

WI-FI 7 & 8 GATEWAY & REPEATER STRATEGY FOR UK TELCOS

Strategy Brief · Updated April 2026

ARPU Growth · Churn Reduction · Smart Home Platform · Data Monetisation

£1.0B+

ANNUAL REVENUE OPP

29.2M

UK BROADBAND LINES

~90%

UK FTTP COVERAGE

6.3M

HOMES UPGRADING

7×

MEMORY COST SURGE

Prepared by Jonathan Lishawa
For UK ISP Gateway Strategy · April 2026



Prescience



SILPION

UK Home Wi-Fi Gateway Market

29.2M

BROADBAND LINES

~90%

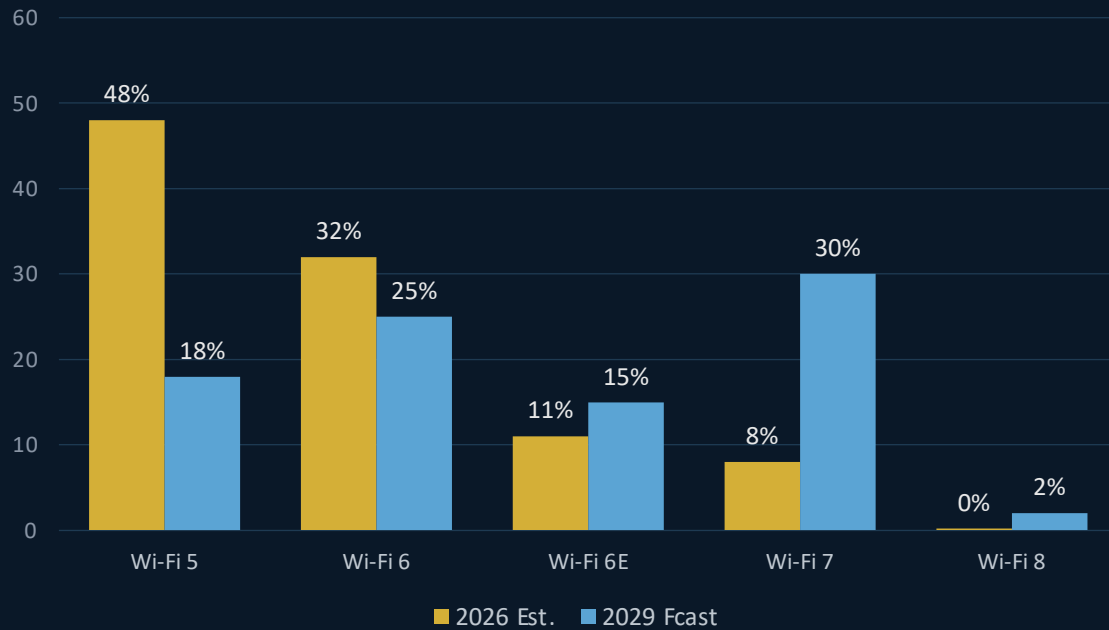
FOTP COVERAGE

42%

FIBRE TAKE-UP

£35

AVG MONTHLY BILL



- EE & Vodafone deployed; ~8% Wi-Fi 7 by end 2026
- Memory 7× cost surge constraining CPE deployment
- Wi-Fi 8 chips sampling; ISP products end 2028

Sources: Ofcom Connected Nations, Opensignal, Counterpoint, ABI Research.

Flat ARPU and Rising Churn Pressure

UK broadband ARPU flat at ~£31/mo. Wi-Fi quality is the #1 churn driver.

