

• TELECOMS · GUIDE

The skills matrix *for* *telecoms teams*

Telecoms is rebuilding its skill base in real time. As networks shift from copper to fibre, from legacy voice to 5G, and from on-premise to cloud, the capabilities a team needs are changing faster than experience alone keeps up, with a third of senior network roles already not equipped for what is coming. A skills matrix tracks that shifting mix, so an operator can see the legacy skills ebbing, the next-generation ones it must build, and the gaps in between.



Dr Alex J. Martin-Smith

CMGR · MBA · LLM · DBA

Reading time 12 min · **Method** Upleashed 0 to 5 capability framework · **Updated** May 2026

THE SHORT ANSWER

A telecoms skills matrix maps the workforce against the capabilities the network depends on, copper and legacy alongside fibre, 5G, cloud and cyber, scored on a clear scale and tracked as the mix shifts. Read the flow: which legacy skills are ebbing, which next-generation ones are building, and where the team is short for what is coming. In short: **it shows the skill mix changing over time, so an operator can reskill from legacy to next-generation deliberately, keeping the old network running while building the new.**

KEY TAKEAWAYS

- **The skill base is shifting fast.** Copper and legacy voice are ebbing as fibre, 5G, cloud and cyber surge, often faster than experience adapts.
- **Experience is not current knowledge.** A long-serving engineer can have deep 4G skills and real gaps in 5G; benchmark against what is needed now.
- **Run the old, build the new.** Legacy networks must keep running during migration, so both skill sets matter at once.
- **Track the mix over time.** A stream of capability over the years shows the reskilling gap before it stalls a rollout.
- **Benchmark, do not assume.** Map against a defined standard for 5G, fibre and cloud, not self-assessed experience.

— START HERE

A skill base *in motion*

Few sectors are reskilling as fast as telecoms. The network underneath is changing, copper to fibre, legacy voice to 5G, on-premise to cloud, and with it the capabilities a team must hold. The risk is that experience masks the gap: a decade in telecoms is not the same as current 5G knowledge. A skills matrix makes the **shifting mix visible**, mapping the workforce against both the legacy skills still keeping the network running and the next-generation ones it must build.

Map legacy and next-generation together

A telecoms matrix maps the workforce against the **full span of capability**: the legacy skills still needed, copper and PSTN, legacy voice and older mobile generations, alongside the next-generation ones, fibre and FTTP, 5G and Open RAN, cloud and edge, automation and cyber. Both matter at once, because the old network must keep running while the new one is built, so the matrix has to hold the declining and the rising skills side by side rather than treating reskilling as a clean switch.

Benchmark against what is needed now

The crucial discipline is to **benchmark, not assume**. Telecoms technology moves with every standards release, roughly every twelve to eighteen months, so experience and current knowledge drift apart: an engineer with deep 4G expertise can have significant gaps in 5G standalone, and without a

defined benchmark that gap stays invisible. A skills matrix scores people against what each capability genuinely requires today, turning a vague sense of seniority into an accurate read of who can actually deliver the current network.

Track the mix as it shifts

Because the skill base is in motion, the most useful view is **over time**. Tracking the matrix across the years shows the legacy capabilities ebbing as people retire or retrain, and the next-generation ones building, or failing to. Seeing that flow reveals the reskilling gap while there is still time to act: where fibre or 5G capability is not growing fast enough to meet the rollout, where legacy skills are fading before the migration is complete, where the team is caught short between the two.

— WHY IT MATTERS NOW

Not equipped for *what is coming*

The capabilities telecoms needs are changing faster than experience adapts, and a large share of senior roles are already not equipped for emerging trends. A skills matrix tracked over time is how an operator sees the reskilling gap and closes it before a rollout stalls.

~33%

EIGHTFOLD AI, VIA REPORTS

of leading network engineering and operations roles are seen as not equipped for emerging trends like 5G and Open RAN.

~12–18mo

3GPP RELEASE CYCLE

brings new standards, so experience and current knowledge drift apart unless capability is benchmarked.

39%

WEF, 2025

of workers' core skills are expected to change by 2030, a shift telecoms is living through ahead of most.

Telecoms faces a double bind: it must keep legacy networks running while building fibre, 5G and cloud at pace, and the workforce that knows the old systems is not automatically the one that can deliver the new. Left unmanaged, this shows up as a slow, invisible erosion of capability, rollouts taking longer than they should, gaps that only surface when a project stalls.

