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**T-Mobile's Timely 3G Sunset Will Spur Stronger 5G Services:
Early 2022 CDMA Network Retirement Shouldn't Be Slowed**

by

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I. Introduction and Summary

On August 9, news outlets reported on a U.S. Department of Justice letter addressing T-Mobile's plan to retire an old 3G CDMA wireless network at the beginning of 2022. And on August 17, it was reported that the California Public Utility Commission is now looking into T-Mobile's timeline for shutting off the CDMA network. Yet any regulatory intervention to extend the life of 3G networks would keep wireless services stuck in the slow-speed era to the overall detriment of consumers.

The transition of wireless subscribers to next-generation networks ought to be encouraged, not halted. Timely retirement of 3G networks is essential to free up spectrum and other resources for the rollout of 5G networks. Typically, old 3G CDMA networks offer single-digit Mbps download speeds, whereas OpenSignal found that download speeds on T-Mobile's 5G networks in July 2021 was 87.5 Mbps. The primary public benefit of the T-Mobile/Sprint merger remains its acceleration of nationwide 5G network services. And there are good reasons for concluding that T-Mobile's 15-month advance notice to DISH Network of the

pending CDMA shutdown was reasonable and that regulators should not interfere with its implementation.

In connection with the T-Mobile/Sprint merger, T-Mobile sold to DISH Network Sprint's Boost prepaid service, which DISH operates as a mobile virtual network operator (MVNO). It is reported that a majority of Boost's approximately 9 million subscribers still rely on Sprint's CDMA network for wireless services. T-Mobile and DISH signed an agreement that requires "reasonable advance notice of at least six months prior to the shutdown of the Legacy Network in any market." In the fall of 2020, T-Mobile provided DISH with notice of intent to shutter its 3G CDMA network on January 1, 2022. Despite having received 15-months advance notice, DISH has lobbied for government intervention to stop or delay T-Mobile's 3G shutdown, claiming it would not be able to transition its CDMA-reliant subscribers to other networks by that date.

Importantly, the FCC recognized in its 2020 *T-Mobile/Sprint Order* that "the phase-out of CDMA networks is already underway." The Commission nowhere demanded that the old networks be maintained to cater to the last batches of subscribers still using CDMA-reliant phones. Rather, the Commission sensibly found that "it is not in the public interest to require a company to devote their limited resources to maintaining an outdated technology when those resources could instead be directed to bringing to American consumers faster, higher-quality and more reliable services." And T-Mobile's advance notice to DISH is comparable to the 15-month T-Mobile/MetroPCS subscriber transition timeline that the FCC cited favorably in its *T-Mobile/Sprint Order*.

In *New York v. Deutsche Telekom*, the court decision that upheld the T-Mobile/Sprint merger against antitrust claims, the U.S. District Court of the Southern District of New York characterized Sprint's adoption of CDMA as one of Sprint's "multiple ill-advised technological and business decisions which resulted in a chronically underdeveloped network that is inconvenient for consumers to use." Government intervention delaying the retirement of Sprint's CDMA network would make a business misjudgment that contributed to Sprint's demise into a government-dictated industrial policy that magnifies its negative effects.

The Justice Department's July 2021 letter avoids offering any definitive position on T-Mobile's 2022 timeframe for sunseting Sprint's CDMA network. Rather it states: "The Division cannot yet determine whether the notice provided will have been reasonable for a January 1, 2022 CDMA shutdown in light of all relevant facts and circumstances since they have not all transpired." But the DOJ's letter seems to focus on the wrong time period. The most relevant facts for ascertaining what was "reasonable" should be those facts that formed the basis of T-Mobile's and DISH's intentions in signing the agreement as well as the facts on the ground when the advance notice was actually provided.

The Justice Department's letter curiously adds that "if DISH undertakes all reasonable efforts to transition its customers off the CDMA network and a substantial portion are still remaining at the end of the period, that fact may very well suggest that notice had not been sufficient." But it seems highly unlikely that T-Mobile's 15-month advance notice was unreasonable in light of the relevant pre-notice facts that suggest that the notice was sufficient.

The generally recognized industry-wide phase-out and retirement of 3G networks, T-Mobile's unmistakable intent that it would retire Sprint's deficient CDMA network, and T-Mobile's track record in transitioning MetroPCS subscribers within 15 months all go to show that the advance notice given to DISH was reasonable. And it would be wrong to insist that those unforeseeable post-notice occurrences events like lockdowns and chip shortages somehow make T-Mobile's advance notice to DISH or its act of providing advance notice retroactively unreasonable. Those post-notice facts simply aren't relevant to the reasonableness of T-Mobile's advance notice regarding its CDMA network shutdown.

