



RF Planning and Wireless Site Surveys

Peace of mind for your wireless investment

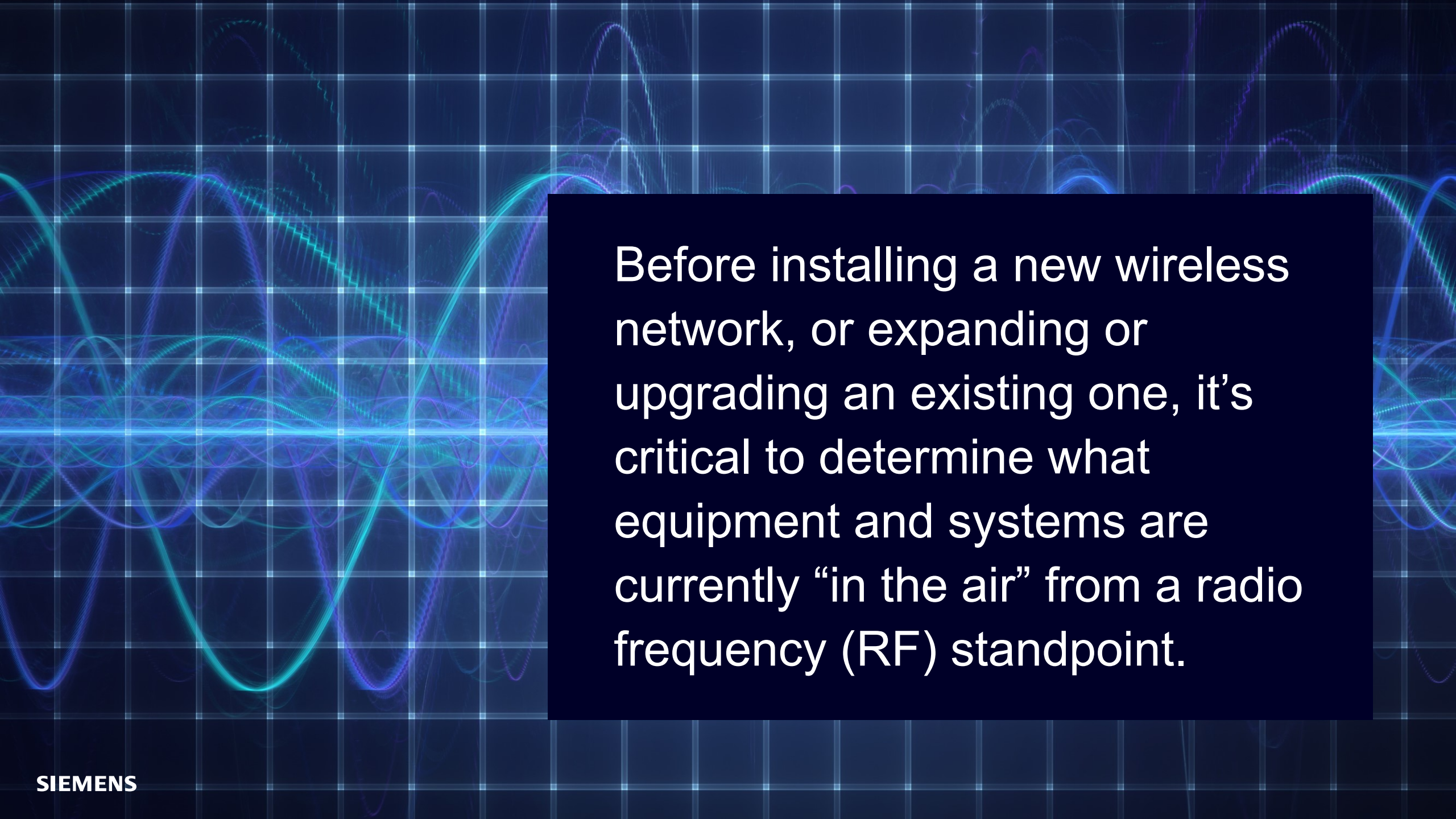
Many industrial companies today are adding wireless communication to the network infrastructure to improve or enhance communication efficiencies.



