



# NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

## MINUTES

### NFPA Correlating Committee on Signaling Systems for the Protection of Life and Property (SIG-AAC) NFPA 72 Second Draft Meeting (A2024)

December 13, 2023  
10:01 a.m. – 4:50 p.m. (EST)

Web/Teleconference

1. **Call to order.** Merton W. Bunker, Jr., chair, called the meeting to order at 10:01 a.m. on December 13, 2023.
2. **Introductions.** Attendees introduced themselves and identified their affiliation. NFPA staff took attendance.
3. **Chair report.** Merton W. Bunker, Jr. welcomed attendees and provided an overview of the meeting.
4. **Staff liaison report.** Patrick Bakaj provided an overview of the standards development process and the revision cycle schedule.
5. **Previous meeting minutes.** The minutes from January 10-11, 2023, Orlando, FL were approved without revision.
6. **Correlating Committee Liaison Reports**
  - a. Shane Clary gave an update on the development of NFPA 101
  - b. Shane Clary had no updates on the development of NFPA 25.
  - c. Doug Aiken gave an update on the development of NFPA 1225.
7. **NFPA 72 Second Draft.**
  - a. **Correlating Review.** The Correlating Committee reviewed the work of the Technical Committees and developed Second Correlating Revisions as necessary. These will be available in the Second Draft Report at [www.nfpa.org/72next](http://www.nfpa.org/72next).
  - b. **Task group report(s).** The following task groups provided their reports and recommendations.
    - i. **Task Group 1 – Fundamentals (SIG-FUN).** Rick Heffernan. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.

- ii. **Task Group 2 – Initiating Devices (SIG-IDS).** Peter Larrimer. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
  - iii. **Task Group 3 – Notification Appliances (SIG-NAS).** Art Black. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
  - iv. **Task Group 4 – Supervising Stations (SIG-SSS).** Wayne Moore. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
  - v. **Task Group 5 – Protected Premises (SIG-PRO).** Thomas Parrish. The task group provided a verbal report, no revisions were made. The task group has been discharged with thanks.
  - vi. **Task Group 6 – Household (SIG-HOU).** Andrew Bererzowski. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
  - vii. **Task Group 7 – Inspection, Testing, and Maintenance (SIG-TMS).** Rodger Reiswig. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
  - viii. **Task Group 8 – Public Fire Reporting Systems (SIG-PRS).** Lynn Neilson. The task group provided a verbal report, no revisions were made. The task group has been discharged with thanks.
  - ix. **Task Group 9 – Emergency Communications Systems (SIG-ECS).** Jeffery Van Keuren. The task group provided a report (attached), revisions were made. The task group has been discharged with thanks.
- c. **New task groups.** The following task groups were appointed to work subsequent to the meeting:
- i. **Product Standards Task Group.** TG Chair: Rodger Reiswig. Members: Jeff Van Keuren, Morris Stoops, Art Black, Allan Sanedrin. Review the Code as it relates to product standards references and provide clear direction to each Technical Committee how to reference product standards. The task group will develop public inputs for the next revision cycle.
  - ii. **Silencing/Deactivation Task Group.** TG Chair: Michael Pallett. Members: Rodger Reiswig, Jeff Van Keuren, Allen Sanedrin, Maria Marks, Art Black. Review the Code for audible and visual deactivation for fire alarm evacuation systems and emergency communications systems. The task group will develop public inputs for the next revision cycle.

## 8. Other Business.

- a. **1225 Petition** – The NFPA 72 Correlating Committee desires to petition the Standards Council to move the NFPA 1221 portion of NFPA 1225 to a three-year revision cycle, establish a technical committee for the NFPA 1221 material under the NFPA 72

Correlating Committee, or move the NFPA 1221 material back into NFPA 72. –  
**Substantiation:** Emergency responder communications enhancement system technology is rapidly changing. The current five-year cycle is not rapid enough to keep up with the changing technology and changes in cybersecurity concerns.

- b. **715 Petition** – The NFPA 72 Correlating Committee desires to petition the Standards Council to bring NFPA 715 under the NFPA 72 Correlating Committee. –  
**Substantiation:** The content of NFPA 715, Fuel Gases and Warning Equipment concerns detection and signaling for fuel gases. Detection and signaling are the purview of NFPA 72. Correlation between NFPA 72 and NFPA 715 is important to ensure the documents align.

9. **Future meetings.** This was the final meeting of this committee for the revision cycle. Public Inputs for the next edition are expected to close June 2025. A meeting notification will be posted at [www.nfpa.org/72next](http://www.nfpa.org/72next) when the next meeting is scheduled.

10. **Adjournment.** The meeting was adjourned at 4:50 p.m. on December 13, 2023.

**Attendees**

**Committee Members:**

X	<b>Bunker, Merton</b>	Chair	Merton Bunker & Associates, LLC.
X	<b>Bakaj, Patrick</b>	Secretary (Staff Liaison)	National Fire Protection Association
X	<b>Aiken, Douglas</b>	Principal	IMSA Educational Foundation
X	<b>Berezowski, Andrew</b>	Principal	National Electrical Manufacturers
X	<b>Black, Art</b>	Principal	Carmel Fire Protection
X	<b>Chavez, Louis</b>	Principal	UL Solutions
X	<b>Clary, Shane</b>	Principal	The Monitoring Association
X	<b>Grill, Raymond</b>	Principal	Ray Grill Consulting PLLC
X	<b>Heffernan, Rick</b>	Principal	Automatic Fire Alarm Association, Inc.
X	<b>Krueger, Kyle</b>	Principal	National Electrical Contractors Association
X	<b>Larrimer, Peter</b>	Principal	US Department of Veterans Affairs
X	<b>LeBlanc, David</b>	Principal	JENSEN HUGHES
X	<b>Moore, Wayne</b>	Principal	Self Employed
X	<b>Nielson, Lynn</b>	Principal	City of Henderson
	<b>Norton, Thomas</b>	Principal	US Naval Historical Center
X	<b>Parrish, Thomas</b>	Principal	Telgian Corporation
X	<b>Reiswig, Rodger</b>	Principal	Johnson Controls

X	Schifiliti, Robert	Principal	R. P. Schifiliti Associates, Inc.
X	Stroud, Brad	Principal	Texas Instruments, Inc.
X	Van Keuren, Jeffery	Principal	Carrier/UTC
	Besson, Daniel	Voting Alternate	International Association of Fire Chiefs
	Buehrer, Matthew	Alternate	Automatic Fire Alarm Association, Inc.
	Hendershot, David	Alternate	National Electrical Contractors Association
X	Leber, Fred	Alternate	AML Encore Corporation
X	Marks, Maria	Alternate	National Electrical Manufacturers
X	Sanedrin, Allan	Alternate	UL Solutions
X	Stoops, Morris	Alternate	Carrier/UTC
X	Dallaire, Laurence	Nonvoting Member	TC on Initiating Devices for Fire Alarm
X	Kerr, J. David	Nonvoting Member	TC on Testing & Maintenance of Fire
	Koffel, William	Nonvoting Member	TC on Emergency Communication
X	Lowrey, David	Nonvoting Member	TC on Fundamentals of Fire Alarm
	Martin, Leo	Nonvoting Member	TC on Public Fire Reporting Systems
X	O'Connor, Daniel	Nonvoting Member	TC on Supervising Station Fire Alarm
X	Ogle, Cory	Nonvoting Member	TC on Household Fire Alarm Systems
X	Poole, Andrew	Nonvoting Member	TC on Notification Appliances for Fire
X	Poole, Jack	Nonvoting Member	TC on Protected Premises Fire Alarm
	Reiss, Martin	Member Emeritus	Jensen Hughes
	Wilson, Dean	Member Emeritus	JENSEN HUGHES

**Guests:**

Bryan Holland National Electrical Manufacturers Association (NEMA)  
Michael Pallett Pallett Corner Consulting  
Larry Rietz JENSEN HUGHES  
Sheryl Tricocci Independent Consultant  
Tim Knisley AFAA  
Tom Goss NFPA Staff  
Chad Duffy NFPA Staff

Total number in attendance: 37

Task Group 1 CC SCM SIG FUN Notes revised

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation	TG1 Comments
SIG-FUN	7.7.2.3		CR	See Word Document 72_SIG-FUN_7_7_2_3.docx	MOS requires titles on section headers. Alternatively, the requirements can be moved down one level and included under 7.7.2 Document Accessibility. The annex on 7.7.2.3 could be relocated to 7.7.2.	Renumber, relocate annex to 7.7.2 7.7.2* Document Accessibility. [move annex from 7.7.2.3 to 7.7.2] 7.7.2.1 With every new system, a documentation cabinet shall be installed at the system control unit or at another approved location at the protected premises. 7.7.2.2 The documentation cabinet shall be sized so that it can contain all necessary documentation. 7.7.2.3* 7.7.2.3.1 All record documentation shall be stored in a dedicated documentation cabinet. 7.7.2.43.2 Record documentation shall not be stored in any control unit enclosure.
SIG-FUN	11.30		CR	The section references security levels in accordance with ANSI/ISA/IEC 62443-4-2/3-3. 62443-4-2 and 62443-3-3 are two documents. Clarify if Security Level 1 is in accordance with 62443-4-2 and 62443-3-3 or if Security Level 1 is in accordance with 62443-4-2 or 62443-3-3. This is typical for 11.3(1), 11.3(2), 11.3(3), and 11.3(4).	MOS does not permit the use of a / to reference two documents. The reference to ANSI/ISA/IEC 62443-4-2/3-3 should be separated and clarified if one or both are applicable for each security level.	Accept as noted
SIG-FUN	A.18.9.4.2, Annex J			Provide update to "FAA Human Factors" reference, the current link does not work.		Delete Link as it does not work (FAA Human Factors) unless new link is identified
SIG-FUN	1.4.1			"Unless otherwise permitted elsewhere in this Code, the provisions of this document shall not be required to be applied to...installations that were existing..." is 'permitted' the correct term? Is it specifically prohibited to apply new requirements to existing installations? Should 'permitted' be changed to 'required'?		To be discussed at Second Draft TCC Meeting
SIG-FUN, SIG-ECS	2.2, 24.3.14, A.24.3.13, 1.1.1		CR	2.2 NFPA Publications. <del>NFPA 1600<sup>®</sup>-Standard on Continuity, Emergency, and Crisis Management-2019 edition.</del> <del>NFPA 1620-Standard for Pre-Incident Planning-2020 edition.</del> NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery, 2024 edition.  24.3.14* Emergency Response Plan Elements. A well-defined emergency response plan shall be developed in accordance with NFPA 1600 and NFPA 1620 as part of the design and implementation of a mass notification system.  A.24.3.13 There are many credible risk assessment methodologies that can be utilized and/or referenced in conducting the risk assessment required in 24.3.13, some of which are listed as follows: 3.NFPA 16001660, Quincy, MA: National Fire Protection Association, www.nfpa.org [text not associated with the change was removed to fit in Excel]  1.1.1 NFPA Publications. <del>NFPA 1600<sup>®</sup>-Standard on Continuity, Emergency, and Crisis Management, 2019 edition.</del> NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery, 2024 edition.	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.	Accept changes as noted due to consolidation of NFPA 1600 and 1620
SIG-NAS, SIG-ECS, SIG-FUN	18.3.7, 24.3.10		CR	See word document 72_SIG_FUN_SIG_NAS_SIG_ECS_NACs.docx	Correlate the DCNAC (18.3.7) and A-NAC(24.3.10) requirements between Chapter 18 and Chapter 24 and rename DCNAC to V-NAC to mirror A-NAC. During the SIG ECS SDM there was discussion to move the DCNAC and A-NAC requirements to Chapter 10 .	Accept as noted in substantiation
SIG-TMS, SIG-FUN	A.14.6.1.1		CR	A.14.6.1.1 Examples of acceptable methods used to define the required sequence of operations and to document the actual sequence of operations include a logic diagram [see Figure A.14.6.1.1(a)] and an input/output matrix [see Figure A.14.6.1.1(b)]. <del>The required and actual sequence of operation should include all applicable items found in the list in A.7.4.9.</del>	A.14.6.1.1 references a list of items in A.7.9 that does not exist in the Code.	A.7.4.9 sends you to A.14.6.1.1 and the items required are in A.14.6.1.1 - change FACP to FACU
SIG-TMS, SIG-FUN	3.3.293.3		CR	3.3.293.3 Cybersecurity Software. Software that is included in a system element and arranged such that its inclusion or exclusion in no way affects the executive or site-specific software execution and whose purpose is to reduce the vulnerability of the system and/or equipment to cybersecurity attacks. (SIG-FUN+MS)	SIG TMS and SIG FUN created definitions for Cybersecurity Software, the SIG TMS definition was kept, however the definition should belong to SIG FUN.	Accept - Belongs to SIG-FUN

Task Group 2 CC SCM SIG IDS Notes

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation	RPS Comments	CRO Comments	PL Comments
SIG-IDS	A.17.11.2.1		CR	Selection of acoustic leak detection technology should be based on testing that demonstrates performance is in alignment with the proposed application. As an emerging technology, there are limited industry certification standards for this performance testing, it is up to the AHJ to approve the application. <del>Guidance can be found in prEN 50724, Fixed Ultrasonic Gas Leak Detectors (UGLD) – General requirements and test methods.</del>	The Manual of Style requires references to have a publication date. EN50724 is a draft document that is not published yet. - Also remove the reference from Annex J	The suggested changes are recommended.		This appears to have a date when searching the internet. <a href="https://webstore.ansi.org/standards/ds/dsen507242023">https://webstore.ansi.org/standards/ds/dsen507242023</a>
SIG-IDS	17.7.4.2.3.1		CR	17.7.4.2.3.1* <del>in the absence of specific performance-based design criteria, detectors on ceilings up to 40 ft (12.2 m) in height shall be spaced in accordance with either one of the following:</del> (1) <del>The detectors on ceilings up to 40 ft (12.2 m) shall comply with the following:</del> (a) The distance between detectors shall not exceed a nominal spacing of 30 ft (9.1 m). (b) There shall be detectors within a distance of one-half the nominal spacing, measured at right angles from all walls or partitions extending upward to within the top 15 percent of the ceiling height. (2) *All points on the ceiling up to 40 ft (12.2 m) in height shall have a detector within a distance equal to or less than 0.7 times the nominal 30 ft (9.1 m) spacing (0.75). (3) <del>Detectors shall be located in accordance with performance-based design criteria.</del>	The current wording is confusing by stating if there is no performance criterion, then follow the prescriptive requirements. NFPA 72 is a prescriptive standard with performance based allowances; the prescriptive requirement should be first followed by the performance allowance.	The suggested changes to SR 5025 are recommended but do not address comment of COR.	(1) Detectors on ceilings up to 40 ft (12.2m) in height... (1) (b) the nominal spacing of 30 ft (9.1 M), (1)(b) within the top 15% of the ceiling height is confusing. (2) the nominal spacing of 30 ft (9.1 m).	This doesn't look like it changes much from the previous edition. Not sure that this is a correlation issue. Read the annex note to 17.7.4.2.3.1.
				There shall be detectors within a distance of one-half the nominal spacing, measured at right angles from all walls or partitions <del>that extending</del> upward to within <del>the top</del> 15 percent of the ceiling height.		Consider this for a revision for b.		
SIG-IDS	17.7.2		CR	17.7.2.1 Detectors installed for signal initiation during new construction or <del>building</del> alterations to existing construction shall comply with one of the following: (1) Detectors shall be cleaned and verified to be operating in accordance with the listed sensitivity prior to the final acceptance test of the system. (2) Detectors shall be replaced prior to the final acceptance test of the system.  17.7.2.2 Detectors installed but not operational during <del>building</del> alterations to existing construction shall comply with one of the following: (1) Detectors shall be protected from construction debris, dust, dirt, and damage in accordance with the manufacturer's recommendations and verified to be operating in accordance with the listed sensitivity prior to the final acceptance test of the system. (2) Detectors shall be replaced prior to the final acceptance test of the system.	Editorial suggested the wording of 'alterations to existing construction' in lieu of 'building alterations' to better align with language with in the standard.	The suggested changes are recommended.		This doesn't appear to be a correlation issue to me.
SIG-IDS	17.7.3			Manual stations used to release extinguishing or suppression agents shall <del>comply with 17.15.1 through .8 and shall</del> be identified in one of the following ways:		RPS add: <del>shall comply with 17.15.1 through .8 and shall....</del>		
SIG-IDS	17.19.2.2(B)			Unless otherwise permitted by the <del>dry pipe or preaction valve</del> manufacturer's published installation instructions, the off-normal signal shall be initiated <del>when the pressure increases or decreases by 10 psi (70 kPa)</del> in accordance with NFPA 13 .		RPS: Could not find corresponding reqs in NFPA 13 except for Pressure Tank Alternative.		
				Unless otherwise <del>required by NFPA 13 or unless</del> permitted by the <del>dry pipe or preaction valve</del> manufacturer's published installation instructions, the off-normal signal shall be initiated <del>when the pressure increases or decreases by 10 psi (70 kPa) in accordance with NFPA 13.</del>		Consider this for a revision.		

### Task Group 3 CC SCM SIG NAS Notes

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-NAS, SIG-ECS, SIG-FUN	18.3.7, 24.3.10		CR	See word document 72_SIG_FUN_SIG_NAS_SIG_ECS_NACs.docx	Correlate the DCNAC (18.3.7) and A-NAC(24.3.10) requirements between Chapter 18 and Chapter 24 and rename DCNAC to V-NAC to mirror A-NAC. During the SIG ECS SDM there was disucssion to move the DCNAC and A-NAC requirements to Chapter 10 . - Taken care of in SIG FUN
SIG-NAS, SIG-IDS, SIG-HOU			CR	See word document 72_Standards_references.docx	Referencing of applicable standards for notification appliances and initiating devices was accomplished differently. SIG IDS located example standards in the Annex, SIG-NAS required the appliances to meet a specific standard in the body. SIG-HOU made no revisions (there were no PCs on Chapter 29 regarding reference standards). - Task Group.
SIG-NAS, SIG-HOU	A.18.10.2		CR	A.18.10.2 Notification appliances including, but not limited to, supplemental tactile notification appliances are available for the deaf and hard of hearing. Tactile notification appliances can be capable of awakening people. Such appliances can, through hard wiring into the fire alarm system or by wireless methods, initiate in response to the activation of an audible smoke alarm. Some tests show that visual notification appliances might not be effective in awakening some sleeping individuals during an emergency. Some tactile notification appliances can be more effective in awakening individuals, regardless of hearing levels, from sleep. See the FPRF report, Review of Alarm Technologies for Deaf and Hard of Hearing Populations, and A.29.5.10-2 for further details.	The Annex to 29.5.10.2 was edited and relocated to 29.5.10. The cross reference should be updated from A.29.5.10.2 to A.29.5.10 to point to the correct section. - Passed.
SIG-FUN, SIG-NAS	7.3.4.8		CR	7.3.4.8 Design documentation for maximum public mode audible levels, including the definition of the protected space and design sound pressure levels, shall comply with 18.4.1.9.	The cross reference to 18.4.1.9 was removed by SIG NAS during the second draft meeting. - Done in SIG FUN
SIG-NAS	18.5.3.5		CR	18.5.3.5* Visual notification appliances used for fire alarm signaling only or to signal the intent for complete evacuation shall be clear or nominal white and <del>shall</del> not exceed 1000 cd (effective intensity).	The section contains two shall statements in a single section. If they are two parts of one requirement, they are permitted by the Manual of Style. If they are two requirements, they should be broken into a list or the second 'shall' should be removed. - no action

### Task Group 3 CC SCM SIG NAS Notes

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-NAS	18.5.5.8.2		CR	<p>18.5.5.8.1</p> <p>The installation of visual notification appliances in corridors 20 ft (6.1 m) or less in width shall be in accordance with the requirements of either 18.5.5.7 or 18.5.5.8.</p> <p><del>18.5.5.8.2</del></p> <p>Paragraph 18.5.5.8 shall apply to corridors not exceeding 20 ft (6.1 m) in width.</p>	<p>Section 8.5.5.8.2 appears to be a circular reference to 8.5.5.8.1 as well as redundant. Recommend deleting the section. Renumber subsequent sections. - passed</p>
SIG-NAS	18.8.1.2		CR	<p>18.8.1.2*</p> <p>The sound pressure level, in dBA, of the tone produced by a signaling loudspeaker shall comply with all the requirements in 18.4.4 (public), 18.4.5 (private), <del>or</del> 18.4.6 (sleeping), or 18.4.8 (RAMO) for the intended mode or shall comply with the requirements of 18.4.7 (narrow band tone signaling).</p>	<p>The RAMO mode of operation was added to Chapter 18, but an 18.4.8 cross reference to was not added to 18.8.1.2. Verify that RAMO should be included as a cross reference. - passed</p>
SIG-NAS	18.9.4.10		CR	<p>18.9.4.10</p> <p>Spacing between individual characters shall be a minimum of 10 percent and a maximum of 35 percent of the character height. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. <del>Spacing between individual characters shall be minimum 10 percent and maximum 35 percent of character height.</del></p>	<p>The Manual of Style requires a single sentence per section. The language was reordered to comply with the Manual of Style and for readability. - passed</p>