ARPU FLAT DESPITE SPEED UPGRADES

Avg bill £35; gigabit only £5–10 premium

26% cite affordability concerns

WI-FI UPGRADE = DIFFERENTIATION

£5–10/mo add-on grows ARPU 14–29%

£175–£400 profit/home over 5 years

CHURN REDUCTION OPPORTUNITY

27%

of churn from poor connectivity

45%

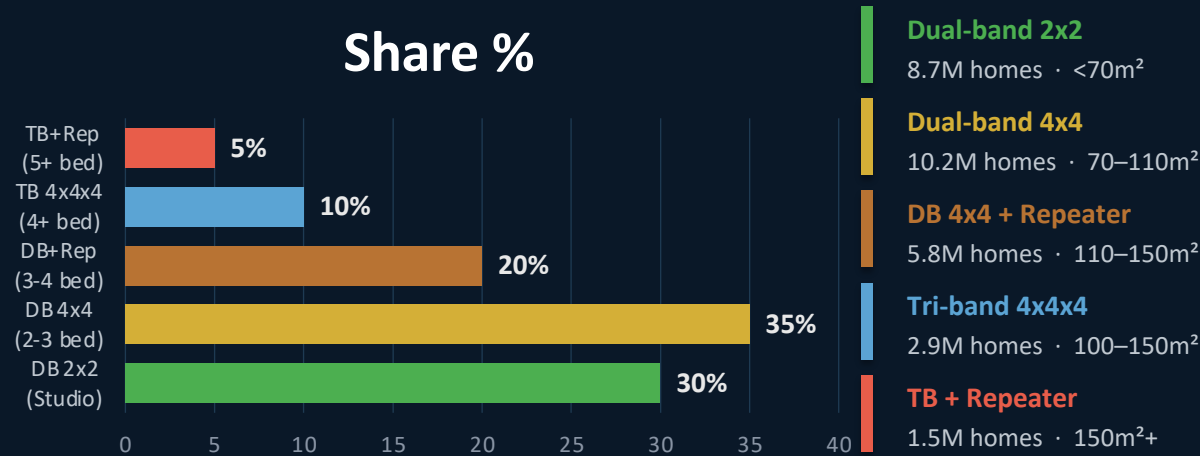
cite unreliable Wi-Fi as top issue

1%

churn cut = more margin than price hike

Source: Ofcom, Uswitch broadband statistics 2026, ISP industry data.

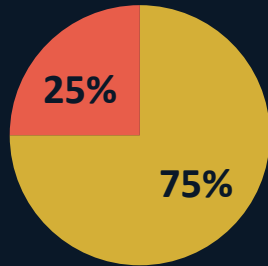
UK Property Types & Wi-Fi Configs



SEGMENT	HOMES	CONFIG	REPEATER
Studio / 1-bed flat	8.7M	DB 2x2	None
2-3 bed terrace/semi	10.2M	DB 4x4	Optional
3-4 bed semi/detached	5.8M	DB 4x4+Rep	Included
4+ bed detached	2.9M	TB 4x4x4	Optional
5+ bed / large	1.5M	TB+Rep	Included

29.1M dwellings (ONS). Real-world speeds 30–50% of theoretical.

Gateway Recommendation by Tier



■ Standard (<£40) ■ Premium (>£40)

5.93M gateways + 2.45M repeaters/yr

8.38M total units per annum

STANDARD: <£40/MO | 21.8M HOMES

Dual-band 4x4 Wi-Fi 7 (up to 5.8Gbps)

Optional repeater · COG: £50/gateway

PREMIUM: >£40/MO | 7.3M HOMES

Tri-band 4x4x4 Wi-Fi 7 (up to 17.4Gbps)

1–2 repeaters included · COG: £78/gateway

Volume model assumes 4-year refresh cycle across 29.2M lines.

Customer Propensity for Wi-Fi Upgrades

Both bundles available to all segments. Cross-segment purchasing modelled.

£5/MO DUAL-BAND + REPEATER

15% of standard + 8% premium choosing std

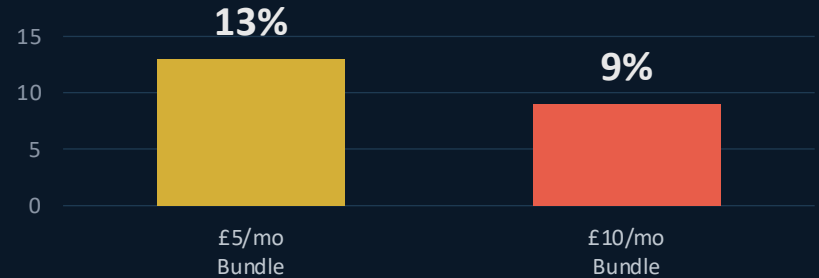
3.85M homes · £231M/yr

£10/MO TRI-BAND + 2 REPEATERS

25% of premium + 3% mainstream upselling

2.48M homes · £298M/yr

Take-Up %



£529M

BUNDLE REV

6.3M

HOMES

Every 1% churn reduction boosts margin more than an equivalent price hike. Wi-Fi quality addresses the #1 dissatisfaction driver.

