



WHITE PAPER · FOR FACILITIES LEADERS, PROPERTY MANAGERS, IT
TEAMS, AND OWNERS OF SITES WITH ANALOG SERVICES

Replacing copper lines without losing building services

A practical guide to office calling and analog
building services

Replace each analog service according to its function, written
carrier notice, and demonstrated performance during an outage.

PUBLISHED BY
Greg Steinig, SPARK VoIP

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Executive summary

Businesses should start copper migration with a service inventory, then approve replacements by function. A published phone number, a fire panel, an elevator emergency device, and a fax machine may share an old telephone bill. They require different engineering and acceptance decisions. Moving office calls to a hosted private branch exchange does not establish that the building systems work through the same connection.

There is no single nationwide POTS disconnection date in the evidence reviewed for this paper. The cited carrier describes a staged exit from its copper network in the majority of its wireline footprint by the end of 2029. Each account needs its own written carrier notice; a reseller article cannot establish a universal deadline. [2]

The FCC published an October 15, 2026 effective date for revised network change and service discontinuance rules. The ordinary copper retirement procedure provides at least 90 days of direct notice for active facilities to specified directly interconnecting telephone providers and 911 service providers, subject to exceptions in section 51.333(b) for force majeure and other events outside the carrier's control. This is not a retail customer notice promise; facility retirement and retail service discontinuance are separate regulatory subjects. The amendments are not yet effective at this paper's October 4, 2026 research cutoff. Obtain the notice for each account. [1]

Key findings

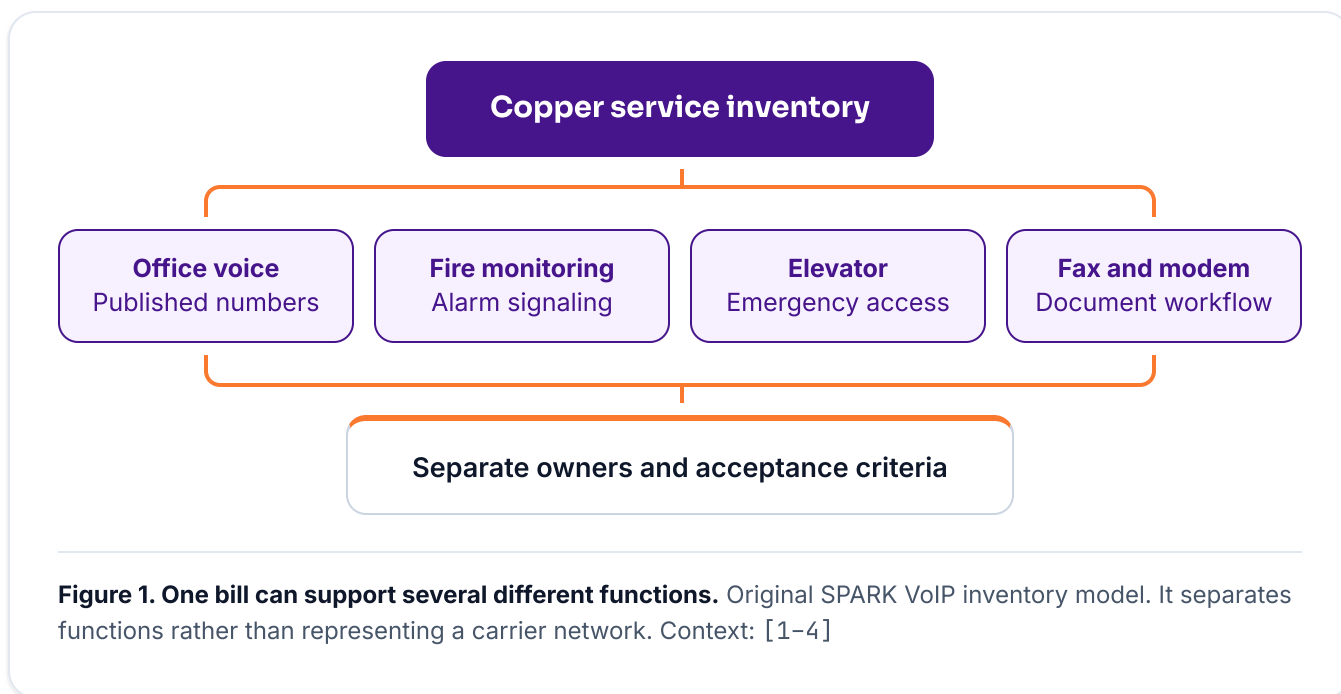
- 01 Carrier notices must be matched to the service address and product. [1, 2]
- 02 Fire and elevator communications require the applicable code and equipment review. [3, 4]
- 03 Power and transport failures need separate acceptance tests.
- 04 Number porting and successful equipment signaling are separate milestones.
- 05 Cancel the old line only after the service owner accepts the replacement.