Moreover, DISH could have negotiated for stronger minimum reasonable advance notice protections against risk of loss from future events that might hamper its ability to migrate Boost customers in response to the retirement of Sprint's CDMA network. But it negotiated only for a six-month minimum for reasonable advance notice, and the actual notice it received came several months ahead of the agreed upon minimum.

Furthermore, events transpiring since T-Mobile provided notice of its pending CDMA network retirement bear more on the reasonableness of DISH's efforts to transition its customers than on whether T-Mobile's sunset notice was reasonable. DISH is primarily responsible for ensuring that its own subscribers continue to have working wireless services. And DISH is a multi-billion dollar company with experience providing communications services to end users. To this end, DISH has secured a MVNO deal with AT&T to offer 5G services, and it also has made agreements with equipment vendors for deploying its own facility-based nationwide 5G network. And T-Mobile's obligations to carry out its seven-year full MVNO agreement with DISH that are expressly contained in the Final Judgment are far more likely to protect against anticompetitive harm than a freeze order on CDMA retirement.

Dragging out the retirement of 3G networks would slow deployment of nationwide 5G network services and diminish their benefits to consumers. Government should allow and encourage this important tech transition.

II. Brief Background on T-Mobile/Sprint and Divestiture to DISH

As a condition for approval of the T-Mobile/Sprint merger under the Final Judgment entered by the U.S. District Court for the District of Columbia on April 1, 2020, T-Mobile agreed to transfer spectrum licenses along with Sprint's Boost brand and several million Boost subscribers to DISH Network. DISH also received rights to any cell sites that might be decommissioned and stores that might be closed by T-Mobile over the next several years. T-Mobile's transfer of Boost to DISH closed on July 1, 2020. And the FCC approved the transfer of spectrum licenses pursuant to the merger in October 2020. Thus, in addition to owning valuable spectrum resources, DISH now operates Boost as a mobile virtual network operator (MVNO) while it works to deploy a facilities-based nationwide 5G network. Pursuant to the Final Judgment T-Mobile and DISH have an agreement whereby T-Mobile serves as the wholesaler of wireless network capacity to Boost for a period of seven years.

T-Mobile and DISH signed a Master Network Services Agreement, which apparently requires "reasonable advance notice of at least six months prior to the shutdown of the Legacy Network in any market." In the fall of 2020, T-Mobile reportedly provided DISH notice that it intended to shutter its 3G CDMA network on January 1, 2022. Advance notice was thus

provided several months before the required minimum under the agreement. Yet DISH has repeatedly publicly complained that the 3G CDMA shutdown will be too soon. It is reported that a majority of Boost's approximately 9 million subscribers use that network. Migrating those Boost subscribers will require the issuance of new cellphones and new SIM cards, which will result in costs for Boost. DISH also has lobbied for government intervention to stop or delay T-Mobile's 3G shutdown. This lobbying appears to have elicited government responses in the form of a letter by the U.S. Department of Justice sent to both wireless service providers in July and made public in August. And on August 17 came reports of a September hearing at the California Public Utilities Commission that centers on the upcoming CDMA network retirement.

III. 3G Wireless Retirement is Necessary for 5G Wireless Rollout

Well-timed retirement of 3G wireless networks is essential to freeing up spectrum and other resources for deployment of next-generation networks. The first U.S. deployment of 3G networks was back in 2003. And the sooner those old networks can be shut down and wireless users upgraded to 4G LTE and 5G networks the better. According to the Boston Consulting Group, timely deployed 5G networks would boost U.S. GDP by \$1.4 trillion to \$1.7 trillion over the next decade, creating 3.8 million to 4.6 million American jobs. OpenSignal found that download speeds on T-Mobile's 5G networks in July 2021 was 87.5 Mbps. Typically, old 3G CDMA networks offer single-digit Mbps download speeds.

All of the nationwide wireless service providers have plans in the works to retire their 3G networks. News outlets have reported on 3G phaseouts and eventual sunseting since [2014](#), and apparently as far back as [2012](#). This ongoing industry-wide transition to next-generation wireless networks and T-Mobile's intent to retire Sprint's 3G CDMA network formed a conspicuous part of the merger.

IV. T-Mobile's Long Expected Retirement of Sprint's 3G CDMA Network

In its October 2019 *T-Mobile/Sprint Order*, the FCC observed that T-Mobile's termination of the CDMA network wouldn't begin before January 2021. At the same time, the Commission recognized that "the phase-out of CDMA networks is already underway and is not a transaction-related issue."