VAS = value-added services (slides 12–14). Total with VAS: £1.0B+ (conservative).

Wi-Fi 7 Upgrade Bundle Options

BUNDLE A: £5/MONTH

DB 4x4 Gateway + 1x Repeater

COG: £82 (£50 GW + £32 Rep)

Cost to Serve: £3.92/mo

Gross Margin: £1.08/mo (21.6%)

BUNDLE B: £10/MONTH

TB 4x4x4 GW + 2x DB Repeaters

COG: £142 (£78 GW + 2x£32 Rep)

Cost to Serve: £6.78/mo

Gross Margin: £3.22/mo (32.2%)

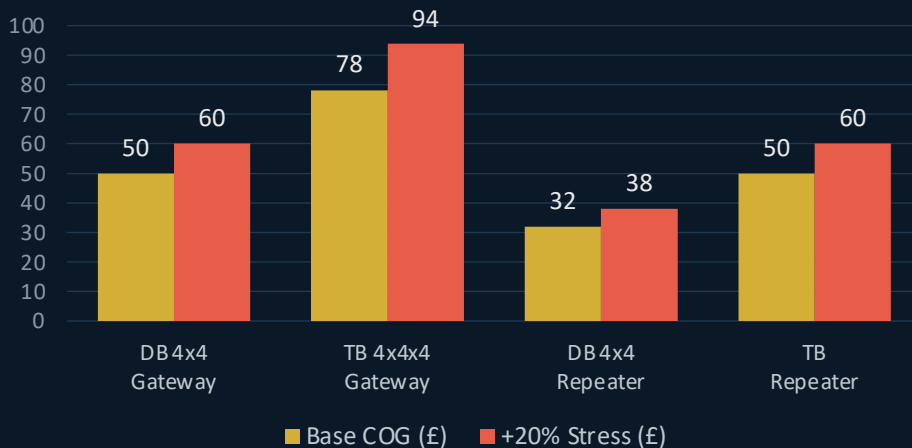
Tri-band delivers 3× monthly margin (£3.22 vs £1.08). At £12/mo, margin rises to 44%.

+20% MEMORY STRESS SCENARIO

Bundle A margin collapses to 6.4% (£0.32/mo). Bundle B drops to 18.8% (£1.88/mo). Tri-band resilience is critical.

24-month contract, WACC 8%. Memory pressure through Q3 2026.

CPE Cost Recovery: Base vs Stress



MEMORY COST CRISIS

7x cost increase. Memory now ~20% of BOM (was 3%). AI data centre demand crowding out CPE.

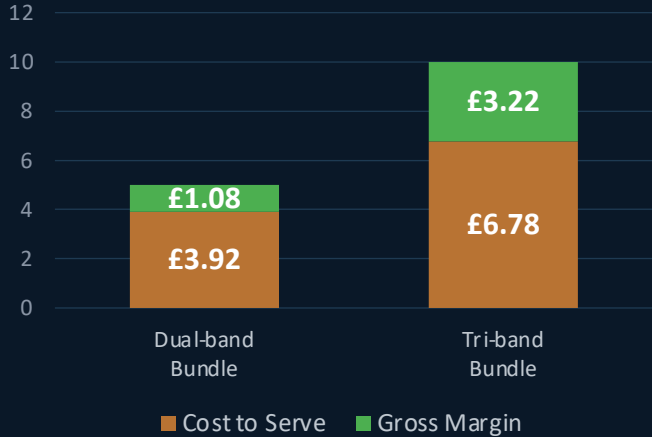
TELCO MITIGATION

Wholesale < 40% of retail. Chipset maturity offsets ~13%. Lock in supply contracts now.

