



The 3G Sunset is Coming

Are You Ready to Upgrade?

Most telematics and Internet-of-Things (IoT) devices purchased after 2018 often come with 4G/LTE modems, but there are still tens of thousands of legacy 3G telematics devices in use across North America. As cellular networks begin to sunset their 3G networks, transportation and logistics fleets should act now to replace 3G devices purchased before 2018 to avoid service disruption – particularly in rural areas.

Let's take a look at when 3G networks are expected to shut down, why fleets should upgrade to 4G/LTE and how to make the change with minimal disruption.

When Will 3G Shutdown?

The transition from 3G to 4G is starting now and will increase as the 3G networks begin to shut down in late 2021 through 2022. This means fleet operators should start the upgrade process to avoid service disruptions as soon as possible. By closing down their older networks, the cellular service providers (e.g., AT&T, Verizon, T-Mobile/Sprint) are freeing up bandwidth to accommodate increased data requirements and faster speeds for 4G/LTE and the newer 5G networks.

The official sunset dates vary by cellular provider:

- T-Mobile in October 2021
- AT&T in February 2022
- Sprint in December 2022
- Verizon at the end of 2022

Apart from these hard deadlines, many cellular service providers have stopped accepting new 3G subscriptions and aren't permitting legacy devices to be reactivated once their subscription ends. As a result, some fleets may be forced to upgrade ahead of the sunset dates set by the cellular service providers—which means it's important to take action now.



Benefits of Upgrading to 4G/LTE

The benefit of moving to 4G/LTE will be more reliable data connections, especially in areas of heavily congested wireless networks. 4G/LTE offers higher data throughput speeds once in session. In addition to faster speeds, 4G/LTE networks offer better coverage, more data, and improved compatibility with other technologies, which in turn, equates to more powerful information transmitted. There may be other benefits specific to various solutions providers that are enabled by the faster connection, increased bandwidth and lower latency, too. 4G/LTE provides the infrastructure that offers the ability to do more.

There are several benefits to upgrading to 4G/LTE:

- **Extended Coverage:** Extended wireless network coverage, particularly in rural areas, with wider coverage ranges and improved network reliability.
- **Faster Connections:** More bandwidth and faster data speeds along with lower latency when it comes to initiating connections.
- **Compatibility:** Better compatibility with new technologies and, in many cases, lower total costs over the long run.

Newer 5G networks are just starting to roll out and offer even faster connections and lower latency, but most 4G/LTE technologies remain the most widely supported and cost-effective (and the 4G sunset won't happen until after 2030). As they come online, 5G networks could open the door to autonomous driving, and other next-generation technologies.



How to Prepare Your Fleet

The process of upgrading from 3G to 4G/LTE may seem daunting, but given the near-term 3G sunset, it's important to start the process as soon as possible. As with most technology projects, the upgrade process includes both business and technological considerations, which makes it important to plan in conjunction with your solutions provider.

Start with the business considerations...

Allocate Budget

Budget must be allocated to the project in order to ensure that it can be executed without any issues. Oftentimes, solutions providers can provide an outline of the total costs for both the equipment and service. In addition, talk with your provider about budgeting options to help upgrade your fleet with zero upfront cost.

Name a Point Person

Choose someone within the organization to spearhead the upgrade process and coordinate between the solutions provider and the internal team.

Consider the Options

Assess satisfaction with your current telematics solutions provider and evaluate the newest advances in trailer tracking and ELD technologies available today to see if it makes sense to upgrade your overall solution.

Consider newer features such as:

- Asset tracking device power management, leveraging solar panels, supercapacitors and long-lasting primary batteries for long service life.
- Camera technology providing high-definition images, get accurate visual proof of the empty or loaded status of trailers, and trailer utilization, which enables more accurate customer billing.
- Sensor data, such as door opened or closed, cargo area environmental sensors (e.g., temperature, humidity, shock) for true freight visibility and conditions.

Prepare for the Upgrade

Determine the optimal times for the upgrades to take place with minimal disruption to the rest of the business. As with prices, solutions providers can usually provide a timeline for device replacement and installation.



Then, iron out the technical details...

Take an Inventory

Determine how many legacy 3G devices are in the fleet, as well as their brand, location, type of asset it's on (e.g., dry van trailer, container, chassis, tanker, flatbed, reefer, in-cab, in-vehicle). The goal is to determine what type and how many assets need to be upgraded and what types of upgraded devices are best suited for your operations.

Come Up With a Plan

Select a solutions provider, determine the costs, get up to speed on new systems and plan a phased rollout. Take into consideration the time it takes to uninstall your existing devices and the time it takes to install the new devices. Work with your solutions provider to find out their typical installation time. Depending on the device and sensors solution selected, installation can take from 15 to 30 minutes per device, phased rollouts can reduce downtime of your fleet. The key is coordinating with your solutions provider to minimize disruption. Transportation and logistics companies that address the 3G to 4G/LTE transition early enough will ensure no loss of visibility of their assets. This enables them to receive continued intelligence on the location and status of their assets.

Archive Legacy Data

Hardware is easy to retire but data from telematics systems should be accessible in archive or cloud-based solutions. That way, fleets can still access data from before the migration to new 4G/LTE solutions. These data archives are important for both data consistency and compliance purposes.

Execute Your Plan

Work with your solutions provider to create a schedule to ship and receive your 4G/LTE devices and schedule your assets to come in for uninstalling and reinstalling devices. We recommend planning on scheduling a set amount of assets per month to be addressed. Next, you'll want to ensure that everyone at your company knows what to expect when a migration occurs and coordinate any necessary training to bring everyone from drivers to logistics professionals up-to-speed on how to utilize the new technology. Solutions providers may provide training services to both drivers and logistics personnel.

In the end, it helps to work closely with your selected solutions providers to ensure a smooth transition. By establishing an internal point person and coming in prepared with a plan, your company can ensure that the process is conducted efficiently with minimal disruptions to the business, and most importantly, ensure that the process is finished before the deadline and loss of visibility.



The Bottom Line

The 3G sunset will begin as early as Fall 2021 and could affect tens of thousands of legacy telematics and IoT devices. If fleets haven't prepared for the 4G/LTE migration, there has never been a better time to start the process. By taking a measured approach, you can minimize disruption to the business and ensure a smooth transition to 4G/LTE or 5G compatible technologies.

If you're ready to start the process or are considering a new solutions provider, contact us to schedule a free consultation and learn how we can help ensure a smooth transition.

PowerFleet has 20 years of experience in logistics telematics with more than 125,000 telematics devices in the field, spanning in-cab ELDs, dry van trailers, reefers, containers, chassis, tankers, flatbeds, and much more. We have previous experience with transitioning customers from Analog to 2G to 3G and we understand the unique challenges of retrofitting your fleet when you can't stop operations. We have a team approach and can advise you on the best plan to approach the 3G sunset and offer a strong implementation team to walk you through the upgrade/rollout (e.g. uninstall and install) process. We design, develop and manufacture a large breadth of product options for superior quality and ability to address multiple needs of mixed fleets.

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