A skills matrix counters it by making the **changing skill mix visible over time**: which legacy capabilities are ebbing and how fast, which next-generation ones are building or lagging, where an engineer's experience hides a current-knowledge gap, where reskilling is keeping pace and where it is not. Seeing this lets an operator benchmark capability honestly, target reskilling at the genuine gaps, sequence it so the old network stays supported while the new is built, and plan recruitment for the skills it cannot grow fast enough, turning a chaotic transition into a managed one.

— WHAT IT PROTECTS

Four things a telecoms matrix safeguards

In telecoms, a skills matrix protects four things that bear directly on delivering the network of today and tomorrow. Each follows from tracking the shifting skill mix against what the network needs.

PROTECTS 01

The rollout

By showing whether fibre, 5G and cloud capability is building fast enough, the matrix protects the pace of the network rollout.

PROTECTS 02

The legacy network

It tracks the ebbing legacy skills, so copper and legacy voice stay supported until migration is genuinely complete.

PROTECTS 03

Honest capability

It benchmarks against current standards, so experience is not mistaken for current 5G or fibre knowledge.

PROTECTS 04

Reskilling investment

It targets training at the real gaps, so reskilling spend goes where it closes the capability the network actually needs.

The common thread is **managing a transition in motion**. A telecoms operator cannot freeze the network to reskill; it must run the old and build the new at once, against technology that keeps moving. Its capability is split between ebbing legacy and surging next-generation skills, easily misjudged by equating experience with currency. The matrix makes that shifting picture visible over time, so an operator can keep the legacy network supported, build the next-generation skills the rollout demands, benchmark capability honestly, and invest reskilling where it genuinely closes the gap.

The 0 to 5 capability framework

Tracking a shifting skill base needs a consistent scale, so a score means the same thing each year and against each technology. This framework, developed by Dr Alex J. Martin-Smith, provides it, with Level 3, delivers the capability unsupervised, as the bar for dependable cover, whether on legacy or next-generation skills.

-
- 0** **Not required for the role** EXCLUDED
The capability is not part of this role. Excluded from the score, keeping the matrix focused on the technologies each engineer is expected to cover.

 - 1** **In training** WEIGHTING 25%
Learning the technology, works under supervision. Up to 75% trained. The reskilling pipeline for next-generation capability the network will need.

 - 2** **Developing** WEIGHTING 50%
More than 75% trained; handles routine work alone, complex design or fault scenarios still need support. Developing cover on the technology.

 - 3** **Capable** WEIGHTING 75% · DEPENDABLE COVER
Delivers the capability unsupervised to standard, benchmarked against current requirements. The level that counts as genuine cover, legacy or next-generation.

 - 4** **Subject Matter Expert / Trainer** WEIGHTING 100%
Deep expertise in the technology; designs, handles the hardest faults, and trains others. The experts who lead the network and accelerate reskilling.

 - 5** **Strategic ownership / Authority** WEIGHTING 100%
Sets architecture, standards and direction for the technology. The technical authority steering how the network is built and evolved.

Score against now, watch the flow

Score each capability against **current requirements**, not years served, counting the people at Level 3 or above, then re-score over time. The **flow** is the insight: legacy capability (copper, legacy voice) should ebb in a managed way, staying sufficient until migration completes, while next-generation capability (fibre, 5G, cloud) must build fast enough for the rollout. Where a next-generation band is not swelling quickly enough, that is the reskilling or recruitment gap to close; where legacy ebbs too fast, that is a support risk.

A worked example. Honest benchmarking changes the picture:

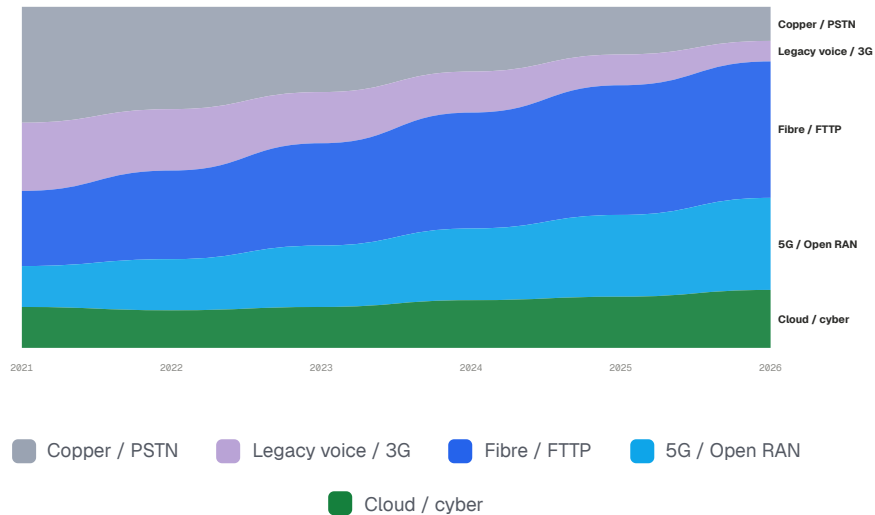
```
Veteran engineer deep 4G, L4 · 5G standalone L1 →  
experience hid a 5G gap  
Fibre / FTTP cover building 22% → 40% of the mix →  
reskilling on track  
Copper ebbing 34% → 10% – manage support to the end of  
migration.
```