# CC Second Draft SIG-SSS Review Plus Notes 12/12/2023 (JVK)

FR # or CI#	First Revision	Committee Statement	Public Comment	Statement of Problem and Substantiation for Public Comment	Draft CN or SCR	Comment
SR-5104	<p><b>3.3.82*</b> Digital Alarm Communicator Transmitter (DACT).</p> <p>A <u>fire alarm system component at the protected premises to which initiating devices or groups of devices are connected that transmits signals via loop start technology. The DACT seizes the connected telephone line, dials a preselected number to connect to a DACR, and transmits signals indicating a status change of the initiating device.</u> (SIG-SSS)</p> <p><b>A.3.3.82</b> Digital Alarm Communicator Transmitter (DACT).</p> <p><u>The DACT uses legacy POTS lines, emulated lines from an MFVN, listed communications equipment, or any combination thereof to connect and transmit signals to a DACR to indicate a status change of the fire alarm system.</u> (SIG-SSS)</p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following point is the specific basis for the change.</p> <p>1. Clarified that DACTs are a legacy transmission means based on loop start technology.</p>	<p>Public Comment No. 47-NFPA 72-2023 [ Section No. 3.3.82 ]</p> <p><b>3.3.82*</b> Digital Alarm Communicator Transmitter (DACT).</p> <p><u>A fire alarm system component at the protected premises to which initiating devices or groups of devices are connected. The DACT seizes the connected telephone line, dials a preselected number to connect to a DACR, and transmits signals a fire alarm control unit or a group of control units are connected and transmits voiced-based signals to the DACR.</u></p> <p><b>A.3.3.81</b></p> <p><u>The DACT uses legacy POTS lines or emulated lines from an MFVN or listed communication equipment, or a combination of them, to connect and transmit signals to a DACR indicating a status change of the initiating device.</u> (SIG-SSS)</p> <p><u>fire alarm system.</u></p>	<p>Public Comment No. 47-NFPA 72-2023 [ Section No. 3.3.82</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 and to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p><b>Committee Statement</b> Rejected but see related SR-5104</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following point is the specific basis for the change.</p> <p>1. Clarified that DACTs are a legacy transmission means based on loop start technology.</p>		(JVK) After review there is no correlating committee action required
SR-5147	<p><b>3.3.157*</b> <u>Intermediary Service Provider.</u></p> <p><u>An entity that receives fire alarm system signals from a protected premises for the purpose of retransmitting the signals to the supervising station and for other business purposes.</u> (SIG-SSS)</p> <p><b>A.3.3.157</b> <u>Intermediary Service Provider.</u></p> <p><u>The following are examples of services provided by an intermediary service provider:</u></p> <ol style="list-style-type: none"> <li><u>Signals from a protected premises traverse a path through a communications channel(s) to the intermediary service provider's network servers, which automatically retransmit signals through the communications channel(s) to the responsible supervising station.</u></li> </ol>	<p>Currently, intermediary services providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service provider servers they are processed in a reliable and supervised manner, and do not bypass the supervising station.</p>	<p>Public Comment No. 169-NFPA 72-2023 [ New Section after 3.3.154 ]</p> <p><b>TITLE OF NEW CONTENT</b></p> <p><b>3.3.156* Intermediary Service Provider.</b></p> <p><u>A company that participates in the delivery of signals from an alarm system installed at a protected premises to the responsible supervising station by taking a position in the communications cloud where:</u></p> <ol style="list-style-type: none"> <li><u>Signals from a protected premise traverse a path through communications channel(s) to the intermediary service provider's network servers, which automatically retransmit signals</u></li> </ol>	<p>Public Comment No. 169-NFPA 72-2023 [ New Section after 3.3.154 ]</p> <p><b>Statement of the Problem</b> The proposed new definition is the work of a Task Group assigned by the Chair of SIG-SSS to address an Intermediary Service Provider. The term Intermediary Service Provider is new to NFPA 72 and is used in Chapter 26. The term is defined to add clarity to new material proposed in PC No 168 creating new Section 26.2.11.</p>	<p>SCR-xxxx</p> <p><del>2. The intermediary service provider provides supervision of the connection between itself, the protected premises, and the supervising station.</del></p> <p><u>2. All communication paths from the protected premises, through the intermediary service provider, to the supervising station shall be supervised.</u></p> <p><b>Committee Statement</b> Revised 2 to align with 26.2.11.2.1</p>	<p>(JVK) A.3.3.157 I have an issue with</p> <p><i>2. The intermediary service provider provides supervision of the connection between itself, the protected premises, and the supervising station.</i></p> <p>Even though this is annex material, this statement indicated that the supervision is the responsibility of the intermediate service provider. It does not indicate where the trouble signals are to be announced.</p>

	<p>2. <u>The intermediary service provider provides supervision of the connection between itself, the protected premises, and the supervising station.</u></p> <p>3. <u>The receipt of an alarm by an intermediary service provider signal triggers the following:</u></p> <ol style="list-style-type: none"> <li>1. <u>Immediate retransmission of the signal to the supervising station</u></li> <li>2. <u>Delivery of services not required by this Code, such as notification to a list of supplemental contacts specified by the fire alarm system owner or predictive maintenance analytics</u></li> </ol> <p><u>Figure A.3.3.157 depicts the location of an intermediary service provider in the communications cloud relative to a protected premises and a supervising station. (SIG-SSS)</u></p> <p><b><u>Figure A.3.3.157 Typical Intermediary Service Provider Concept.</u></b></p>		<p>through communications channel(s) to the responsible supervising station.</p> <ol style="list-style-type: none"> <li>b. <u>The intermediary service provider provides supervision of the connection between itself, the protected property, and the supervising station.</u></li> <li>c. <u>The receipt of an alarm signal triggers both a) immediate retransmission of the signal to the supervising station and b) delivery of services not required by this code, such as notification to a list of supplemental contacts specified by the fire alarm system owner, predictive maintenance analytics, and the like.</u></li> </ol> <p><b><u>A.3.3.156 – Figure 3.3.156 depicts the location of an intermediary service provider in the communications cloud relative to a protected premises and a supervising station.</u></b></p>	<p><b>Committee Statement</b></p> <p>Rejected but see related SR-5147</p> <p>Currently, intermediary services providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service provider servers they are processed in a reliable and supervised manner, and do not bypass the supervising station.</p>	<p>The intermediate service provider may provide provided part of all the supervision of its connections to the protected premises and the supervising station, but it is combination of the protected premises, intermediate service provided and the supervising station working as a system that provides all the required supervision.</p>	
<p>SR-5106</p>	<p><b>3.3.172*</b> Managed Facilities-Based Voice Network (MFVN).</p> <p>A physical facilities-based network capable of transmitting real-time signals with formats unchanged that is managed, operated, and maintained by the <del>service provider</del> <u>regulated communications carrier</u> to ensure service quality and reliability from the subscriber location to the <u>supervising station via the public-switched telephone network (PSTN) or interconnection points</u> with other MFVN peer networks <del>or the supervising station.</del> (SIG-SSS)</p> <p><b>A.3.3.172</b> Managed Facilities-Based Voice Network (MFVN).</p> <p>Managed facilities-based voice network (MFVN) service is functionally equivalent to traditional <u>public-switched telephone network-based (PSTN-based) services</u> provided by authorized common carriers (i.e., public utility telephone companies), <u>Incumbent Local Exchange Carriers (ILEC), Local Exchange Carriers (LEC), Competitive Local Exchange Carriers (CLEC), and other Federal Communications Commission-licensed (FCC-licensed) carriers offering interconnection to facilities and unbundled network elements in order to provide such telecommunications services</u>], with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and provides all of the following features:</p> <ol style="list-style-type: none"> <li>1. A loop start telephone circuit service interface.</li> <li>2. Pathway reliability that is assured by proactive management, operation, and maintenance by the MFVN provider.</li> <li>3. <del>8</del> <u>Eight</u> hours of standby power supply capacity for MFVN communications equipment, either located at the protected premises or field deployed. Industry standards followed by the authorized common carriers (public utility telephone companies), <del>and the other communications service providers</del> that operate MFVNs, specifically engineer the selection of the size of the batteries, or other permanently located standby power source, in order to provide 8 hours of standby power with a reasonable degree of accuracy. Of course, over time, abnormal ambient conditions and battery aging can <del>always</del> <u>have a potential</u> adverse effect on battery capacity. The MFVN field-deployed equipment typically monitors the condition of the standby battery and signals potential battery failure to permit the communications service provider to take appropriate action.</li> <li>4. <del>24</del> <u>Twenty-four</u> hours of standby power supply capacity for MFVN communications equipment located at the communications service provider's central office.</li> <li>5. Installation of network equipment at the protected premises with safeguards to prevent unauthorized access to the equipment and its connections.</li> <li>6. <u>Carrier communications and virtual signaling traffic traveled over a fully managed network, such as network facilities owned or leased by a private network connection or a combination thereof.</u></li> </ol> <p>When providing telephone service to a new customer, MFVN providers give notice to the telephone service subscriber of the need to have any connected alarm system tested by authorized fire alarm service personnel in accordance with <u>26.6.2.6 and applicable requirements of Chapter 14</u> to make certain that</p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers.</li> </ol>	<p>Public Comment No. 172-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p>3.3.170* Managed Facilities-Based Voice Network (MFVN). A physical facilities-based network capable of transmitting real-time signals with formats unchanged that is managed, operated, and maintained by the <del>service provider</del> <u>to communications carrier</u> to ensure service quality and reliability from the subscriber location to the <del>interconnection point</del> <u>supervising station via the Public-Switched Telephone Network (PSTN) or interconnection points</u> with other MFVN peer networks <del>or the supervising station.</del> (SIG-SSS)</p> <p>Public Comment No. 213-NFPA 72-2023 [ Section No. A.3.3.170 ]</p> <p><b>A.3.3.170</b> Managed Facilities-Based Voice Network (MFVN).</p> <p>Managed facilities-based voice network service is functionally equivalent to traditional PSTN-based services provided by</p>	<p>Public Comment No. 172-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p><b>Statement of the Problem</b></p> <p>Adds clarification as to the types of carriers that can operate MFVN networks and obligations of MFVN operators.</p> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5106</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers</li> </ol> <p>Public Comment No. 213-NFPA 72-2023 [ Section No. A.3.3.170 ]</p> <p><b>Statement of the Problem</b></p> <p>Adds clarification as to the types of carriers that can operate MFVN</p>	<p>NFPA staff suggest the following change:</p> <p><b>A.3.3.172</b> Managed Facilities-Based Voice Network (MFVN).</p> <p>Managed facilities-based voice network (MFVN) service is functionally equivalent to traditional <u>public-switched telephone network-based (PSTN-based) services</u> provided by authorized common carriers (i.e., <u>public utility telephone companies</u>), <u>Incumbent Local Exchange Carriers (ILEC), Local Exchange Carriers (LEC), Competitive Local Exchange Carriers (CLEC), and other Federal Communications Commission-licensed (FCC-licensed) carriers offering interconnection to facilities and unbundled network elements in order to provide such telecommunications services</u>], with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and provides all of the following features:</p> <p>(JVK) I suggest we do not make this change since the FCC has identified 41 million POTS lines still in service</p>	<p>(JVK) After review there is no correlating committee action required.</p> <p>(JVK) After review there is no correlating committee action required.</p>

<p>all signal transmission features have remained operational. These features include the proper functioning of line seizure and the successful transmission of signals to the supervising station. In this way, the MFVN providers assist their new customers in complying with a testing procedure similar to that outlined in 26.2.7 for changes to providers of supervising station service.</p> <p>The evolution of the deployment of telephone service has moved beyond the sole use of metallic conductors connecting a telephone subscriber's premises with the nearest telephone service provider's control and routing point (wire center). In the last 25 years, telephone service providers have introduced a variety of technologies to transport multiple, simultaneous telephone calls over shared communication pathways. <del>In order to</del> To facilitate the further development of the modernization of the telephone network, the authorized common carriers (public utility telephone companies) have transitioned their equipment into a <del>managed facilities-based voice network (an MFVN)</del> capable of providing a variety of communications services in addition to the <del>provision of</del> traditional telephone service.</p> <p>Similarly, the evolution of digital communications technology has permitted entities other than the authorized common carriers (public utility telephone companies) to deploy robust communications networks and offer a variety of communications services, including telephone service.</p> <p>These alternate service providers fall into two broad categories. The first category includes those entities that have emulated the MFVN provided by the authorized common carriers. The second category includes those entities that offer telephone service using means that do not offer the rigorous quality assurance, operational stability, and consistent features provided by an MFVN.</p> <p><del>The</del> <u>This</u> Code intends to only recognize the use of the telephone network transmission of alarm, supervisory, trouble, and other emergency signals by means of MFVNs.</p> <p>For example, <del>the</del> <u>this</u> Code intends to permit an MFVN to provide facilities-based telephone (voice) service that interfaces with the premises fire alarm or emergency signal control unit through a digital alarm communicator transmitter (DACT) using a loop start telephone circuit and signaling protocols fully compatible with and equivalent to those used in <del>public switched telephone networks</del> <u>PSTNs</u>. The loop start telephone circuit and associated signaling can be provided through traditional copper wire telephone service (<del>POTS</del>—"plain old telephone service", <u>or POTS</u>) or by means of equipment that emulates the loop start telephone circuit and associated signaling and then transmits the signals over a pathway using packet switched (IP) networks or other communications methods that are part of an MFVN.</p> <p>Providers of MFVNs have disaster recovery plans to address both individual customer outages and widespread events such as tornados, ice storms, or other natural disasters, which include specific network power restoration procedures equivalent to those of traditional landline telephone services. (<u>SIG-SSS</u>)</p>		<p>authorized common carriers (public utility telephone companies, <u>Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services,</u>) with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and provides all of the following features:</p> <ol style="list-style-type: none"> <li>1. A loop start telephone circuit service interface.</li> <li>2. Pathway reliability that is assured by proactive management, operation, and maintenance by the MFVN provider.</li> <li>3. 8 hours of standby power supply capacity for MFVN communications equipment either located at the protected premises or field deployed. Industry standards followed by the <u>FCC</u> authorized common carriers (public utility telephone companies <u>Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services,</u> and the other communications service providers that operate MFVNs, specifically engineer the selection of the size of the batteries, or other permanently located standby power source, in order to provide 8 hours of standby power with a reasonable degree of accuracy. Of course, over time, abnormal ambient conditions and battery aging can always have a potentially adverse effect on battery capacity. The MFVN field-deployed equipment typically monitors the condition of the standby battery and signals potential battery failure to permit the communications service provider to take appropriate action.</li> <li>4. 24 hours of standby power supply capacity for MFVN communications equipment located at the communications service provider's central office.</li> <li>5. Installation of network equipment at the protected premises with safeguards to prevent unauthorized access to the equipment and its connections.</li> </ol> <p>When providing telephone service to a new customer, MFVN providers <del>give notice to the</del> <u>should advise the</u> telephone service subscriber of the need to have any connected alarm system tested by authorized fire alarm service personnel in accordance with Chapter 14 to make certain that all signal transmission features have remained operational. These features include the proper functioning of line seizure and the successful transmission of signals to the supervising station. In this way, the MFVN providers <u>may</u> assist their new customers in complying with a testing procedure similar to that outlined in 26.2.7 for changes to providers of supervising station service.</p> <p>The evolution of the deployment of telephone service has moved beyond the sole use of metallic conductors connecting a telephone subscriber's premises with the nearest telephone service provider's control and routing point (wire center). In the last 25 years, telephone service providers have introduced a variety of technologies to transport multiple, simultaneous telephone calls over shared communication pathways. In order to facilitate the further development of the modernization of the telephone network, the authorized common carriers (public utility telephone companies, <u>Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services,</u>) have transitioned their equipment into a managed facilities-based voice network (MFVN)</p>	<p>networks and obligations of MFVN operators.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5106</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers.</li> </ol>		
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			<p>capable of providing a variety of communications services in addition to the provision of traditional telephone service.</p> <p>Similarly, the evolution of digital communications technology has permitted entities other than the authorized common carriers (public utility telephone companies) <del>to</del> <u>Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services.</u> to deploy robust communications networks and offer a variety of communications services, including telephone service.</p> <p>These alternate service providers fall into two broad categories. The first category includes those entities that have emulated the MFVN provided by <del>the authorized common carriers</del> <u>FCC authorized common carriers including but not limited to Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services.</u> The second category includes those entities that offer telephone service using means that do not offer the rigorous quality assurance, operational stability, and consistent features provided by an MFVN.</p> <p>The Code intends to only recognize the use of the telephone network transmission of alarm, supervisory, trouble, and other emergency signals by means of MFVNs.</p> <p>For example, the Code intends to permit an MFVN to provide facilities-based telephone (voice) service that interfaces with the premises fire alarm or emergency signal control unit through a digital alarm communicator transmitter (DACT) using a loop start telephone circuit and signaling protocols fully compatible with and equivalent to those used in public switched telephone networks. The loop start telephone circuit and associated signaling can be provided through traditional copper wire telephone service (POTS — “plain old telephone service”) or by means of equipment that emulates the loop start telephone circuit and associated signaling and then transmits the signals over a pathway using packet switched (IP) networks or other communications methods that are part of an MFVN.</p> <p>Providers of MFVNs have disaster recovery plans to address both individual customer outages and widespread events such as tornados, ice storms, or other natural disasters, which include specific network power restoration procedures equivalent to those of traditional landline telephone services.</p> <p>Public Comment No. 130-NFPA 72-2023 [ Section No. A.3.3.170 ]</p> <p><b>A.3.3.170</b> Managed Facilities-Based Voice Network (MFVN).</p> <p>Managed facilities-based voice network service is <del>functionally</del> <u>functionally</u> equivalent to traditional PSTN-based services provided by authorized common carriers (public utility telephone companies) with respect to dialing, dial plan, call completion, carriage of signals and protocols, and loop voltage treatment and provides all of the following features:</p> <ol style="list-style-type: none"> <li>1. A loop start telephone circuit service interface.</li> <li>2. Pathway reliability that is assured by proactive management, operation, and maintenance by the MFVN provider.</li> <li>3. 8 hours of standby power supply capacity for MFVN communications equipment either located at the protected premises or field deployed. Industry standards followed by the authorized common carriers (public utility telephone companies), <del>and the other communications service Local Exchange Carriers service</del> providers that operate MFVNs, specifically engineer the selection of the size of the batteries, or other permanently located standby power source, in order to provide 8 hours of standby power with a reasonable degree of</li> </ol>	<p>Public Comment No. 130-NFPA 72-2023 [ Section No. A.3.3.170 ]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 and to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5106</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing</p>		<p>(JVK) After review there is no correlating committee action required</p>
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			<p>accuracy. Of course, over time, abnormal ambient conditions and battery aging can always have a potentially adverse effect on battery capacity. The MFVN field-deployed equipment typically monitors the condition of the standby battery and signals potential battery failure to permit the communications service provider to take appropriate action.</p> <ol style="list-style-type: none"> <li>4. 24 hours of standby power supply capacity for MFVN communications equipment located at the communications service provider's central office.</li> <li>5. Installation of network equipment at the protected premises with safeguards to prevent unauthorized access to the equipment and its connections.</li> </ol> <p>When providing telephone service to a new customer, MFVN providers give notice to the telephone service subscriber of the need to have any connected alarm system tested by authorized fire alarm service personnel in accordance with <u>26.6.2.3.9 and applicable requirements of Chapter 14</u> to make certain that all signal transmission features have remained operational. These features include the proper functioning of line seizure and the successful transmission of signals to the supervising station. In this way, the MFVN providers assist their new customers in complying with a testing procedure similar to that outlined in 26.2.7 for changes to providers of supervising station service.</p> <p>The evolution of the deployment of telephone service has moved beyond the sole use of metallic conductors connecting a telephone subscriber's premises with the nearest telephone service provider's control and routing point (wire center). In the last 25 years, telephone service providers have introduced a variety of technologies to transport multiple, simultaneous telephone calls over shared communication pathways. In order to facilitate the further development of the modernization of the telephone network, the authorized common carriers (public utility telephone companies) have transitioned their equipment into a managed facilities-based voice network (MFVN) capable of providing a variety of communications services in addition to the provision of traditional telephone service.</p> <p>Similarly, the evolution of digital communications technology has permitted entities other than the authorized common carriers (public utility telephone companies) to deploy robust communications networks and offer a variety of communications services, including telephone service.</p> <p>These alternate service providers fall into two broad categories. The first category includes those entities that have emulated the MFVN provided by the authorized common carriers. The second category includes those entities that offer telephone service using means that do not offer the rigorous quality assurance, operational stability, and consistent features provided by an MFVN.</p> <p>The Code intends to only recognize the use of the telephone network transmission of alarm, supervisory, trouble, and other emergency signals by means of MFVNs.</p> <p>For example, the Code intends to permit an MFVN to provide facilities-based telephone (voice) service that interfaces with the premises fire alarm or emergency signal control unit through a digital alarm communicator transmitter (DACT) using a loop start telephone circuit and signaling protocols fully compatible with and equivalent to those used in public switched telephone networks. The loop start telephone circuit and associated signaling can be provided through traditional copper wire telephone service (POTS — "plain old telephone service") or by means of equipment that emulates the loop start telephone circuit and associated signaling and then transmits the signals over a pathway using packet switched (IP) networks or other communications methods that are part of an MFVN.</p> <p>Providers of MFVNs have disaster recovery plans to address both individual customer outages and widespread events such as tornados, ice storms, or other natural disasters, which include specific network power restoration procedures equivalent to those of traditional landline telephone services.</p>	<p>important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers.</li> </ol>		
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			<p>Public Comment No. 48-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p><b>3.3.170*</b> Managed Facilities-Based Voice Network (MFVN).</p> <p><u>A physical facilities-based network capable of transmitting real-time signals with formats unchanged that is managed, operated, and maintained by the service provider to ensure service quality and reliability from the subscriber location to the interconnection point with public-switched telephone network (PSTN) interconnection points or other MFVN peer networks or the networks the supervising station.-(SIG-SSS)</u></p>	<p>Public Comment No. 48-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5106</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers.</li> </ol>		<p>(JVK) After review there is no correlating committee action required</p>
			<p>Public Comment No. 48-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p><b>3.3.170*</b> Managed Facilities-Based Voice Network (MFVN).</p> <p><u>A physical facilities-based network capable of transmitting real-time signals with formats unchanged that is managed, operated, and maintained by the service provider to ensure service quality and reliability from the subscriber location to the interconnection point with public-switched telephone network (PSTN) interconnection points or other MFVN peer networks or the networks the supervising station.-(SIG-SSS)</u></p>	<p>Public Comment No. 48-NFPA 72-2023 [ Section No. 3.3.170 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5106</p>		<p>(JVK) After review there is no correlating committee action required</p>

