

# Information Technology Systems Installation Methods Manual

*Installation practices for the ICT community*

**Seventh Edition**



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*advancing the information and  
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Thank you for ordering the *Information Technology Systems Installation Methods Manual*, 7th edition, 2017. Please place the chapter tabs and appendix tabs in front of the title page for each chapter and appendix.

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**Information Technology  
Systems Installation  
Methods**

**M A N U A L**

**7th Edition**



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This publication is not a single source document but a compendium of many sources of ICT industry-related practices, processes, and procedures.

The information contained in this publication includes, but is not limited to, national and international codes, de jure and de facto standards, and industry-accepted best practices. All source information can be found in Appendix A: Codes, Standards, Regulations, and Organizations and the Bibliography section of this publication.

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Working in close collaboration with the job task analysis prepared by the National Occupational Competency Testing Institute for use by BICSI, the subject matter experts (SMEs) of the *Information Technology Systems Installation Methods Manual (ITSIMM)* 7th Edition have updated, reorganized, and formatted the technical content from previous editions into a more conducive product that enhances both the field elements and the methodology within ICT installations.

Combining the common installation practices of both copper and optical fiber, the manual now emphasizes the specific differences required in each element relative to placement, termination, and splicing, as well as the testing and troubleshooting of both media.

I would like to commend Bob Gross, Robert Hertling, and Tony Whaley for their extensive time and effort in coordinating the format and logical flow of the content of this edition of the manual. Their professionalism and attention to detail has resulted in a document that I believe will become the global standard of installation for many years.

It has been an honor and privilege to work with so many of the SMEs that have contributed to this living document over the last 20 years. I have personally gained much more than I have contributed and urge others to volunteer.

Sincerely,

A handwritten signature in black ink that reads "James R. Craig". The signature is written in a cursive style with a large, looping initial "J" and a stylized "C".

James R. (Ray) Craig, RCDD, NTS, TECH, CT



## Acknowledgments

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Thank you for ordering the seventh edition of BICSI's *ITSIMM*. The officers of BICSI are pleased to provide an up-to-date manual that offers proven guidelines and methods accepted by the ICT industry.

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# How to Use This Manual

Chapter number and name are indicated at the outside top of each page.

Chapter 1: Principles of Transmission

Chapters are divided into sections.

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Each chapter section is divided into multiple subheadings.

### Part Heading

Part headings are used to discuss major areas of a topic.

- Bullets indicate important terms and phrases.
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Figures and tables are numbered sequentially in a given chapter. Each is followed by a brief descriptive title.

Figure 1.1  
Title

ITSIMM, 7th edition

1-1

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