## Choosing a Low Cost Cellular Provider

We discussed low cost cellular service plans in the last meeting of the Special Interest Group on Smartphones and Tablets and I wanted to share information on the subject with all CUE members. To help you sort through the abundance of information on this subject, I adopted the pattern of the Technical Tips columns found on the APCUG website. The paragraph summarizes the information on the given subject and is followed by links to websites which offer more detailed information. I hope you find this information useful.

Mobile Virtual Network Operators (MVNO's) provide lower cost cellular service without owning a network infrastructure. An MVNO operates on a business agreement with one of the four major mobile network operators (AT&T, T Mobile, Sprint and Verizon) in which they obtain bulk access to network services at wholesale rates. MVNO's differ on whether they provide their own customer service, billing support, marketing and sales or farm these things out to a third party. But that is not the only way MVNO's differ from each other and from the major operators. A list of MVNO's and major operators may be found in the following articles: <a href="https://www.whistleout.com/CellPhones/Guides/What-is-a-MVNO">https://www.whistleout.com/CellPhones/Guides/What-is-a-MVNO</a> <a href="https://bestmvno.com/mvnos/">https://bestmvno.com/mvnos/</a>

A primary consideration if you are thinking about moving to an MVNO is the infrastructure provider. Whose towers are used and what is their coverage? That's important for two reasons: if you plan on traveling and if you plan on bringing your own phone to the MVNO. AT&T and T Mobile use radios with GSM technology while Sprint and Verizon use CDMA technology and Sprint and Verizon radios are not compatible on each other's network. So here is a list of the MVNO by infrastructure provider.

https://www.whistleout.com/CellPhones/Guides/which-network-is-your-mvno-on

As part of the Verizon purchase of rights to use a certain advanced wireless spectrum band from the cable companies, Charter and Comcast, these cable companies obtained MVNO rights from Verizon and now provide low cost cellular service plans to anyone paying for internet service from that cable company. Spectrum Mobile runs many ads in the Erie subscriber area and the rate structure offered to Spectrum internet subscribers (\$45/month/line for unlimited text, talk and data and \$14/month/line for unlimited text and talk with 1 GB of data) seem attractive. Currently they sell you the phones for their service at a monthly rate, but in coming months they should allow you to bring your own Verizon CDMA phone. More can be found in the following articles:

https://clark.com/technology/charter-spectrum-mobile-cell-phone-service/ https://www.fiercewireless.com/wireless/charter-s-mvno-gets-iphone-and-execution-appears-to-be-solid

Choosing an MVNO plan requires not only considering the infrastructure behind the provider but also the limitations you must accept with the service. For example the Spectrum Mobile service limits video streaming to 480p, not the 720p or 1080p you might expect and unlimited data may have "limitations". All MVNO plans are not alike and may be more limited than plans from major providers. Read and understand the fine print.

https://bgr.com/2018/07/05/spectrum-mobile-cheap-unlimited-plan-vs-verizon/https://www.whistleout.com/CellPhones/Guides/whats-the-difference-between-throttling-and-

## deprioritization

There are many articles to guide you in selecting the best MVNO plan, but all depend on you understanding what you want from cellular service and support. How much data do you use? What happens when you exceed the plan's data limits? Can you live with slow speed if your plan throttles data beyond some arbitrary useage? <a href="https://www.digitaltrends.com/mobile/best-mvno/">https://www.digitaltrends.com/mobile/best-mvno/</a>

Finally, the biggest savings my come to those who bring own phone to the new provider. The process of switching providers is straight forward, but you may not find the level of support you may have become accustomed to with one of the majors. That may influence your choice of MVNO's. The first link is a guide as to switching carriers if you own an iPhone. Choose Cell Phones on the page to see a lot more reference material. The second link is a guide to unlocking any phone by carrier.

https://www.whistleout.com/CellPhones/iPhone-Everything-you-need-to-switch-carriers https://www.digitaltrends.com/mobile/how-to-unlock-a-phone-on-every-carrier/

I am by no means an expert on low cost carriers as I still have a Verizon account. Tom Kuklinski has had accounts with a variety of low cost carriers and would be a source of information if you have questions.

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