Part of the Commission's merger analysis focused on the likely efficiencies to be generated by the transaction and T-Mobile's related ability to transition Sprint subscribers to next-generation wireless services. As part of that analysis, the Commission found there was no evidence that T-Mobile would accelerate its 3G network retirement so as to leave Sprint's CDMA subscribers without service. Instead, the Commission recognized that T-Mobile's transition plans would "ensure that existing subscribers and services would not be displaced without a replacement service that is comparable in coverage and capacity." Moving subscribers using older networks to equivalent or better networks is a better overall approach to improving consumers' wireless service.

Importantly, the FCC nowhere demanded that the old networks ought to be maintained in order to cater to the last batches of subscribers still using CDMA-reliant phones. According to the Commission, CDMA phase-out was "not a transaction-related issue." And the *T-*

Mobile/Sprint Order expressly rejected any requirement that T-Mobile extend the life of the old 3G CDMA network to benefit other wireless service providers: "[I]mposing a roaming condition to maintain an outdated technology would not be in the public interest, and accordingly, we do not require New T-Mobile to maintain the legacy CDMA network for a specific period of time." The Commission sensibly found that "it is not in the public interest to require a company to devote their limited resources to maintaining an outdated technology when those resources could instead be directed to bringing to American consumers faster, higher-quality and more reliable services."

Additionally, T-Mobile's 15-month advance notice to DISH in the fall of 2020 about its early 2022 CDMA retirement is comparable with the 15-month T-Mobile/MetroPCS subscriber transition timeline that the FCC cited favorably. In its *T-Mobile/Sprint Order*, the FCC recognized that "T-Mobile was able to successfully transition customers from Metro's network over to T-Mobile's network in an efficient and expedient manner" within 15 months. Based on that track record, the Commission wrote: "We find it likely that T-Mobile can replicate the success of the MetroPCS acquisition in the present case." Thus, when T-Mobile's sale of Sprint's Boost brand to DISH closed in July 2020, it would have been reasonable for DISH to expect that T-Mobile would migrate Sprint's CDMA-reliant subscribers and shut down Sprint's CDMA network within 15 months of the close of the Boost sale – if not within 15 months of the completion of T-Mobile's acquisition of Sprint in April 2020. In other words, T-Mobile's recognized intent to reproduce a 15-month migration of subscribers following its acquisition of Sprint supports the reasonableness of the 15-month advance notice on the CDMA network sunset that it provided to DISH.

V. Choice of CDMA Technology Contributed to Sprint's Demise. So Why Prolong the Effects of That Mistake?

The detrimental shortcomings of Sprint's legacy CDMA network underscores the folly of any future regulatory intervention intended to prolong its operating life. The February 2020 court decision that rejected antitrust challenges to T-Mobile/Sprint and upheld the merger identified Sprint's reliance on CDMA technology as a reason for the old carrier's undoing. In *New York v. Deutsche Telekom*, the U.S. District Court of the Southern District of New York wrote:

For roughly the past 15 years, Sprint has made multiple ill-advised technological and business decisions which resulted in a chronically underdeveloped network that is inconvenient for consumers to use. For example, Sprint's choice to use a technology standard called CDMA instead of the GSM standard widely adopted by the rest of the industry meant that many consumers would have to change their mobile handsets if they switched to Sprint's network, and, because of this decision, Sprint's customers remain among the exceptions who cannot use voice and data services simultaneously.

Imposing government regulation to delay the retirement of Sprint's CDMA network would make a business misjudgment that contributed to Sprint's demise into industrial policy and magnify its negative effects. The pro-competitive and pro-consumer answer to wireless subscribers using old CDMA networks is to timely upgrade to 4G LTE and 5G network services that satisfy the FCC's benchmarks for wireless broadband.

VI. DOJ Letter Doesn't Dispel the Reasonableness of T-Mobile's 3G Sunset Notice

The Department of Justice's July 2021 letter regarding CDMA sunset follows a DISH's request for assistance and the agency's meetings with both parties. In its letter, the DOJ avoids offering any definitive position on T-Mobile's 2022 timeframe for sunseting Sprint's CDMA network. Yet its letter insists that whether T-Mobile's shutdown advance notice was "reasonable" under the terms of a written contract between T-Mobile and DISH depends on future facts and circumstances. In its letter, the DOJ writes: "The Division cannot yet determine whether the notice provided will have been reasonable for a January 1, 2022 CDMA shutdown in light of all relevant facts and circumstances since they have not all transpired."

