by the Government in April 2007, the Communications Authority (“CA”) will publish a spectrum release plan (“SRP”) to inform the industry of the potential supply of radio spectrum through an open bidding or tendering process for the following three years. The SRP is updated every year on a rolling basis, or as required, taking into account the latest developments.

Spectrum Release Plan for 2016 – 2018

Frequency Band (MHz)	Allocation	Earliest Release Date¹	Target Consultation Date	Remarks
No spectrum available for release				

Spectrum included in previous versions of Spectrum Release Plan

Frequency Band (MHz)	Allocation	Remarks
216 – 223	Broadcasting Fixed Mobile	Channel 11A (216.160 – 217.696 MHz), Channel 11B (217.872 – 219.408 MHz) and Channel 11D (221.296 – 222.832 MHz) may be used for new digital broadcasting and telecommunications services, including broadcast-type mobile TV and digital audio broadcasting (“DAB”) services. Channel 11C (219.584 – 221.120 MHz) has been assigned for DAB services.
678 – 686 (UHF TV Channel No. 47)	Broadcasting Mobile	This band was assigned through the auction of radio spectrum in the UHF band held in June 2010 for the provision of broadcast-type mobile TV services.

¹ Earliest release date refers to the earliest date when the spectrum concerned is expected to be available for release to the market for auction or tendering, subject to the outcome of consultation and passing of the relevant subsidiary legislation. It does not however necessarily refer to the actual date when the auction or tendering will take place.

Frequency Band (MHz)	Allocation	Remarks
798 – 806 (UHF TV Channel No. 62)	Broadcasting Mobile	The Chief Executive in Council decided in September 2009 that Radio Television Hong Kong (“RTHK”) should be allocated resources and frequency spectrum to provide, inter alia, digital terrestrial TV (“DTT”) services as the public service broadcaster. In April 2011, Government indicated to the former Telecommunications Authority (“TA”) that RTHK has to make use of Channel 62, the only UHF TV frequency available for the provision of DTT services with territory wide coverage, for the delivery of its DTT services. In view of the Government’s decision and upon RTHK’s application, the former TA assigned Channel 62 to RTHK in March 2012 for DTT services. After conducting a series of DTT trial transmission from July 2012 to January 2014, RTHK started its trial DTT service on Channel 62 in January 2014.
832.5 – 837.5 877.5 – 882.5	Mobile	These bands were assigned through the auction of radio spectrum in the 850 MHz, 900 MHz and 2 GHz Bands held in February/March 2011 for the provision of public mobile telecommunications services.
885 – 890 930 – 935	Mobile	These bands were assigned through the auction of radio spectrum in the 850 MHz, 900 MHz and 2 GHz Bands held in February/March 2011 for the provision of public mobile telecommunications services.
1466 – 1480	Broadcasting Mobile	This band may be used for new digital broadcasting and telecommunications services, including broadcast-type mobile TV and DAB services. As a result of the second consultation on the development of mobile TV services which took place in January 2008, this band has been reserved subject to further development of the worldwide market.
1780.1 – 1785 1875.1 – 1880	Mobile	These bands were assigned through the auction held in June 2009 for the provision of public mobile telecommunications services.

Frequency Band (MHz)	Allocation	Remarks
1904.9 – 1919.9 2019.7 – 2024.7	Fixed Mobile	These bands are currently assigned to mobile network operators for the provision of 3G mobile services. The assignments will expire on 21 October 2016. In accordance with the decision of the CA announced on 15 November 2013, ² these bands will be put back to reserve upon expiry of the existing assignments in October 2016.
1930.2 – 1940.0 1960.0 – 1969.8 2120.2 – 2130.0 2150.0 – 2159.8	Fixed Mobile	In accordance with the decision of the CA announced on 15 November 2013, ² these bands were planned to be released for auction towards end 2014 and were therefore included in previous SRP. Following the decision of the CA announced on 2 May 2014, ³ the bands released for auction were revised to 1920.3 – 1935.1 MHz, 1960.0 – 1969.8 MHz, 2110.3 – 2125.1 MHz and 2150.0 – 2159.8 MHz instead. These revised bands were assigned through the auction held in December 2014 for the provision of public mobile telecommunications services.
2010 – 2019.7	Fixed Mobile	This band was listed for the auction of radio spectrum in the 850 MHz, 900 MHz and 2 GHz Bands held in February/March 2011 for the provision of public mobile telecommunications services but was not acquired by any bidder in the auction. The CA will review the demand for this band.
2300 – 2390	Fixed Mobile	This band was assigned through the auction of spectrum for broadband wireless access service held in February 2012.
2500 – 2515 2620 – 2635	Fixed Mobile	These bands were assigned through the auction of spectrum for broadband wireless access service held in January 2009.
2515 – 2540 2635 – 2660	Fixed Mobile	These bands were assigned through the auction of spectrum for broadband wireless access service held in March 2013.
2540 – 2570 2660 – 2690	Fixed Mobile	These bands were assigned through the auction of spectrum for broadband wireless access service held in January 2009.

² See http://www.coms-auth.hk/filemanager/statement/en/upload/237/ca_statements20131115_en.pdf.

³ See http://www.coms-auth.hk/filemanager/statement/en/upload/270/decision_20140502_e.pdf.

Frequency Band (MHz)	Allocation	Remarks
2570—2620	Fixed Mobile	The frequency band of 2600—2615 MHz was listed for the auction of spectrum for broadband wireless access service held in January 2009 but was not acquired by any bidder in the auction. The frequency band of 2575—2615 MHz has been assigned for Government use. The frequency bands of 2570—2575 MHz and 2615—2620 MHz are reserved as guard bands and will not be made available for assignment.

This SRP is for information by the industry and public. Publication of the SRP does not constitute any allocation or assignment of the spectrum. The SRP does not bind the CA in exercise of its discretion in the actual spectrum allocation and assignment. The CA will conduct separate consultation exercises before exercising his powers under sections 32H(2)(a) and (b) and 32I(1) of the Telecommunications Ordinance (Cap 106) as is reasonable in all the circumstances of the case. In making a decision on spectrum allocation and/or assignment, the CA will also take into account all relevant matters of the case. The CA is entitled to depart or deviate from the SRP where the circumstances so warrant. The SRP is therefore not legally binding on the CA and is subject to annual review and may from time to time be amended, as and when it is considered necessary in the light of latest developments.

Office of the Communications Authority
[day] [month] 2016