What You Can Do

Incorporation of Division 17 into the CSI Master Format will need the involvement and support of telecommunications professionals everywhere.

Here's some things you can do to learn more and to lend your support to this important initiative:

- Join your local CSI chapter. Local chapter membership information can be found at www.csinet.org.
- Obtain the CSI Manual of Practice (MOP), which includes the MasterFormat™ as well as the SectionFormat™ and PageFormat™ documents. The MOP is an invaluable resource for anyone involved in the design and construction of a new building. With these manuals and by getting involved, you'll learn about the construction industry and what you need to do to participate effectively and proactively.
- Start using Division 17's 3-Part Specifications in current proposals, bids and planning documents.
- Visit the Division 17 Web site regularly: www.division17.net.
- Download the Division 17 Portable Document Format (PDF) file. Become familiar with it and spread the word.
- Present Division 17 to interested parties. There is a slide show on the Web site that can be run over the Web or downloaded and run as a PowerPoint presentation. Links to useful plug-ins and industry resources are also available.
- Architects and owners can include telecommunications in the scope of the contract for new buildings. Taking a proactive approach will set you apart from the competition.
- Build relationships. Remember people buy from people and people work with people.

Start now. Visit www.division 17.net and join CSI today.

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Division 17

Proposed Addition to the CSI MasterFormat™

Background

The Construction Specifications Institute's MasterFormat™ has been used by the construction industry to plan, design and construct new buildings and additions for almost four decades.

Produced in 1963, the current of MasterFormat™ contains 16 Divisions around which all building parameters are organized, from general site specifications through electrical systems.

With the rapid evolution of the telecommunications industry —especially in the areas of voice, video and data— it is clear to BICSI and most telecommunications professionals that the MasterFormat™ needs to be revised to address the ever expanding array of current and future building requirements.

In fact, of the more than 300 pages that comprise the current MasterFormat™, only two pages are devoted to low-voltage electrical requirements (for copper phone lines).

The inadequacies of the current MasterFormat™ are clear to any telecommunications professional who plans, designs, installs or maintains voice or data systems within a corporate, educational or government building or campus.

Division 17

The Division 17 addition to CSI's MasterFormat™ was developed to significantly improve the planning, estimating and design of inside and outside copper and fiber cable plants, data, voice, video and other low-voltage systems.

The construction and Technology And Communication Systems (TACS) industries—as well as building owners and managers—will realize significant benefits from integrating Division 17 into MasterFormat™ including:

- Improve communications between construction and TACS personnel by establishing common standards;
- Increase operational efficiency during all project phases from design and planning through construction and maintenance;
- Providing higher value TACS products and services; and
- Increase client satisfaction through more accurate budget planning, more accurate project scheduling and better utilization of client resources (space, time, budgets).

The proposed Division 17 model and associated specifications are structured similarly to Divisions 1 – 16 of the existing CSI MasterFormat™.

MAJOR SECTIONS OF PROPOSED DIVISION 17 INITIATIVE

17000 Administrative
17100 Cable Plant
17200 Data Requirements
17300 Voice Systems
17400 Video/Audio Systems
17500 WAN Requirements
17600 Architectural, Mechanical and Electrical Requirements
17700 Intra-Building Communication Systems
17800 Building Automation and Control
17900 Security, Access and Surveillance

BICSI & Division 17

In keeping with its mission to lead the telecommunications industry in the improvement of quality services and methods around the world, BICSI is taking a leadership role in the Division 17 proposal.

In October 1999, BICSI submitted a proposal to the CSI Institute Technical Committee concerning Division 17 implementation in the next MasterFormat™ edition (expected in 2002).

The current draft (Feb 1999, Version 2) of Division 17 was presented, along with letters of support from a number of associations including:

- Building Owners Managers Association (BOMA) International;
- Association of College and University Telecommunications Administrators (ACUTA);
- National Systems Contractors Association (NSCA); and the
- Telecommunications Industry Association (TIA).

Other industry organizations that have formally endorsed the Division 17 proposal include:

- Association for Telecommunications Professionals in Higher Education (ACUTA);
- National Systems Contractors Association (NSCA); and
- Telecommunications Industry Association (TIA).

Also, in an effort to align the Division 17 efforts and telecommunications standards with construction industry standards, BICSI has made appropriate changes to the ninth edition of the Telecommunications Distribution Methods Manual that was printed in June 2000.

Similar contributions have also been made or are being made to ANSI/TIA/EIA-606-1993, ANSI/TIA/EIA-569-A-1998, and the various entities that establish national CAD standards.

Other Components of Division 17

In addition to the consistently organized categories and sections shown at right, the Division 17 proposal also includes two other equally important components—T- Series Technology Drawings and Three-Part Specifications.

T-SERIES DRAWINGS

A (T)-series of Technology Drawings with standardized symbols have also been established under the Division 17 proposal to convey technology-specific information including:

- Backbone information on full-building drawings;
- Drop locations on serving-zone drawings; and
- Rack- and backboard-elevations on Communication Equipment Room drawings.

(T) SERIES DRAWING ORGANIZATIONAL MODEL

A1	Building Architectural Floor Plans
T0	System and pathway drawings at the Site perspective.
T1	Layout of complete building per floor. Drawing indicates: location of serving zones; communication equipment rooms; access points; pathways, and; other systems that need to be viewed from the complete building perspective.
T2	The building is divided up by its serving zones. Drawing indicates: drop locations; communication equipment rooms; access points, and; detail call outs for communication equipment rooms and other congested areas.
T3	Detailed look at communication equipment room. Drawing indicates: technology layout (racks, ladderacks, etc.); mechanical/electrical layout; rack elevation, and; backboard elevation. May also be an enlargement of a congested area.
T4	Detailed drawings of "typicals" including: faceplate labeling; faceplate types; installation procedures; detail racking, and; raceways.
T5	Schedules (spreadsheets) to capture information to be entered into database for cutovers and cable plant management.