— SEE THE SHIFT

The skill mix *over time*

Here is the workforce's capability mix as a stream over recent years: each band is a skill area, and its thickness is its share of qualified capability. The legacy bands, copper and legacy voice, narrow as the network migrates, while fibre, 5G and cloud swell. The shape of the flow shows the reskilling transition in motion, and whether the next-generation skills are building fast enough to replace the old.

SKILL MIX OVER TIME · LEGACY EBBS, NEXT-GEN SWELLS



Legacy → next-gen

the mix is shifting: copper and legacy voice are ebbing while fibre, 5G and cloud swell, the reskilling transition made visible

Illustrative operator on the Upleashed 0 to 5 framework. Each band's thickness is its share of qualified capability; legacy ebbs as next-generation swells.

WHAT THE NETWORK DIRECTOR READS HERE

- **Legacy is ebbing, as it should.** Copper and legacy voice narrow year on year. That is the planned direction, but the bands are not yet gone, so these skills must stay sufficient until migration is genuinely complete.
- **Fibre and 5G are swelling.** The next-generation bands widen steadily, evidence reskilling and recruitment are building the capability the rollout needs. The question is whether the rate matches the build programme.
- **Watch the crossover.** As legacy shrinks and next-gen grows, the risk is a dip in between, losing copper skills faster than fibre cover is ready. The stream shows whether the transition is smooth or leaves a trough.
- **Cloud and cyber are the thin band.** Growing, but slowly. As networks virtualise, this may need to widen faster, a prompt to prioritise reskilling or hiring here before it constrains the others.

— READY-TO-USE EXAMPLES

Example skills to map for telecoms

A telecoms matrix should map the workforce against the legacy and next-generation capabilities the network depends on, benchmarked against current standards. Here are ready-to-adapt categories, a starting point to tailor to your operation.

Category	Examples to map (the columns)	Watch out for
Legacy network	Copper / PSTN, legacy voice, 3G, older transmission	Losing legacy skills before migration is complete
Fibre & access	FTTP / FTTH, fibre splicing, fault rectification, installation	Field fibre cover lagging the build programme
Mobile & RAN	4G, 5G, 5G standalone, Open RAN, small cells	Deep 4G experience masking a 5G standalone gap
Core, cloud & data	IP / core networks, cloud and edge, virtualisation, automation	Cloud and automation skills growing too slowly
Operations & cyber	NOC and operations, field service, cyber security, customer support	Cyber treated as separate from network capability support

Map the capabilities your network depends on, legacy and next-generation alike, scored against current standards so Level 3 means delivering unsupervised to today's requirements, and re-score over time so the shifting mix is visible. Benchmark against a defined standard rather than self-assessed experience, especially for fast-moving technologies like 5G. As always, map what matters most, keep the matrix current, and use the flow to sequence reskilling so the old network runs while the new one is built.

— AVOID THESE

Six mistakes on a telecoms matrix

MISTAKE 01

Experience as currency

Years served is not current knowledge. Benchmark 5G and fibre against today's standard, not seniority.

MISTAKE 02

A one-off snapshot

The mix shifts constantly. Re-score over time so the reskilling gap shows before it stalls a rollout.

MISTAKE 03

Dropping legacy too soon

The old network still runs. Keep legacy skills sufficient until migration is genuinely complete.

MISTAKE 04

Next-gen building too slowly

A rollout needs cover in time. Track whether fibre and 5G capability is swelling fast enough.

MISTAKE 05

Self-assessment alone

Perception is not performance. Validate against a benchmark, not engineers rating themselves.

MISTAKE 06

Ignoring cloud and cyber

Networks are virtualising. Map cloud, automation and cyber as core, not peripheral, skills.

The method is free. A ready-made matrix just makes the reskilling gap *impossible to miss*.

Everything here works in a blank spreadsheet, and that is a fine place to start. A purpose-built template just makes the telecoms view effortless: score capability against current standards, re-score over time, and the shifting mix, legacy ebbing, next-generation building, is laid out for you, so the reskilling gaps, the experience-versus-currency mismatches and the bands lagging the rollout stand out, giving you the evidence to sequence reskilling and recruitment deliberately.