PRODUCT	BASE COG	STRESS COG	IMPACT
Dual-band 4x4 GW	£50	£60	Margin at risk
Tri-band 4x4x4 GW	£78	£94	Absorb at £10
DB 4x4 Repeater	£32	£38	Modest impact
Tri-band Repeater	£50	£60	Margin at risk

WACC 8%, 24-month payback. Support: 2% intro + 4% ongoing.

Bundle Pricing vs Cost to Serve



DUAL-BAND GATEWAY + REPEATER

Retail: £5.00/mo | Cost: £3.92/mo

Gross Margin: £1.08/mo (21.6%)

TRI-BAND GATEWAY + 2 REPEATERS

Retail: £10.00/mo | Cost: £6.78/mo

Gross Margin: £3.22/mo (32.2%)

Tri-band delivers 3x margin. At £12/mo margin rises to 43.5%. Promo at £8/mo still yields 15.1%.

+20% MEMORY STRESS

Bundle A: 6.4% margin. Bundle B: 18.8%. Dual-band margin essentially eliminated.

COG: £82 (DB) / £142 (TB) base. Stress: £98 / £170.

UK ISP Wi-Fi 7 Deployment Status

EE (BT GROUP)	DEPLOYED – ALL PLANS	FIRST MOVER
Smart Hub 7 Plus on all FTTP. 8.5Gbps trial.		
VODAFONE	DEPLOYED – PRO 3	FAST FOLLOW
Ultra Hub 7 + Wi-Fi 7 Booster (May 2025).		
SKY BROADBAND	DEPLOYED – PREMIUM	SELECTIVE
Gigafast+ Hub Wi-Fi 7 on CityFibre (£70–80/mo).		
VIRGIN MEDIA	PLANNED – H2 2026	LATECOMER
Hub 6 Wi-Fi 7 in dev. ~5.5M subs = biggest opp.		
COMMUNITY FIBRE	DEPLOYED – HIGH-SPEED	NICHE
Linksys Wi-Fi 7 for 2.5/5Gbps. London FTTP.		

Smart Gateway: Connectivity to Platform

Wi-Fi 7/8 SoC performance enables real-time data, control, and new revenue streams.

RELIABILITY & LOW LATENCY

Wi-Fi 7 MLO + 6GHz delivers deterministic sub-5ms latency. Enables real-time smart home control, 4K/8K streaming, cloud gaming, and AR/VR without buffering or dropouts.

SoC PERFORMANCE LEAP

Broadcom BCM4918 APU, Qualcomm Dragonwing, MediaTek Filogic 880. CPU + NPU + networking integrated on one chip. Hardware-accelerated telemetry provides real-time QoE analytics.

SMART HOME ECOSYSTEM

Zigbee, Matter, and Thread protocol support turns the gateway into a smart home hub. Enables partner ecosystems, third-party device integration, and energy management services.

Sources: Broadcom, Qualcomm MWC 2026, MediaTek Filogic, SDMC Wi-Fi 8 AI Gateway.

Wi-Fi 8: AI Sensing & Business Cases

NPU + 802.11bn wireless sensing = spatial awareness. Camera-free, privacy-safe, OTA-delivered.

NPU & AI INFERENCE

Broadcom Neural Engine, Qualcomm Dragonwing, MediaTek Filogic 880. On-device ML, AI firewall.

SENSING & SMART HOME ECOSYSTEM

Wi-Fi 8 + BT 7.0 + UWB sensing. Zigbee/Matter/Thread for partner ecosystems and energy management.

EDGE SECURITY & CONSUMER CONSENT

Edge intelligence demands security-by-design and explicit consent. GDPR, DPA 2018, and EU Cyber Resilience Act drive compliance as AI processing moves on-device.

HOME SECURITY

£8–20/mo

Self-managed from £8/mo; managed + emergency response £20/mo. Wi-Fi sensing, no cameras.

ASSISTED LIVING

£10–30/mo

Self-managed from £10/mo; managed + emergency response £30/mo. Fall detection, sleep monitoring.

SMART HOME / ENERGY

£5–8/mo

Presence-aware heating, lighting. Real-time device orchestration via NPU.