However, the Justice Department's letter seems to focus on the wrong time period for evaluating the reasonableness of T-Mobile's advance notice. The most relevant facts for ascertaining what was "reasonable" should be those facts that formed the basis of T-Mobile's and DISH's intentions in signing the agreement as well as the facts on the ground when the advance notice was actually provided. As discussed above, the generally recognized industry-wide phase-out and retirement of 3G networks, the FCC's recognition of T-Mobile's unmistakable intent to retire Sprint's deficient CDMA network sometime not before January 2021, and T-Mobile's track record in transitioning MetroPCS subscribers within 15 months all go to show that the advance notice given to DISH was reasonable.

Significant post-notice developments such as COVID19 outbreaks from China, government-imposed lockdowns, labor shortages, as well as microchip and other supply chain disruptions were far beyond T-Mobile's foreseeable knowledge or ability to control when it tendered advance notice to DISH. And it would be wrong to insist that those post-notice occurrences make T-Mobile's advance notice to DISH retroactively unreasonable. Those facts simply aren't relevant to the reasonableness of T-Mobile's advance notice regarding its CDMA network shutdown.

Moreover, even if unforeseeable events like lockdowns and chip shortages played an interpretive role regarding "reasonable" advance notice of CDMA network shutdown, the parties' agreement nowhere states that such events count solely against T-Mobile rather than DISH. Written contracts are a mechanism by which parties allocate potential risk of loss. And when parties fail to allocate risks in contracts each of the parties must internalize whatever losses they incur. DISH could have negotiated for stronger minimum reasonable advance notice protections against risk of loss from future events that might hamper its ability to migrate Boost customers in response to the retirement of Sprint's CDMA network. Instead, it negotiated only for a six-month minimum for reasonable advance notice, and the actual notice it received came several months ahead of the minimum.

The Justice Department's letter adds that "if DISH undertakes all reasonable efforts to transition its customers off the CDMA network and a substantial portion are still remaining at the end of the period, that fact may very well suggest that notice had not been sufficient." But it seems highly unlikely that T-Mobile's 15-month advance notice was unreasonable in light of the relevant pre-notice facts that suggest that the notice was sufficient.

Furthermore, post-notice facts likely would have much more bearing on the reasonableness of DISH's efforts to transition its customers rather than whether T-Mobile's sunset notice was reasonable. CDMA-reliant subscribers have consumer contracts with DISH, not T-Mobile. DISH is therefore primarily responsible for ensuring that its subscribers continue to have working wireless services. DISH is able to look after its own business interests and obligations. As the FCC recognized in its T-Mobile/Sprint Order: "Not only does DISH have the necessary independence and financial resources, but it also has considerable experience providing communications services to end-user customers, and has spectrum licenses of its own that ultimately can and will be used in providing wireless service to end users." To this end, DISH has secured a MVNO deal with AT&T to offer 5G services and it also has made agreements with equipment vendors for deploying its own facility-based nationwide 5G network. All the while, DISH is enjoying contractual MVNO arrangements with T-Mobile on favorable terms, by which T-Mobile is obligated to support 4G LTE and 5G services for Boost customers.

Additionally, DOJ's letter points to the provision in the Final Judgment approving the T-Mobile/Sprint merger that its terms must be interpreted "to give full effect to the procompetitive purposes of the antitrust laws and to restore all competition harmed by the challenged conduct." But the primary pro-competitive and pro-consumer benefits of the merger are its enablement and acceleration of the deployment of a nationwide 5G network as well as its enhancing of competition against wireless market leaders AT&T and Verizon. Those benefits are not furthered by dragging out the retirement of 3G networks. And T-Mobile's obligations to carry out its seven-year full MVNO agreement with DISH that are expressly contained in the Final Judgment are far more likely to protect against anticompetitive harm than a freeze order on CDMA retirement.

VII. Conclusion

Government mandates to prolong 3G network maintenance and operations will hold back the buildout of next-generation wireless networks. T-Mobile has acted reasonably in announcing its plan to shutter Sprint's old CDMA network in early 2022, providing DISH over a year to migrate subscribers to next-generation services. Dragging out the retirement of Sprint's old CDMA network would keep wireless consumers stuck in the slow-speed era. It also would slow deployment of nationwide 5G network services and diminish their benefits to wireless consumers and to the U.S. economy. Government should allow and encourage this important tech transition.

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Further Readings

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