			<p>Public Comment No. 225-NFPA 72-2023 [ Section No. A.26.6.3.5 ]</p> <p><b>A.26.6.3.5</b></p> <p>When considering a fire alarm system utilizing a single communication path to the supervising station, consideration should be given to the risk exposure that results from the loss of that path for any period of time and for any reason. Some of these outages can be regular and predicable and others transitory.</p> <p>One example of a single technology used to produce two paths is the use of a digital cellular premises unit communicating with two or more cell towers. In this case, the supervising station and the protected premises must be made aware if communications degrades to below two towers. Another example is the use of two different cellular carriers to produce the two paths. Similarly, in this case the supervising station and the protected must be made aware if communications degrades to one carrier.</p> <p><u>This example can be mitigated by the MFVN provider offering supervision of the connectivity function by alerting change of state or loss of Network Registration from the Telecommunications Network Equipment gateway.</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Providing clarification that the MFVN is a regulated communications service/carrier.</li> <li>2. The annex language was expanded for clarity of FCC licensed carriers.</li> </ol> <p>Public Comment No. 225-NFPA 72-2023 [ Section No. A.26.6.3.5 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>Adds information on how the carrier can play a role in monitoring the connectivity of the communications pathway within the MFVN.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5106</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p>		<p>(JVK) After review there is no correlating committee action required</p>
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				<p>1. Providing clarification that the MFVN is a regulated communications service/carrier.</p> <p>2. The annex language was expanded for clarity of FCC licensed carriers.</p>		
PC-141		<p>Rejected</p> <p>The current language is sufficient. The responding technician would not be allowed into the facility when emergency responders are still operating. Technicians should also be equipped with their own CO detection equipment.</p>	<p>Public Comment No. 141-NFPA 72-2023 [ Section No. 26.2.4.1.3.2 ]</p> <p>26.2.4.1.3.2 Servicing of a system shall occur within 4 hours of the carbon monoxide alarm signal</p>	<p>Public Comment No. 21-NFPA 72-2023 [ Section No. 26.2.4.1.3.2 ]</p> <p><b>Statement of the Problem</b></p> <p>NOTE: The following CC Note No. 22 appeared in the First Draft Report on First Revision No. 5026. Review the language of 26.2.4.1.3.2. Consider revision to the language. The language indicates that servicing of the carbon monoxide alarm should be within 4 hours of the activation of the alarm. However, the servicing should be 4 hours after an all clear has been issues by the first responders. It is important that the service personnel are not put in harms way, if the CO event is still under investigation.</p> <p><b>Committee Statement</b></p> <p>Rejected</p> <p>The current language is sufficient. The responding technician would not be allowed into the facility when emergency responders are still operating. Technicians should also be equipped with their own CO detection equipment</p>	<p>SCR-xxxx</p> <p><u>A.26.2.4.1.3.2</u> The start of the 4 hour time window occurs once the emergency responders issue an "all clear"</p> <p><b>Committee statement</b></p> <p>The addition of the annex material clarifies the starting point of the 4-hour period.</p>	<p>(JVK) After reviewing, the commentor make a good point that the servicing timing should not be within 4 hours of the initial activation of the alarm, but 4 hours after the "all clear" has been given by the emergency responders. The committee statement implies the commentors, justification has merit, but did not take actions. Should add annex material.</p>
SR-5142	<p><b>26.2.8</b> Supervising Station Signal Processing Equipment.</p> <p>Signal processing equipment located at the supervising station listed to UL 60950-1, <i>Information Technology Equipment — Safety — Part 1: General Requirements</i> or UL 62368-1, <i>Audio/Video, Information and Communication Technology Equipment — Part 1: Safety Requirements</i>, and used for computer-aided alarm and supervisory signal processing shall not be required to comply with 10.3.5 provided if it is installed and operated conforming to in accordance with UL 1981, <i>Central-Station Automation Systems</i>, within an environment that is maintained at a level within the temperature, humidity, and voltage rating range of the equipment, and the equipment manufacturer's published instructions are available for examination.</p>	<p>Added an additional publication that is used in the industry.</p>	CC	<p>CC</p> <p><b>Statement of the Problem</b></p> <p><b>Committee Statement</b></p> <p>Added an additional publication that is used in the industry</p>	See SR-5152	<p>(JVK) I have no idea where this came from but, after review, there is no correlating committee action required</p>
PC-21		<p>Rejected</p> <p>These provisions are necessary to allow for temporary work from home in an emergency. It doesn't matter what the declared emergency is, it is critical to allow the continuity of supervising station monitoring.</p>	<p>Public Comment No. 21-NFPA 72-2023 [ Section No. 26.2.10 ]</p> <p><del>26.2.10 Emergency Monitoring Locations.</del> <del>26.2.10.4</del> <del>Upon an emergency declaration made by a national, state, or local authority that results in a business disruption event that inhibits normal operation of a supervising station, fire alarm system signals shall be permitted to be received at alternate locations other than a listed central station, proprietary supervising station, or remote supervising station.</del> <del>26.2.10.2</del> <del>The provision of 26.2.10.1 shall be permitted to remain in effect for the duration of the emergency declaration.</del> <del>26.2.10.3</del> <del>Specific authorization by local authorities having jurisdiction shall not be required for emergencies declared by a higher authority.</del> <del>26.2.10.4</del> <del>The provision of 26.2.10.1 shall be permitted to remain in place for not more than 30 calendar days following the termination of the declared emergency.</del></p>	<p>Public Comment No. 21-NFPA 72-2023 [ Section No. 26.2.10 ]</p> <p><b>Statement of the Problem</b></p> <p>TIA 22-2 resulted in the placement of Section 26.10.2 in NFPA. This section permits supervising station operators to work from remote locations, such as a residence, during declared emergencies. Working remotely must be discontinued within 30 days following the termination of the declared emergency. Supervising stations are intended to receive life safety and property protection signals and re-transmit them to the public communications center and/or property owner. Supervising stations are traditionally hardened locations to protect against environmental disasters, security breaches, power outages, communications outages, and so forth. Supervising stations must be always staffed with at least two</p>		<p>(JVK) After review there is no correlating committee action required.</p>



				<p>operators . Subscribers pay for these services and expect a reliable service. Protection from unpredictable failures of power loss and/or internet connectivity requires mission critical equipment that the Central Station automatically switches to in the event of either or both of these pivotal sources failing. On the other hand, an operator working from home cannot duplicate this level of preparedness and protection, let alone know when these failures interrupt the operators ability to monitor subscriber's premises.</p> <p>TIA 22-2 was intended to provide relief during the COVID-19 pandemic, when many local governments required citizens to quarantine. The text was incorporated as a new Section 26.10.2 and allows remote operators during a declared emergency. The text became a permanent part of the 2022 edition. Although intended to address the COVID-19 pandemic, these provisions may apply to other declared emergencies, both local and national. The COVID-19 emergency enacted in March 2020 has not been terminated (at the time of submission of this PC), primarily for political reasons. However, most citizens believe the pandemic is over and has been for some time. Yet, many organizations are still allowing remote working. At the time of TIA 22-2 approval, nobody anticipated the emergency would last for more than three years.</p> <p>Curiously, few if any, local public emergency communications centers permitted remote working. Operators reported to dispatch centers across the country on a daily basis during the pandemic. Dispatchers are considered essential employees and supervising station operators should be categorized the same way.</p> <p>Working from home is fraught with foreseeable and unforeseeable distractions that are not permitted in a supervising station environment. These include but are not limited to personal use of cellular phones, televisions, family members/roommates, unauthorized viewing of security information by others/ persons in the home, children, unpredictable loss of internet access and connectivity, power surges, extended power failures, lightning damage, texting, social media, noisy neighbors, and so forth. Additionally, persons who monitor from home are subject to the same risks that monitored subscribers face.</p> <p>Enforcement of strict policies regarding distractions is very difficult, if not impossible when operators work remotely. Other concerns include use of the public Internet, security, power outages, communications outages/redundancy, lack of a dedicated workspace, a lack of fire protection, etc.</p> <p>Consumers of alarm monitoring services were sold alarm systems that were represented to be monitored by</p>		
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				<p>operators who are stationed within the four-walls of a UL Listed Central Station. No work from home monitoring can match what for over one hundred years has stood the test of time and been the standard of care including but not limited to being an inherently distraction free environment when working inside a UL Central Station.</p> <p>There is no security and/or life safety benefit whatsoever to work from home monitoring. Instead, the only thing that can be reliably quantified is that UL Listed Central Stations have increased their profitability by using this method. Customers are paying for a service and have expectations of a certain quality of the product</p> <p>Distracted operators working from home are not in the best interest of the industry and should be used only where there are no other options. For example, a hurricane, tornado, blizzard, or earthquake may damage a supervising station in a specific location or prevent staff from commuting. If there is no subsidiary station, then remote working may be warranted until such time the supervising station can be reopened. Some supervising station owners are citing recruitment/retention issues. Some are additionally seeking to reduce their real estate footprint. This may be good for the bottom line but cost savings is hardly a valid reason to continue remote operation as it exists today. Supervising stations monitor life safety systems and are critical in nature. TIA 22-2 was implemented with the best of intentions. However, unintended consequences such as hand-offs/operator availability, infrastructure, and distractions were downplayed and must be addressed. It is understood that UL is currently revising UL 827 so that operators to work remotely. The proposed provisions may help alleviate some of the concerns and risks stated above. If those changes find their way into UL 827, then Section 26.10.2 should be eliminated for redundancy because UL 827 would permit remote operators, regardless of whether an emergency is declared.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected</p> <p>These provisions are necessary to allow for temporary work from home in an emergency. It doesn't matter what the declared emergency is, it is critical to allow the continuity of supervising station monitoring.</p>		
PC-211		<p>Rejected</p> <p>NFPA 72 already gives the ability to approve an alternative monitoring location in an emergency to the AHJ. UL 827 is still in a draft form.</p>	<p>Public Comment No. 211-NFPA 72-2023 [ New Section after 26.2.10.4 ]</p> <p><b><u>TITLE OF NEW CONTENT</u></b>  <u>26.2.11 Alternate Monitoring Location</u>  <u>Upon approval of AHJ fire alarm system signals shall be permitted to be received at alternative locations in accordance</u></p>	<p>Public Comment No. 211-NFPA 72-2023 [ New Section after 26.2.10.4 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>This section if allowed would allow monitoring to be provided from any location with no regard to the listing</p>		<p>(JVK). The comment UL 827 is in draft form is incorrect. It is UL 827A that is in draft form</p>

			<p>with UL 827 other than a listed central station, proprietary supervising station, or remote supervising station.</p>	<p>requirements of the monitoring station. This would be a large step back from what is currently required for listed centers. This has provided a means to provide service during a declared emergency but there is no guidance as to which emergencies the previous sections allow this to be in effect and would open the door for monitoring to be completed remotely from the listed station with no rules on secondary power, IT security and facility security. This section would be a large step backwards for the code and I propose not adding it.</p> <p><b>Committee Statement</b></p> <p>Rejected</p> <p>NFPA 72 already gives the ability to approve an alternative monitoring location in an emergency to the AHJ. UL 827 is still in a draft form.</p>		
<p>SR-5149</p>	<p><b>26.2.11 Intermediary Service Providers.</b></p> <p><b>26.2.11.1</b></p> <p><u>Where an intermediary service provider is used, the requirements of 26.2.11.2 through 26.2.11.4 shall be met.</u></p> <p><b>26.2.11.2</b></p> <p><u>Intermediary service providers shall include the services listed in 26.2.11.2.1 through 26.2.11.2.5.</u></p> <p><b>26.2.11.2.1*</b></p> <p><u>All communication paths from the protected premises, through the intermediary service provider, to the supervising station shall be supervised at an interval of not more than 60 minutes.</u></p> <p><b>A.26.2.11.2.1</b></p> <p><u>Intermediary service providers can use one or more communications paths between a fire alarm system installed at a protected premises and its own facility(ies), and between its own facility(ies) and the supervising station. Permitted pathways can include those cited in 26.6.3, 26.6.4, or 26.6.5.</u></p> <p><b>26.2.11.2.2</b></p> <p><u>Failure of any pathway shall be annunciated at the responsible supervising station.</u></p> <p><b>26.2.11.2.3</b></p> <p><u>Failure to complete a signal transmission shall be annunciated at the protected premises.</u></p> <p><b>26.2.11.2.4</b></p> <p><u>All alarm, trouble, and supervisory signals from fire alarm systems received by an intermediary service provider shall be electronically retransmitted, without delay, to the supervising station responsible for acknowledgement and signal dispositioning.</u></p> <p><b>26.2.11.2.5</b></p> <p><u>Routine retransmission of signals from the protected premises to their destination supervising station shall comply with 26.4.4.4, 26.6.3.3, and 26.6.3.4.</u></p> <p><b>26.2.11.3</b></p> <p><u>All elements of fire alarm service required by this section shall be provided by a company that has a listing covering these elements.</u></p> <p><b>26.2.11.4</b></p> <p><u>Intermediary service provider facilities that support the delivery of signals to a supervising station from a protected premises fire alarm system installed in accordance with this Code shall conform to the construction, fire protection, physical security, cybersecurity, emergency lighting, power, communications</u></p>	<p>Currently, intermediary service providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service providers servers, they are processed in a reliable and supervised manner, and do not bypass the supervising station.</p>	<p>Public Comment No. 168-NFPA 72-2023 [ Section No. 26.7 ]</p> <p><del>26.</del></p> <p><del>7- Subsidiary Stations or</del></p> <p><del>2.11 Intermediary Service Provider.</del></p> <p><del>Providers</del></p> <p><del>26.</del></p> <p><del>7</del></p> <p><del>2:</del></p> <p><del>1- General.</del></p> <p><del>26.7.1.1-</del></p> <p><del>The requirements of this section shall apply to gateway communications systems between the protected premises and the public safety answering points (PSAP).</del></p> <p><del>26.7.1.2-</del></p> <p><del>Gateway communication systems shall consist of fire alarm control units, transmitters, and other signal initiating devices or technologies that communicate on wireless network(s) from the protected premises through the gateway to a PSAP.</del></p> <p><del>26.7.1.3*-</del></p> <p><del>The systems covered under Section 26.7 shall be for the transmission of signals between the protected premises and a PSAP.</del></p> <p><del>26.7.1.4-</del></p> <p><del>This section shall establish minimum required levels of performance, reliability, and quality for gateways and signal transmission from the gateway to a PSAP.</del></p> <p><del>26.7.2- Gateway Communication Systems.</del></p> <p><del>26.7.2.1-</del></p> <p><del>Gateway communications systems shall be designed, installed, operated, and maintained in accordance with 26.7.2 to provide reliable transmission and receipt of alarms in a manner acceptable to the authority having jurisdiction.</del></p> <p><del>26.7.2.2-</del></p> <p><del>A gateway communications system shall be permitted to be used for the transmission of other signals or calls of a public emergency nature, provided that such transmission does not interfere with the transmission and receipt of fire alarms.</del></p> <p><del>26.7.2.3-</del></p>	<p>Public Comment No. 168-NFPA 72-2023 [ Section No. 26.7 ]</p> <p><b>Statement of the Problem</b></p> <p>At the conclusion of the First Draft meeting a Task Group was created by the Chair of SIG-SSS to further review possible requirements to address the transmission of signals from the protected premises, thru a provider, and on to a supervising station. During the First Draft meeting, FR No. 5108 was created which added new language for Subsidiary Stations or Intermediary Service Provider in Section 26.7. The submitted language found in PC No. 168 is the work of the Task Group and seeks to eliminate all of FR No. 5108, which created a new Section 26.7. In its place, PC No 168 creates a new Section 26.2.11, and related Annex material, addressing Intermediary Service Providers. The following is the technical substantiation for the proposed Public Comment.</p> <p>Rapid technological advances in recent years have enabled the availability of intermediary alarm transmission services aimed at enhancing the user experience of all stakeholders in contemporary fire alarm protection. Intermediary services delivered by third-party providers have a position in the communications cloud which places them between a protected premises and the responsible supervising station. Signals from a protected premise traverse a path through communications channel(s) to the third-party provider's network servers, which then forward signals through communications channel(s) to the responsible supervising station.</p> <p>A market for third-party intermediary alarm transmission related services has evolved in which the intermediary service providers typically:</p>		<p>(JVK) I'm struggling with 26.2.11.2.5.</p> <p>Why is only 26.6.3.3 and 26.6.3.4 acceptable, when A.26.11.2.1 also allows 26.6.3, 26.6.4 and 26.6.5.</p> <p>Is this a correlation issue?</p>