The Advanced Excel Skills Matrix tracks the skill mix over time against current standards, the basis for managing the legacy-to-next-generation transition and targeting reskilling, all on the same 0 to 5 framework used throughout this guide.

TRY IT FREE	MOST POPULAR	WHEN YOU ARE READY
<p>£0</p> <p>The online 5x5 builder maps a small team in your browser, with no sign-up. Ideal for a single network team.</p>	<p>£199</p> <p>The full Excel template: capability over time, current-standard benchmarks and analytics, up to 30 people and 30 skills. One-off, yours forever.</p>	<p>£1</p> <p>Upgrade to PulseAI in your first year for a living, web and mobile version with AI skill suggestions and reminders.</p>

— COMMON QUESTIONS

Quick *answers*

Q What is a skills matrix for telecoms?

It is a grid mapping the workforce against the capabilities the network depends on, legacy skills like copper and legacy voice alongside next-generation ones like fibre, 5G, cloud and cyber, with a level in each cell, tracked over time. Read as a flow, it shows which skills are ebbing, which are building, and where reskilling is short.

Q Why track the skill mix over time?

Because telecoms is reskilling in motion: legacy capability must ebb in a managed way while next-generation capability builds, and a single snapshot hides whether that transition is on track. Re-scoring over time reveals the flow, so an operator can see if fibre and 5G cover is growing fast enough, and if legacy skills are fading before migration is complete.

Q Why benchmark instead of trusting experience?

Because in telecoms experience and current knowledge drift apart. Standards move roughly every twelve to eighteen months, so a long-serving engineer with deep 4G expertise can have real gaps in 5G standalone. Scoring against a defined, current benchmark rather than years served gives an accurate read of who can actually deliver today's network.

Q Why map legacy and next-generation together?

Because both matter at once. The legacy network must keep running while the new one is built, so a team needs sufficient copper, legacy-voice and older-mobile skills right up to the end of migration, even as it grows fibre, 5G and cloud capability. Holding both in the matrix prevents dropping legacy support too early or under-building the new skills.

Q How does it guide reskilling and recruitment?

By showing where next-generation capability is not building fast enough to meet the rollout. That pinpoints where to target reskilling for existing engineers, and where the gap is too large or urgent to train, signalling a recruitment need. It also sequences the change, so reskilling does not strip the legacy network of support before migration is done.

Q Does this work across telecoms roles?

Yes. Whether the focus is field operations, network engineering, the NOC, or technical support, the same approach applies: map legacy and next-generation capabilities, benchmark against current standards, and track the shifting mix over time. The specific technologies differ by role, but the challenge of reskilling from an old network to a new one is shared across them.

— ABOUT THE AUTHOR



Dr Alex J. Martin-Smith

CMGR · MBA · LLM · DBA

Alex is the creator of the Upleashed capability framework that powers Skills Matrix Template, the award-winning Excel skills matrix. A Chartered Manager with an MBA, an LLM and a doctorate in business administration, he has spent more than two decades helping operations, HR and quality teams turn capability from a gut feel into something they can measure, manage and prove.

Connect on LinkedIn: [linkedin.com/in/alexmartinsmith](https://www.linkedin.com/in/alexmartinsmith)

A stylized, handwritten signature in black ink that reads "Alex J. Martin-Smith".

Dr Alex J. Martin-Smith

SOURCES

Eightfold AI. (n.d.). *Telecoms workforce and network skills analysis*. [As cited in industry reports].

Gartner. (2024). *Talent management research: Workforce skills data*. Gartner.

Martin-Smith, A. J. (n.d.). *The 0 to 5 capability framework*. Upleashed Limited.
<https://upleashed.com/capability-framework/>

World Economic Forum. (2025). *The future of jobs report 2025*. World Economic Forum.

Reskill *ahead of the rollout.*

You now have the telecoms method. The quickest way to start is to list your legacy and next-generation capabilities, score them against current standards, and re-score over time to see the flow. The next-generation bands not swelling fast enough, and the experience hiding a 5G gap, are exactly where to target reskilling and recruitment now.

[Try the free 5x5 builder →](#)

[Get the template, £199](#)

Award-winning method · 148,000+ teams · instant download · single-team licence

Skills Matrix Template — the award-winning Excel skills matrix by Upleashed. skillsmatrixtemplate.com

Powered by [Upleashed Limited](https://upleashed.com) · upleashed.com