The recommended outcome is a documented replacement for every active service, with a named owner, an outage plan, and repeatable tests. This paper covers United States business sites. It does not prescribe one code edition or certify a particular adapter.

Identify what is actually retiring

Plain old telephone service, or POTS, describes traditional analog telephone service. The public switched telephone network, or PSTN, is broader: changing the local access technology does not eliminate the public network that connects telephone users. A copper pair is a physical facility; the service carried over it is a commercial and regulatory offering. Confusing those terms can lead a business to buy the wrong replacement.

The cited carrier's April 2026 customer update describes upgrades to fiber and wireless offerings and asks customers receiving notices to act. That carrier program does not establish a deadline for a particular business account. Start with the written notice, billing number, service description, and address. Ask the carrier to confirm the final service date, product restrictions, and any continuation option in writing. [2] A confirmed discontinuance calls for a replacement schedule. Elective modernization can compare continued service with specialized replacement of selected endpoints, subject to confirmed availability.



A line with little traffic may still perform a required supervisory or emergency function. Low usage is a poor cancellation criterion. Where the endpoint is unknown, the facilities owner should trace the cable and consult the maintainer before anyone disconnects it.

Select replacements by service function

Specify the required behavior at the receiving end. For a fire panel, work with the maintainer to identify the signals and fault conditions the supervising station must receive. For an elevator, have the maintainer identify the applicable emergency communication, location, accessibility, and outage requirements. NFPA 72 concerns fire alarm and signaling systems; ASME A17.1/CSA B44 covers elevator safety. Their public descriptions establish scope, not approval of a replacement device. Obtain the adopted edition, local amendments, applicable clauses, equipment instructions, and required approval from the authority having jurisdiction, or AHJ. [3, 4] Record that evidence in Table 4.

Table 1. Replacement choices and acceptance evidence

Service	Candidate path	Evidence before acceptance
Office voice	Hosted PBX or SIP service	Inbound calls, outbound identity, 911, and callbacks
Fire panel	Approved IP or cellular communicator	Maintainer and authority review; station receipt; fault reporting
Elevator	Compatible emergency communication system	Location, accessibility, power failure, and responder connection
Fax	Managed digital fax or tested analog gateway	Representative documents, receipt confirmation, access, and retention
Legacy modem	Vendor approved data connection	Protocol performance, destination acceptance, and outage behavior