	<p>infrastructure, and service resiliency requirements for intermediary service providers contained in UL 827, <i>Central-Station Alarm Services</i>.</p>		<p>All devices shall be designed to function satisfactorily under the climatic and environmental conditions to which they could be exposed.</p> <p><del>26.7.2.3.1</del></p> <p>All devices shall be identified as suitable for the location and conditions for which they are installed.</p> <p><del>26.7.2.4</del></p> <p>All circuits, paths, and equipment necessary for the receipt of signals from a protected premises shall be monitored for integrity.</p> <p><del>26.7.2.5</del></p> <p>All systems and signal transmissions shall be under the control of a designated supervising station.</p> <p><del>26.7.2.5.1</del></p> <p>Designation shall be through a contract between the owner and the supervising station.</p> <p><del>26.7.2.5.2</del></p> <p>The contract between the owner and the supervising station shall be the only one in force.</p> <p><del>26.7.2.6</del></p> <p>All gateway equipment shall be listed for its purpose.</p> <p><del>26.7.2.7</del></p> <p>All gateway equipment shall be installed in locations accessible to the authority having jurisdiction for the purpose of inspection.</p> <p><del>26.7.2.8</del></p> <p>Gateway communications systems shall, in their entirety, be subject to a complete operational acceptance test upon completion of system installation.</p> <p><del>26.7.2.8.1</del></p> <p>The operational test(s) shall comply with the following:</p> <ol style="list-style-type: none"> <li><del>1. Be made in accordance with the requirements of the authority having jurisdiction</del></li> <li><del>2. In no case be less than those stipulated in Chapter 14</del></li> </ol> <p><del>26.7.2.8.2</del></p> <p>Operational acceptance tests shall be performed on any alarm reporting devices, as covered in Section 26.7, that are installed or modified subsequent to the test required by 26.7.2.8.</p> <p><del>26.7.2.9</del></p> <p>Personnel shall be qualified in accordance with the requirements of 10.5.7.</p> <p><del>26.7.3 Communications Methods.</del></p> <p><del>26.7.3.1 Application.</del></p> <p><del>26.7.3.1.1</del></p> <p>A gateway communications system shall include wireless network(s) for command and control communications between the protected premises, alarm processing equipment, supervising station, and PSAP.</p> <p><del>26.7.3.1.2</del></p> <p>A gateway communications system shall be permitted to be used with emergency communications systems covered under Chapter 24.</p> <p><del>26.7.3.2 Wireless Network(s).</del></p> <p><del>26.7.3.2.1</del></p>	<ol style="list-style-type: none"> <li>1. Perform in a manner that has some similarities to a subsidiary station.</li> <li>2. Delivers some, or all, elements of the fire alarm transmission services required by NFPA 72, such as supervision of the connection between itself and the protected premises, and reporting communication loss to the responsible supervising station when necessary.</li> <li>3. Upon receipt of specific NFPA 72 defined signals from a fire alarm system, a) immediately retransmit the signal to the responsible supervising station and b) initiate delivery of services not required by this code, but of value to the system owner and other stakeholders, such as notification to a list of supplemental contacts specified by the system owner, predictive analytics that enable preventative maintenance, and the like.</li> </ol> <p>Historically, intermediary service providers were considered part of the communications cloud by virtue of the receive-and-forward nature of code-defined signal handing. In that respect, they appeared to emulate the function of an internet routing point.</p> <p>Recent events have demonstrated that the internet router analogy is flawed as loss of service from an intermediary service provider is not necessarily just routed around by standard internet protocols. Loss of an intermediary service provider can effectively create a denial-of-service situation that disrupts the responsible supervising station's ability to deliver its life-safety services, potentially to a large number of protected premises.</p> <p>This proposal is intended to recognize the key role of intermediary service providers in contemporary alarm protection service and to manage the risks associated with their participation by establish baseline requirements that protect the interests of stakeholders in that protection.</p> <p>The proposal puts focus on compliance with UL827 to address issues related to intermediary service provider construction, fire protection, security, emergency lighting, as well as resilient power, communications, and overall service delivery resiliency. Industry suggests that an ANSI compliant continuous development Standards process (such as that used by Underwriters Laboratories Inc) is best positioned to respond to rapid technology changes that underlie NFPA 72 compliant service delivery.</p> <p>Related Item • FR No. 5108</p> <p><b>Committee Statement</b> Rejected but see related SR-5149</p>		
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			<p>The terms <i>wireless network</i> and <i>cellular transmission</i> shall be considered the same and interchangeable throughout this section.</p> <p><del>26.7.3.2.2</del></p> <p>All wireless networks shall meet the requirements of 26.7.3.2.3 through 26.7.3.2.6.</p> <p><del>26.7.3.2.3</del></p> <p>In addition to the requirements of this Code, all wireless equipment shall be designed and operated in compliance with all applicable rules and regulations of the Federal Communications Commission (FCC) or, where required, the National Telecommunications and Information Administration (NTIA).</p> <p><del>26.7.3.2.4</del></p> <p>Unlicensed wireless networks shall not be permitted.</p> <p><del>26.7.3.2.5</del></p> <p>Fire alarm signals, other emergency alarm signals, and monitoring for integrity signals shall be permitted on the same wireless network, dedicated for that purpose.</p> <p><del>26.7.3.2.6</del></p> <p>Two independent means shall be provided to retransmit an alarm signal from the gateway to the designated PSAP.</p> <p><del>26.7.4 Alarm Processing Equipment.</del></p> <p>The alarm processing equipment at the gateway required to receive and control signals from the protected premises shall be installed and maintained as defined in NFPA 1225.</p> <p><del>26.7.5 Visual Recording Devices.</del></p> <p><del>26.7.5.1</del></p> <p>Alarms shall be automatically received and recorded at the gateway.</p> <p><del>26.7.5.2</del></p> <p>A device for producing a permanent graphic recording of all alarm, supervisory, trouble, and test signals received or retransmitted, or both, shall be provided at each gateway for each system.</p> <p><del>26.7.5.3</del></p> <p>Reserve recording devices shall be provided in accordance with 26.7.5.3.1 and 26.7.5.3.2.</p> <p><del>26.7.5.3.1</del></p> <p>Where each gateway is served by a dedicated recording device, the number of reserve recording devices required on site shall be equal to at least 5 percent of the systems that are in service and in no case less than one device.</p> <p><del>26.7.5.3.2</del></p> <p>Where two or more gateways are served by a common recording device, a reserve recording device shall be provided on site for each gateway connected to a common recorder.</p> <p><del>26.7.5.4</del></p> <p>Permanent visual records shall comply with 26.7.5.4.1 and 26.7.5.4.2.</p> <p><del>26.7.5.4.1</del></p> <p>A permanent visual record and an audible signal shall be required to indicate the receipt of an alarm.</p> <p><del>26.7.5.4.2</del></p> <p>The permanent record shall indicate the exact location from which the alarm is being transmitted.</p> <p><del>26.7.5.5</del></p>	<p>Currently, intermediary service providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service providers servers, they are processed in a reliable and supervised manner, and do not bypass the supervising station.</p>		
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			<p>Facilities shall be provided with a device that automatically records the date and time of receipt of each alarm.</p> <p><del>26.7.6 System Integrity.</del></p> <p><del>26.7.6.1</del></p> <p>Circuits upon which transmission and receipt of alarms depend shall be constantly monitored for integrity to provide prompt warning of conditions adversely affecting reliability.</p> <p><del>26.7.6.2</del></p> <p>The power supplied to all required circuits and devices of the system shall be constantly monitored for integrity.</p> <p><del>26.7.7 Trouble Signals.</del></p> <p><del>26.7.7.1</del></p> <p>Trouble signals shall be indicated where there is a trained and competent person on duty at all times within a gateway.</p> <p><del>26.7.7.2</del></p> <p>Trouble signals shall be distinct from alarm signals and be indicated by a visual and audible signal.</p> <p><del>26.7.7.3</del></p> <p>A switch for silencing the audible trouble signal shall be permitted, provided that the visual signal remains operating until the silencing switch is restored to its normal position.</p> <p><del>26.7.7.4</del></p> <p>The audible signal shall be responsive to faults on any other circuits that occur prior to restoration of the silencing switch to its normal position.</p> <p><del>26.7.8 Power Supply.</del></p> <p><del>26.7.8.1</del></p> <p>The requirements of 26.7.8 shall be met for primary and secondary power for the gateway.</p> <p><del>26.7.8.2</del></p> <p>Visual and audible means to indicate a 15 percent or greater reduction of normal power supply (rated voltage) shall be provided.</p> <p><del>26.7.8.3</del></p> <p>Where the electrical service/capacity of the equipment required under Section 4.7 of NFPA 1225 satisfies the needs of equipment in this section, such equipment shall not be required to be duplicated.</p> <p><del>26.7.9 Engine Driven Generators.</del></p> <p>The installation of engine driven generator sets shall be in accordance with NFPA 37, NFPA 110, and NFPA 1225.</p> <p><del>26.7.10 Equipment Fire Protection.</del></p> <p>Where applicable, electronic computer/data processing equipment shall be protected in accordance with NFPA 75.</p> <p><del>26.7.11 Gateway.</del></p> <p><del>26.7.11.1</del></p> <p>All equipment shall be listed for its intended use and shall be installed in accordance with NFPA 70.</p> <p><del>26.7.11.2 Alarm Processing Equipment.</del></p> <p><del>26.7.11.2.1</del></p> <p>The alarm processing equipment shall be located where it can be monitored for alarm and trouble conditions.</p> <p><del>26.7.11.2.2</del></p>			
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			<p>The alarm processing equipment shall be accessible in case of a pathway or communications failure with the communications center.</p> <p><del>26.7.11.3</del></p> <p>Wireless alarm repeating systems used to repeat signals between a protected premises and the gateway processing equipment location shall meet the requirements of 26.7.11.3.1 through 26.7.11.3.4.</p> <p><del>26.7.11.3.1</del></p> <p>There shall be a minimum of two complete and independent alarm repeater systems, including batteries and power supplies.</p> <p><del>26.7.11.3.2</del></p> <p>If the gateway is configured with one alarm repeater in standby mode, the system shall be capable of both of the following:</p> <ol style="list-style-type: none"><li>1. Detecting a communications failure</li><li>2. Automatically switching to the backup system without interruption or loss of any alarm or trouble transmission</li></ol> <p><del>26.7.11.3.3</del></p> <p>Gateways shall not be used for any purpose other than alarm communications between the protected premises and the PSAP.</p> <p><del>26.7.11.3.4</del></p> <p>Where it is not possible to use the gateway alarm reporting infrastructure to provide communications between the protected premises and a PSAP, alarm processing equipment at the contracted supervising station shall be used in accordance with Section 26.3, Section 26.4, or Section 26.5.</p> <p><del>26.7.11.4</del></p> <p>Pathways between the protected premises and the gateway alarm processing equipment shall be monitored for integrity, be dedicated, and not be used for any other purpose.</p> <p><del>26.7.11.5</del></p> <p>When communications protected premises and the gateway alarm processing equipment fails, the requirements of 26.7.11.5.1 through 26.7.11.5.3 shall apply.</p> <p><del>26.7.11.5.1</del></p> <p>A pathway or communications trouble condition shall be detected and annunciated at the protected premises, the originating supervising station, and the gateway alarm processing equipment within 200 seconds and meet the requirements of 26.7.7.</p> <p><del>26.7.11.5.2</del></p> <p>Visual and audible trouble alarm indications pertaining to a pathway or communications failure between the protected premises and the gateway alarm processing equipment shall be distinct from all other trouble alarms.</p> <p><del>26.7.11.5.3</del></p> <p>The gateway alarm processing equipment shall be manned by trained personnel until communications can be re-established.</p> <p><u>11.1</u> Where an Intermediary Service Provider is used, the requirements of 26.2.11.2 through 26.2.11.3 shall be met.</p> <p><u>26.2.11.2</u> Intermediary Service Providers shall include the services listed in 26.2.11.2.1 through 26.2.11.2.3.</p> <p><u>26.2.11.2.1</u>*All communication paths from the protected premises, through the intermediary service provider, to the supervising station shall be supervised at an interval of not more than 60 minutes.</p> <p><u>A.26.2.11.2.1</u> Intermediary Service Providers may utilize one or more communications paths between a fire alarm system installed at a protected premises and its own facility(s), and between its own facility and the supervising station. Permitted pathways may include 26.6.3 Performance-Based Technologies, 26.6.4 Digital</p>			
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			<p>Communicator Systems, or 26.6.5 Radio Systems. The failure of any pathway should immediately be annunciated at the responsible supervising station. The failure to complete a signal transmission should immediately be annunciated at the protected premises.</p> <p><b>26.2.11.2.2</b>*All alarm, trouble, and supervisory signals from fire alarm systems received by an intermediary service provider shall be retransmitted, without delay, electronically to the supervising station responsible for signal dispositioning.</p> <p><b>A.26.2.11.2.2</b>Routine retransmission of signals to their destination supervising station should take a maximum of 5 seconds from receipt of a signal until the electronic retransmission to the supervising station.</p> <p><b>26.2.11.2.3</b>Other elements of fire alarm service required by this code shall be provided by a company that has a listing covering these elements.</p> <p><b>26.2.11.3</b> Intermediary Service Provider facilities that support the delivery of signals to a supervising station, from a protected premises fire alarm system installed in accordance with this code shall, by January 1, 2027, conform to the construction, fire protection, physical security, cybersecurity, emergency lighting, power, communications infrastructure, and service resiliency requirements for Intermediary Service Providers contained in the latest edition of UL 827, Central Station Alarm Services.</p>			
SR-5111	<p><b>26.5.7.2</b></p> <p>The status of all alarm, supervisory, and trouble signals shall be noted and recorded <u>at the beginning of each shift or change in personnel.</u></p>	<p>The language of the section was revised to comply with the manual of style. It appears that the technical meaning was changed as the requirement to record the status of alarm, supervisory, and trouble signals was inadvertently deleted. The revision corrects the language to require the status of the signals to be recorded at the beginning of each shift or change in personnel.</p>	<p>Public Comment No. 142-NFPA 72-2023 [ Section No. 26.5.7.2 ]</p> <p>26.5.7.2 The status of all alarm, supervisory, and trouble signals shall be noted and recorded.</p>	<p>Public Comment No. 142-NFPA 72-2023 [ Section No. 26.5.7.2 ]</p> <p><b>Statement of the Problem</b></p> <p>NOTE: The following CC Note No. 23 appeared in the First Draft Report on First Revision No. 5125.</p> <p>Review the language of 26.5.7.2. The status of alarm, supervisory, and trouble signals should be recorded and should be performed at the beginning of each shift or change in personnel. As it written it is not clear when this is to be done. The language of the section was revised to comply with the manual of style, however it appears that the technical meaning was changed as the requirement to record the status of alarm, supervisory, and trouble signals is now not required at the beginning of each shift or change in personnel.</p> <p>Related Item • FR - 5125</p> <p><b>Committee Statement</b> Rejected but see related SR-5111</p> <p>The language of the section was revised to comply with the manual of style. It appears that the technical meaning was changed as the requirement to record the status of alarm, supervisory, and trouble signals was inadvertently deleted. The revision corrects the language to require the status of the signals to be recorded at the beginning of each shift or change in personnel.</p>		(JVK) After review there is no correlating committee action required
SR-5112	<p><b>26.6.1.1</b></p> <p>Section 26.6 shall apply to the following:</p> <ol style="list-style-type: none"> <li>Transmitter located at the protected premises</li> </ol>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical</p>	<p><b>Public Comment No. 136-NFPA 72-2023 [ Section No. 26.6.1.1 ]</b></p> <p><b>26.6.1.1</b> Section 26.6 shall apply to the following:</p>	<p>Public Comment No. 136-NFPA 72-2023 [ Section No. 26.6.1.1 ]</p> <p><b>Statement of the Problem</b></p>		(JVK) After review there is no correlating committee action required.



	<p>2. *Transmission channel between the protected premises and the supervising station or subsidiary station</p> <p><b><u>A.26.6.1.1(2)</u></b></p> <p><u>For a fire alarm system that relies on a DACS to establish communications channels between the protected premises and the supervising station via the PSTN or MFVN, the requirement to supervise circuits between the protected premises and the supervising station is considered to be met if the communications channel is periodically tested in accordance with 26.6.4.2.5. It is not the intent of this section to regulate the PSTN or other MFVNs.</u></p> <p>3. If used, any subsidiary station and its communications channel</p> <p>4. Signal receiving, processing, display, and recording equipment at the supervising station</p>	<p>advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p>	<ol style="list-style-type: none"> <li>1. Transmitter located at the protected premises</li> <li>2. * Transmission channel between the protected premises and the supervising station or subsidiary station</li> </ol> <p><u>Add Annex: 26.6.1.1 For fire alarm systems that rely on digital alarm communicator systems to establish communications channels between the protected premises and the central station via the public switched telephone network or another MFVN, the requirement to supervise circuits between the protected premises and the central station is considered to be met if the communications channel is periodically tested in accordance with 26.6.4.2.5. It is not the intent of this section to regulate the PSTN or other MFVNs.</u></p> <ol style="list-style-type: none"> <li>1. If used, any subsidiary station and its communications channel</li> <li>2. Signal receiving, processing, display, and recording equipment at the supervising station</li> </ol>	<p>6.6.1.1 (2) implies that chapter 26 applies to the entirety of the transmission channel between the protected premises and the supervising station, but this is often not the case. It is recommended to add an Annex note consistent with an annex note already in section 10.6.9.2 highlighting that the PSTN and other MFVNs are not regulated by chapter 26.</p> <p>See 10.6.9.2 * Power supply sources and electrical supervision for digital alarm communications systems shall be in accordance with Section 10.6, 10.6.9, Section 10.19, and Section 12.6.</p> <p>Annex 10.6.9.2 Because digital alarm communicator systems establish communications channels between the protected premises and the central station via the public switched telephone network, the requirement to supervise circuits between the protected premises and the central station (see 12.6.1 and 12.6.2) is considered to be met if the communications channel is periodically tested in accordance with 26.6.4.2.5.</p> <p>Neither chapter 26 nor NFPA 72 is intended to regulate the hardware or procedures of communications companies that are otherwise regulated by the FCC or Public Utility Commissions.</p> <p><b><u>Committee Statement</u></b> Rejected but see related SR-5112</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. Annex material was added for clarification of what is included in the list that are regulated in the DACT section 26.6.1.1.</p>		
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			<p><b>6.6.1.1</b></p> <p>Section 26.6 shall apply to the following:</p> <ol style="list-style-type: none"> <li>1. Transmitter located at the protected premises</li> <li>2. Transmission channel between the protected premises and the supervising station or subsidiary station <u>except for any portion of the channel that is carried by or over a circuit provided by an FCC approved carriers. These circuit boundaries are defined as any portion of the circuit between the FCC defined network demarcation or standard network interface points at either end of a transmission channel.</u></li> <li>3. If used, any subsidiary station and its communications channel <u>and:</u></li> <li>4. Signal receiving, processing, display, and recording equipment at the supervising station</li> </ol>	<p>Public Comment No. 215-NFPA 72-2023 [ Section No. 26.6.1.1 ]</p> <p><b>Statement of the Problem</b> NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5112</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. Annex material was added for clarification of what is included in the list that are regulated in the DACT section 26.6.1.1.</p>		(JVK) After review there is no correlating committee action required.
SR-5116	<p><b>26.6.2.4.4*</b></p> <p><u>Communications pathways shall be permanently identified, as approved by the AHJ, at each connection point from the FACU to the service provider communications equipment.</u></p> <p><b>A.26.6.2.4.4</b></p> <p><u>The identification of fire alarm system communications pathways by the building owner or its designees is critical to the integrity and sustainability of these systems. Therefore, the marking of such pathways and their integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no changes to these pathways at the protected premises are made without proper AHJ notification. Due to the wide variety of circumstances and conditions that might need to be labeled, the means of labeling is left to AHJ approval. Suggested language for the marking or signage of these pathways and shared equipment might include language similar to, "This is part of a communications systems pathway, no changes to this equipment or configurations shall be made without notifying the local AHJ," or more simply, "Fire communications pathway, notify AHJ BEFORE modification."</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p>	<p>Public Comment No. 218-NFPA 72-2023 [ New Section after 26.6.2.4.3 ]</p> <p><b>TITLE OF NEW CONTENT</b></p> <p><b>26.6.2.4.4 *</b></p> <p><u>Communication pathways shall be labeled where the fire alarm equipment interfaces to the other communication equipment as required by the AHJ.</u></p> <p><b>A 26.6.2.4.4.</b><u>The identification of fire alarm system communication pathways by the building owner or its designees are critical to the integrity and sustainability of these systems. Therefore, the marking of this pathway and its integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no unapproved changes are made to these pathways. Due to the wide variety of circumstances and conditions that may need to be labeled, the means of labeling is left to the approval of the AHJ. Suggested language for the marking or signage of these pathways and share equipment might include language similar to: "This is part of a communication systems pathway, no changes to this equipment or configurations shall be made without approvals from the local AHJ," or more simply, "Fire Communications Pathway, Notify AHJ BEFORE modification." Placement of such markings must always be on the "Customer" side of the FCC Standard Network Interface (SNI), or FCC defined demarcation connection point. In no instance may such marking be</u></p>	<p>Public Comment No. 218-NFPA 72-2023 [ New Section after 26.6.2.4.3 ]</p> <p><b>Statement of the Problem</b> Expands on information proposed by the performance based task group but has additional annex guidance as NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5116</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of</p>	<p>SCR-xxxx</p> <p><del>26.6.2.4.4*</del> <del>Communications pathways shall be permanently identified, as approved by the AHJ, at each connection point from the FACU to the service provider communications equipment.</del></p> <p><del>A.26.6.2.4.4</del> <del>The identification of fire alarm system communications pathways by the building owner or its designees is critical to the integrity and sustainability of these systems. Therefore, the marking of such pathways and their integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no changes to these pathways at the protected premises are made without proper AHJ notification. Due to the wide variety of circumstances and conditions that might need to be labeled, the means of labeling is left to AHJ approval. Suggested language for the marking or signage of these pathways and shared equipment might include language similar to, "This is part of a communications systems pathway, no changes to this equipment or</del></p>	<p>(JVK) Why is this here? 26.2.6 (1) already covers this. This is redundant and not necessary.</p> <p><b>See SCR-xxxx changes to SR-5151</b></p>

		<p>1. To ensure identification of the pathway between the communications carrier and the fire alarm control panel.</p>	<p><u>applied to or affixed to any equipment, terminal, or hardware provided by or maintained by the FCC approved Network Carrier (Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements to provide such telecommunications services.) Such equipment is considered property of the respective Carrier. Such Network Equipment is separated from customer premises equipment by the FCC SNI or Demarc.</u></p> <p>Public Comment No. 50-NFPA 72-2023 [ New Section after 26.6.2.4 ]</p> <p><u>26.6.2.4.4 *</u></p> <p><u>Communication pathways shall be labeled, as required by the AHJ, where the fire alarm equipment interfaces to the other communication equipment.</u></p> <p><u>A 26.6.2.4.4.</u></p> <p><u>The identification of fire alarm system communication pathways by the building owner or its designees are critical to the integrity and sustainability of these systems. Therefore, the marking of this pathway and its integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no unapproved changes are made to these pathways. Due to the wide variety of circumstances and conditions that may need to be labeled, the means of labeling is left to the approval of the AHJ. Suggested language for the marking or signage of these pathways and share equipment might include language similar to: "This is part of a communication systems pathway, no changes to this equipment or configurations shall be made without approvals from the local AHJ," or more simply, "Fire Communications Pathway, Notify AHJ BEFORE modification."</u></p>	<p>numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. To ensure identification of the pathway between the communications carrier and the fire alarm control panel.</p> <p>Public Comment No. 50-NFPA 72-2023 [ New Section after 26.6.2.4 ]</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p><b>Committee Statement</b> Rejected but see related SR-5116</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. To ensure identification of the pathway between the communications carrier and the fire alarm control panel.</p>	<p><del>configurations shall be made without notifying the local AHJ," or more simply, "Fire communications pathway, notify AHJ BEFORE modification."</del></p> <p><b>Committee Statement</b></p> <p>This requirement does not belong under 26.6.2.4* Equipment. It should have been placed in the new section 26.6.2.6* Communications Pathway Management was introduced by SR 5151 during the comment draft.</p>	<p>JVK) Why is this here? 26.2.6 (1) already covers this. This is redundant and not necessary.</p> <p><b>See SCR-xxxx changes to SR-5151</b></p>
PC-173		Rejected but held	Public Comment No. 173-NFPA 72-2023 [ New Section after 26.6.2.5 ] <u>26.6.2.4.4 Equipment Physical Protection</u>	Public Comment No. 173-NFPA 72-2023 [ New Section after 26.6.2.5 ]		(JVK) After review there is no correlating committee action required

