

Carrier networks relying on 3G don't have the time they think

Recent PowerFleet webinar brings clarity and urgency to the 3G sunset

While the 3G sunset deadlines will wrap in 2022 for cellular providers like Verizon, AT&T and Sprint, there are still some companies in the trucking industry that have hesitated to upgrade their 2G or 3G cellular devices to 4G LTE for various reasons: budgetary concerns, uncertainty over which tech vendor to use and a belief that the deadline will continue to get pushed out. In a poll of carriers that haven't yet taken action, 14% said they simply lack the understanding of what a 3G sunset means for their fleets.

To clear up vague messaging regarding the 3G sunset, [PowerFleet hosted a webinar](#) and invited executives from both KORE Wireless and Milestone Chassis to share insights from the vendor and carrier perspectives for fleets considering upgrades to 4G/LTE.

Internet of Things solutions provider KORE has a 20-year history in the industry and supports more than 12 million subscribers worldwide and 20 carriers, while equipment lessor Milestone also boasts 20 years in the logistics space and manages 85,000 assets, including chassis, trailers and containers. Recently, Milestone upgraded a significant portion of its fleet to LTE through a partnership with PowerFleet.

Network sunsetting is driven by an increase in consumer streaming

"As the number of consumer-driven cellular-enabled devices continue to increase and encompass data-hungry applications, the network capabilities also need to increase, but even in cellular technologies, those resources are finite," said Paul Eberling, director of carrier service delivery at KORE Wireless. "There's only so much wireless spectrum to be had

to make way for LTE 5G and beyond, so carriers must either purchase new spectrum or refarm their current dedicated to 2G and 3G networks.”

The network sunseting trend began in 2016 when AT&T ended its 2G network, which impacted 10 million active users. Eberling calls sunseting a logical and natural progression, especially as 5G becomes a reality. The 2G/3G sunseting process is not like switching off a light; it will be progressive and over time, kicking the upgrade down the road will affect a carrier’s connectivity.

“This refarming may start before the actual sunset date as the carriers identify geographic areas where little or no 3G network resource is being utilized,” said Eberling. “The takeaway here is that you don’t have the time you think you have, whether small fleet or large.”

What do carriers need to consider when choosing devices and vendors?

Carriers are rightly concerned about the costs involved in managing migration, as well as optimizing those costs and the technical debt that comes along with upgrading legacy solutions. But choosing the right partner will ease that burden by providing advisory services.

Elizabeth Elkins, chief product officer at solutions provider PowerFleet, said that organizations considering device upgrades and providers should be asking the following questions: “Does the device have two-way communication so that if your device provider needs to send firmware updates over the air, they can do that? Can your device providers help you with field servicing? When you receive these devices for your replacement, will they be auto provisioned or will you need to spend time activating them? Are you going to be going cross-border? You need to make sure that you select a device that can actually roam onto different networks.”

Elkins also emphasized that carriers must think beyond cost and consider the risk of losing coverage when carrying essential or refrigerated goods. If the driver needs to reduce temperature using two-way command but he or she has lost connectivity and visibility, the budgetary concerns regarding the loss of goods is much more significant — especially considering the rush on essential food and goods during COVID-19.

Lessons learned post-migration

Because Milestone leases its equipment and doesn't have daily control over it, General Manager Jason Anderson didn't have time on his side when deciding to upgrade.

"We're leasing our equipment to people trying to run a business. They need GPS and the data that comes from the asset tracking. They're going to be upset if you start having these sunsets occurring and start losing visibility to their assets."

To make the replacement process seamless, Anderson recommends appointing a tactical lead on the replacement devices to help maintain and track records within the ERP system. Milestone's partnership with its vendor PowerFleet also came with a single point of contact, although behind that single contact is a large support organization, ranging from customer service to installers and install trainers.

As far as benefits of the LTE upgrade, Anderson notices the increased coverage and data-sharing bandwidth and battery power.

"The mileage capabilities that PowerFleet offers is big for us, since we do deal with things like tire wear. Cellular coverage is strong and so is the reliability of how fast we're getting messages. It's just better to be on the LTE platform all together."

PowerFleet provides solutions for some of the most recognizable brands and fleets in the industry: Publix, Walmart, Knight Transportation and XPO Logistics. Not only do carriers need to act on this 3G sunset, they need to choose a partner that understands the requirements, both in the deployment and the use of the technology.