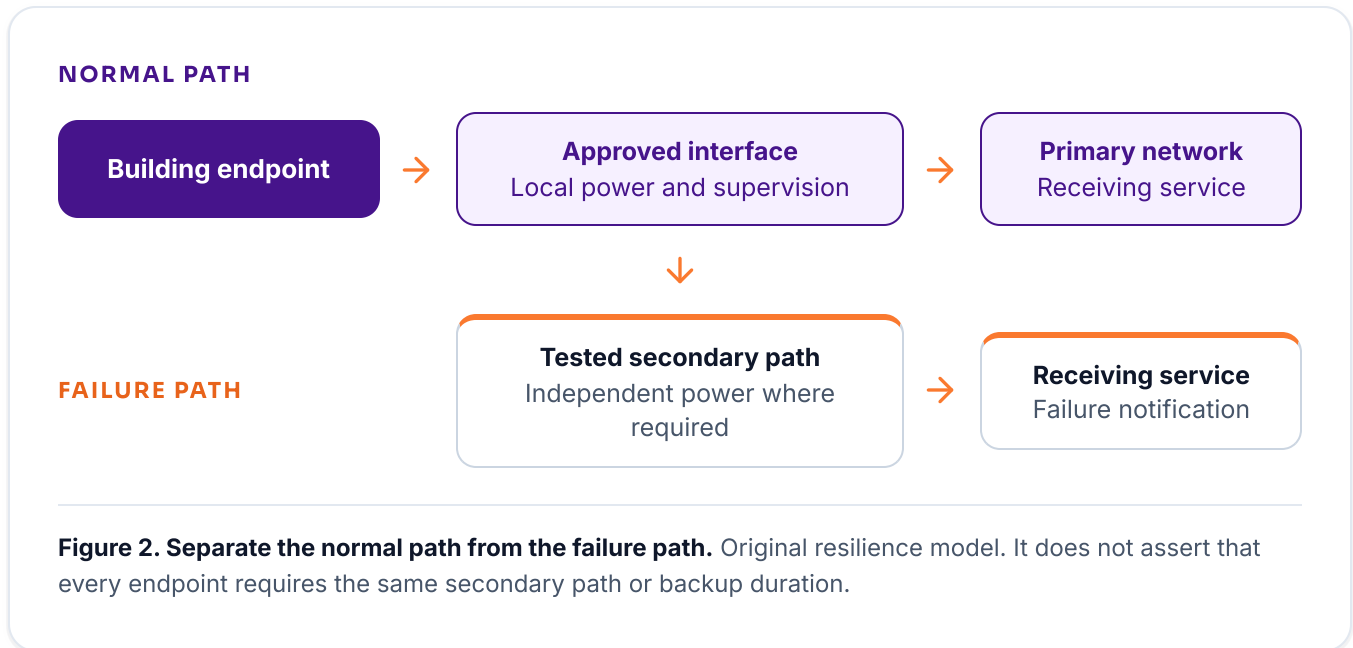
Procurement framework. The candidate paths require equipment and installation review; the public scope references [3, 4] do not establish device compatibility or installation approval.

An analog telephone adapter supplies an analog interface to an IP service. That interface does not prove compatibility with an alarm signaling protocol or a legacy modem. A seller’s claim that a device replaces POTS should trigger a request for the precise supported equipment, power design, supervision behavior, and documented approvals.

For fax, compare the whole document process. A gateway may preserve a familiar machine; a managed digital service may reduce local hardware. Neither approach settles document access, destination accuracy, retention, or the handling of sensitive information. Select the path that passes the organization’s actual workflow.

Design for power and transport failures

The replacement chain often adds powered equipment at the site. A local gateway can depend on an outlet, a battery, a router, and an upstream network. A phone reaching a hosted platform during normal operation says little about what happens when the building loses power. Power budgeting should include every device required by the communication path.



Two network connections can share a failure cause. Two SIM cards on one device may share its power supply and antenna. Two wired connections may enter the same building conduit. Document those dependencies instead of describing every pair of connections as independent.

Write a test for each failure mode: building power loss, primary access loss, weak cellular signal, exhausted battery, and a failed receiving destination where the equipment supports that test. The alarm or elevator maintainer should define safe test conditions and the required duration. Record observed behavior and recovery, not just the configuration screen.

Acceptance records the behavior observed under the tested conditions. Maintained readiness requires recurring verification. Name who follows the manufacturer's battery instructions, receives fault alerts, checks required tests, and arranges retesting after equipment, network, or receiving-destination changes. Set the applicable schedule with the maintainer using the adopted requirements and equipment instructions. Retain dated results and unresolved faults in the installation record.

