

# TECHNOLOGY APPLICATION GUIDE

## Distributed Antenna Systems

### Design and Implementation Best Practices



#### WHAT IS THE DAS STANDARD FROM BICSI?

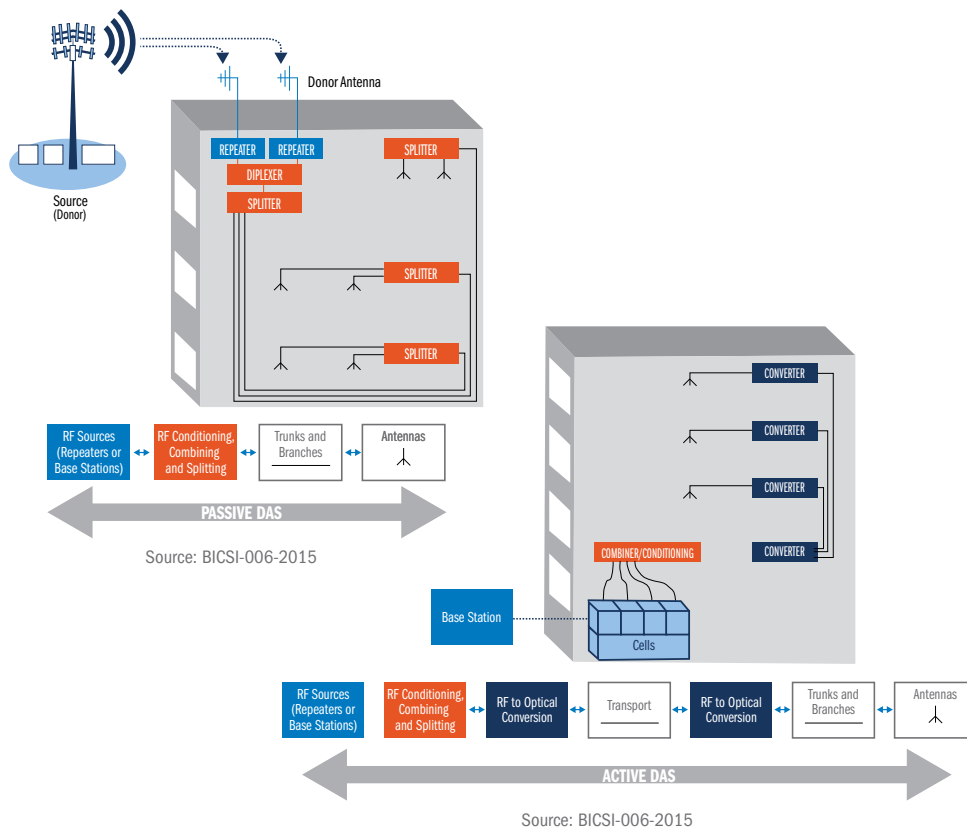
From architecture and design to deployment and implementation, the BICSI standards for distributed antenna systems (DAS) provide guidelines and best practices for deploying a system to augment existing wireless service. As a group of spatially separated and distributed antennas, DAS extend service indoors by relaying a cellular signal from a device to a carrier's system.

The ANSI/BICSI 006-2015 standard outlines the requirements of superior performing systems as well as requirements and recommendations for the design and installation of standards-compliant, manufacturer-agnostic systems. The standard:

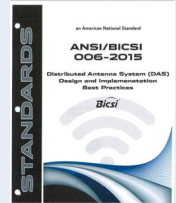
- Provides uniform project installations
- Ensures design consistency
- Sets a minimum level of installation/design proficiency
- Provides information for better system performance
- Sets minimum standards for hardware performance

#### WHY IS IT IMPORTANT?

The use of standards as best practices for DAS implementation affords designers and installers an opportunity to enhance their knowledge of quality DAS.



#### SCOPE OF STANDARD – ANSI/BICSI 006-2015



- Description of typical DAS
- Components used within a DAS
- Types of host systems
- Compliance and integration with codes, standards and legal concerns
- Coordination with host systems
- RF system design methods
- EMC and RFI mitigation
- Designer, installer and service personnel qualifications
- Administration, labeling and documentation
- Inspection, testing and maintenance

#### Limitations

The DAS standard is applicable to all signal source technologies; this standard does not specifically address Wi-Fi or WiMAX.

Source: BICSI-006-2015

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### CODE REQUIREMENTS

- Review local code requirements with the authority having jurisdiction.
- It should be included in scope of work documents.
- If there is no local code, check with the fire department to find which authority has responsibility for that geographic area.
- NFPA72 (National Fire Alarm and Signaling Code) recommends specific requirements for public safety DAS (radio systems).
- International Code Council (ICC) has similar recommendations.

### WHY ANIXTER?

- Our staff of experienced wireless experts can help guide you through the deployment process.
- With a technical sales force and experts in our Technology Support Services team we are devoted to cabling and security solutions.
- We have the broadest infrastructure offerings to fit your current and future industrial communication and control, network cabling, security application, data center and enterprise cabling needs.
- Our footprint supports our customers' and suppliers' operations around the globe.



### Technology Alliance Partners<sup>SM</sup>

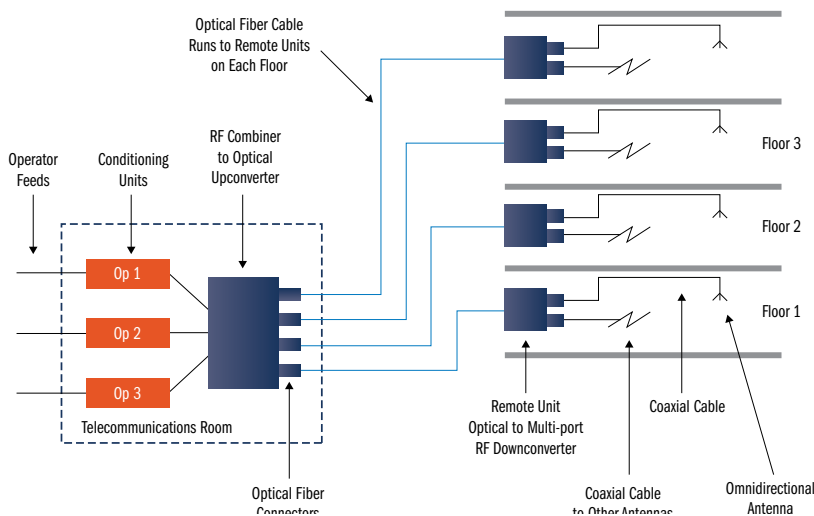
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Anixter's Technology Alliance Partners provide solutions designed to connect the world's most important systems. Our Partners help organizations operate more efficiently and securely, while maximizing value.



Source: BICSI-006-2015

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