



UK 4G Spectrum Refarming

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Spectrum Refarming

In common with networks around the world, UK CSPs have been engaged in a process of refarming 2G and 3G spectrum to be used by 4G.

In most cases, the objective seems to be to reduce the available 2G spectrum to an operational minimum; enough to provide a 2G coverage safety net, while at the same time paving the way for 3G to eventually be retired completely. There is also a degree of preparation for 5G going on.

This technical briefing describes the frequency allocations in the most affected bands only – 900MHz (Band 8), 1800MHz (Band 3) and 2100MHz (Band 1).

The majority of information contained in this document has been gained via direct RF survey observation, some of the optional channels have been calculated rather than observed, so the actual EARFCNs may differ slightly. Some information provided by Peter Clarke at www.pedroc.co.uk.



Band 8 – 900MHz

123

Channel number

DL MHz	2G	3G	4G
925	975-999	2938	5MHz channel
930	1000-1023	2963	5MHz channel
935	1-23	2987	5MHz channel
940	24-48	3012	5MHz channel
945	49-61		
950	62-81		3698
950	82-100		5MHz channel
955	101-124		
960			



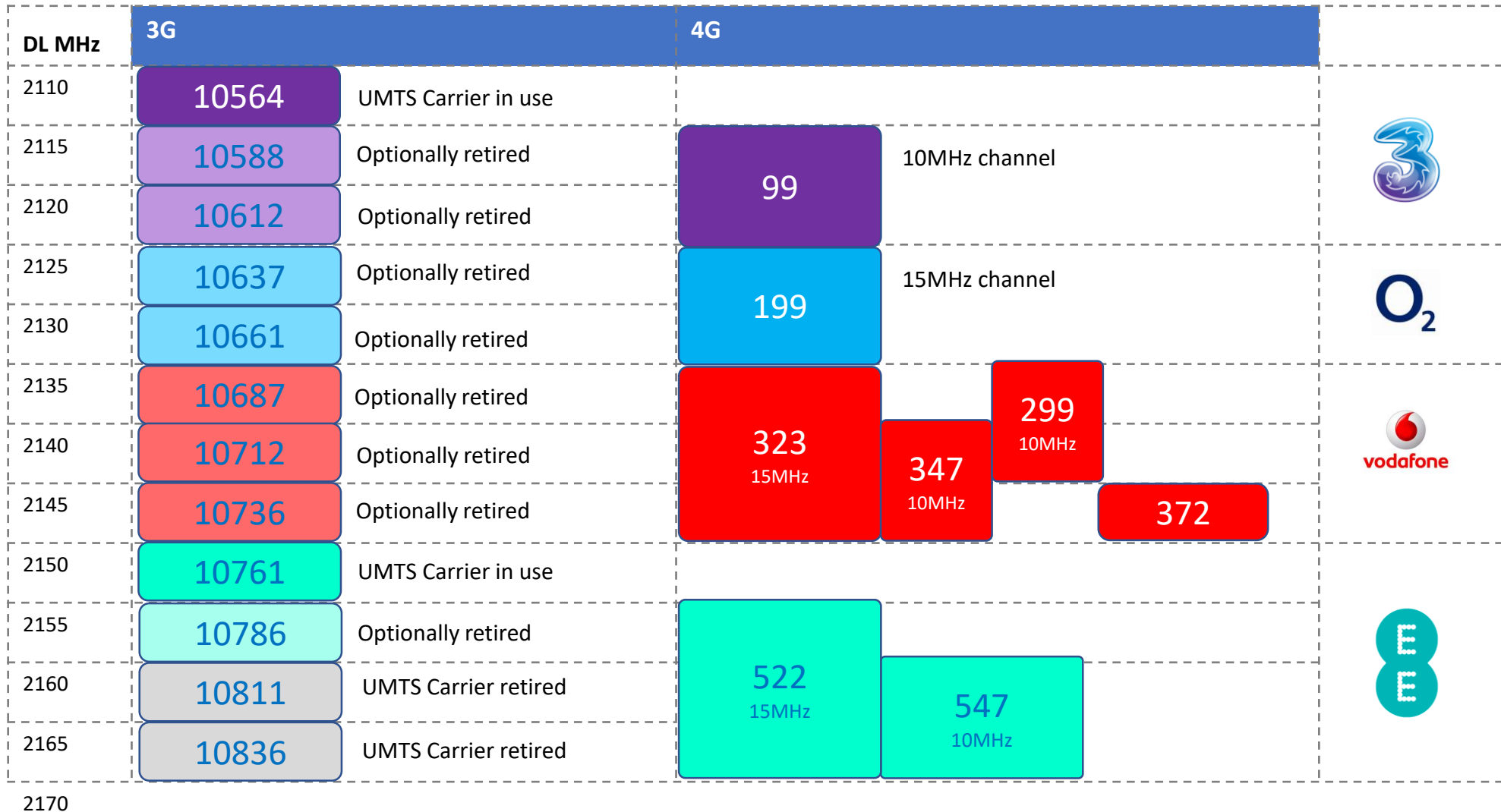
Band 3 – 1800MHz

123

Channel number

DL MHz	2G		4G		
1805	512-540	28 GSM carriers retired	1226	5MHz channel	O ₂
1810	541-569	28 GSM carriers retired	1288	5MHz channel	vodafone
1815	570-644		1392	15MHz channel	3
1820					
1825					
1830	645-695	50 GSM carriers in use	1667	20MHz channel	EE
1835					
1840					
1845	696-841		1811	10MHz	
1850					
1855			1808	10MHz	
1860					
1865	842-869	27 GSM carriers in use			
1870					
1875					

Band 1 – 2100MHz





Any questions or comments?

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