CYBERSECURITY

£5–7/mo

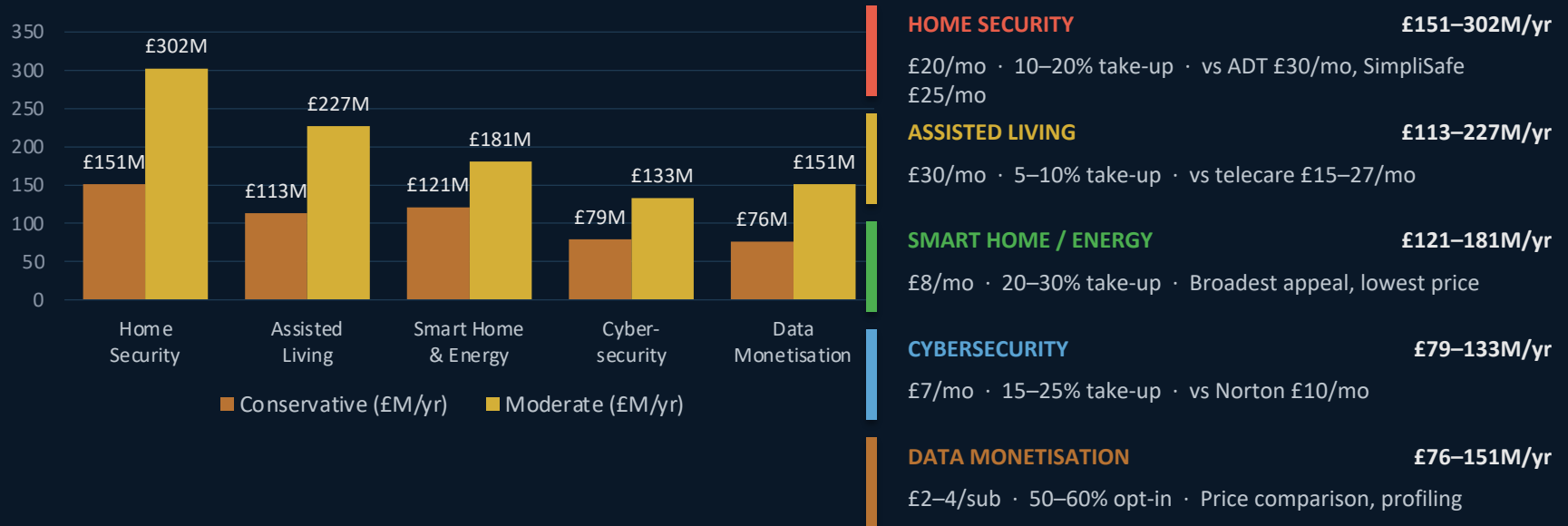
AI firewall on NPU. Threat detection at edge. Regulation drives demand as devices multiply.

Managed install adds £50–100 per visit — leverages existing field service teams.

802.11bn ratified Sept 2028. ISP products end 2028 earliest. Self-managed = app-guided setup.

VAS Revenue by Service Category

Comparing addressable market, take-up, and revenue potential across 6.3M upgraded homes.



TOTAL VAS OPPORTUNITY

Conservative: £540M/yr | Moderate: £994M/yr

VAS incremental to £529M bundle revenue. Total with bundles: £1.1–1.5B at scale. Data monetisation GDPR-compliant, opt-in.

Gateway Data: A New Revenue Layer

Wi-Fi 7/8 gateways generate rich, anonymised behavioural data with commercial value for third parties.

PRICE COMPARISON & SWITCHING

Real broadband performance data for Uswitch, Broadband Genie. Actual vs advertised speeds by postcode.

USER PROFILING & SEGMENTATION

Device types, usage patterns, household composition. Anonymised cohorts for ad targeting and product design.

THIRD-PARTY DATA PARTNERSHIPS

Insurance risk, energy switching, smart home product recommendations.

