Spectrum Deep Tracks: The 800 MHz Band

What's Next?

A collaborative analysis from



and



March 2024

Authors:

Brian Goemmer, Spektrum Metrics & Terry Chevalier, Sunstone Associates





Abstract:

With the recent news that DISH would not be exercising their option to purchase the Enhanced Special Mobile Radio (ESMR) 800 MHz licenses from T-Mobile, attention has turned to what it means for DISH. However, an equally important question for many investors, operators, utilities, and integrators is what does it mean for the 800 MHz frequencies, more specifically what's next for the band?

In the following report, we provide a brief background and technical overview of the ESMR band and then outline the potential transactional steps which could occur. We also conduct a more detailed analysis of the impact the 800 MHz band can have on T-Mobile's strategic transaction of Comcast's 600 MHz portfolio. The authors then extract which markets might be essential to T-Mobile's divestiture plans by evaluating the post-transaction impact under the FCC's spectrum screen and regulatory review.

This report will be of interest to spectrum speculators, low band holders, utilities, systems integrators, investors, potential 800 MHz auction bidders, and financial analysts. The analysis within this report is completed with the aid of the Spektrum Metrics Aggregation Toolset, February 2024 version, which allows rapid calculation of aggregated spectrum levels by carrier and identification of markets that exceed the FCC's current spectrum aggregation limit.





Disclaimer: This material is for our clients only. This material is based on current public information that we consider reliable, but we do not represent it as accurate or complete, and it should not be relied on as such. The spectrum landscape is highly dynamic, being affected by a complex array of regulatory proceedings, legislation, company strategies and tactics, industry announcements, and ongoing transactions. We seek to update our research as appropriate, but availability and accessibility of information may be limited.

No part of this material or any research report may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of Spektrum Metrics or Sunstone Associates. Our research does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients and firms. Clients should consider whether any advice or recommendation in our research is suitable for their particular circumstances and, if appropriate, seek further professional advice, as needed.





	ble of Contents	Table	T
6	Executive Summary	1 Exe	1
6	Context & Relevant Background	2 Co	2
Error! Bookmark not defined.	.1 The 800 MHz Band – the Basics	2.1	
Error! Bookmark not defined.	.2 Relevant History and Context	2.2	
Error! Bookmark not defined.	The 800 MHz Auction	3 The	3
Error! Bookmark not defined.	.1 Auction format	3.1	
Error! Bookmark not defined.	.2 Mobile Network Operator Interest	3.2	
Error! Bookmark not defined.	.3 Other Potential Bidders	3.3	
Error! Bookmark not defined.	Post Auction Scenarios	4 Pos	4
Error! Bookmark not defined.	.1 The Spectrum Screen and the Low Band factor	4.1	
Error! Bookmark not defined.	.2 The Implications of the Screen to T-Mobile	4.2	
Error! Bookmark not defined.	Implications and Conclusion	5 lmp	5
7	About the Authors	6 Ab	6
Error! Bookmark not defined.	Glossary	7 Glo	7
Error! Bookmark not defined.	APPENDIX	B AP	8
∕lHzError! Bookmark not	.1 Market license areas impacted by divestiture of 800 M efined.	8.1 defin	
Error! Bookmark not defined.	.2 Counties impacted by divestiture of 800 MHz	8.2	





Table of Figures Figure 1 – 800 MHz Band Plan Error! Bookmark not defined. Figure 2 - % Coverage of Licensed Population by Channel Position Error! Bookmark not

defined.

Figure 3 – Example: Potential impact of Comcast 600 MHz to T-Mobile **Error! Bookmark not defined.**

Figure 4 – Comcast 600 MHz Portfolio..... Error! Bookmark not defined.

Figure 6 – Impact of Divesting ESMR on T-Mobile's proposed acquisition of Comcast 600 MHz

Error! Bookmark not defined.

Figure 7 - T-Mobile markets where divesting ESMR could provide a buffer to the low band review threshold...... Error! Bookmark not defined.

Figure 8 – Map of potentially high priority 800 MHz divestiture PEA license areas for T-Mobile **Error! Bookmark not defined.**

Figure 9 - Map of potentially high priority 800 MHz divestiture counties for T-MobileError! Bookmark not defined.





1 Executive Summary

If you've been following the news for the past few months, there has been an ongoing "row" between T-Mobile and DISH concerning a specific mobile band – the Enhanced Specialized Mobile Radio ("ESMR") band of 800 MHz spectrum.

As part of the Department of Justice (DOJ) order that allowed T-Mobile's acquisition of Sprint, one of the key terms was that DISH would have the option to purchase the ESMR spectrum from T-Mobile with a strike price of \$3.59B.

In the past few months, DISH has executed a merger with EchoStar to create financing flexibility for their wireless capital needs to meet their wireless build targets while also raising cash to purchase the 800 MHz. However, EchoStar has recently indicated they are unlikely to exercise the option to buy.

Many analysts are focused on what this means for DISH and their prospects. While this is a critical and important question for the industry, another equally important question for mobile companies, spectrum holders, and analysts is "what does this mean for 800 MHz"? Specifically, who might want to buy the band and who has the necessary balance sheet to support a multi-billion dollar purchase?

There is also another point to consider and that is, why would T-Mobile want to keep this band? The band does not fit T-Mobile's current layer cake strategy and although the band was deployed by Sprint, there are several reasons that the band doesn't appear to be in T-Mobile's strategic plan.

This report will review what's next for the 800 MHz in terms of a likely auction or next steps. It will also examine the issue of the "spectrum screen" and enhanced factors of low band holdings for review of potential transactions. More specifically, using the Spektrum Metrics aggregation calculators, we will evaluate the impact of the 800 MHz on T-Mobile's overall below 1 GHz spectrum holdings at a county and license level. This in turn will highlight the implications for their proposed Comcast 600 MHz purchase.

While it's important to note that the enhanced factor review does NOT imply a barrier to a transaction, it does represent an added hurdle. Most companies would endeavor to NOT trigger enhanced reviews which could result in delays, added costs, and potential remedies.





2 About the Authors

In our research and analysis papers, Sunstone Associates and Spektrum Metrics combine their collective wireless carrier experience with analysis outputs from the leading spectrum ownership analysis tool.



Terry Chevalier is the Managing Director of Sunstone Associates. Prior to founding Sunstone Associates, Terry was heavily involved in spectrum strategy efforts for AT&T including leading the analytics and strategy team for multiple spectrum auctions. This experience includes establishing bid teams, assessment tools, objectives, priorities, valuation, mock auctions, bidding & reporting tools, impairments or coordination requirements, and auction execution, representing ~\$20B in spectrum acquisition. He also led business strategy efforts for multiple spectrum

bands, supported advocacy efforts, and has presented spectrum matters to a variety of audiences.



Brian Goemmer is the President of Spektrum Metrics, formally Allnet Insights & Analytics. Prior to Spektrum Metrics, Brian held multiple executive engineering and operations positions at Western Wireless and Clearwire and led spectrum management efforts at both companies. Spektrum Metrics' Spectrum Ownership and Analysis Tools detail current and future spectrum ownership in the United States, Canada, and Mexico through a collection of 23 analysis modules.