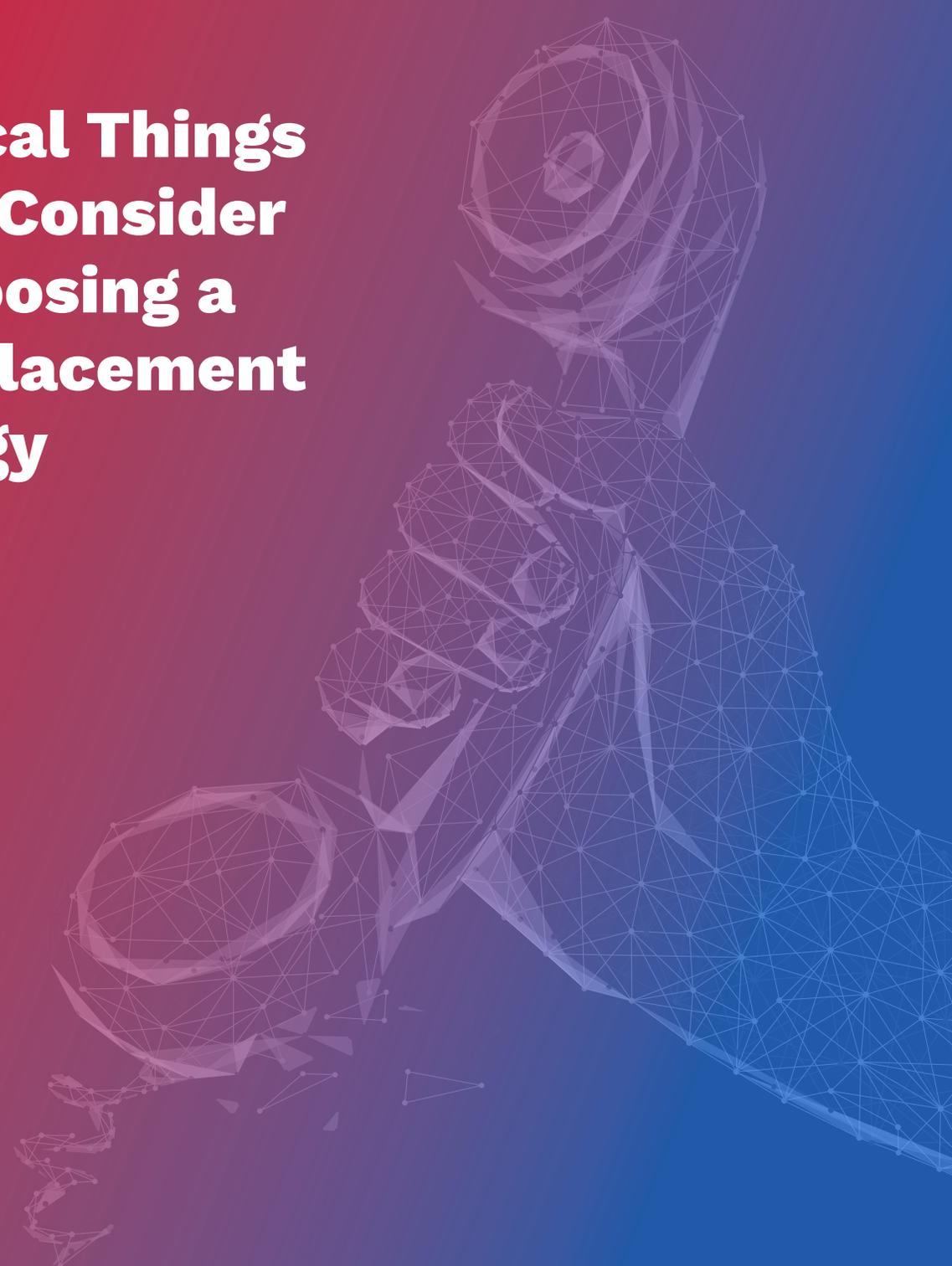


# Five Critical Things You Must Consider When Choosing a POTS Replacement Technology



The digital landscape is experiencing a monumental transformation. The increased demand for bandwidth, speed, and reliability by both businesses and consumers has outgrown the capabilities of traditional analog connections. This, in turn, led to a shift toward digital alternatives and a sharp decline in the demand for copper-wire infrastructure. In addition, it became increasingly expensive to maintain legacy copper networks - carriers have the authority to raise rates whenever they please, your bill could be \$60/Line today and then \$1600/Line tomorrow. In 2022, FCC regulation changes allowed carriers like Verizon, AT&T, and others to begin shutting down legacy copper networks in favor of **fiber, cellular, and VoIP networks**.<sup>1</sup> With most telco carriers aiming for a 2025-2030 phase-out of legacy copper networks,<sup>2</sup> now is the time to identify protocols, IT readiness, and business-specific solutions to safely future-proof your network on your timetable.

## POTS Decommissioning Challenges and Aggressive Timelines

From retail and banking to healthcare and education, every industry faces this digital overhaul. Copper plain old telephone service (POTS) lines used for the last 150 years are expensive to maintain and too slow for increased remote and virtual workforce needs. A migration of this scale and scope is typically rolled out as a multi-year project. But time is of the essence, and navigating copper decommission requires immediate planning, strict quality control, and logistical support.<sup>3</sup>

Voice and data transitions are typically IT-led. But there are applications outside of the average IT leader's purview that may be easily overlooked<sup>4</sup>:

- Phones in building elevators
- Fax machines
- Credit card readers and POS terminals
- Fire and burglar alarm systems
- Security gates and door access boxes
- Emergency call boxes
- Meter reading
- Modem data

Many of these analog systems are not digitally equipped, but they can be migrated off POTS lines with the right solutions. Identifying and anticipating equipment replacement eliminates higher back-end costs. Organizations must also address other factors such as expense, backup protection, security, lead time, rollout capacity, and more before the transition.