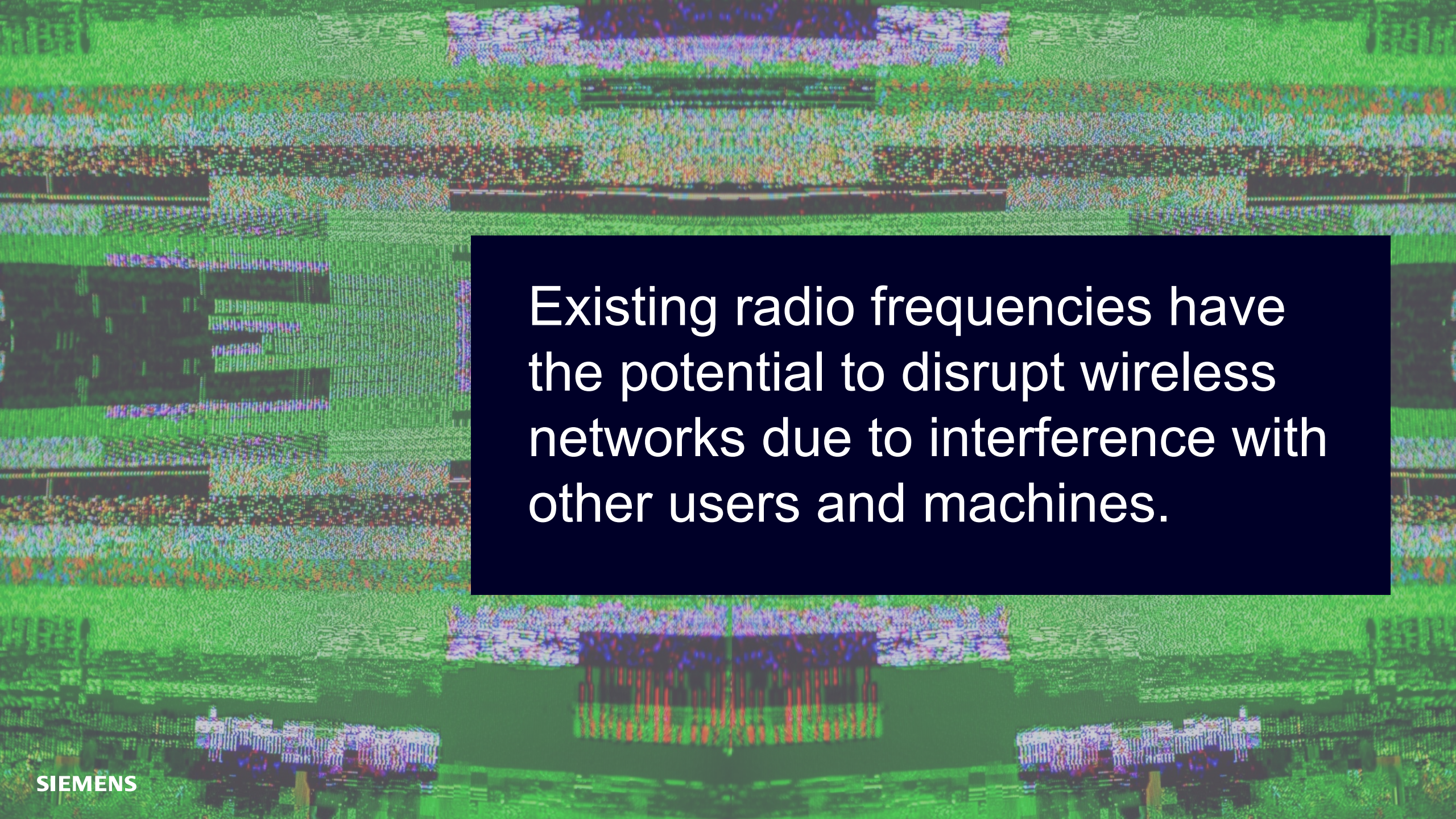
At the same time, industrial companies that are already wireless often need to expand, modernize, or upgrade their existing wireless network.



Regardless of the networking application, it is essential to obtain an informed and objective evaluation of your current network configuration while considering a “road map” for the future.



Before installing a new wireless network, or expanding or upgrading an existing one, it's critical to determine what equipment and systems are currently "in the air" from a radio frequency (RF) standpoint.



Existing radio frequencies have the potential to disrupt wireless networks due to interference with other users and machines.

Spectrum analysis reveals existing wireless channels or devices that could interfere with the wireless network.



