

The Sunset of Plain Old Telephone Service (POTS): Fiction vs. Fact

The retirement of analog services is fast approaching, but there is a significant amount of confusion about what this really means for the telecommunications industry. Some will say that FCC Order 19-72A requires companies to replace all their POTS lines by August 2, 2022. Others say that FCC Order 19-72A only eliminates pricing controls. Here are some facts about what it really means and how it might affect business critical applications such as elevators, alarms, call boxes, fax machines, and more.

Fiction	Fact
All analog or copper-based POTS services will be discontinued on August 2, 2022.	<i>FALSE.</i> On August 2, 2019, the FCC issued Forbearance Order 19-72A1, which officially granted telecommunications carriers permission to retire outdated, degraded copper POTS lines. This order effectively severed the final ties that required companies to maintain a specific standard of traditional POTS connectivity. While the FCC does want to encourage the retirement of outdated analog services, they have <i>not</i> ordered the carriers to terminate these services on this date.
All POTS lines must be replaced by August 2, 2022.	<i>FALSE.</i> The FCC (via Forbearance) removed price caps on POTS lines, resulting in significant price increases. Price increases are expected to continue, so this is expected to encourage and facilitate the ongoing technology transition to advanced communications services over next-generation IP-based and landline and cellular services.
POTS services are required for elevators, fire alarms, fax machines, call boxes, and more.	<i>FALSE.</i> Most of the customer premise equipment out there today was originally built to connect over legacy copper-based connections. Managed Facilities-based Voice Networks (MFVN) compliant solutions like AReS™ are designed to work with this legacy equipment, seamlessly handling analog to IP conversion and providing a simple path to advanced communication services.
Legacy fire alarms, elevator equipment, and call boxes must be replaced to accommodate advanced communications IP-based services.	<i>FALSE.</i> AReS™ Analog Replacement Solutions are designed from the ground up to ensure you do not have to replace existing customer premise equipment, which could be a costly and time-consuming process. Since AReS™ provides dial tone to IP conversion, virtually any device that uses analog service today can be used with Ethernet or IP-based cellular connectivity.
Buildings must be re-wired to accommodate advanced communication IP-based services.	<i>FALSE.</i> AReS™ is compatible with almost all existing customer premise equipment, including legacy elevators and fire alarms. We include everything needed to take your existing analog telephone line and easily move it onto a cellular connection without having to re-wire your building infrastructure.
One-size fits all for POTS Replacement applications.	<i>FALSE.</i> Each application is different. For example, a Fire Alarm may use specific protocols for communications, while an elevator may use a completely different set of protocols. AReS™ is configured on a per port basis for a specific application, not a one-size-fits-all model.
Cellular services are not approved for applications like elevators and fire alarms.	<i>FALSE.</i> With the introduction of the 2010 edition of the NFPA 72 rules, the door was opened for cellular technology to become an alternative solution to POTS. It can also be used as a single communication path to replace POTS lines of service. However, many companies combine

	landline and cellular services to ensure they always have connectivity, even in the event of a network outage.
POTS is more reliable and cost-effective than cellular.	<p><i>FALSE.</i> There are many reasons why cellular has emerged as a leading solution for mission-critical applications, including elevators and fire alarms.</p> <p><u>Cost:</u> In many cases, deregulation has resulted in higher costs for POTS lines of service, and prices are expected to continue increasing for the foreseeable future while the cost of cellular services continues to decrease.</p> <p><u>Reaction Times:</u> Time matters, and the reaction times for cellular versus POTS are significant. If there is a fire alarm that takes one or more times to connect via a dial tone or pulse, precious seconds can be wasted, resulting in a catastrophic loss of life or property. In addition, with a system that uses redundant phone lines, if both lines experience issues there could be up to a 24-hour gap before the central monitoring station misses a test and reacts. With cellular connectivity, connection times are faster, and the central station would be alerted within a few minutes in the event of a failure.</p> <p><u>Technology:</u> While POTS is quickly reaching end of life, cellular is continuing to evolve from 3G to 4G and into 5G and beyond.</p>
A strong cellular signal is required in the basement or wiring closet where your fire alarm or elevator panels are located.	<i>FALSE.</i> While signal strength and penetration are critical, AReS™ is designed with flexibility in mind. For example, you can easily remove the Cradlepoint 4G or 5G router from the enclosure and move it to a location anywhere in the building, connecting it via Ethernet back to the enclosure, which would typically be located in the wiring closet next to the fire alarm or elevator panel.
E911 services are incompatible with cellular connectivity.	<i>FALSE.</i> As with any public safety related service, E911 capability is a hard and fast requirement. Therefore, it is critical to properly configure detailed location data with your provider to ensure the requisite information is shared with 911 dispatch. This means the address, floor number, and even room number if available.
Like 3G, 4G will soon be going end-of-life.	<i>FALSE.</i> 4G has many, many years left in service. However, AReS™ is designed to be easily upgradeable by simply swapping out the router to the next generation 5G technology, eliminating the need to reconfigure your customer premise equipment with equipment changes.

Still, have questions?

MACH Networks offers fully managed end-to-end **Analog Replacement Solutions**. Our Cradlepoint-based solutions are the only enterprise-class solution on the market today and are specifically designed to work with your mission-critical applications, including elevators, fire and burglar alarms, call boxes, fax machines, and more. As for reliability, we stand behind our solutions with a Lifetime Warranty for as long as you are a customer of MACH Networks.

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