## Five Key Considerations for the Great Copper "Switch Off"

The sweeping mandatory transition away from legacy copper services is an opportunity to assess your digital needs, add or modify equipment, and increase efficiency. First, use a clear set of key performance indicators (KPIs) to determine risks and maintain operational support throughout the process. Second, prioritize critical considerations necessary for preventing disruptions and cyber security issues.

### Compliance

Regulatory scrutiny notoriously lags behind most digital modernizations. It is incumbent on the company to anticipate potential risk and compliance issues, especially for heavily regulated industries like government services, banking, and healthcare. The top three compliance challenges listed in Thomson Reuters Cost of Compliance Report 2020<sup>5</sup> include:

- Keeping up with regulatory change
- Budget and resource allocation
- Data protection

It's important to understand internal vulnerabilities, employ and retain appropriately skilled staff, and ensure proper procedures are followed for collecting, securing, and transferring data.

### Certifications and Code Mandates

For most business-critical applications, the main concern is digital connectivity. Elevators, fire alarms, and emergency call boxes on the other hand, have multiple code requirements. The federal government outlines specific guidelines for emergency phone

equipment, backup capabilities, and monitoring.<sup>6</sup> IT leaders and building managers must verify equipment code compliance before swapping legacy POTS lines.

### Back-Up Protection

Establishing proper resilience measures is a two-fold process. Copper connections do not require backup power in case of an outage. Not so with fiber, coaxial cable, or wireless. Process readiness must include battery protection capable of handling applications, computers, and more to prevent disruptions during business hours – as well as maintaining communication for at least 24 hours in case of a power outage.<sup>7</sup>

### Security

As cyber criminals become more sophisticated and the security perimeter expands further away from your corporate environment, digital migration presents a confluence for an attack. Identify and plan for all potential vulnerabilities before attempting a transition. A security breach can expose customer and employee data, leading to possible revenue loss and reducing confidence in your company.