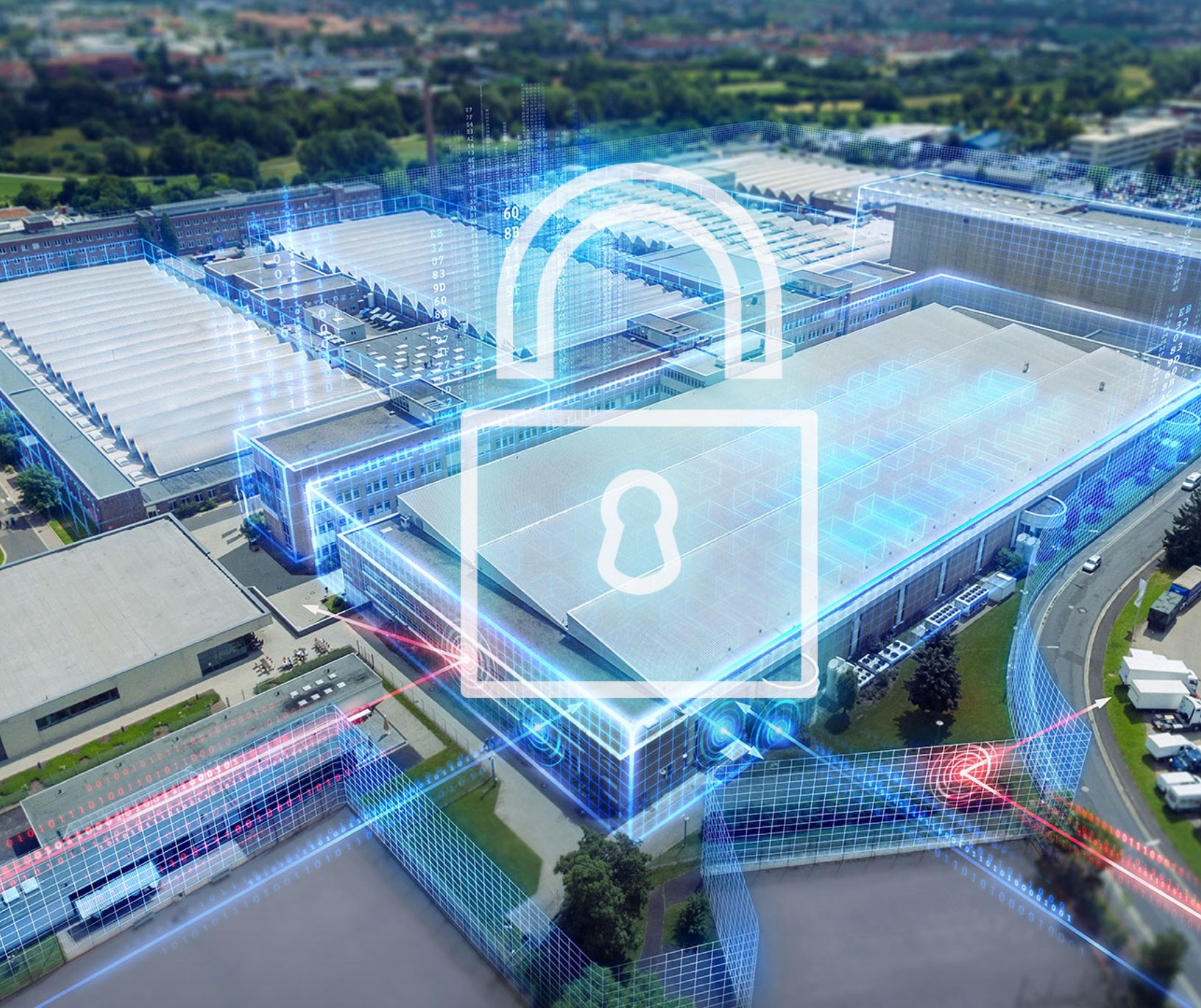
Network diagrams - combined with a thorough walkthrough of the site - help determine the current wireless network in place, along with any environmental issues that could negatively affect performance.



Siemens wireless site surveys and radio frequency (RF) planning services help ensure that your wireless network deployment, expansion or upgrade initiatives are **engineered for success.**

RF Planning seeks to make your wireless network as **fault tolerant** and **bulletproof** as possible.





RF Planning ensures that adequate cybersecurity protections are in place within the plant wireless infrastructure.

Proper RF planning ensures all mission-critical industrial manufacturing equipment can communicate seamlessly within your network.



Best practice RF planning considers a wide range of wireless challenges in the manufacturing environment such as:

- Temperature ranges
- Sources of electrical interference
- Materials and products affecting signal attenuation
- Mechanical placement of machinery and equipment
- Physical barriers and obstructions that may restrict or reflect signal propagation

To optimize RF coverage, Siemens can help assign frequency (or optimize based on channel planning) to avoid interference while providing guidance to support current and future plant infrastructure needs.



Fine-tuning of
RF system
parameterization
helps optimize the
radio frequency
performance
environment.





Upon completion, you receive a detailed post-site visit report outlining the key findings of the Siemens Wireless Site Survey.



By identifying potential wireless issues or challenges upfront, you can avoid costly missteps down the road.



Site visit reports can include detailed “bill of materials” for installation to help inform program budgeting and avoid costly scope gaps.

With Siemens RF Planning and Wireless Site Surveys you will enjoy:

- 01 RF coverage insight prior to implementation
- 02 Elimination of ad hoc configurations
- 03 Documented coverage and frequency (channel) planning
- 04 Less interference with shared frequency users



If you want to learn more about any of our Industrial Network Professional Services, or schedule a free consultation, contact us at siemensci.us@siemens.com

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