Budget the whole migration

Use a service-by-service cost comparison. The old monthly telephone bill is only one input. Include surveys, specialized equipment, installation, inspections, overlapping service, cellular subscriptions, gateway support, batteries, and future maintenance. A lower connection price can still produce a more expensive project if equipment remediation was omitted.

Table 2. Illustrative five year comparison for one office voice connection

Cost element	Retained service baseline	Replacement scenario
Monthly service assumption	\$180	\$65
60 months of service	\$10,800	\$3,900
Equipment and installation assumption	\$0	\$900
Incremental backup assumption	\$0	\$500
Temporary overlap assumption	\$0	\$180
Modeled five year subtotal	\$10,800	\$5,480

Hypothetical constant-dollar inputs, not quotes. The retained-service column is an arithmetic baseline; continuation for 60 months is unverified. Monthly service is multiplied by 60 and added to the stated project costs. Life safety equipment is outside this example.

The arithmetic difference is \$5,320 before taxes, rate changes, repairs, inspections, recurring maintenance, and internal labor. It is not a verified savings estimate. If the carrier will discontinue the old service during the modeled period, the retained-service baseline is unavailable for that period. Compare feasible replacement options using written availability and itemized quotes. Fire panels and elevators need separate equipment, approval, and acceptance costs.

Use the current bill and confirmed continuation period to define the available choices. Price each feasible replacement over the same period, including overlap, inspections, battery replacement, subscriptions, and internal labor. Test a higher monthly rate and equipment remediation identified during inspection. Retaining a permitted service or replacing only specialized endpoints may be a reasonable choice when supported by the carrier and maintainer.

Number porting needs its own cost and schedule line. The FCC’s Consumer Inquiries and Complaints Center describes retaining a number when changing providers within the same geographic area. [5] Confirm eligibility, the receiving provider’s process, and the effect on other services sharing the account. Coordinate cancellation after the port and required equipment acceptance are complete.

06

Cut over only after acceptance

The project should progress through explicit deliverables. First reconcile carrier bills against the physical inventory. Then select equipment with the service maintainer and obtain the necessary approvals. Install the replacement in parallel where practical, verify normal and failure behavior, coordinate the number move, and close out the old account after acceptance.

HOW SPARK VOIP HANDLES OFFICE VOICE

For office voice lines, SPARK VoIP uses temporary numbers and forwarding from the old system on its set go-live date, so the old line can stay active until the replacement is accepted; SPARK VoIP and then the customer test the new system, with customer sign-off before go-live.

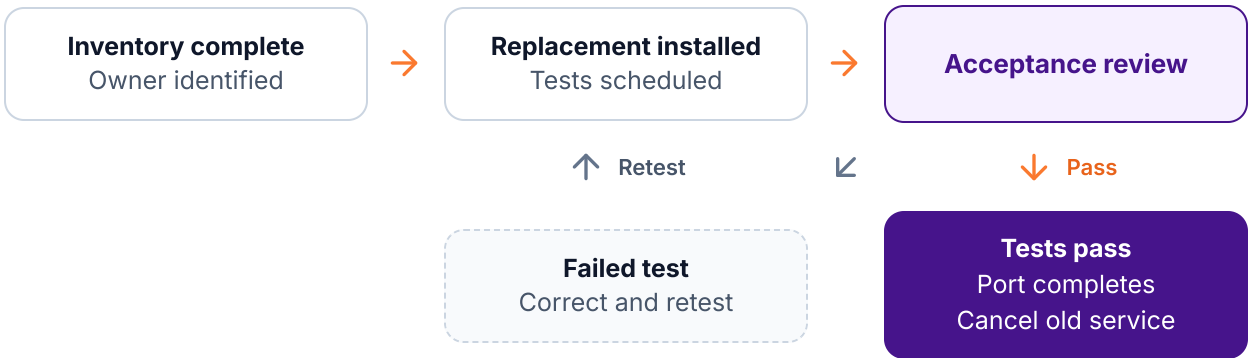


Figure 3. Acceptance controls the cancellation decision. Original project control model. A failed test keeps the old service active where carrier availability permits.

