

Telecommunications Network Planner interview questions

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What to expect

Telecommunications Network Planner interviews assess your ability to analyse traffic and coverage data, design practical network layouts, and work with field teams and regulators. Expect a mix of technical questions, process walk-throughs and scenario-based problems, often with a panel that includes a senior planner or network engineer.

- **Technical and modelling:** Questions about radio and fixed line design, propagation modelling, capacity planning and the tools you use, such as Atoll, QGIS and Python.
- **Process walk-through:** You are asked to step through how you plan a site, forecast demand and prepare rollout documentation from start to finish.
- **Behavioural:** STAR-style questions about stakeholder management, project delivery and resolving design or survey problems.
- **Scenario and judgement:** A realistic planning problem, such as covering a remote community or coping with a sudden capacity spike, where you explain your approach and trade-offs.
- **Regulatory and safety awareness:** Questions on ACMA requirements, EME compliance, ARPANSA guidance and carrier obligations under the Telecommunications Act 1997.

A typical process starts with a phone screen with a recruiter or hiring manager, covering your background and right to work. The main interview is usually a panel with a senior planner and a network engineer, combining technical questions with behavioural and scenario prompts. Some employers include a short modelling or data exercise, either before or during the interview, and a final conversation with the hiring manager about fit and availability.

1. Walk me through how you plan capacity for a mobile network site when traffic is growing.

Why they ask

This is a core part of the role and shows whether you can connect traffic data, coverage requirements and practical build options.

How to structure your answer

A walk-through: start with the data you review, explain how you forecast demand, then describe the design options you weigh and how you document the plan.

Example answer

"I start by pulling recent traffic and utilisation data for the site and its neighbours, along with any coverage complaints or quality reports. I look at busy hour trends and growth over the past few months, then forecast demand for the next planning cycle. If the site is approaching capacity, I model options in Atoll and QGIS: adding carriers, adjusting antenna tilt or adding a small cell nearby. I check each option against coverage, cost and build feasibility. I then document the preferred option with a cost estimate and a timeline, and discuss it with the field team before it goes into the rollout plan."

2. Tell me about a time you had to adjust a network design because of a constraint you did not expect.

Why they ask

Planning rarely goes to script, and employers want to see how you respond when survey results, access issues or cost limits change the picture.

How to structure your answer

STAR: set the situation and task, describe the constraint you hit, explain the action you took to redesign or replan, and close with the result.

Example answer

"On a regional rollout we had planned a new site based on desktop modelling, but the site survey found the access road was unsuitable for the crane we needed. I went back to the coverage model and tested two alternative locations within the same search area. One gave similar coverage with a shorter access route, so I updated the design, cost estimate and documentation, and presented the change to the project manager. We kept the rollout on schedule and avoided a costly road upgrade."

3. You are asked to plan coverage for a remote community with limited access and a tight budget. How do you approach it?

Why they ask

This tests judgement under real-world constraints and your ability to balance coverage, cost and community needs.

How to structure your answer

A judgement-under-pressure structure: clarify the requirement, outline your options, explain the trade-offs, and state how you would recommend moving forward.

Example answer

"First I would confirm what the community actually needs: voice coverage, basic data, or both, and where people live and travel. I would check existing infrastructure and any planned upgrades from other carriers. Then I would model a few options, such as a small macro site, a repeater, or a partnership to share infrastructure. I would look at power, backhaul and access for maintenance, because those often drive cost in remote areas. I would present the trade-offs to the project team, recommend the option that gives the best coverage for the budget, and flag any risks around approvals or seasonal access."

4. How do you use propagation modelling tools like Atoll or QGIS in your planning work?

Why they ask

This is a technical question to see how you actually apply the tools, not just list them on your resume.

How to structure your answer

A technical explanation: describe the tool, the inputs you use, the outputs you produce, and how you validate the model.

Example answer

"I use Atoll for radio propagation modelling, setting up the clutter, terrain and antenna parameters for the area. I run coverage and capacity simulations to compare site options and check interference. QGIS is where I bring in demographic and infrastructure layers, so I can see where demand is likely to come from and how a site fits with existing assets. I always validate the model against drive test or field data where it is available, because a model is only useful if it reflects what is happening on the ground. I then export the results into planning documents and cost estimates."

5. Describe a time you had to explain a complex network issue to a non-technical stakeholder.

Why they ask

Planners work with project managers, council officers and community representatives, so clear communication matters.

How to structure your answer

STAR, with a focus on how you simplified the message and what changed as a result.

Example answer

"A local council asked why a proposed site would not cover every house in the area. I prepared a simple coverage map with colours showing strong, variable and no coverage, and explained that terrain and building density affect signal. I avoided jargon and used a mobile phone analogy for how signal weakens. The council then understood why we needed a second small cell for full coverage, and they supported the revised plan."

6. What do you check to make sure a proposed site or design meets Australian regulatory and safety requirements?

Why they ask

Compliance is non-negotiable in telecommunications, and employers want to know you understand the Australian framework.

How to structure your answer

A process walk-through: list the key checks, explain how you document them, and mention who you consult.

Example answer

"I start with the ACMA requirements, including spectrum licensing and the Australian Radiofrequency Spectrum Plan, to confirm the frequencies and power levels are allowed. I check electromagnetic energy compliance against the ARPANSA standard and make sure the site design stays within the exposure limits. If the site is on a carrier network, I review obligations under the Telecommunications Act 1997, including carrier powers and immunities and any local government requirements. I document each check and consult with the RF safety team or a specialist if anything is unclear. I also keep the compliance records with the rollout documentation so the evidence is ready if it is requested."