Spectrum Release Plan for 2020 – 2022

Introduction

In accordance with 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 for the following three years. The SRP is updated every year on a rolling basis, or as required, taking into account the latest developments. Details of the SRP for 2020 - 2022 are listed below. Spectrum in the SRP may be made available for use by the industry through open bidding, tendering process or other appropriate means.

2. This SRP is for information of the industry and the 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 its 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.

Frequency Band (MHz)	Bandwidth (MHz)	Earliest Release Date ^[1]	0	Remarks
24250 - 26550 ^[2]	2300	2020 [3]	Completed	Assignment of available spectrum for provision of mobile / wireless
27750 - 28350 ^[2]	600			fixed services

Updated Spectrum Release Plan for 2020 – 2022

Frequency Band (MHz)	Bandwidth (MHz)	Earliest Release Date ^[1]	Target Consultation Date	Remarks
617 – 698	Maximum 160 ^[4]	2021 [5]	2020 [5]	Assignment of new spectrum for provision of indoor mobile services from Q4 2021 the earliest ^[5]
703 - 803				Assignment of new spectrum for provision of indoor mobile services from Q4 2021 the earliest ^{[5][6]}
4800 - 4840 4920 - 4960	80	2021	2020	Assignment of new spectrum for provision of mobile services
825 - 832.5 870 - 877.5	15	2021	2020	Re-assignment of existing spectrum for provision of mobile services from Q4 2023 ^[7]
2500 - 2515 $2540 - 2570$ $2620 - 2635$ $2660 - 2690$	90	2022	2020	Re-assignment of existing spectrum for provision of mobile services from Q2 2024 ^[8]

Notes

- ^[1] "Earliest release date" refers to the earliest date when the spectrum concerned is expected to be available for release to the market through auction, tendering or other appropriate means, subject to the outcome of consultation and enactment of the relevant subsidiary legislation. It does not necessarily refer to the actual date of spectrum assignment.
- [2] Among the spectrum in the 26 GHz band (24250 27500 MHz) and 28 GHz band (27500 28350 MHz), 2500 MHz of spectrum (24250 26550 MHz and 27750 27950 MHz) is available for assignment on a non-shared basis and 400 MHz of spectrum (27950 28350 MHz) is available for assignment on a shared basis, the latter of which is open to application anytime.
- ^[3] The CA plans to invite for the second round applications in around end 2020 for assignment of the remaining non-shared spectrum in the 26 GHz and 28 GHz bands for the provision of large scale public mobile services, and the earliest date for assignment will be in the first half of 2021.

- ^[4] Based on the band plans of the Third Generation Partnership Project, a maximum of 160 MHz of spectrum in the 617 – 698 MHz band ("600 MHz band") and 703 – 803 MHz band ("700 MHz band") is planned to be released.
- ^[5] Subject to the vacation of the 600 MHz and 700 MHz bands before end-2021 and the frequency coordination with the Mainland on the use of the concerned frequency bands to avoid mutual radio interference across the boundary.
- ^[6] At least 20 MHz of spectrum in the 700 MHz band can be used for outdoor deployment as well.
- ^[7] The existing assignment in these bands will expire on 19 November 2023.
- ^[8] The existing assignments in these bands will expire on 30 March 2024.

Spectrum included in previous versions of Spectrum Release Plan

Frequency Band (MHz)	Bandwidth (MHz)	Remarks	
216 - 223	7	Use of Channel 11C (219.584 – 221.120 MHz) for Digital Audio Broadcasting services has ceased since 4 September 2017.	
		Channel 11A to 11D (within the range of 216 – 223 MHz) may be used for new digital broadcasting and telecommunications services, including broadcast-type mobile TV services.	
832.5 - 837.5	10	These bands were assigned through the auction of	
877.5 - 882.5		radio spectrum in the 850 MHz, 900 MHz and 2 GHz Bands held in February/March 2011 for the provision of public mobile services.	
885 - 890	10	These bands were assigned through the auction of radio spectrum in the 850 MHz, 900 MHz and	
930 - 935		2 GHz Bands held in February/March 2011 for the provision of public mobile services.	
890 - 915	50	The right of first refusal for 80 MHz of spectrum in the frequency bands of 1720 – 1730 MHz, 1740 – 1770 MHz, 1815 – 1825 MHz and 1835 – 1865 MHz ("RFR Spectrum") was offered to the incumbent spectrum assignees administratively in July 2018. All of them exercised their right of first refusal to acquire the relevant RFR Spectrum. The remaining 120 MHz of spectrum was assigned by way of the auction conducted in	
935 - 960			
1710 – 1785 1805 – 1880	150		
		December 2018. These bands will continue to be used for the provision of public mobile services upon expiry of the existing assignments in 2021.	
1466 - 1480	14	This band may be used for new digital broadcasting and telecommunications services, including broadcast-type mobile TV 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 market.	

Frequency Band (MHz)	Bandwidth (MHz)	Remarks
1904.9 – 1919.9 2019.7 – 2024.7	20	These bands were previously assigned to mobile network operators for the provision of 3G mobile services. The assignments expired on 21 October 2016. In accordance with the decision of the CA announced on 15 November 2013, ¹ these bands were put back to reserve following the expiry of the relevant assignments in October 2016. The 1904.9 – 1915.0 MHz band was assigned for use by the Government in 2019.
$\begin{array}{r} 1930.2 - 1940.0 \\ 1960.0 - 1969.8 \\ 2120.2 - 2130.0 \\ 2150.0 - 2159.8 \end{array}$	39.2	In accordance with the decision of the CA announced on 15 November 2013, ¹ these bands were planned to be released through auction towards end 2014 and were therefore included in previous SRP. Following the decision of the CA announced on 2 May 2014, ² the bands to be released through 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 (with a total bandwidth of 49.2 MHz). These revised bands were assigned through the auction held in December 2014 for the provision of public mobile services.
2010 - 2019.7	9.7	This band was included in 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 services but was not acquired by any bidder in the auction. The CA will review the demand for this band.
2300 - 2390	90	This band was assigned through the auction of spectrum for broadband wireless access service held in February 2012.
2515 - 2540 2635 - 2660	50	These bands were assigned through the auction of spectrum for broadband wireless access service held in March 2013.

¹ See <u>http://www.coms-auth.hk/filemanager/statement/en/upload/237/ca_statements20131115_en.pdf</u>.

² See <u>http://www.coms-auth.hk/filemanager/statement/en/upload/270/decision_20140502_e.pdf</u>.

Frequency Band (MHz)	Bandwidth (MHz)	Remarks
3300 - 3400	100	This band (limited to indoor use) was assigned through the auction of spectrum for public mobile services held in November 2019.
3400 - 3600	200	This band was auctioned for public mobile services in October 2019, with the assignment to be effective from 1 April 2020.
4840 - 4920	80	This band was assigned through the auction of spectrum for public mobile services held in October 2019.
26550 - 27750	1200	This band was administratively assigned for the provision of large scale public mobile services in April 2019.
27950 - 28350	400	The CA has made available this band for assignment on a geographically sharing basis for the provision of innovative localised wireless broadband services. The first assignment was made in October 2019.

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