Retain the inventory, equipment model and serial numbers, software version, governing code and approval record, receiving destination, commissioning results, and maintenance schedule. Keep fault contacts and cancellation confirmation with the service record. Table 4 defines the

installation evidence to attach to the register. For multiple buildings, use the same fields to identify sites with incomplete acceptance.

Sequence work by service criticality and confirmed deadline. Do not give an unknown line the lowest priority just for lack of information. Unknown function should trigger investigation. An accepted replacement needs a recurring maintenance date, not merely a completed installation ticket.

After the move, compare the next bill to the intended disconnect list. Old lines can remain billed after the equipment has moved. Confirm both technical completion and account closure; one does not prove the other.

07

Create a service acceptance register

Use one row per physical service, not one row per invoice. An invoice can contain several numbers with different owners. Unknown endpoints stay open for investigation; a quiet call log is insufficient evidence for cancellation.

Table 3. Service acceptance evidence and owners

Service record	Required evidence	Decision owner
Every billed line	Account, number, site, endpoint, maintainer, confirmed carrier date	Facilities and telecom
Fire signaling	Maintainer-approved signals and faults received at the station	Alarm maintainer and authority
Elevator communication	Responder connection, correct location, required accessibility, outage behavior	Elevator maintainer and authority
Office number	Completed port, inbound and outbound calling, emergency design	IT and receiving provider
Fax or modem	Representative transactions and destination acknowledgment	Workflow owner
Account closure	Acceptance record and next-bill reconciliation	Finance and service owner
Recurring verification	Dated tests, battery maintenance, open faults, next due date, and change-triggered retests	Named maintainer and site owner

Original recommended working matrix. Assign names and record actual evidence before approving the purchase.

For each service, document the temporary operating arrangement if a replacement fails. Carrier availability may limit how long the old line can remain active; escalate a failed test before the confirmed deadline. Authorize cancellation after acceptance and completion of any number move. Keep commissioning evidence separate from recurring test and maintenance results. This register is recommended project control based on the distinctions in [1-5].

08

Record installation approval and recurring tests

Attach one installation record to each fire or elevator service in the register. The qualified maintainer should identify the governing requirements and the party authorized to approve the work. Record the AHJ's role where applicable. Resolve code, equipment, and test questions in writing before approval; do not treat an empty field as approval.

Table 4. Installation approval and maintenance record

Record field	Evidence to retain	Responsible party
Service and site	Account, address, endpoint, and receiving destination	Site owner
Governing basis	Adopted code edition, local amendments, and applicable clause numbers	Qualified maintainer
Equipment	Manufacturer, model, listing, instructions, and configuration	Installer and maintainer
Required behavior	Signaling, supervision, accessibility, and backup requirements derived for this installation	Maintainer and AHJ where applicable
Review and approval	Approving party, scope, written decision, date, and outstanding conditions	Approving party
Commissioning	Test conditions, duration, receiving-end result, witness, date, and unresolved failures	Maintainer and receiving service
Recurring verification	Applicable schedule, last result, next due date, and change-triggered retests	Named maintainer
Faults and batteries	Fault recipient, escalation contact, battery instructions, work completed, and open defects	Maintainer and site owner

Original recommended record schema. Public code scope: [3, 4]. Fill it from the adopted text, equipment documentation, written approvals, and witnessed tests; it is not an installation approval form.

Commissioning shows what happened during the recorded test. Recurring records show whether inspections, tests, battery work, and fault correction have been completed on the applicable schedule. Review shared power, network, and receiving-service dependencies after a change. The required test interval and backup duration must come from the installation's governing requirements and equipment instructions.

