KNOWLEDGE BASE DOCUMENT: PRODUCT & TECHNICAL SUPPORT

Organization: NA Telecommunications & Internet Services
Department: Customer Service & Technical Support
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1.0 Mobile Services Reference

This section covers cellular plans, SIM management, and roaming features.

1.1 Plan Structures

- **Prepaid Plans:**
    - **Definition:** Service is paid for in advance. No credit check required.
    - **Features:** Hard data caps (service stops when data is used). No overage fees.
    - **Expiration:** Credit expires 30 days after top-up.
- **Postpaid Plans:**
    - **Definition:** Billed at the end of the monthly cycle. Requires credit check.
    - **Features:** Unlimited talk/text options. Data throttling (slowdown) applies after high-speed cap is reached, rather than hard stop.
    - **Family/Group Plans:** Up to 5 lines per account. Data is pooled (shared) among all users unless specified as "Per Line Unlimited."

1.2 International Roaming

- **Activation:** Roaming must be enabled in device settings AND on the carrier account level.
- **Day Pass:** Flat fee ($10/day) for using domestic plan features abroad.
- **Pay-Per-Use:** High cost per MB/Minute. Not recommended for smartphones.
- **Troubleshooting:** If roaming fails, toggle "Airplane Mode" On/Off to force a network search.

1.3 SIM & eSIM Procedures

- **Physical SIM Replacement:** Required if SIM is damaged or lost. Requires ID verification in-store or via mail.
- **eSIM Activation:** Digital SIM embedded in newer phones.

Process: Generate QR code in CRM → Email to customer → Customer scans via Phone Settings→ Cellular →   Add eSIM.

- ○ **Note:** An active internet connection (WiFi) is required to download an eSIM profile.

1.4 Number Portability (MNP)

- **Definition:** Moving a phone number from another carrier to us.
- **Requirements:** Account Number from old carrier + Transfer PIN (NTP) + Zip Code.
- **Timeline:** Mobile-to-Mobile takes 2–24 hours. Landline-to-Mobile takes 3–5 business days.
- **Mixed Service:** Old service continues to work until the port is 100% complete.

2.0 Home Internet & WiFi Reference

This section covers fixed-line services, hardware, and installation.

2.1 Technology Tiers

1. **DSL:** Uses copper phone lines. Max speed 100 Mbps. Distance-sensitive (further from hub = slower).
2. **Fiber:** Uses glass cabling. Symmetrical speeds (e.g., 1Gbps Upload / 1Gbps Download). Lowest latency.
3. **Fixed Wireless (5G Home):** Uses cellular towers. Speeds vary by signal strength/congestion (50–300 Mbps).

2.2 Router Hardware & Optimization

- **Restart (Power Cycle):** Unplug power for 30 seconds, plug back in. Fixes 80% of minor bugs.
- **Factory Reset:** Holding the "Reset" pinhole for 15 seconds. **Warning:** This erases all custom WiFi names and passwords.
- **WiFi Channels:**
  - ○ **2.4 GHz:** Better range, penetrates walls, slower speed. Best for smart home devices.
  - ○ **5 GHz:** Faster speed, shorter range. Best for streaming/gaming.

2.3 Coverage Extension

- **Mesh Systems:** Multiple nodes creating a single seamless network. Best for homes > 2,000 sq ft.

- **Extenders/Boosters:** Catches signal and rebroadcasts it. Often creates a separate network name (SSID_EXT). Less efficient than Mesh.

2.4 Installation & Service Visits

- **Self-Install:** Customer receives kit. Must activate via App.
- **Technician Install:** Required for new Fiber drops or if no jack exists.
  - **Windows:** 4-hour arrival windows (e.g., 8 AM–12 PM).
  - **Adult Presence:** Someone 18+ must be home.

3.0 Billing & Payments Reference

3.1 Understanding the Bill

- **Proration:** Charges incurred for partial months. Occurs when opening an account or changing a plan mid-cycle.
  - *Example:* Plan change on the 15th of a 30-day month results in 50% charge of old plan + 50% charge of new plan.
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- **Surcharges vs. Taxes:**
  - *Taxes:* Government mandated (Sales tax, 911 fees).
  - *Surcharges:* Carrier fees (Regulatory Cost Recovery, Admin fees).
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3.2 Payment Logistics

Auto-Pay: Discounts often apply (

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   10 off) for linking a bank account/debit card.
- **Grace Period:** Bill is due on the 1st. Late fee applies on the 5th. Service suspension occurs at 30–45 days past due depending on credit class.
- **Restoration:** Suspended services are restored within 1 hour of full payment.