### Expense

From equipment and installation to personnel and transition timeline, multiple variables that affect budget and spending must be factored into every aspect of this digital migration. You can minimize cost and revenue disruption with strict quality control, strategic KPIs, and creative technical solutions.<sup>8</sup>

## Top Concerns for Digital Transformation Projects

The COVID-19 pandemic categorically sped up digital initiatives, but integration and security challenges still hinder progress for many organizations. Migrating from legacy copper to alternative connections presents even more complications. According to a Nominet report on cyber security during digital transformation, a project of this size brings with it five main concerns for CIOs, CISOs, and CTOs<sup>9</sup>:

- Increased cyber security risks (53%)
- Rigid technology infrastructure (40%)

- Legal, risk management, and/or compliance concern (36%)
- Budget (34%)
- Resistance to change/risk aversions (32%)

Cyber safety is the biggest challenge facing an organization during major digital enterprise projects. 95% of respondents expressed concern about cyber threats in general, especially in the healthcare sector.<sup>10</sup> Web Arx Security found that 30,000 websites are hacked daily worldwide – prime targets include financial, healthcare, and retail sectors.<sup>11</sup>

## How To Plan for Your Transition

Holistic and strategic planning is the first step towards a successful transition.

### Inventory and Audit Your Copper-Dependent Lines

Many copper systems have been in place for years, and often businesses have no idea what those lines service. The first thing a company should do is a complete audit of their copper-dependent lines. Determine which ones are necessary to keep and plan for replacement.

### Consider Your Timeline

The longer you remain on copper technology, the more vulnerable you are. In addition to rising costs for service, networks are aging, it's difficult or impossible to get parts for repairs, and what's more, the technicians who can make those repairs are steadily retiring. The time is now to plan to transition to a new service – and quickly.

### Research Alternate Technology Choices Thoroughly

Consider what features you need and choose accordingly. There are a wide variety of services such as broadband, wireless, or fixed that may offer the best solution. If you just need voice applications, and/or legacy Centrex, then a VOIP solution may be the best option. If you need to consider replacing life/safety lines (i.e., fire alarms) then consider an all-in-one device with wireless backup, or a POTS over broadband solution. Regardless of your choice, keep in mind that ultimately, your business needs consistency, reliability, redundancy, and security.

### Sources:

1. FCC Order - PIAB.pdf (thepotsreplacement.com)
2. Copper switch off: Opportunity to drive infrastructure convergence? | Arthur D. Little (adlittle.com)
3. The Decommissioning of Copper Gets Real | No Jitter
4. POTS Box Solutions
5. IMPACT ANALYSIS: Risk and Compliance under a Digital Transformation - TR - Business Insight MENA (thomsonreuters.com)
6. Elevator telephones (elevatorsource.com)
7. Tech Transitions: Network Upgrades That May Affect Your Service | Federal Communications Commission (fcc.gov)
8. The Shift from Copper Networks to Fiber-Optic Networks | BCG
9. Digital transformation: Top 5 concerns for CIOs - TechRepublic
10. Cyber-Security-in-the-Age-of-Digital-Transformation.pdf (nominet.uk)
11. How Many Cyber Attacks Happen Per Day? [2022 Stats and Facts] (techjury.net)

## Consider Your Future Business Needs

The right partner will help guide you through these considerations and more – they will also help you to evaluate your needs quickly, make sound recommendations to meet the challenge, provide direction, and formulate a plan for the future. As a next generation aggregator, Spectrotel makes it simple to modernize your enterprise with multiple phase solutions for transition and optimization. Spectrotel has the industry's most extensive portfolio of POTS alternative solutions, offering cost-effective and resilient solutions to transform your copper networks and future-proof your business-critical lines. Contact us today to explore your options to bridge your POTS service from the past to the future with cost effective, compliant, and resilient solutions.