A carrier transition is a planning trigger

EXAMPLE

Documented example of staged retirement

The cited carrier's public customer update describes a transition underway and a majority-footprint target for 2029. It names several replacement offerings rather than one universal substitute. This is evidence that the access transition is real and staged. It is not evidence that each listed service supports every building endpoint. [2]

For a hypothetical property operator with twelve sites, the first useful milestone is a reconciled inventory for all twelve. Suppose four sites have elevator lines, eight have alarm signaling, and each has a published office number. The operator should approve those functions independently. A successful office voice migration at one property cannot stand in for the elevator test at another.

What future replacements will need

As access technology changes, maintenance records become more valuable. Future equipment upgrades can inherit an approved destination, a power budget, and a tested failure procedure. Without those records, a second migration repeats the first survey and may recreate the same omissions.

The purchasing decision

The purchasing decision should be based on a complete service specification and observed acceptance. Ask the advisor to show how each endpoint behaves during normal operation and the agreed failures, who approves the result, and who maintains it. That makes the project reviewable before the old line disappears.

SPARK VoIP can be evaluated for the office voice portion of a migration. Alarm, elevator, and specialized analog work should be assigned to the qualified maintainers and providers named in the scope. Request a joint inventory and written acceptance plan before selecting products.

References

Numbered references support factual statements. Recommendations and original planning models are identified in the text. Sources were checked through October 4, 2026. Publication dates are included when established.

- [1] FCC (October 1, 2026). Network modernization rules and announcement of October 15, 2026 effective date. 91 FR 62334. Sections 51.329 and 51.333, and Part 63.
[Read source](#)
- [2] The cited carrier (April 28, 2026). Keeping Customers Connected with Reliable High Speed Connectivity. Carrier transition description and 2029 objective.
[Read source](#)
- [3] NFPA. National Fire Alarm and Signaling Code Handbook. NFPA 72. Public publisher description of installation, inspection, testing, and maintenance scope. Scope reference only; installation clauses must be checked in the adopted code.
[Read source](#)
- [4] ASME. Safety Code for Elevators and Escalators. ASME A17.1/CSA B44. Public publisher description of code scope. This catalog does not identify the edition or amendments adopted for a particular installation.
[Read source](#)
- [5] FCC. Consumer Inquiries and Complaints Center. Porting: Keep Your Number When You Change Providers. Accessible FCC statement on number portability within the same geographic area. Checked October 4, 2026.
[Read source](#)

Methodology and research limits

Research prioritized the FCC final notice and amended rule text, the cited carrier's own transition update, and the standards publishers' scope descriptions. The accessible FCC complaints portal supports the portability statement. The notice discussion separates the ordinary procedure and its exceptions from retail service discontinuance. Original diagrams and working tables translate these distinctions into a procurement process; they do not report measured installation outcomes or create statutory duties.

Carrier schedules are account and location specific. The paper uses public standards scope information and does not establish installation-specific code clauses, backup duration, supervision intervals, or device approval. Have the qualified maintainer document those details for the site. No adapter or outage design was independently tested. The cost illustration assumes constant prices and omits several lifecycle costs; its retained-service baseline may be unavailable. It cannot establish buyer savings or safety-system suitability.

Evidence gaps

Before procurement, obtain the carrier notice and availability confirmation, endpoint inventory, adopted code and clauses, equipment listings and instructions, required approvals, receiving-service requirements, and comparable quotes. Then record commissioning and recurring maintenance evidence. These installation and buyer records are needed to decide suitability; a generic product description cannot supply them.

Figures and tables

Figure 1	One bill can support several different functions
Table 1	Replacement choices and acceptance evidence
Figure 2	Separate the normal path from the failure path
Table 2	Illustrative five year comparison for one office voice connection
Figure 3	Acceptance controls the cancellation decision
Table 3	Service acceptance evidence and owners
Table 4	Installation approval and maintenance record

Publication context

SPARK VoIP provides a 3CX based hosted VoIP offering. This paper is educational and does not establish a customer contract, a legal opinion, a certification, or a guaranteed result. Service scope, support, integrations, and any regulated workflow need written confirmation for the proposed deployment.



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