		<p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle.</p>	<p><u>26.6.2.4.4.1 Communication equipment, power supplies, and circuits at the protected premises, located on the customer side of the FCC demarcation or standard network interface, used for transmission of fire alarm signals shall be secured from tampering and protected from hazardous conditions, including weather conditions that can adversely affect the equipment operations, or be listed to for such conditions.</u>  <u>26.6.2.4.4.2 Communication equipment, power supplies, and circuits at the protected premises, located on the carrier side of the FCC demarcation or standard network interface, used for transmission of fire alarm signals shall be secured and installed in accordance with FCC approved telecommunications wiring standards applicable to the specific installation.</u></p>	<p><b>Statement of the Problem</b></p> <p>Similar text was discussed by the performance standards task group for inclusion in section 26.6.3, but these requirements are really applicable to all technologies and on both the customer and carrier side of the demarcation point, when one is present. Having the requirements included here would help to improve alarm transmission reliability of for all technologies.</p> <p><b>Committee Statement</b></p> <p>Rejected but held</p> <p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle.</p>		
SR-5151	<p><b>26.6.2.6*</b> <u>Communications Pathway Management.</u>  <u>Any changes to the communications pathway, communications technologies, or communications hardware at the protected premises shall meet all of the following:</u></p> <ol style="list-style-type: none"> <li><u>The AHJ shall be notified.</u></li> <li><u>Reacceptance testing shall be performed in accordance with Chapter 14.</u></li> <li><u>Documentation shall be provided in accordance with Chapter 7.</u></li> <li><u>Secondary power shall be verified as complying with 26.6.3.13.</u></li> </ol> <p><b>A.26.6.2.6</b>  <u>Since many authorities are now requiring change in monitoring permits to verify compliance with new technology configurations, hardware, and programming, it has become important for protected premises and contracted vendors to not only properly identify the communications technologies and hardware to be implemented, but also make sure the application of such technologies and pathways are implemented in conformance with this Code. It is the responsibility of the building owner or its designees to ensure that any changes to the communications pathway, technologies, or hardware at the protected premises are compliant.</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>This revision clarifies that the AHJ should be notified of changes in communications equipment and assure that the signals are transmitted properly via any new communications channels.</li> <li>Back up power must be verified for the newly added communications equipment.</li> </ol>	<p>Public Comment No. 49-NFPA 72-2023 [ New Section after 26.6.2.3 ]</p> <p><u>26.6.2.3.9*</u>  <u>Any changes to the communication pathway, technologies or hardware at the protected premises shall meet the following:</u></p> <ol style="list-style-type: none"> <li><u>AHJ notified</u></li> <li><u>Reacceptance and documentation requirements of Chapter 7</u></li> <li><u>Secondary power shall be inspected yearly to ensure it is maintained in compliance to 26.6.3.13.</u></li> </ol> <p><u>A.26.6.2.3.9</u>  <u>As many authorities are now requiring change in monitoring permits to verify compliance with the new technology configurations, hardware and programming, it has become important for protected premise and contracted vendors to not only properly identify the communication technologies and hardware to be implemented, but also to make sure the application of this technology and pathways are implemented in conformance with the code. It is the responsibility of the building owner or its designees to ensure that any changes to the communication pathway, technologies, or hardware at the protected premises are compliant.</u></p>	<p>Public Comment No. 49-NFPA 72-2023 [ New Section after 26.6.2.3 ]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item  • CI 5100</p> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5151</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>This revision clarifies that the AHJ should be notified of changes in</li> </ol>	<p>SCR-xxxx</p> <p><b>26.6.2.6*</b> <u>Communications Pathway Management.</u>  <u>Any changes to the communications pathway, communications technologies, or communications hardware at the protected premises shall meet all of the following:</u></p> <ol style="list-style-type: none"> <li><u>The AHJ shall be notified.</u></li> <li><u>Reacceptance testing shall be performed in accordance with Chapter 14.</u></li> <li><u>Documentation shall be provided in accordance with Chapter 7.</u></li> <li><u>Secondary power shall be verified as complying with 26.6.3.13.</u></li> <li><u>Communications pathways shall be permanently identified, as approved by the AHJ, at each connection point from the FACU to the service provider communications equipment.</u></li> </ol> <p><b>A.26.6.2.6</b>  <u>Since many authorities are now requiring change in monitoring permits to verify compliance with new technology configurations, hardware, and programming, it has become important for protected premises and contracted vendors to not only properly identify the communications technologies and hardware to be implemented, but also make sure the application of such technologies and pathways are implemented in conformance with this Code. It is the responsibility of the building owner or its designees to ensure that any changes to the communications pathway, technologies, or hardware at the protected premises are compliant.</u></p> <p><u>(5) The identification of fire alarm system communications pathways by the building owner or its designees is</u></p>	<p>(JVK) Why is this here? 26.2.6 (1) already covers this. This is redundant and not necessary.</p> <p>See SR-5116</p>

				<p>communications equipment and assure that the signals are transmitted properly via any new communications channels.</p> <p>2. Back up power must be verified for the newly added communications equipment.</p>	<p><u>critical to the integrity and sustainability of these systems. Therefore, the marking of such pathways and their integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no changes to these pathways at the protected premises are made without proper AHJ notification. Due to the wide variety of circumstances and conditions that might need to be labeled, the means of labeling is left to AHJ approval. Suggested language for the marking or signage of these pathways and shared equipment might include language similar to, "This is part of a communications systems pathway, no changes to this equipment or configurations shall be made without notifying the local AHJ." or more simply, "Fire communications pathway, notify AHJ BEFORE modification."</u></p> <p><b>Committee Statement</b></p> <p>The SR-5116 requirements belong under the new section 26.6.2.6* Communications Pathway Management introduced during the comment draft. Not in 26.6.2.4* Equipment.</p>	
SR-5118	<p><b>26.6.3.2</b> Communications Integrity.</p> <p><del>Provision shall be made to monitor the</del>The integrity of the transmission technology and its communications path shall comply with 26.6.3.2.1 through 26.6.3.2.3.</p> <p><b>26.6.3.2.1</b></p> <p><u>Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></p> <p><b>26.6.3.2.2</b></p> <p><u>Communications equipment installed at the protected premises shall comply with 26.6.3.2.2.1 and 26.6.3.2.2.2.</u></p> <p><b>26.6.3.2.2.1</b></p> <p><u>Premises equipment installed to transmit signals shall be listed for the purpose and comply with the applicable requirements of 26.6.3.</u></p> <p><b>26.6.3.2.2.2</b></p> <p><u>Premises equipment initiating signal transmission at the control unit shall be listed independently of the communications technology and be part of the fire alarm system.</u></p> <p><b>26.6.3.2.3</b></p> <p><u>Communications service provider equipment installed at the protected premises shall comply with 26.6.3.2.3.1 and 26.6.3.2.3.2.</u></p> <p><b>26.6.3.2.3.1</b></p> <p><u>Communications services equipment from communications service providers, including MFVN providers, shall be listed as communications and information technology equipment and comply with applicable requirements of 26.6.3.12 and 26.6.3.13.</u></p> <p><b>26.6.3.2.3.2</b></p> <p><u>Communications services equipment from communications service providers complying with 26.6.4.2.1.3 and used to transmit signals shall be listed independently of the communications technology used.</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. The requirements for listing were added to improve fire alarm reliability</p> <p>2. Delineates between the premises and the service provider equipment.</p>	<p>Public Comment No. 51-NFPA 72-2023 [ Section No. 26.6.3.2 ]</p> <p><u>26.6.3.2</u></p> <p><u>Communications Integrity</u></p> <p><u>Provision shall be made to monitor the integrity of the transmission technology and its communications path by the following requirements:</u></p> <p><u>26.6.3.2.1</u></p> <p><u>Acknowledgements to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></p> <p><u>26.6.3.2.2</u></p> <p><u>The communication equipment installed at the protected premises shall conform to the following requirements:</u></p> <p><u>(1) Premises Equipment</u></p> <p><u>(a) Equipment installed to transmit signals shall be listed for the purpose and meets the applicable requirements of 26.6.3.</u></p> <p><u>(b) Equipment initiating signal transmission at the fire alarm control unit or as a separate communicator shall be considered part of the fire alarm system and be listed independently of the communication technology used.</u></p> <p><u>(2) Providers of Communication Services Equipment</u></p> <p><u>(a) Equipment provided by communication service providers, including MFVN providers shall be listed as communications and information technology equipment and meet the applicable requirements of 26.6.3.</u></p> <p><u>(b) Equipment from service providers complying with 26.6.4.2.1.3 used to retransmit signals shall be listed independently of the communication technology used.</u></p>	<p>Public Comment No. 51-NFPA 72-2023 [ Section No. 26.6.3.2 ]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item</p> <ul style="list-style-type: none"> <li>• CI 5000</li> </ul> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5118</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the</p>	<p><u>critical to the integrity and sustainability of these systems. Therefore, the marking of such pathways and their integrated shared equipment is equally important for the integrity of the fire alarm system to make sure that no changes to these pathways at the protected premises are made without proper AHJ notification. Due to the wide variety of circumstances and conditions that might need to be labeled, the means of labeling is left to AHJ approval. Suggested language for the marking or signage of these pathways and shared equipment might include language similar to, "This is part of a communications systems pathway, no changes to this equipment or configurations shall be made without notifying the local AHJ." or more simply, "Fire communications pathway, notify AHJ BEFORE modification."</u></p> <p><b>Committee Statement</b></p> <p>The SR-5116 requirements belong under the new section 26.6.2.6* Communications Pathway Management introduced during the comment draft. Not in 26.6.2.4* Equipment.</p>	<p>(JVK) After review I struggle with the wording of 26.6.3.2.1 "Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station."</p> <p>I believe it is missing a word...."signals"</p> <p>26.6.3.2.1 Acknowledgments <del>to</del> of the protected premises signals for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</p>

			<p>Public Comment No. 174-NFPA 72-2023 [ New Section after 26.6.3.2 ]</p> <p><u>26.6.3.2.1 Acknowledgements to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></p> <p><u>26.6.3.3 Equipment installed at the premises shall conform to the following:</u></p> <ol style="list-style-type: none"> <li>1.       <ol style="list-style-type: none"> <li>a. <u>Premises Equipment</u> <ol style="list-style-type: none"> <li>i. <u>Equipment initiating signal transmission as the control unit or as a separate communicator shall be considered part of the fire alarm system and be listed as such independently of the communication technology used.</u></li> <li>ii. <u>Equipment installed as customer premises alarm signaling equipment to transmit fire alarm signals shall be listed as communications and information technology equipment.</u></li> </ol> </li> <li>b. <u>Equipment provided by MFVN providers shall be listed as communications and information technology equipment.</u></li> </ol> </li> </ol>	<p>following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The requirements for listing were added to improve fire alarm reliability</li> <li>2. Delineates between the premises and the service provider equipment.</li> </ol> <p>Public Comment No. 174-NFPA 72-2023 [ New Section after 26.6.3.2 ]</p> <p><b>Statement of the Problem</b> Investigation with FCC approved carriers regarding faults with fire alarm transmission implicate the lack of device listing as a major cause of poor system performance. Adding requirements for listing for both customer equipment and MFVN provided equipment, on top of the existing requirements for testing and supervision, will improve the reliability of fire alarm transmission.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5118</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The requirements for listing were added to improve fire alarm reliability</li> <li>2. Delineates between the premises and the service provider equipment.</li> </ol> <p>Public Comment No. 222-NFPA 72-2023 [ Section No. 26.6.3.2 ]</p> <p><b>Statement of the Problem</b> Expands on work of performance based task group which emphasizes the importance of listing but adds clarification that c NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the</p>		<p>(JVK) After review I struggle with the wording of 26.6.3.2.1 "Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station."</p> <p>I believe it is missing a word....."signals"</p> <p>26.6.3.2.1 Acknowledgments to of the protected premises signals for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</p> <p>(JVK) After review I struggle with the wording of 26.6.3.2.1 "Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station."</p> <p>I believe it is missing a word....."signals"</p>
			<p>Public Comment No. 222-NFPA 72-2023 [ Section No. 26.6.3.2 ]</p> <p>26.6.3.2 Communications Integrity.</p> <p>Provision shall be made to monitor the integrity of the transmission technology and its communications path <u>by the following requirements:</u></p> <ol style="list-style-type: none"> <li>1. <u>Acknowledgements to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></li> </ol>	<p>Public Comment No. 222-NFPA 72-2023 [ Section No. 26.6.3.2 ]</p> <p><b>Statement of the Problem</b> Expands on work of performance based task group which emphasizes the importance of listing but adds clarification that c NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the</p>		<p>(JVK) After review I struggle with the wording of 26.6.3.2.1 "Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station."</p> <p>I believe it is missing a word....."signals"</p>

			<p><u>(2) The customer provided communication equipment installed at the protected premises shall conform to one of the following requirements:</u></p> <p><u>(a) Premises Equipment</u></p> <p><u>i. Equipment installed as Customer premises alarm signaling equipment to transmit signals shall be listed for the purpose that meets the applicable requirements of 26.6.3.</u></p> <p><u>ii. Equipment initiating signal transmission at control unit or as a separated communicator shall be considered part of the fire alarm system and be listed per 26.6.3.2(a) independently of the communication technology used</u></p> <p><u>(b) Providers of Communication Services Equipment</u></p> <p><u>i. Equipment provided by communication service providers, including MFVN providers shall be listed as communications and information technology equipment and meet the applicable requirements of 26.6.3. for any equipment installed on the customer side of the FCC demarc or standard network interface.</u></p> <p><u>ii. Equipment from service providers complying with 26.6.4.2.1.3 and installed on the customer side of the FCC demarc or standard network interface, used to retransmit signals shall be listed per 26.6.3.2(b) independently of the communication technology used. Any equipment connected on the Network side of the FCC demarc or standard network interface shall carry the appropriate UL listing for Telecommunications Network Equipment.</u></p> <p>Public Comment No. 212-NFPA 72-2023 [ New Section after 26.6.2.5 ]</p> <p><u>TITLE OF NEW CONTENT</u></p> <p><u>26.6.2.4.2.1 Equipment utilized for transmission of Fire Alarm Signals shall be listed for the purpose.</u></p>	<p>network side of the FCC demarcation point.</p> <p>Related Item • CI-5176</p> <p><b><u>Committee Statement</u></b> Rejected but see related SR-5118</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The requirements for listing were added to improve fire alarm reliability</li> <li>2. Delineates between the premises and the service provider equipment.</li> </ol> <p>Public Comment No. 212-NFPA 72-2023 [ New Section after 26.6.2.5 ]</p> <p><b><u>Statement of the Problem</u></b> Many emulation devices are being installed that are not listed for fire use and may not have sufficient power as outlined in Chapter 10 of this standard. If the device is going to be used for Fire Alarm Panel communication then it should be listed for the purpose.</p> <p>Related Item • PI-303</p> <p><b><u>Committee Statement</u></b> Rejected but see related SR-5118</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address</p>		<p>26.6.3.2.1 Acknowledgments to of the protected premises signals for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</p> <p>(JVK) After review I struggle with the wording of 26.6.3.2.1 "Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station."</p> <p>I believe it is missing a word....."signals"</p> <p>26.6.3.2.1 Acknowledgments to of the protected premises signals for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</p>
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				changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.  1. The requirements for listing were added to improve fire alarm reliability  2. Delineates between the premises and the service provider equipment.		
SR-5121	<p><b>26.6.3.3</b> Single Communications Path.</p> <p><del>Unless prohibited by the enforcing authority, governing laws, codes, or standards, where a single communications path is used, the following requirements shall be met:</del></p> <ol style="list-style-type: none"> <li><del>1. The path shall be supervised at an interval of not more than 60 minutes.</del></li> <li><del>2. A failure of the path shall be annunciated at the supervising station within not more than 60 minutes.</del></li> <li><del>3. The failure to complete a signal transmission shall be annunciated at the protected premises in accordance with Section 10.15.</del></li> </ol> <p><b>26.6.3.3.1</b></p> <p><del>A single communications path shall be permitted unless prohibited by the AHJ or by governing laws, codes, or standards.</del></p> <p><b>26.6.3.3.2</b></p> <p><del>Where a single communications path is used, the following requirements shall be met:</del></p> <ol style="list-style-type: none"> <li>1. <u>The path shall be supervised for integrity to ensure end-to-end communications at an interval of not more than 60 minutes.</u></li> <li>2. <u>A failure of the path within 60 minutes shall be annunciated in accordance with Section 10.15.</u></li> </ol>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1.This section is revised in accordance with the Manual of Style and does not include any technical changes.</p>	<p>Public Comment No. 56-NFPA 72-2023 [ New Section after 26.6.3.3 ]</p> <p><u>26.6.3.3 Single Communications Path.</u></p> <p><u>26.6.3.3.1</u></p> <p><u>A Single Communications Path shall be permitted unless prohibited by the enforcing authority, governing laws, codes, or standards.</u></p> <p><u>26.6.3.3.2</u></p> <p><u>Where a single communication path is used, the following requirements shall be met:</u></p> <ol style="list-style-type: none"> <li>1. <u>The path shall be supervised for integrity to ensure end to end communications within not more than 60 minutes.</u></li> <li>2. <u>A failure of the path within not more than 60 minutes shall be annunciated in accordance with Section 10.15.</u></li> </ol>	<p>Public Comment No. 56-NFPA 72-2023 [ New Section after 26.6.3.3 ]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5121</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1.This section is revised in accordance with the Manual of Style and does not include any technical changes.</p>	<p>SCR-xxxx</p> <p>26.6.3.3 Single Communications Pathway.</p> <p>26.6.3.3.1 A single communications pathway shall be permitted unless prohibited by the AHJ or by governing laws, codes, or standards.</p> <p>26.6.3.3.2 Where a single communications pathway is used, the following requirements shall be met:</p> <ol style="list-style-type: none"> <li>1. The pathway shall be supervised for integrity to ensure end-to-end communications at an interval of not more than 60 minutes.</li> <li>2. A failure of the pathway within 60 minutes shall be annunciated in accordance with Section 10.15.</li> </ol> <p><b>Committee Statement</b></p> <p>Section 26.6.3.3 describes a communications path, 26.6.3.4 describes communication pathways, and 26.6.3.5 describes multiple paths. This revision correlates the usage of 'pathway' and 'pathways' in lieu of 'path' and 'paths'.</p>	<p>(JVK) per NFPA input, SCR-xxxx has been suggested to change the work "path" to "pathways". Pathways is used throughout the code. Path is not.</p>
SR-5134	<p><b>26.6.3.4</b> Multiple Communications Paths/Pathways.</p>	<p>This revision clarifies that multiple pathways must be arranged so that a failure on</p>	<p>Public Comment No. 224-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p>	<p>Public Comment No. 224-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p>		<p>(JVK) After review there is no correlating committee action required.</p>



<p><del>If</del>Where multiple transmission <del>paths</del>pathways are used, the following requirements shall be met:</p> <ol style="list-style-type: none"> <li>Each <del>path</del>pathway shall be supervised <del>within for integrity to ensure end-to-end communications at an interval of not more than 6 hours.</del></li> <li><del>The failure of any path of a multipath system shall be annunciated at the supervising station within not more than 6 hours.</del></li> <li>Multiple communications <del>paths</del>pathways shall be arranged so that a single point of failure <del>shall on one pathway does not cause more than a single path to fail</del>the failure of other pathways.</li> <li><del>The failure</del>Failure to complete a signal transmission shall be annunciated <del>at the protected premises</del>in accordance with Section 10.15.</li> </ol>	<p>one pathway does not cause a failure of any other pathway. NFPA 72 only regulates on premises pathways and equipment beyond the premises is outside the scope of NFPA 72</p>	<p><b>26.6.3.4</b> Multiple Communications Paths.</p> <p>If multiple transmission paths are used, the following requirements shall be met:</p> <ol style="list-style-type: none"> <li>Each path shall be supervised within not more than 6 hours.</li> <li>The failure of any path of a multipath system shall be annunciated at the supervising station within not more than 6 hours.</li> <li>Multiple communications paths shall be arranged so that a single point of failure shall not cause more than a single path to fail. <u>This provision does not apply to Telecommunication Network Equipment installed on the Network side of the FCC demarc or standard network interact that may be provided by FCC approved Carriers. Such equipment is considered part of the transmission, switching and carrier function of said provider networks and fully regulated by FCC carrier regulation.</u></li> <li>The failure to complete a signal transmission shall be annunciated at the protected premises in accordance with Section 10.15.</li> </ol> <p>Public Comment No. 67-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p> <p><b>26.6.3.</b></p> <p><del>4</del> Multiple <b>4 Multiple Communications Paths.</b></p> <p><del>Where</del> If multiple transmission paths are used, the following requirements shall be met:</p> <ol style="list-style-type: none"> <li><u>Each path shall be supervised for integrity to ensure end to end communications within not more than 6 hours.</u></li> <li><u>The failure of any path of a multipath system shall be annunciated at the supervising station within not more than 6 hours.</u></li> <li><u>Multiple communications paths shall be arranged so that a single point of failure downstream of the listed protected premises equipment permitted by 26.6.3.2 shall not cause more than a single path to fail.</u></li> <li><u>The failure to complete a signal transmission of any path within not more than 6 hours shall be annunciated at the protected premises in accordance with Section 10.15.</u></li> </ol> <p>Public Comment No. 175-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p>	<p><b>Statement of the Problem</b> NFPA 72 does not address the architecture of the MFVN with respect to single points of failure or overall reliability.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5134</p> <p>This revision clarifies that multiple pathways must be arranged so that a failure on one pathway does not cause a failure of any other pathway. NFPA 72 only regulates on premises pathways and equipment beyond the premises is outside the scope of NFPA 72.</p> <p>Public Comment No. 67-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p> <p><b>Statement of the Problem</b> The intent of this committee input is to create a task group to evaluate the existing arrangement of Section 26.6 (Communications Methods) and harmonize all communications methods into the requirements for performance-based technologies to the extent this is possible. This would permit and regulate the use of new and emerging communication technologies while eliminating prescriptive requirements for outdated technologies, which are currently being phased out due to many factors such as regulatory, technology, and reliability changes. If during this assessment, the task group determines that an existing or legacy communication method cannot be moved into the performance-based technology requirements, a separate section will be maintained to regulate this communication technology. The task group will continue to review Public Input 526 for appropriate requirements and text for inclusion in Section 26.7.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b> Rejected but see related SR-5134</p> <p>This revision clarifies that multiple pathways must be arranged so that a failure on one pathway does not cause a failure of any other pathway. NFPA 72 only regulates on premises pathways and equipment beyond the premises is outside the scope of NFPA 72.</p> <p>Public Comment No. 175-NFPA 72-2023 [ Section No. 26.6.3.4 ]</p>		<p>(JVK) After review there is no correlating committee action required.</p> <p>(JVK) After review there is no correlating committee action required.</p>
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			<p><b>26.6.3.4</b> Multiple Communications Paths.</p> <p>If multiple transmission paths are used, the following requirements shall be met:</p> <ol style="list-style-type: none"> <li><del>Each</del> End to end communications of each path shall be supervised within not more than 6 hours.</li> <li>The failure of any path of a multipath system shall be annunciated at the supervising station within not more than 6 hours.</li> <li>Multiple communications paths shall be arranged so that <del>a</del>any single point of failure of the listed equipment on the customer side of the FCC demarcation or standard network interface shall not cause more than a single path to fail.</li> <li>The failure to complete a signal transmission shall be annunciated at the protected premises in accordance with Section 10.15.</li> </ol>	<p><b>Statement of the Problem</b> Changes made to eliminate single points of failure in the transmission path, but limiting the application of this requirement to the customer side of the FCC demarcation point as the code is not intended to regulate the elements of the PSTN operated by FCC approved carriers.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5134</p> <p>This revision clarifies that multiple pathways must be arranged so that a failure on one pathway does not cause a failure of any other pathway. NFPA 72 only regulates on premises pathways and equipment beyond the premises is outside the scope of NFPA 72.</p>		
SR-5143	<p><b>26.6.3.5*</b> Single Technology.</p> <p>A single technology shall be permitted to be used to create the multiple paths <del>provided that</del> the requirements of 26.6.3.4(1) through <del>26.6.3.4(4)</del>26.6.3.4(3) are met.</p>	Updated cross reference.	???	<p>????</p> <p><b>Statement of the Problem</b></p> <p><b>Committee Statement</b></p>	SCR-xxxx	(JVK) per NFPA input, SCR-xxxx has been suggested to change the work "path" to "pathways". Pathways is used throughout the code. Path is not.
PC-226		<p>Rejected</p> <p>The limit of 512 does not apply to the carrier network but does apply to the supervising station.</p>	<p>Public Comment No. 226-NFPA 72-2023 [ Section No. 26.6.3.7.1 ]</p> <p>26.6.3.7.1 The maximum number of independent fire alarm systems connected to a single system unit shall be limited to 512. <u>This does not apply to FCC approved carrier network</u></p>	<p>Public Comment No. 226-NFPA 72-2023 [ Section No. 26.6.3.7.1 ]</p> <p><b>Statement of the Problem</b> Adds clarification that NFPA 72 has no jurisdiction to regulation the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p><b>Committee Statement</b> Rejected</p> <p>The limit of 512 does not apply to the carrier network but does apply to the supervising station.</p>		(JVK) After review there is no correlating committee action required
SR-5124	<p><b>26.6.3.11.3*</b></p> <p><u>The integrity and signal reliability of listed communications equipment used for fire alarm signal transmission shall be compatible with the latency and jitter parameters applicable to the communications protocol.</u></p> <p><b>A.26.6.3.11.3</b></p> <p><u>Latency and jitter conditions are important network metrics to consider because communications equipment transmitting fire alarm signals over internet protocol is sensitive to such conditions, which can impact communications integrity and signal reliability. Latency is the measurement of time for a packet of data to transmit from Point A to Point B. Jitter is the</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for</p>	<p>Public Comment No. 177-NFPA 72-2023 [ Section No. 26.6.3.11 ]</p> <p>26.6.3.11 Signal Error Detection and Correction.</p> <p>26.6.3.11.1 Communication of alarm, supervisory, and trouble signals shall be in accordance with this section to prevent degradation of the signal in transit, which in turn would result in either of the following:</p> <ol style="list-style-type: none"> <li>Failure of the signal to be displayed and recorded at the supervising station</li> </ol>	<p>Public Comment No. 177-NFPA 72-2023 [ Section No. 26.6.3.11 ]</p> <p><b>Statement of the Problem</b> Latency and jitter are valuable measurements of network hardware performance and measurement of these parameters for the customer side premises equipment could provide an increase in alarm transmission reliability. These performance measurements must be</p>		(JVK) Nothing was added to Chapters 7 and 14 to document or verify this requirement.