3.3 Refunds & Adjustments

- **Eligibility:** Billing errors, service outages > 24 hours (verified), or equipment returns within 14 days.
- **Timeline:** Credit card refunds take 3–5 business days. Bill credits appear within 1–2 billing cycles.

4.0 Account Management

4.1 Changes & Moves

- **Plan Changes:** Can be done anytime. Upgrades are instant; downgrades usually take effect next billing cycle.
- **Relocation:** Requires 2-week notice. Customer must bring equipment to new address unless switching technology (e.g., Fiber to DSL).

4.2 Cancellations & Contracts

- **Contract Term:** Standard term is 12 or 24 months.
- **Early Termination Fee (ETF):** Pro-rated fee (e.g., $20 x months remaining) charged if cancelling before contract end.
- **Process:** Retention department handles all cancellations. Equipment must be returned to avoid non-return fees ($150+).

5.0 Common Troubleshooting Scripts

Agents must follow this logic flow: Issue → Diagnosis → Resolution → Escalation.

5.1 Issue: "No Signal / No Service" (Mobile)

- **Diagnosis Steps:**
  1. Verify account status is "Active" (not suspended).
  2. Ask customer to check if "Airplane Mode" is On.
  3. Check Outage Map for local tower issues.
- **Resolution:**
  1. Toggle Airplane Mode On for 10 seconds, then Off.
  2. Restart the device completely.
  3. Reseat the SIM card (take out, put back in).
- **Escalation Trigger:** If device shows "Invalid SIM" or "Emergency Calls Only" after reseat, escalate to **Tier 2** for network refresh.

5.2 Issue: "Slow Internet" (Home WiFi)

- **Diagnosis Steps:**
  1. Run speed test at [SpeedTest URL].
  2. Check if speed matches plan (Acceptable range is +/- 20% of advertised speed).
  3. Ask how many devices are connected.
- **Resolution:**

1. If speed is good at router but bad on device: Issue is WiFi coverage. Suggest 5GHz or extender.
2. If speed is bad at router: Power cycle the modem/router.
3. Check for background downloads (game updates, cloud backups).

Escalation Trigger: Speeds consistently below 50% of plan after reboot → Escalate to **Tier 2** for line test.

5.3 Issue: "WiFi Connected but No Internet"

- **Diagnosis Steps:**
    1. Check modem lights. (WAN/Internet light should be Solid Green/White).
    2. If Internet light is Red or Blinking: Physical connection issue.
- **Resolution:**
    1. Check coax/fiber cable is tight.
    2. Unplug power for 1 minute.
    3. "Forget Network" on device and rejoin.

Escalation Trigger: Red WAN light persists after reboot → Escalate to **Tier 2** (likely needs Technician).

5.4 Issue: "Cannot Make/Receive Calls" (Landline/Mobile)

- **Diagnosis Steps:**
    1. Check "Do Not Disturb" settings on device.
    2. Check call forwarding settings (is it forwarding to voicemail immediately?).
- **Resolution:**
    1. Disable WiFi Calling to test cellular network.
    2. Update Carrier Settings (Settings → General → About).

Escalation Trigger: Specific error message (e.g., "Call Failed" or Fast Busy Signal) → Escalate to **Tier 2** for switch translation check.

5.5 Issue: "Unexpected Charges on Bill"

- **Diagnosis Steps:**
    1. Compare current bill to previous bill line-by-line.
    2. Look for "One-time charges," "Data Overage," or "Third-party purchases."
    3. Check if a promotion expired (e.g., "12-month discount ended").
- **Resolution:**
    1. Explain the specific charge (e.g., "The $10 increase is because your 'New Customer' promo expired").
    2. If valid error: Apply credit up to agent limit ($25).

Escalation Trigger: Customer disputes valid charge >$50 or claims fraud → Escalate to **Tier 2 (Billing/Fraud)**.

Approved by: Product Management & Training Dept
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