REVENUE MODEL

£2–4 per subscriber per month

6.3M homes × 50–60% opt-in

£76–151M/yr at scale

REGULATORY & CONSENT FRAMEWORK

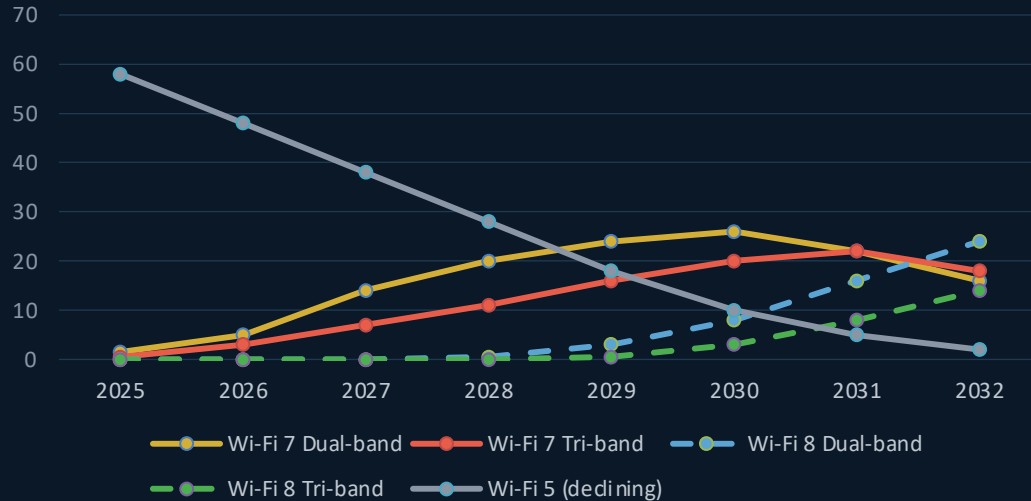
GDPR + UK DPA 2018: explicit opt-in, anonymised

EU Cyber Resilience Act: device security obligations

Edge AI intensifies scrutiny — consent is a differentiator

BT, Sky already monetise network data. ISP data partnerships growing 15–20% CAGR (Analysys Mason).

UK Wi-Fi Market Forecast (2025–2032)



2025–2026

EARLY ADOPTION

EE/Vodafone first. ~8% Wi-Fi 7 by end 2026.

2027–2028

MAINSTREAM

VM Hub 6. Wi-Fi 7 peaks. 802.11bn ratified Sept 2028.

2029–2032

TRANSITION

54% Wi-Fi 7 by 2030. Wi-Fi 8 ramps from 2029.

£150M

UK WI-FI 7 CPE 2026

54%

WI-FI 7 BY 2030

32.8%

GLOBAL CAGR

£1.0B+

TOTAL OPPORTUNITY

Wi-Fi 8 dashed (pre-standard). Total includes bundles + VAS + data monetisation.

Five Strategic Recommendations

Grow ARPU, reduce churn, monetise data, and build the smart home platform.

01 LAUNCH PREMIUM WI-FI TO GROW ARPU

Tri-band at £10–12/mo delivers 32% margin and lifts ARPU 14–29%. Tri-band holds 18.8% under +20% memory stress.

32.2%

MARGIN

02 DIFFERENTIATE ON IN-HOME EXPERIENCE

27% of churn is CX-driven. Premium Wi-Fi addresses #1 complaint. 1% churn cut exceeds equivalent price hike.

27%

CHURN CUT

03 BUILD SMART HOME PLATFORM

Wi-Fi 8 NPU + sensing unlocks £540M–994M/yr VAS: security (£20/mo), assisted living (£30/mo), automation, cyber. Edge AI demands security-by-design. Partnership opportunities unlock +£50M/year.

£994M

VAS REV

04 MONETISE DATA WITH CONSENT

Anonymised usage data for price comparison, profiling, 3rd parties. £76–151M/yr. Regulatory compliance (GDPR, DPA 2018, EU CRA) and explicit consent are competitive differentiators.

£151M

DATA REV

05 PREPARE WI-FI 8 FOR 2028

BCM4918 APU + BCM6714/19 sampling. Qualcomm Dragonwing with NPU. 802.11bn Sept 2028. Lock in supply now.

2028

WI-FI 8

• Q2 2026: VM Hub 6 RFP • H2 2026: VM Wi-Fi 7 • End 2028: Wi-Fi 8 ISP products