	<p><u>measurement of the fluctuation of latency time when two devices are talking to each other.</u></p> <p><b>26.6.3.11.4</b></p> <p><u>Any communications failure due to latency or jitter conditions shall result in a trouble signal annunciated at the protected premises.</u></p>	<p>transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. The revision addresses the concerns for latency and jitter in communications equipment.</p> <p>2. Provides guidance to testing laboratories to develop appropriate equipment parameters.</p>	<p>2. Incorrect corrupted signal displayed and recorded at the supervising station</p> <p>26.6.3.11.2</p> <p>Reliability of the signal shall be achieved by any of the following:</p> <ol style="list-style-type: none"> <li>1. Signal repetition — multiple transmissions repeating the same signal</li> <li>2. Parity check — a mathematically check sum algorithm of a digital message that verifies correlation between transmitted and received message</li> <li>3. An equivalent means to 26.6.3.11.1(1) or 26.6.3.11.1(2) that provides a certainty of 99.99 percent that the received message is identical to the transmitted message</li> </ol> <p><u>26.6.3.11.3 * Communication equipment, located on the customer side if the FCC demarcation of standard network interface, used for transmission of fire alarm signals shall meet the latency and jitter requirements applicable to the communication protocol used for signal transmission ensuring communication integrity and signal reliability.</u></p> <p><u>A.26.6.3.11.3 Latency and jitter are important network metrics to ensure communication integrity and signal reliability. Latency is the measurement of time for a packet of data to transmit from point A to point B. Jitter is the measurement of the fluctuation of the latency time when two devices are talking to each other. They are important because communication equipment transmitting fire alarm signals over Internet Protocol is sensitive to latency and jitter. Manufacturer installation instructions for the equipment should indicate the signal latency and jitter parameters required to ensure communication integrity and signal reliability. This requirement does not apply to the MFVN performance as these services are regulated by the FCC and others. Signals carried by network carriers must adhere to FCC standards and other regulatory standards.</u></p> <p><u>26.6.3.11.4* Any communication failure due to latency and jitter out of parameter conditions shall be detected by the communication equipment located on the customer side if the FCC demarcation of standard network interface and result in a communication failure trouble signal being annunciated at the protected premises.</u></p> <p><u>A.26.6.3.11.4 This requirement does not apply to the MFVN performance as these services are regulated by the FCC and others. Signals carried by network carriers must adhere to FCC standards and other regulatory standards.</u></p> <p>Public Comment No. 59-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><b>26.6.3.11.4</b></p> <p><u>Any communication failure due to latency and jitter out of parameter conditions shall be detected by the communication equipment and result in a communication failure trouble signal being annunciated at the protected premises.</u></p>	<p>limited to the network on the customer side of the FCC demarcation point as NFPA 72 is not intended to regulate the POTS, wireless or IP elements of the PSTN.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5124</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. The revision addresses the concerns for latency and jitter in communications equipment.</p> <p>2. Provides guidance to testing laboratories to develop appropriate equipment parameters</p> <p>Public Comment No. 59-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><b>Statement of the Problem</b> Rejected but see related SR-5124</p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b></p>		<p>(JVK) Nothing was added to Chapters 7 and 14 to document or verify this requirement.</p>
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			<p>Public Comment No. 228-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><u>26.6.3.11.3 *</u></p> <p><u>Communication equipment used for transmission of fire alarm signals shall meet the Latency and Jitter requirements applicable to the communication protocol used for signal transmission ensuring communication integrity and signal reliability. This does not apply to FCC approved Carrier equipment.</u></p> <p><u>A.26.6.3.11.3</u></p> <p><u>Latency and Jitter are important network metrics to ensure communication integrity and signal reliability. Latency is the measurement of time for a packet of data to transmit from point A to point B. Jitter is the measurement of the fluctuation of the latency time when two devices are talking to each other. They are important because communication equipment transmitting fire alarm signals over Internet Protocol is sensitive to latency and Jitter. Manufacturer installation instructions or specifications for the equipment should indicate that signal Latency and Jitter parameters will conform to FCC Telecommunication standards for communication integrity and signal reliability.</u></p> <p><u>26.6.3.11.4</u></p> <p><u>Any communication failure due to latency and jitter out of parameter conditions shall be detected by the communication equipment and result in a communication failure trouble signal being annunciated at the protected premises. This does not apply to FCC approved Carrier.</u></p> <p><u>ANNEX:these services are regulated by the FCC requirements for transmission. Signals carried by Network carriers must adhere to FCC standards.</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The revision addresses the concerns for latency and jitter in communications equipment.</li> <li>2. Provides guidance to testing laboratories to develop appropriate equipment parameters.</li> </ol> <p>Public Comment No. 228-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><b><u>Statement of the Problem</u></b> Adds clarification that NFPA 72 has no jurisdiction to regulation the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p>Related Item • CI-5176</p> <p><b><u>Committee Statement</u></b> Rejected but see related SR-5124</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In</p>		<p>(JVK) Nothing was added to Chapters 7 and 14 to document or verify this requirement.</p>
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			<p>Public Comment No. 58-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><u>26.6.3.11.3 *</u>  <u>Communication equipment used for transmission of fire alarm signals shall meet the Latency and Jitter requirements applicable to the communication protocol used for signal transmission ensuring communication integrity and signal reliability.</u></p> <p><u>A.26.6.3.11.3</u>  <u>Latency and Jitter are important network metrics to ensure communication integrity and signal reliability. Latency is the measurement of time for a packet of data to transmit from point A to point B. Jitter is the measurement of the fluctuation of the latency time when two devices are talking to each other. They are important because communication equipment transmitting fire alarm signals over Internet Protocol is sensitive to latency and Jitter. Manufacturer installation instructions for the equipment must indicate the signal Latency and Jitter parameters required to ensure communication integrity and signal reliability.</u></p>	<p>the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The revision addresses the concerns for latency and jitter in communications equipment.</li> <li>2. Provides guidance to testing laboratories to develop appropriate equipment parameters.</li> </ol> <p>Public Comment No. 58-NFPA 72-2023 [ New Section after 26.6.3.11.2 ]</p> <p><b>Statement of the Problem</b>  This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100. Related Item</p> <ul style="list-style-type: none"> <li>• CI 5000</li> </ul> <p><b>Committee Statement</b>  Rejected but see related SR-5124</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. The revision addresses the concerns for latency and jitter in communications equipment.</li> <li>2. Provides guidance to testing laboratories to develop appropriate equipment parameters.</li> </ol>		<p>((JVK) Nothing was added to Chapters 7 and 14 to document or verify this requirement.</p>
SR-5152	<p><b>26.6.3.12</b> Sharing Communications Equipment On-Premises.  <b>26.6.3.12.1*</b></p>	<p>Secondary power is not being uniformly applied throughout the industry. Even in performance based design</p>	<p>Public Comment No. 178-NFPA 72-2023 [ Section No. A.26.6.3.12 ]</p>	<p>Public Comment No. 178-NFPA 72-2023 [ Section No. A.26.6.3.12 ]</p> <p><b>Statement of the Problem</b></p>		<p>((JVK) Isn't the annex material in A.26.6.3.12.1 the same as the requirements of section 26.2.8???</p>

	<p>Where the fire alarm transmitter is sharing on-premises communications equipment, the shared equipment shall be listed as communications <del>equipment</del>, information technology equipment, or telecommunications equipment.</p> <p><b>A.26.6.3.12.1</b></p> <p>Most communications equipment is not specifically listed for fire alarm applications, but is listed in accordance with applicable product standard for general communications equipment and is acceptable. <u>Two examples of commonly applied listing standards are UL 60950-1, Information Technology Equipment — Safety — Part 1: General Requirements, and UL 62368-1, Audio/Video, Information and Communication Technology Equipment — Part 1: Safety Requirements.</u></p> <p><b>26.6.3.12.2</b></p> <p><u>All shared on-premises communications equipment shall meet the secondary power requirements of 26.6.3.13.</u></p>	<p>secondary power requirements should not be less than the minimum prescriptive requirements within the code.</p>	<p><b>A.26.6.3.12</b></p> <p>Most communications equipment is not specifically listed for fire alarm applications, but is listed in accordance with applicable product standard for general communications equipment and is acceptable. <u>UL 60950-1, Information Technology Equipment — Safety — Part 1: General Requirements or UL 62368-1, Audio/Video, Information and Communication Technology Equipment — Part 1: Safety Requirements are two commonly applied listing standards which may be suitable.</u></p> <p>Public Comment No. 230-NFPA 72-2023 [ Section No. 26.6.3.12 ]</p> <p><b>26.6.3.12*</b> Sharing Communications Equipment On-Premises.</p> <p>If the fire alarm transmitter is sharing on-premises communications equipment, the shared equipment shall be listed as communications or information technology equipment.</p> <p><b>26.6.3.12.1</b></p> <p><u>If the fire alarm transmitter is sharing on-premises communications equipment, the shared equipment shall be listed as communications, information technology equipment or Telecommunication Network Equipment.</u></p> <p><b>26.6.3.12.2</b></p> <p><u>MFVN providers with communication equipment collocated at the protected premises shall meet the requirements of 26.6.4.2.1.3 for equipment connected on the Customer side of the FCC demarc or standard network interface. Equipment connected on the Network side of said demarc shall conform to the appropriate UL listing for Telecommunications Network Equipment.</u></p> <p>Public Comment No. 60-NFPA 72-2023 [ Section No. 26.6.3.12 ]</p> <p><b>26.6.3.12*</b> Sharing Communications Equipment On-Premises.</p> <p><del>If the</del></p> <p><b>26.6.3.12.1</b></p> <p><u>Where fire alarm transmitter is sharing on-premises communications equipment, the shared equipment shall be listed as communications or information technology equipment.</u></p> <p><b>26.6.3.12.2</b></p> <p><u>MFVN providers with communication equipment collocated at the protected premises shall meet the requirements of 26.6.4.2.1.3.</u></p> <p><b>26.6.3.12.3</b></p> <p><u>Communication equipment used for transmission of fire alarm signals that receives primary power from the protected premises shall meet these secondary power requirements of 26.6.3.13.</u></p>	<p>UL 60950-1 and UL 62368-1 are the most common listing standards. As we seek to increase the use of listed communications equipment, directing the use to appropriate standards via the annex is very helpful.</p> <p>Related Item • CI-5176.</p> <p><b>Committee Statement</b> Rejected but see related SR-5152</p> <p>Secondary power is not being uniformly applied throughout the industry. Even in performance based design secondary power requirements should not be less than the minimum prescriptive requirements within the code.</p> <p>Public Comment No. 230-NFPA 72-2023 [ Section No. 26.6.3.12 ]</p> <p><b>Statement of the Problem</b> Adds clarification on what are acceptable listing standards for network equipment, and emphasizes that NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5152</p> <p>Secondary power is not being uniformly applied throughout the industry. Even in performance based design secondary power requirements should not be less than the minimum prescriptive requirements within the code.</p> <p>Public Comment No. 60-NFPA 72-2023 [ Section No. 26.6.3.12 ]</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b> Rejected but see related SR-5152</p>		<p>(JVK) Isn't the annex material in A.26.6.3.12.1 the same as the requirements of section 26.2.8???</p> <p>(JVK) Isn't the annex material in A.26.6.3.12.1 the same as the requirements of section 26.2.8???</p>
SR-5130	<p>26.6.3.13.1 Premises Equipment.</p> <p>The secondary power capacity for all transmitters and shared equipment necessary for the transmission of alarm, supervisory, trouble, and other signals</p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to</p>	<p>Public Comment No. 180-NFPA 72-2023 [ Section No. 26.6.3.13.1 ]</p>	<p>Public Comment No. 180-NFPA 72-2023 [ Section No. 26.6.3.13.1 ]</p> <p><b>Statement of the Problem</b></p>		<p>(JVK) Why is the word "shared" in 26.6.3.13.1 but changed to "premises" in the Annex material. Based on 2 of the committee statement</p>

<p>located at the protected premises shall be a minimum of 24 hours or as permitted by 10.6.7.3.1(2), 26.6.3.13.1.1, or 26.6.3.13.1.2.</p> <p><del>A.26.6.3.13.1</del></p> <p><del>Shared equipment owned by or under the control of the subscriber should provide 24 hours of secondary standby power.</del></p> <p>26.6.3.13.1.1</p> <p>Secondary power capacity for <del>shared premises</del> equipment shall be permitted to have a <u>minimum</u> capacity of 8 hours where acceptable to the <del>authority having jurisdiction AHJ</del> and where a risk analysis is performed to ensure acceptable availability is provided.</p> <p><del>A.26.6.3.13.1.1</del></p> <p><del>Shared equipment owned by or under the control of an approved managed facilities based voice network provider should supply 8 hours of secondary power.</del></p> <p>26.6.3.13.1.2*</p> <p>Secondary power capacity for shared and premises equipment used in additional communications paths shall not be required where the first communications path meets the performance requirements of 26.6.3.3.</p> <p>A.26.6.3.13.1.2</p> <p>The requirement in 26.6.3.13.1.2 does not exempt first communications path transmitters and first communications path <del>shared premises</del> equipment necessary for the transmission of alarm, supervisory, trouble, and other signals <del>located at the protected premises</del> from the secondary power capacity requirements <del>of provided in</del> 26.6.3.13. This section does not permit the communications paths to be considered multiple communication paths under 26.6.3.4.</p> <p><u>26.6.3.13.1.3</u></p> <p><u>Communications equipment used for transmission of fire alarm signals that receives primary power from the protected premises shall meet the secondary power requirements of 26.6.3.13.</u></p>	<p>address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Simplified the secondary power requirements.</li> <li>2. Added language to ensure secondary power was provided for all premises powered equipment.</li> </ol>	<p>26.6.3.13.1* Premises Equipment.</p> <p>The secondary power capacity for all transmitters and shared equipment necessary for the transmission of alarm, supervisory, trouble, and other signals located at the protected premises <u>and installed on the customer side of the FCC demarcation or standard network interface shall be a minimum of 24 hours or as permitted by 10.6.7.3.1(2), 26.6.3.13.1.1, or 26.6.3.13.1.2.</u></p> <p>26.6.3.13.1.1*</p> <p>Secondary power capacity for shared equipment shall be permitted to have a capacity of 8 hours where acceptable to the authority having jurisdiction and where a risk analysis is performed to ensure acceptable availability is provided.</p> <p>26.6.3.13.1.2*</p> <p>Secondary power capacity for shared and premises equipment used in additional communications paths shall not be required where the first communications path meets the performance requirements of 26.6.3.3.</p> <p><u>26.6.3.13.1.3 The secondary power capacity for MFVN communications equipment located at the protected premises and installed on the network side of the FCC demarcation or standard network interface and receiving power from the protected premises shall be a minimum of 24 hours.</u></p> <p><u>26.6.3.13.1.4 The secondary power capacity for other MFVN communications equipment located at the protected premises and installed on the network side of the FCC demarcation or standard network interface shall be a minimum of 8 hours.</u></p> <p>Public Comment No. 231-NFPA 72-2023 [ Section No. 26.6.3.13.1 ]</p> <p>26.6.3.13.1* Premises Equipment.</p> <p>The secondary power capacity for all transmitters and shared equipment necessary for the transmission of alarm, supervisory, trouble, and other signals located at the protected premises shall be a minimum of 24 hours or as permitted by 10.6.7.3.1(2), 26.6.3.13.1.1, or 26.6.3.13.1.2. <u>All equipment supplied by FCC approved carrier connected on the Network side of the FCC SNI or Demarc shall be required to supply up to 8 hours of standby battery power.</u></p> <p><u>A.26.6.3.13.1 Shared equipment owned by or under the control of the subscriber should provide 24 hours of secondary standby power. All equipment supplied by FCC approved</u></p>	<p>I think this proposal is consistent with the performance-based task group intention and also consistent with FCC rules regarding backup power. Certain MFVN providers have options of 24 hours or 8 hours of battery backup. Eight hours for equipment on the network side of the demarcation point is common as noted elsewhere in the code. Twenty-four hours for equipment on the customer side of the demarcation point is consistent with other parts of the code as well and is a commonly available option that the subscriber can select for fire alarm systems.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5130</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Simplified the secondary power requirements.</li> <li>2. Added language to ensure secondary power was provided for all premises powered equipment.</li> </ol> <p>Public Comment No. 231-NFPA 72-2023 [ Section No. 26.6.3.13.1 ]</p> <p><b>Statement of the Problem</b> MFVN equipment located on the network side of the FCC demarcation point is provided with 8 hours of secondary power. This has been noted in the NFPA 72 for several cycles and is consistent with FCC regulations. See A.3.3.170.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5130</p>		<p>(JVK) Why is the word "shared" in 26.6.3.13.1 but changed to "premises" in the Annex material. Based on 2 of the committee statement</p>
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			<p>carrier connected on the Network side of the FCC SNI or Demarc should supply up to 8 hours of standby battery power.</p> <p><u>26.6.3.13.1.1*</u></p> <p>-</p> <p>Secondary power capacity for shared equipment shall be permitted to have a capacity of 8 hours where acceptable to the authority having jurisdiction and where a risk analysis is performed to ensure acceptable availability is provided. <u>All equipment supplied by FCC approved carrier connected on the Network side of the FCC SNI or Demarc shall be required to supply up to 8 hours of standby battery power.</u></p> <p><u>26.6.3.13.1.</u></p> <p><u>2</u></p> <p><u>1*</u></p> <p>-</p> <p>-</p> <p><u>Secondary power capacity for shared</u></p> <p><del>and premises equipment used in additional communications paths shall not be required where the first communications path meets the performance requirements of</del></p> <p><u>equipment shall be permitted to have a capacity of 8 hours where acceptable to the authority having jurisdiction and where a risk analysis is performed to ensure acceptable availability is provided. All equipment supplied by FCC approved carriers connected on the Network side of the FCC SNI or Demarc shall be required to supply up to 8 hours of standby battery power.</u></p> <p><u>A.26.6.3.</u></p> <p><del>3-</del></p> <p><u>13.1.1 Shared equipment owned by or under the control of an approved managed facilities-based voice network provider should supply 8 hours of secondary power.</u></p> <p>Public Comment No. 61-NFPA 72-2023 [ Section No. 26.6.3.13.1.1 ]</p> <p>26.6.3.13.1.1*</p> <p>Secondary power capacity for shared equipment <del>shall and MFVN equipment shall</del> be permitted to have a capacity of 8 hours where acceptable to the authority having jurisdiction and where a risk analysis is performed to ensure acceptable availability is provided.</p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Simplified the secondary power requirements.</li> <li>2. Added language to ensure secondary power was provided for all premises powered equipment.</li> </ol> <p>Public Comment No. 61-NFPA 72-2023 [ Section No. 26.6.3.13.1.1 ]</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b> Rejected but see related SR-5130</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this</p>		<p>(JVK) Why is the word "shared" in 26.6.3.13.1 but changed to "premises" in the Annex material. Based on 2 of the committee statement</p>
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				<p>second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Simplified the secondary power requirements.</li> <li>2. Added language to ensure secondary power was provided for all premises powered equipment.</li> </ol>		
PC-234		<p>Rejected but held</p> <p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle</p>	<p>Public Comment No. 234-NFPA 72-2023 [ New Section after 26.6.3.13 ]</p> <p><u>26.6.3.14 Equipment Physical Protection</u>  <u>Communication equipment, power supplies, and circuits at the protected premises used for transmission of fire alarm signals shall be secured from tampering and protected from hazardous conditions, including weather conditions that can adversely affect the equipment operations, or be listed to for such conditions. All equipment supplied by FCC approved carriers located on the Network side of the FCC SNI or Demarc shall be installed in accordance with FCC approved Telecommunications wiring standards meeting Industry standards for safety, security and environmental protection as required by the specific installation situation. Decisions on specific configurations shall be at the sole discretion of the MFVN Network provider as a condition of providing Network Access and Transport.</u></p>	<p>Public Comment No. 234-NFPA 72-2023 [ New Section after 26.6.3.13 ]</p> <p><b>Statement of the Problem</b></p> <p>The added text builds on the work of the performance-based task group and provides guidance on the physical installation rules applicable to MFVN equipment and cabling on the network side of the FCC demarcation.</p> <p><b>Committee Statement</b></p> <p>Rejected but held</p> <p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle</p>		<p>(JVK) After review there is no correlating committee action required, but the committee statement of "The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle." Is a bad precedence of kicking the can down the road.</p> <p>Is the process at fault for not get enough time to resolve or was the committee at fault for lack of preparedness.</p>
PC-62		<p>Rejected but held</p> <p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle</p>	<p>Public Comment No. 62-NFPA 72-2023 [ New Section after 26.6.3.14 ]</p> <p><u>26.6.3.14 Equipment Physical Protection</u>  <u>Communication equipment, power supplies, and circuits at the protected premises used for transmission of fire alarm signals shall be secured from tampering and protected from hazardous conditions, including weather conditions that can adversely affect the equipment operations, or be listed to for such conditions.</u></p>	<p>Public Comment No. 62-NFPA 72-2023 [ New Section after 26.6.3.14 ]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100</p> <p><b>Committee Statement</b></p> <p>Rejected but held</p> <p>The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle</p>		<p>(JVK) After review there is no correlating committee action required, but the committee statement of "The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle." Is a bad precedence of kicking the can down the road.</p> <p>Is the process at fault for not get enough time to resolve or was the committee at fault for lack of preparedness.</p>
PC-63		<p>Rejected but held</p> <p>The committee requires additional time to consider the</p>	<p>Public Comment No. 63-NFPA 72-2023 [ Section No. 26.6.3.14 ]</p> <p>26.6.3.44-15 Unique Flaws Not Covered by This Code.</p>	<p>Public Comment No. 63-NFPA 72-2023 [ Section No. 26.6.3.14 ]</p> <p><b>Statement of the Problem</b></p>		<p>(JVK) After review there is no correlating committee action required, but the committee statement of "The committee requires additional time to</p>

		requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle	If a communications technology has a unique flaw that could result in the failure to communicate a signal, the implementation of that technology for alarm signaling shall compensate for that flaw so as to eliminate the risk of missing an alarm signal.	This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100  <b>Committee Statement</b>  Rejected but held  The committee requires additional time to consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle	consider the requirements for equipment protection found in other codes and standards and provide appropriate wording for the next revision cycle." Is a bad precedence of kicking the can down the road.  Is the process at fault for not get enough time to resolve or was the committee at fault for lack of preparedness.
SR-5125	26.6.4.1.1 The requirements of 26.6.4.2 shall not apply when a DACT is used as a signaling interface from a fire alarm control unit to another listed communications means.  26.6.4.1.2 <del>The listed</del> When a DACT is used as a signaling interface from a fire alarm control unit to any other communications means, the communications means shall meet the requirements of either 26.6.3 or 26.6.5.	During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.  1. This revision refers the use either to one-way radio or performance based requirements when a DACT is used as a signaling interface device.	Public Comment No. 181-NFPA 72-2023 [ Sections 26.6.4.1.1, 26.6.4.1.2 ]  Sections 26.6.4.1.1, 26.6.4.1.2  26.6.4.1.1- <del>The</del> The requirements of 26.6.4.2  <del>shall not apply</del> apply when a DACT is used as a signaling interface from a fire alarm control unit to <del>another listed communications means.</del> an MFVN.  26.6.4.1.2 - <del>The listed</del> When a DACT is used as a signaling interface from a fire alarm control unit to any other communications means, the communications means shall meet the requirements of either 26.6.3 or 26.6.5.	Public Comment No. 181-NFPA 72-2023 [ Sections 26.6.4.1.1, 26.6.4.1.2 ]  <b>Statement of the Problem</b> It should be clearly stated that this section applies when the DACT connects to an MFVN. Otherwise, the performance based rules or radio system rules apply. There is no longer a need to state here that the alternative means are listed as that is indicated elsewhere, and the MFVN equipment may also be listed. So using the term "another listed means" is unnecessary and could add confusion. The essential requirement is to limit this section to DACTs connected to MFVNs and this should be stated.  Related Item • CI-5176  <b>Committee Statement</b> Rejected but see related SR-5125  During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.	(JVK) This change is assumed to be used for POTS line replacement.  If so, after review there is no correlating committee action required

				<p>1. This revision refers the use either to one-way radio or performance based requirements when a DACT is used as a signaling interface device.</p>		
<p>SR-5126</p>	<p>26.6.4.2.1* Managed Facilities-Based Voice Network (MFVN).  A DACT shall be connected to a managed facilities-based voice network (MFVN) upstream of any private telephone system at the protected premises.</p> <p>26.6.4.2.1.1  The connections to a managed facilities-based voice network an MFVN shall be under the control of the subscriber for whom service is being provided by the supervising station alarm system.</p> <p>26.6.4.2.1.2  Special attention shall be required to ensure that this MFVN connection is made only to a loop start telephone circuit and not to a ground start telephone circuit.</p> <p style="text-align: right;"><a href="#">Detail SR-5148</a></p> <p><u>26.6.4.2.1.3*</u>  An MFVN provider (voice or digital) shall be authorized by the regulating authority as a common carrier.</p> <p><u>26.6.4.2.1.4</u>  Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</p> <p><u>26.6.4.2.1.5</u>  Communication equipment used for transmission of fire alarm signals that receives primary power from the protected premises shall meet the requirements of 26.6.3.13.</p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1.This revisions provides clarity by removing unnecessary text</p>	<p>Public Comment No. 235-NFPA 72-2023 [ Section No. 26.6.4.2.1.1 ]</p> <p>6.6.4.2.1.1  <del>The connections to a managed facilities-based voice network shall be under the control of the subscriber for whom service is being provided by the supervising station alarm system.</del> <u>Connections on the Network side of the FCC demarc will be under the control and managed by the MFVN provider.</u></p> <p>Public Comment No. 182-NFPA 72-2023 [ Section No. 26.6.4.2.1.1 ]</p> <p>26.6.4.2.1.1-  <del>The connections to a managed facilities-based voice network shall</del>  <u>The connections and equipment residing on the customer side of the FCC demarcation or standard network interface shall be under the control of the subscriber for whom service is being provided by the supervising station alarm system.</u></p> <p><u>26.6.4.2.1.2 The connections and equipment residing on the network side of the FCC demarcation or standard network interface shall be under the control of the FCC approved carrier.</u></p>	<p>Public Comment No. 235-NFPA 72-2023 [ Section No. 26.6.4.2.1.1 ]</p> <p><b>Statement of the Problem</b>  Connections on the Network side of the FCC demarc are under the control and managed by the MFVN provider and not regulated by NFPA 72.</p> <p>Related Item  • CI-5176</p> <p><b>Committee Statement</b>  Rejected but see related SR-5126</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1.This revisions provides clarity by removing unnecessary text.</p> <p>Public Comment No. 182-NFPA 72-2023 [ Section No. 26.6.4.2.1.1 ]</p> <p><b>Statement of the Problem</b>  Connections and equipment on the customer side of the demarcation are the subscriber's responsibility. Connections and equipment on the network side of the demarcation are the carrier's responsibility. We don't need to connections are to an MFVN as this section applies only to connections to an MFVN as stated earlier.</p> <p>Related Item  • CI-5176</p> <p><b>Committee Statement</b>  Rejected but see related SR-5126</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical</p>		<p>(JVK) 26.6.4.2.1.4 makes no sense see SCR-5118 for comments on the same text.</p> <p>Why do we have same text in the same Chapter. Should a refence be made to preserve continuity of future changes.</p> <p>(JVK) After review there is no correlating committee action required</p>

				<p>advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1.This revisions provides clarity by removing unnecessary text.</p>	
SR-5148	<p><u>26.6.4.2.1.3*</u>  <u>An MFVN provider (voice or digital) shall be authorized by the regulating authority as a common carrier.</u></p> <p><u>A.26.6.4.2.1.3</u>  <u>Communication carriers have equipment that is normally installed in accordance with Federal Communications Commission-approved (FCC-approved) telecommunications network standards meeting industry standards for safety, security, and environmental protection as required by the specific installation situation. Examples of authorized common carriers include Incumbent Local Exchange Carriers (ILEC), Local Exchange Carriers (LEC), Competitive Local Exchange Carriers (CLEC), and FCC-licensed cellular service carriers as defined by the FCC to provide telecommunication services for the state or jurisdiction in which the service will be rendered.</u></p> <p><u>26.6.4.2.1.4</u>  <u>Acknowledgments to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></p> <p><u>26.6.4.2.1.5</u>  <u>Communication equipment used for transmission of fire alarm signals that receives primary power from the protected premises shall meet the requirements of 26.6.3.13.</u></p>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. Clarify the authorizing authority for common carriers.</p> <p>2. Specifies if the communication equipment receives power from the protected premises that it must be provided with secondary power.</p> <p>3. Correlates with the performance based requirements.</p>	<p>Public Comment No. 184-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><u>TITLE OF NEW CONTENT</u>  <u>26.6.4.2.1.4 Secondary Power</u></p> <p><u>26.6.4.2.1.4.1 The secondary power capacity for all transmitters and shared equipment necessary for the transmission of alarm, supervisory, trouble, and other signals located at the protected premises and installed on the customer side of the FCC demarcation or standard network interface shall be a minimum of 24 hours or as permitted by 10.6.7.3.1(2), 26.6.4.2.1.4.1.1, or 26.6.4.2.1.4.1.1.2.</u></p> <p><u>26.6.4.2.1.4.1.1* Secondary power capacity for shared equipment shall be permitted to have a capacity of 8 hours where acceptable to the authority having jurisdiction and where a risk analysis is performed to ensure acceptable availability is provided.</u></p> <p><u>26.6.4.2.1.4.1.2* Secondary power capacity for shared and premises equipment used in additional communications paths shall not be required where the first communications path meets the performance requirements of 26.6.3.3.</u></p> <p><u>26.6.4.2.1.4.1.1.3The secondary power capacity for MFVN communications equipment located at the protected premises and installed on the network side of the FCC demarcation or standard network interface and receiving power from the protected premises shall be a minimum of 24 hours.</u></p> <p><u>26.6.4.2.1.4.1.1.4 The secondary power capacity for other MFVN communications equipment located at the protected premises and installed on the network side of the FCC demarcation or standard network interface shall be a minimum of 8 hours.</u></p>	<p>Public Comment No. 184-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><b><u>Statement of the Problem</u></b>  Secondary power requirements should be added to the DACT section consistent with those proposed in the performance-based section. I think this proposal is consistent with the performance-based task group intention and also consistent with FCC rules regarding backup power. Certain MFVN providers have options of 24 hours or 8 hours of battery backup. Eight hours for equipment on the network side of the demarcation point is common as noted elsewhere in the code. Twenty-four hours for equipment on the customer side of the demarcation point is consistent with other parts of the code as well and is a commonly available option that the subscriber can select for fire alarm systems. An alternative is to take these requirements and those proposed in PC-180 and move both to the general section 26.6.2 as powering requirements should be common across all transport technologies.</p> <p>Related Item  • CI-5176</p> <p><b><u>Committee Statement</u></b>  Rejected but see related SR-5148</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address</p>	(JVK) After review there is no correlating committee action required.

			<p>Public Comment No. 239-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><u>Communications equipment used for transmission of fire alarm signal that receives primary power from the protected premises shall meet the requirements 26.6.3.13. All equipment supplied by FCC approved located on the Network side of the FCC SNI or Demarc shall only be required to supply a minimum of up to 8 hours of standby battery power. Additional capacity may be provided as determined by the MFVN Carrier provider.</u></p>	<p>changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Clarify the authorizing authority for common carriers.</li> <li>2. Specifies if the communication equipment receives power from the protected premises that it must be provided with secondary power.</li> <li>3. Correlates with the performance based requirements</li> </ol> <p>Public Comment No. 239-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><b>Statement of the Problem</b> MFVN equipment located on the network side of the FCC demarcation point is provided with 8 hours of secondary power. This has been noted in the NFPA 72 for several cycles and is consistent with FCC regulations. See A.3.3.170.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5148 During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Clarify the authorizing authority for common carriers.</li> <li>2. Specifies if the communication equipment receives power from the protected premises that it must be provided with secondary power.</li> </ol>		<p>(JVK) After review there is no correlating committee action required.</p>
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			<p>Public Comment No. 237-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><u>26.6.4.2.1.3</u></p> <p><u>An MFVN provider (voice or digital) shall be authorized by the State Public Utilities Commission (PUC) as a common carrier or Local Exchange Carrier (LEC) as defined by the Federal Communications Commission (FCC) to provide telecommunication services in the State or jurisdiction where the service will be rendered;including but not limited to Incumbent Local Exchange Carriers [ILEC], Local Exchange Carriers [LEC] Competitive Local Exchange Carriers [CLEC] and other Federal Communications Commission [FCC] approved carriers offering interconnection to facilities and Unbundled Network Elements in order to provide such telecommunications services connectedon the Network side of the FCC SNI or Demarc. Such equipmentsshall be installed in accordance with FCC approved Telecommunications Network wiring standards meeting Industry standards for safety, security and environmental protection as required by the specific installation situation. Decisions on specific configurations shall be at the sole discretion of the MFVN Network provider as a condition of providing Network Access and Transport.</u></p>	<p>3. Correlates with the performance based requirements.</p> <p>Public Comment No. 237-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><b>Statement of the Problem</b> Adds clarification as to the types of carriers that can operate MFVN networks.</p> <p>Related Item • CI-5176</p> <p><b>Committee Statement</b> Rejected but see related SR-5148</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Clarify the authorizing authority for common carriers.</li> <li>2. Specifies if the communication equipment receives power from the protected premises that it must be provided with secondary power.</li> <li>3. Correlates with the performance based requirements.</li> </ol>		<p>(JVK) After review there is no correlating committee action required.</p>
			<p>Public Comment No. 64-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><u>26.6.4.2.1.3</u></p> <p><u>An MFVN provider (voice or digital) shall be authorized by the State Public Utilities Commission (PUC) as a common carrier or Local Exchange Carrier (LEC) as defined by the Federal Communications Commission (FCC) to provide telecommunication services in the State or jurisdiction where the service will be rendered.</u></p> <p><u>26.6.4.2.1.4</u></p> <p><u>Acknowledgements to the protected premises for alarm, supervisory, or trouble signals shall only be initiated by the supervising station.</u></p> <p><u>26.6.4.2.1.5</u></p>	<p>Public Comment No. 64-NFPA 72-2023 [ New Section after 26.6.4.2.1.2 ]</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the performance-based design task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b></p>		<p>(JVK) After review there is no correlating committee action required.</p>

			<p>Communication equipment used for transmission of fire alarm signals that receives primary power from the protected premises shall meet the requirements 26.6.3.13.</p>	<p>Rejected but see related SR-5148</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Clarify the authorizing authority for common carriers.</li> <li>2. Specifies if the communication equipment receives power from the protected premises that it must be provided with secondary power.</li> <li>3. Correlates with the performance based requirements.</li> </ol>		
<p>SR - 5138</p>	<p>26.6.4.2.4.1</p> <p>A system employing a DACT shall employ a single <u>legacy POTS</u> telephone line (number) and one of the following transmission means:</p> <ol style="list-style-type: none"> <li>1. One-way private radio alarm system</li> <li>2. <del>Two-way RF multiplex system</del></li> <li>3. Transmission means complying with 26.6.3</li> <li>4. A second telephone line (number), where all of the following conditions are met: <ol style="list-style-type: none"> <li>1. Access to one of the technologies in 26.6.4.2.4.1(1), 26.6.4.2.4.1(2), or 26.6.4.2.4.1(3) is not available at the protected premises.</li> <li>2. The <del>authority having jurisdiction</del> AHJ approves the arrangement.</li> <li>3. The DACT is programmed to call a second DACR line (number) when the signal transmission sequence to the first called line (number) is unsuccessful.</li> <li>4. The DACT is capable of selecting the operable means of transmission in the event of failure of the other means.</li> <li>5. Each telephone line is tested in accordance with 26.6.4.2.4.2 or at alternating 6-hour intervals.</li> </ol> </li> </ol>	<p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <ol style="list-style-type: none"> <li>1. Two way radios were removed because they are no longer used.</li> </ol>	<p>Public Comment No. 68-NFPA 72-2023 [ Section No. 26.6.4.2.4.1 ]</p> <p><u>26.6.4.2.4 Transmission Channels.</u></p> <p><u>26.6.4.2.4.1</u></p> <p><u>A system employing a DACT shall be connected to transmission means arranged according to 26.6.4.2.1.1 or 26.6.4.2.1.2</u></p> <p><u>26.6.4.2.4.1.1</u></p> <p><u>A DACT is permitted to employ a primary and a secondary telephone line (two numbers) from a managed facilities-based voice network meeting the circuit integrity requirements of 26.6.3.2.2(2) (b) and capable of supplying at least two communications pathways according to 26.6.3.4 or a single pathway according to 26.6.3.3 when the latter arrangement is approved by the Authority Having Jurisdiction.</u></p> <p><u>26.6.4.2.4.1.2</u></p> <p><u>A DACT is permitted to employ a primary legacy POTS telephone line (number) and one of the following transmission means:</u></p> <ol style="list-style-type: none"> <li>1. <u>One-way private radio alarm system</u></li> <li><input type="checkbox"/> <u>Two-way RF multiplex system</u> <ol style="list-style-type: none"> <li>1. <u>Transmission means complying with</u> <ol style="list-style-type: none"> <li>1. <u>with 26.6.3</u></li> <li>2. <u>A second legacy POTS telephone line (number), where all of the following are met:</u></li> </ol> </li> </ol> </li> </ol>	<p>Public Comment No. 68-NFPA 72-2023 [ Section No. 26.6.4.2.4.1 ]</p> <p><b>Statement of the Problem</b></p> <p>The intent of this committee input is to create a task group to evaluate the existing arrangement of Section 26.6 (Communications Methods) and harmonize all communications methods into the requirements for performance-based technologies to the extent this is possible. This would permit and regulate the use of new and emerging communication technologies while eliminating prescriptive requirements for outdated technologies, which are currently being phased out due to many factors such as regulatory, technology, and reliability changes. If during this assessment, the task group determines that an existing or Legacy communication method cannot be moved into the performance-based technology requirements, a separate section will be maintained to regulate this communication technology. The task group will continue to review Public Input 526 for appropriate requirements and text for inclusion in Section 26.7.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b></p>		<p>(JVK) After review there is no correlating committee action required.</p>

