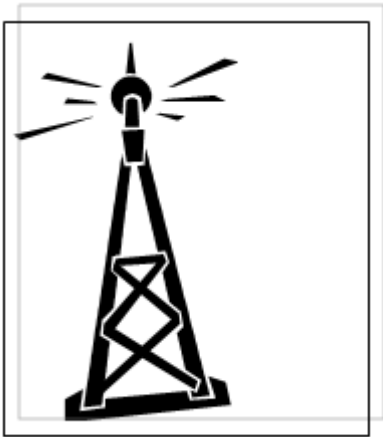# 3

Wireless Accessibility

Chapter 8: Wireless Networking Concepts

Chapter 9: Wireless Security

Wireless technologies, in the simplest sense, enable one or more devices to communicate 1without physical connections—without requiring network or peripheral cabling. Wireless technologies use radio frequency transmissions as the means for transmitting data, whereas wired technologies use cables. Wireless technologies range from complex systems, such as Wireless Local Area Networks (WLAN) and cell phones to simple devices such as wireless headphones, microphones, and other devices that do not process or store information. They also include infrared (IR) devices such as remote controls, some cordless computer keyboards and mice, and wireless hi-fi stereo headsets, all of which require a direct line of sight between the transmitter and the receiver to close the link. A brief overview of wireless networks, devices, standards, and security issues is presented in this section.

In our project, we aimed to achieve wireless accessibility to the microcontrollers so that control engineers walking through a process plant may be able to control and monitor remote processes no matter where they are.