

**WE FOCUS
ON DIGITAL
TECHNOLOGY**

DND
Digital

RF Antenna Design and Simulation Engineer

■ Location: Berlin

■ Permanent employment

■ Full time job

The Dynamit Nobel Defence GmbH is a medium-sized system manufacturer of high technology for military use. Under the brand „DND Digital“, we extend the portfolio towards digital solutions for tactical communications and C4ISTAR-services. A goal of this new business-unit is to provide the necessary hardware together with intelligent service building-blocks for the digitization of military operations.

The challenge:

Software-defined radio-based solutions are an essential building block for the future digitization of military radio equipment. While signal processing is done digitally in software, antennas as the input/output block for every radio reception/transmission, are still hardware. Their design and placement are crucial for signal quality and multiple-input multiple-output (MIMO) capabilities. Furthermore, individual antenna solutions are required for each system due to varying size, weight, power, and other system requirements. This calls for antenna specialists to be part of tactical communications system design.

Your main tasks:

- Design of single antenna elements according to requirements
- Design of antenna arrays and placement on systems
- Simulation and evaluation of the designed antenna arrays
- Measurement of the antenna arrays
- Modelling of the antenna arrays and integration into bit and system-level simulations

Your skills:

- University degree in Electrical Engineering with focus on wireless communications or comparable
- Ideally specialization on antenna theory at the University
- 3-5 years' work experience on the main task listed above
- Profound experience with antenna simulation software, e.g. HFSS, CST, or Zeland IE3D
- Experience with Matlab for modeling and integration into comms-simulation
- Ideally experience with version control, ideally Gitlab
- English and German: Fluent in word and writing

Our contribution:

- Customer and target-oriented working in a flat hierarchy
- Fully equipped radio laboratory
- Gitlab based agile planning and structured working
- Start-up like environment with high degrees of freedom combining advantages of a traditional company
- A professional and experienced team that is excited to be part of the military digital transformation
- Flexible working-time models, e.g. mobile working

