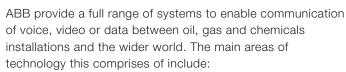
## ABB Telecoms External Communications

Has lack of external communication led to or exacerbated an emergency incident in your installation?

Are you being challenged to provide high data connectivity to remote or offshore sites?

Do you need to connect your installations to a main operations centre?



- Transmission backbone
- Wireless communications
- Cloud services

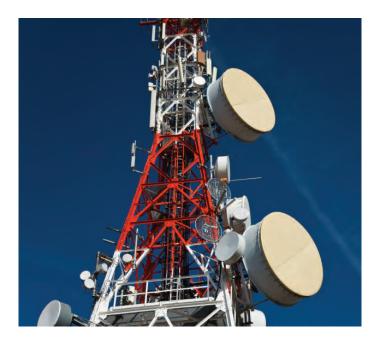
This session illustrates ABB's external communication capabilities to increase safety, security and productivity for your oil, gas and chemicals installations.

## Who should attend?

This session will be predominantly technical and aimed at those involved in the specification, design, operation and maintenance of telecoms systems. Management may also benefit from an overview of the commercial benefits provided by an effective external communication system.

## Benefits of attending

- Develop an understanding of external communications for your oil, gas and chemicals installations
- Understand the capabilities of current/emerging communications technologies
- Understand how to apply communications technology to increase safety, security and productivity throughout your installations
- Potential to reduce your operating costs



## **Topics** covered

- Physical Transmission Backbone
  - Microwave radio links
  - Fibre optic/copper cables
  - Satellite up/downlinks
- Transmission methods
  - DWDM: Dense Wavelength Division Multiplexing
  - CDWM: Course Wavelength Division Multiplexing
  - SDH: Synchronous Digital Hierarchy
  - SONET: Synchronous Optical Networking (SONET)
  - Ethernet LAN PHY
  - Ethernet WAN PHY
- Wireless communications
  - Long distance backup communications
  - Sea to Shore communications
  - Land/Sea to Sea communications
  - Ground/Sea to Air communications
- Cloud services
  - Software as a Service (SaaS)
  - Platform as a Service (PaaS)
  - Infrastructure as a Service (laaS)

**Duration:** 1 or 2 hour session followed by optional discussion session or live demonstration

**Venue:** ABB offices in Cambridgeshire, Aberdeen or customer location

