

DESIGN SERVICES

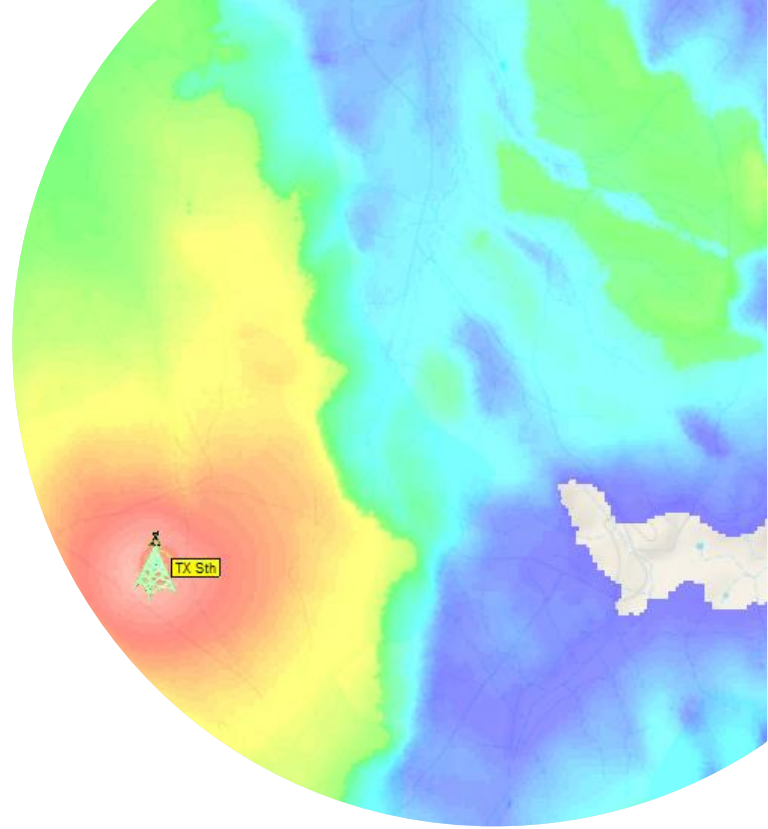
RF Planning & System Design

Regulators and radio network operators want efficiency from RF spectrum usage, and reliable connectivity free of interaction with other systems. A key part of network planning, and strategy for the assignment of frequencies, is desk-based modelling of the network coverage required.

Accurate coverage modelling requires knowledge of a vast number of technology specific parameters, international calculation methodologies that apply to some services and a software tool capable of utilising these parameters and algorithms to provide sound modelling outputs.

We help organisations specify the right system products to be used, design hardware infrastructure and modelling of coverage or RF link performance, through to deployment of the system and subsequent measurements to validate performance.

Erkmar Australia's approach to technology design and use is people focused. It's essential to consider the end user and how we can assist your organisation in empowering them to deliver using the most appropriate connectivity solution. So, we actively look for opportunities to add value for customers, planning the right solution with the right products without excessive organisational spend.



About Erkmar

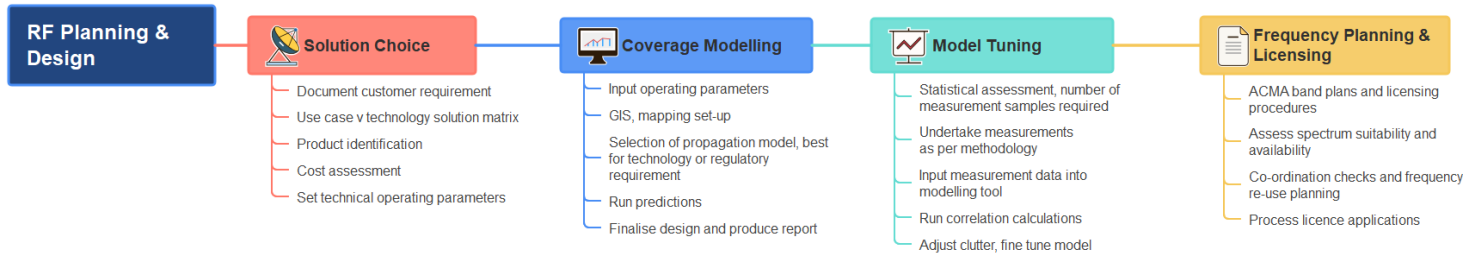
Erkmar Australia Pty Ltd is a technology consultancy and wireless communications services company, based in Brisbane, and part of a larger company, Erkmar Ltd that has a global presence in technology and regulatory consulting, with headquarters in the United Kingdom.

We have delivered assignments throughout the world for the last 14 years. Some examples of our services:-

- Technology strategy development
- Business case development
- Technical procurement specification creation
- Procurement process management
- Validation of vendor proposals against our client's requirement
- Project / program management of installations
- Post implementation validation of project deliverables
- Wireless network coverage mapping and validation
- Quality of experience / Quality of coverage measurement and reporting
- Business process design and validation
- Economic evaluation

We have worked extensively with Governments, Regulators, public organisations and private companies in all the above examples.

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RF Planning & Design Services

The choice of the most appropriate technology and accurate modelling of a wireless connectivity solution go hand in hand and are essential during the solution design.

Solution Choice

Wireless connectivity is not a one size fits all. One use case may require a complex 5G solution with low latency and high data rate capability, another may be a low cost IoT connectivity solution for infrequent status checking of a machine or device with resilience, long life and operation on battery power in harsh environments being more important than speed of data. We are vendor neutral, aiming to specify the right solution for you at the right cost.

Coverage Modelling

We specialise in regional and remote private 4G / 5G network planning and have an agile business operating model allowing us to react quickly for design and modelling of temporary or urgent deployments, such as critical comms disaster or dense concentrations of RF systems within confined venues and sporting events.

We use ATDI HTZ Communications software. ATDI has been developing RF coverage and propagation modelling tools for over 30 years, HTZ Communications is their flagship radio network planning solution which has a vast array of technology types and modulation schemes built in, allowing us to provide you with a quick turnaround regardless of technology modelling requirement, eg two-way voice and data critical comms, cellular systems, wireless IoT, microwave links and radio / TV broadcast. Outdoor or indoor coverage modelling.

Model Tuning

With the right tools configured by RF experts, software modelling is very accurate. It is however a common practice to validate coverage once a system is operational by measuring actual signal levels. Coupled with our measurement and field work services we carry out static or drive test measurements and input these into HTZ to correlate modelling v measurement and enable fine tuning of propagation modelling.

Frequency Planning and Licensing

A need for spectrum / frequency assignments is often integral with a customer’s overall project requirements. We are vendor and technology neutral; with many years’ experience of working in regulatory spectrum planning roles, the advice you receive on spectrum suitability and availability will be based on understanding your needs against the current national spectrum regulations. Whether your requirements fit within class licensed (‘licence exempt’) spectrum or whether you benefit from our in-house ACMA Accredited Person (AP) capability, we provide a seamless service of system planning and coverage modelling through to securing licences for the use of the spectrum required.

Erkmar is your trusted subject matter expert in wireless connectivity planning