T-Mobile is now doing voice over 5G, ahead of most network operators



According to the US carriers, 5G has well and truly arrived. We did it! We won the race to 5G. But there's one piece of the puzzle that's still largely missing: voice. Phone calls still mainly rely on LTE networks, even where 5G data coverage is robust. Today, T-Mobile announced that it has taken a small step forward in making voice over 5G a reality. In Portland, Oregon, and Salt Lake City, Utah, some commercial calls will be routed via T-Mobile's standalone 5G network.

Voice over 5G (referred to as Voice over New Radio, or VoNR) is a major challenge for the whole wireless industry, though all US carriers will likely want to move voice calling over to 5G sometime in the future to free up LTE spectrum for 5G. Voice calls over 5G are also subject to lower latency, so there are real benefits to customers, too.

However, not every carrier is in a rush to send calls over 5G. *Fierce Wireless* noted last year that T-Mobile was leading the

charge as part of its efforts to be seen as the leader in 5G. Verizon and AT&T, in contrast, seem content at the moment to continue using LTE for calls while they keep building their 5G networks. True to form, T-Mobile has made a habit of loudly touting its 5G firsts, including the first voice call over a 5G standalone network using LTE as a fallback in 2020.

The technology only works with the Samsung Galaxy S21 and is available in "limited areas"

VoNR is also something that Dish is working to figure out as it builds a 5G network from scratch, and it could be a sticking point in its ability to meet the FCC's requirements per the Sprint merger deal. It doesn't have an LTE network of its own to fall back on while it figures out VoNR, and analysts say that the carrier is struggling to make smooth handoffs between voice calls on 5G and the LTE networks it uses as roaming partners. If it does meet the FCC's requirement to cover 20 percent of the population by the end of the month, it will probably be with data only — not voice — on its own network.

In the meantime, you'll probably have a hard time seeing a 5G voice call happen in the wild, even if you're a T-Mobile subscriber in Portland or Salt Lake City. Right now, the technology only works with the Samsung Galaxy S21 and is available in "limited areas" of those cities.

Correction June 3rd, 3:45PM ET: *A previous version of this story indicated that T-Mobile had announced its first VoNR call with LTE as a fallback last month; the company made this announcement in 2020. We regret the error.*

https://www.theverge.com/2022/6/3/23153275/t-mobile-5g-voice-vonr-dish-wireless