Logical system drawings and detail drawings are also part of this series.

These T-Series Drawings accomplish two major objectives:

- Creates a set of technology drawings that can be plotted and used to bid out the required work; and
- Allows use of these drawings, in an electronic format, to manage the technology infrastructure.

Proposed Division 17 Categories

17000: General *[Division 1]*	17000	Project Summary/Overview	17050	Site Specific Requirements
	17010	Basic Communications Requirements	17060	Not used
	17020	Not used	17070	Not used
	17030	Administrative Requirements	17080	Project Management & Quality Assurance
	17040	Not used	17090	Technology Documentation
17100: Cable Plant *[16710]*	17100	Cable Plant Overview	17150	Backbone Cabling Requirements
	17110	Communication Equipment Rooms	17160	Horizontal Cabling Requirements
	17120	Main Distribution Frames/Service Entrances	17170	Testing, Identification and Administration
	17130	Interior Communication Pathways	17180	Cutover & Training
	17140	Exterior Communication Pathways	17190	Support & Warranty
17200: Data & LANs *[16730]*	17200	LAN Overview	17250	Software and Supplies
	17210	Switches, Hubs and Routers	17260	Miscellaneous Equipment
	17220	Servers	17270	Testing, Identification and Administration
	17230	Workstations	17280	Cutover & Training
	17240	Printers	17290	Support & Warranty
17300: Voice Systems *[16720]*	17300	Voice Overview	17350	ACD/Call Center Requirements
	17310	PBX	17360	Miscellaneous Items
	17320	Telephone Sets, Faxes and Modems	17370	Testing, Identification and Administration
	17330	Voice Messaging System	17380	Cutover & Training
	17340	Call Accounting Requirements	17390	Support & Warranty
17400: Video/Audio Systems *[16810]*	17400	Video/Audio Overview	17450	Satellite System
	17410	Control and Headend Equipment	17460	Software and Supplies
	17420	Production Equipment /Teleconferencing	17470	Testing, Identification and Administration
	17430	Monitors, VCRs & Projection Equipment	17480	Cutover & Training
	17440	Audio Equipment	17490	Support & Warranty
17500:WAN & Dial Tones	17500	WAN Overview	17540	Dedicated Circuits
	17510	Hardware - Routers, CSU/DSUs	17550	Internet Access
	17520	Local Dial Tone/Centrex	17560	Cable Service
	17530	Long Distance	17570	Private Microwave and Wireless
17600: Architectural, Electrical, HVAC	17600	AMEP Overview	17650	Computer Labs and Classrooms
	17610	CER and Access Point Requirements	17660	Tele-Conferencing Rooms
	17620	AV Control Room Requirements	17670	Auditoriums and Large Group Rooms
	17630	MDF Requirements	17680	Workstation Furniture
	17640	Telephone Specialties	17690	Exterior Requirements
17700: Intra-Building Communication Systems	17700	Other Systems Overview	17750	Paging Systems
	17710	Time & Attendance	17760	Master Clocks
	17720	Patient Monitoring Systems	17770	Networked Copiers
	17730	Intercom and Nurse Call	17780	Bar Code Systems
	17740	Public Address	17790	Dictation Equipment
17800: Building Automation & Control *[13800]*	17800	Building Automation Overview	17840	Elevator Monitoring
	17810	Energy Monitoring	17850	Door Controls
	17820	Lighting Control	17860	Detection & Alarm
	17830	Environmental Control		
17900: Security Access & Surveillance *[13700]*	17900	Security and Access Overview	17920	Card Access
	17910	Security	17930	Surveillance Systems

Italicized numbers in brackets indicate current CSI MasterFormat section designation.

Version 2 DRAFT as of February 23, 1999. For updates to these sections, visit www.bicsi.org or www.division17.net .

THREE-PART SPECIFICATIONS

Technology consultants and engineers can use Division 17 to group their project requirements into sections and then use CSI's SectionFormat™ to organize each section.

Additionally, using CSI's PageFormat™ to present the information on each page will further facilitate the integration of TACS information with documents produced by the construction industry.

Using Division 17 in conjunction with these CSI standards improves communications and increases efficiency.

Next Steps

The Division 17 proposal has recently been forwarded to the CSI Institute Technical Committee.

At this point, it is too early to speculate what recommendation they might make. The committee is fully aware of the changes occurring in the industry, and the necessity of responding to them in a way that keeps up with the revolutionary changes in information technology, while maintaining the benefit of an established industry wide standard.

The committee will consider two primary questions:

- Whether the benefits of change potentially outweigh the disadvantages of modifying a standard that is shared throughout the industry; and
- Whether it's time to look at other changes to Master Format

Independent Use of Division 17

While integrating the Division 17 proposal into CSI's MasterFormat™ will have the greatest positive impact for everyone (construction, TACS and building owners), it is important to note that the proposal can also be used as an independent standard for the TACS industry.

This is noteworthy should CSI choose not to integrate Division 17 into the MasterFormat, as well as outside North America where there are no consistent specifications for the construction industry.

The Division 17 proposal can and should be used today by all telecommunications systems professionals to start reaping the benefits of this initiative now.