		<p>2. The language was clarified that DACTS must connect to a legacy POTS telephone line.</p>	<p><del>in</del> <del>26</del> <del>(2), or</del> <del>6.4</del> <del>.4.1</del> <del>3</del></p> <p><u>(a) Access to one of the technologies in 26.6.4.2.4.1.2(1) or 26.6.4.2.4.1</u></p> <p><u>2</u></p> <p><u>(</u></p> <p><u>2) is not available at the protected premises.</u></p> <p><u>(b) The authority having jurisdiction approves the arrangement.</u></p> <p><u>(c) The DACT is programmed to call a second DACR line (number) when the signal transmission sequence to the first called line (number) is unsuccessful.</u></p> <p><u>(d) The DACT is capable of selecting the operable means of transmission in the event of failure of the other means.</u></p> <p><u>(e) Each telephone line is tested in accordance</u></p> <p><del>with</del> <del>or</del></p> <p><u>with 26.6.4.2.4.2</u> <u>or at alternating 6-hour intervals.</u></p> <p>Public Comment No. 185-NFPA 72-2023 [ Section No. 26.6.4.2.4.1 ]</p> <p><b>26.6.4.2.4.1</b></p> <p>A system employing a DACT shall employ a single telephone line (number) and one of the following transmission means:</p> <ol style="list-style-type: none"> <li>1. One-way private radio alarm system</li> <li>2. Two-way RF multiplex system</li> <li>3. Transmission means complying with 26.6.3</li> <li>4. A second telephone line (number), where all of the following are met: <ol style="list-style-type: none"> <li>1. <del>Access to one of the technologies in 26.6.4.2.4.1(1), 26.6.4.2.4.1(2), or 26.6.4.2.4.1(3) is not available at the protected premises.</del></li> <li>2. <del>The authority having jurisdiction approves the arrangement.</del></li> <li>3. <del>The DACT is programmed to call a second DACR line (number) when the signal transmission sequence to the first called line (number) is unsuccessful.</del></li> <li>4. The DACT is capable of selecting the operable means of transmission in the event of failure of the other means.</li> </ol> </li> </ol>	<p>Rejected but see related SR-5138</p> <p>Public Comment No. 185-NFPA 72-2023 [ Section No. 26.6.4.2.4.1 ]</p> <p><b>Statement of the Problem</b></p> <p>A DACT utilizing listed equipment, connected to a PCU regulated and FCC approved carrier's MFVN, utilizing two lines, installed per NFPA 70, with 24 hours of standby power for customer side equipment and 8 hours of monitored standby power on the network side, tested end to end every 6 hours should be sufficient without further AHJ approval beyond what is required for all other aspects of a fire alarm installation.</p> <p>The need to complicate the DACT installation by inclusion of a secondary means such as radio or other alternative systems "when available" is not enforceable. The code per section 1.2.3 establishes minimum required levels of performance. At an unspecified price, an optional secondary means of transmissions can always be considered "available". Given the improved technical requirements made in chapter 26 regarding listing, labeling, powering and notification and testing, this requirement can be eliminated.</p> <p>Related Item • CI-5176</p>		<p>(JVK) After review there is no correlating committee action required</p>
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			<p>5. Each telephone line is tested in accordance with 26.6.4.2.4.2 or at alternating 6-hour intervals.</p>	<p><b>Committee Statement</b> Rejected but see related SR-5138</p> <p>During the first revision meeting of the SIG-SSS Technical Committee there was identified an immediate need to begin to address the technical advancements and variety of methods of transmitting and processing important fire alarm system signals to supervising stations while at the same time providing continued recognition of legacy methods still in use for transmitting fire alarm system signals to supervising stations. As a result of numerous Task Group meetings this second revision is one of many second revisions intended to address changes that reflect both existing and performance-based technologies considered reasonably reliable and acceptable for the important task of transmitting fire alarm signals to supervising stations and ultimately for notification and response by emergency public safety agencies. In the case of this second revision the following points are the specific basis for the change.</p> <p>1. Two way radios were removed because they are no longer used.</p> <p>2. The language was clarified that DACTS must connect to a legacy POTS telephone line.</p>		
<p>SR-5127</p>	<p><b>26.6.5.1 Two-Way Radio Frequency (RF) Multiplex Systems.</b> <b>26.6.5.1.1 Maximum Operating Time.</b> <b>The maximum end-to-end operating time parameters allowed for a two-way RF multiplex system shall be as follows:</b></p> <p><b>1. For a time lapse from initiation, both of the following shall apply:</b></p> <p>1. <del>The maximum allowable time lapse from the initiation of a single alarm signal until it is recorded at the supervising station shall not exceed 90 seconds.</del></p> <p>2. <del>When any number of subsequent alarm signals occur at any rate, they shall be recorded at a rate no slower than one every additional 40 seconds.</del></p> <p><b>2. For a time lapse from the occurrence, both of the following shall apply:</b></p> <p>1. <del>The maximum allowable time lapse from the occurrence of an adverse condition in any transmission channel until recording of the adverse condition is started shall not exceed 200 seconds for Type 4 and Type 5 systems.</del></p> <p>2. <del>The requirements of 26.6.5.1.4 shall apply.</del></p> <p><b>3. In addition to the maximum operating time allowed for alarm signals, the requirements of one of the following shall be met:</b></p> <p>1. <del>A system unit that has more than 500 initiating device circuits shall be able to record not less than 50 simultaneous status changes within 90 seconds.</del></p> <p>2. <del>A system unit that has fewer than 500 initiating device circuits shall be able to record not less than 10 percent of the total</del></p>	<p>This section has been eliminated since the technology is no longer listed for fire alarm service.</p>	<p>Public Comment No. 66-NFPA 72-2023 [ Section No. 26.6.5.1 ] <b>26.6.5.1 Two-Way Radio Frequency (RF) Multiplex Systems.</b> <b>26.6.5.1.1 Maximum Operating Time.</b> <b>The maximum end-to-end operating time parameters allowed for a two-way RF multiplex system shall be as follows:</b></p> <p><b>1. For a time lapse from initiation, both of the following shall apply:</b></p> <p>1. <del>The maximum allowable time lapse from the initiation of a single alarm signal until it is recorded at the supervising station shall not exceed 90 seconds.</del></p> <p>2. <del>When any number of subsequent alarm signals occur at any rate, they shall be recorded at a rate no slower than one every additional 40 seconds.</del></p> <p><b>2. For a time lapse from the occurrence, both of the following shall apply:</b></p> <p>1. <del>The maximum allowable time lapse from the occurrence of an adverse condition in any transmission channel until recording of the adverse condition is started shall not exceed 200 seconds for Type 4 and Type 5 systems.</del></p> <p>2. <del>The requirements of 26.6.5.1.4 shall apply.</del></p> <p><b>3. In addition to the maximum operating time allowed for alarm signals, the requirements of one of the following shall be met:</b></p> <p>1. <del>A system unit that has more than 500 initiating device circuits shall be</del></p>	<p>Public Comment No. 66-NFPA 72-2023 [ Section No. 26.6.5.1 ]</p> <p><b>Statement of the Problem</b> This public comment is being submitted on behalf of the radio based task group assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and should be removed from the standard. This public comment is tied to Committee Input 5100.</p> <p>Related Item • CI 5000</p> <p><b>Committee Statement</b> Accept</p> <p>This section has been eliminated since the technology is no longer listed for fire alarm service.</p>	<p>SCR – xxxx</p> <p>Table 14.4.3.2 (27)</p> <p><del>(6) Private microwave radio systems</del></p> <p><del>X Monthly Cause each of the following conditions at each of the supervising or subsidiary stations and all repeater station radio transmitting and receiving equipment: verify receipt of correct signals at the supervising station:</del></p> <p><del>(1) RF transmitter in use (radiating)</del> <del>(2) AC power failure supplying the radio equipment</del> <del>(3) RF receiver malfunction</del> <del>(4) Indication of automatic switchover</del></p> <p><b>Committee Statement</b> This table item has been eliminated since the technology is no longer listed for fire alarm service and was with drawn from Chapter 26 in the 2010 edition of NFPA 72.</p>	<p>(JVK) A request from NFPA staff was to review Chapter 14 to verify there were not any correlation issues.</p> <p>After reviewing Chapter 14 the is no specific or implied reference to Two-Way Radio Frequency (RF) Multiplex Systems.</p> <p>There is an issue with Table 14.4.3.2 (27)(6) Private microwave radio systems.</p> <p>According to an article written by Art Black in 2011</p> <p><i>Demise of the Digital Alarm Communicator Transmitter (DACT)</i></p> <p><i>"Private Microwave Radio Systems Private microwave radio systems were provided by a handful of manufacturers in the early 1980s. Since no private microwave radio systems survive, and the testing labs reported that no private microwave radio systems are currently listed, this technology was removed from the 2010 edition of the National Fire Alarm and Signaling Code."</i></p>

<p>number of simultaneous status changes within 90 seconds.</p> <p><b>26.6.5.1.2 Supervisory and Control Functions.</b></p> <p><b>26.6.5.1.2.1</b></p> <p>Facilities shall be provided at the supervising station for the following supervisory and control functions of the supervising or subsidiary station and the repeater station radio transmitting and receiving equipment:</p> <ol style="list-style-type: none"> <li>1. RF transmitter in use (radiating)</li> <li>2. Failure of ac power supplying the radio equipment</li> <li>3. RF receiver malfunction</li> <li>4. Indication of automatic switchover</li> <li>5. Independent deactivation of either RF transmitter controlled from the supervising station</li> </ol> <p><b>26.6.5.1.2.2</b></p> <p>Where the radio equipment is remotely located from the system unit, supervisory and control functions of the supervising or subsidiary station and the repeater station radio transmitting and receiving equipment shall be accomplished via a supervised circuit.</p> <p><b>26.6.5.1.3 Transmission Channel.</b></p> <p><b>26.6.5.1.3.1</b></p> <p>The RF multiplex transmission channel shall terminate in an RF transmitter/receiver at the protected premises and in a system unit at the supervising or subsidiary station.</p> <p><b>26.6.5.1.3.2</b></p> <p>Operation of the transmission channel shall conform to the requirements of this Code whether channels are private facilities, such as microwave, or leased facilities furnished by a communications utility company.</p> <p><b>26.6.5.1.3.3</b></p> <p>If private signal transmission facilities are used, the equipment necessary to transmit signals shall also comply with requirements for duplicate equipment or replacement of critical components, as described in 26.6.6.3.</p> <p><b>26.6.5.1.4* Categories.</b></p> <p>Two-way RF multiplex systems shall be divided into Type 4 or Type 5 classifications based on their ability to perform under adverse conditions.</p> <p><b>A.26.6.5.1.4</b></p> <p>The intent of the plurality of control sites is to safeguard against damage caused by lightning and to minimize the effect of interference on the receipt of signals. The control sites can be co-located.</p> <p><b>26.6.5.1.4.1</b></p> <p>A Type 4 system shall have two or more control sites configured as follows:</p> <ol style="list-style-type: none"> <li>1. Each site shall have an RF receiver interconnected to the supervising or subsidiary station by a separate channel.</li> <li>2. The RF transmitter/receiver located at the protected premises shall be within transmission range of at least two RF receiving sites.</li> <li>3. The system shall contain two RF transmitters that are one of the following: <ol style="list-style-type: none"> <li>1. Located at one site with the capability of interrogating all of the RF transmitters/receivers on the premises</li> <li>2. Dispersed with all of the RF transmitters/receivers on the premises having the capability to be interrogated by two different RF transmitters</li> </ol> </li> <li>4. Each RF transmitter shall operate as follows:</li> </ol>		<p>able to record not less than 50 simultaneous status changes within 90 seconds.</p> <p>2. A system unit that has fewer than 500 initiating device circuits shall be able to record not less than 10 percent of the total number of simultaneous status changes within 90 seconds.</p> <p><del>26.6.5.1.2 Supervisory and Control Functions.</del></p> <p><del>26.6.5.1.2.1</del></p> <p><del>Facilities shall be provided at the supervising station for the following supervisory and control functions of the supervising or subsidiary station and the repeater station radio transmitting and receiving equipment:</del></p> <ol style="list-style-type: none"> <li><del>1. RF transmitter in use (radiating)</del></li> <li><del>2. Failure of ac power supplying the radio equipment</del></li> <li><del>3. RF receiver malfunction</del></li> <li><del>4. Indication of automatic switchover</del></li> <li><del>5. Independent deactivation of either RF transmitter controlled from the supervising station</del></li> </ol> <p><del>26.6.5.1.2.2</del></p> <p><del>Where the radio equipment is remotely located from the system unit, supervisory and control functions of the supervising or subsidiary station and the repeater station radio transmitting and receiving equipment shall be accomplished via a supervised circuit.</del></p> <p><del>26.6.5.1.3 Transmission Channel.</del></p> <p><del>26.6.5.1.3.1</del></p> <p><del>The RF multiplex transmission channel shall terminate in an RF transmitter/receiver at the protected premises and in a system unit at the supervising or subsidiary station.</del></p> <p><del>26.6.5.1.3.2</del></p> <p><del>Operation of the transmission channel shall conform to the requirements of this Code whether channels are private facilities, such as microwave, or leased facilities furnished by a communications utility company.</del></p> <p><del>26.6.5.1.3.3</del></p> <p><del>If private signal transmission facilities are used, the equipment necessary to transmit signals shall also comply with requirements for duplicate equipment or replacement of critical components, as described in 26.6.6.3.</del></p> <p><del>26.6.5.1.4* Categories.</del></p> <p><del>Two-way RF multiplex systems shall be divided into Type 4 or Type 5 classifications based on their ability to perform under adverse conditions.</del></p> <p><del>A.26.6.5.1.4</del></p> <p><del>The intent of the plurality of control sites is to safeguard against damage caused by lightning and to minimize the effect of interference on the receipt of signals. The control sites can be co-located.</del></p> <p><del>26.6.5.1.4.1</del></p> <p><del>A Type 4 system shall have two or more control sites configured as follows:</del></p> <ol style="list-style-type: none"> <li><del>1. Each site shall have an RF receiver interconnected to the supervising or subsidiary station by a separate channel.</del></li> <li><del>2. The RF transmitter/receiver located at the protected premises shall be within transmission range of at least two RF receiving sites.</del></li> <li><del>3. The system shall contain two RF transmitters that are one of the following:</del> <ol style="list-style-type: none"> <li><del>1. Located at one site with the capability of interrogating all of the</del></li> </ol> </li> </ol>			
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1. Maintain a status that allows immediate use at all times.
  2. Provide facilities in the supervising or subsidiary station to operate any off-line RF transmitter at least once every 8 hours.
5. The Type 4 system shall operate as follows:
1. Failure of one of the RF receivers shall not interfere with the operation of the system from the other RF receiver.
  2. Failure of any receiver shall be annunciated at the supervising station.
6. A physically separate channel shall be required between each RF transmitter or RF receiver site, or both, and the system unit.

**26.6.5.1.4.2**

A Type 5 system shall have a single control site configured as follows:

1. A minimum of one RF receiving site
2. A minimum of one RF transmitting site

**26.6.5.1.5 Loading Capacities.**

**26.6.5.1.5.1**

The loading capacities of two-way RF multiplex systems shall be based on the overall reliability of the signal receiving, processing, display, and recording equipment at the supervising or subsidiary station and the capability to transmit signals during adverse conditions of the transmission channels.

**26.6.5.1.5.2**

Allowable loading capacities shall comply with Table 26.6.5.1.5.2.

**Table 26.6.5.1.5.2 Loading Capacities for Two-Way RF Multiplex Systems**

Trunks	System Type	
	Type 4	Type 5
Maximum number of alarm service initiating device circuits per primary trunk facility	5,120	1,280
Maximum number of leg facilities for alarm service per primary trunk facility	512	128
Maximum number of leg facilities for all types of alarm service per secondary trunk facility*	128	128
Maximum number of all types of initiating device circuits per primary trunk facility in any combination	10,240	2,560
Maximum number of leg facilities for types of alarm service per primary trunk facility in any combination*	1,024	256
<b>System Units at the Supervising Station</b>		
Maximum number of all types of initiating device circuits per system unit*	10,240	10,240
Maximum number of protected buildings and premises per system unit	512	512
Maximum number of alarm service initiating device circuits per system	5,120	5,120
<b>Systems Emitting from Subsidiary Station†</b>	—	—

\*Includes every initiating device circuit (e.g., waterflow, alarm, supervisory, guard, burglary, hold-up).

†Same as system units at the supervising station.

**26.6.5.1.5.3**

The capacity of a system unit shall be permitted to be unlimited if the signal receiving, processing, display, and recording equipment are duplicated at the supervising station and a switchover is able to be accomplished in not more than 30 seconds, with no loss of signals during this period.

**26.6.5.1.6 Adverse Conditions.**

- RF transmitters/receivers on the premises
2. Dispersed with all of the RF transmitters/receivers on the premises having the capability to be interrogated by two different RF transmitters

4. Each RF transmitter shall operate as follows:

1. Maintain a status that allows immediate use at all times.
2. Provide facilities in the supervising or subsidiary station to operate any off-line RF transmitter at least once every 8 hours.

5. The Type 4 system shall operate as follows:

1. Failure of one of the RF receivers shall not interfere with the operation of the system from the other RF receiver.
2. Failure of any receiver shall be annunciated at the supervising station.

6. A physically separate channel shall be required between each RF transmitter or RF receiver site, or both, and the system unit.

**26.6.5.1.4.2**

A Type 5 system shall have a single control site configured as follows:

1. A minimum of one RF receiving site
2. A minimum of one RF transmitting site

**26.6.5.1.5 Loading Capacities.**

**26.6.5.1.5.1**

The loading capacities of two-way RF multiplex systems shall be based on the overall reliability of the signal receiving, processing, display, and recording equipment at the supervising or subsidiary station and the capability to transmit signals during adverse conditions of the transmission channels.

**26.6.5.1.5.2**

Allowable loading capacities shall comply with Table 26.6.5.1.5.2.

**Table 26.6.5.1.5.2 Loading Capacities for Two-Way RF Multiplex Systems**

Trunks	System Type	Type 4	Type 5
Maximum number of alarm service initiating device circuits per primary trunk facility	5,120	1,280	1,280
Maximum number of leg facilities for alarm service per primary trunk facility	512	128	128
Maximum number of leg facilities for all types of alarm service per secondary trunk facility*	128	128	128
Maximum number of all types of initiating device circuits per primary trunk facility in any combination	10,240	2,560	2,560
Maximum number of leg facilities for types of alarm service per primary trunk facility in any combination*	1,024	256	256
<b>System Units at the Supervising Station</b>			
Maximum number of all types of initiating device circuits per system unit*	10,240	10,240	10,240
Maximum number of protected buildings and premises per system unit	512	512	512
Maximum number of alarm service initiating device circuits per system	5,120	5,120	5,120
<b>Systems Emitting from Subsidiary Station†</b>	—	—	—

\*Includes every initiating device circuit (e.g., waterflow, alarm, supervisory, guard, burglary, hold-up).

†Same as system units at the supervising station.

**26.6.5.1.5.3**

The capacity of a system unit shall be permitted to be unlimited if the signal receiving, processing, display, and recording equipment are duplicated at the supervising station and a

	<p><del>26.6.5.1.6.1</del>  <del>The occurrence of an adverse condition on the transmission channel between a protected premises and the supervising station that prevents the transmission of any status change signal shall be automatically indicated and recorded at the supervising station.</del></p> <p><del>26.6.5.1.6.2</del>  <del>The indication and recording of the adverse condition shall identify the affected portions of the system so that the supervising station operator will be able to determine the location of the adverse condition by trunk or leg facility, or both.</del></p> <p><del>26.6.5.1.6.3</del>  <del>For two-way RF multiplex systems that are part of a central station alarm system, restoration of service to the affected portions of the system shall be automatically recorded.</del></p> <p><del>26.6.5.1.6.4</del>  <del>When service is restored to a two-way RF multiplex system, the first status change of any initiating device circuit, any initiating device directly connected to a signaling line circuit, or any combination thereof that occurred at any of the affected premises during the service interruption also shall be recorded.</del></p>		<p>switchover is able to be accomplished in not more than 30 seconds, with no loss of signals during this period.</p> <p><del>26.6.5.1.6 Adverse Conditions.</del></p> <p><del>26.6.5.1.6.1</del></p> <p><del>The occurrence of an adverse condition on the transmission channel between a protected premises and the supervising station that prevents the transmission of any status change signal shall be automatically indicated and recorded at the supervising station.</del></p> <p><del>26.6.5.1.6.2</del></p> <p><del>The indication and recording of the adverse condition shall identify the affected portions of the system so that the supervising station operator will be able to determine the location of the adverse condition by trunk or leg facility, or both.</del></p> <p><del>26.6.5.1.6.3</del></p> <p><del>For two-way RF multiplex systems that are part of a central station alarm system, restoration of service to the affected portions of the system shall be automatically recorded.</del></p> <p><del>26.6.5.1.6.4</del></p> <p><del>When service is restored to a two-way RF multiplex system, the first status change of any initiating device circuit, any initiating device directly connected to a signaling line circuit, or any combination thereof that occurred at any of the affected premises during the service interruption also shall be recorded.</del></p>			
SR-5150	<p><del>26.7 Subsidiary Stations or Intermediary Service Provider.</del></p> <p><del>26.7.1 General.</del></p> <p><del>26.7.1.1</del>  <del>The requirements of this section shall apply to gateway communications systems between the protected premises and the public safety answering points (PSAP).</del></p> <p><del>26.7.1.2</del>  <del>Gateway communication systems shall consist of fire alarm control units, transmitters, and other signal initiating devices or technologies that communicate on wireless network(s) from the protected premises through the gateway to a PSAP.</del></p> <p><del>26.7.1.3*</del>  <del>The systems covered under Section 26.7 shall be for the transmission of signals between the protected premises and a PSAP.</del></p> <p><del>A.26.7.1.3</del>  <del>A gateway communications system is intended to communicate alarm, supervisory, and trouble signals from a protected premises to a PSAP.</del></p> <p><del>26.7.1.4</del>  <del>This section shall establish minimum required levels of performance, reliability, and quality for gateways and signal transmission from the gateway to a PSAP.</del></p> <p><del>26.7.2 Gateway Communication Systems.</del></p> <p><del>26.7.2.1</del>  <del>Gateway communications systems shall be designed, installed, operated, and maintained in accordance with 26.7.2 to provide reliable transmission and receipt of alarms in a manner acceptable to the authority having jurisdiction.</del></p> <p><del>26.7.2.2</del>  <del>A gateway communications system shall be permitted to be used for the transmission of other signals or calls of a public emergency nature, provided that such transmission does not interfere with the transmission and receipt of fire alarms.</del></p> <p><del>26.7.2.3</del></p>	<p>Currently, intermediary service providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service providers servers, they are processed in a reliable and supervised manner, and do not bypass the supervising station. Revised requirements were moved to 26.2.11.</p>	CC??	<p>CC??</p> <p><b><u>Statement of the Problem</u></b></p> <p><b><u>Committee Statement</u></b></p> <p>Currently, intermediary service providers are being used to communicate fire protection signals from the protected premises to the supervising stations. Requirements were needed to ensure that when these signals pass through the intermediary service providers servers, they are processed in a reliable and supervised manner, and do not bypass the supervising station. Revised requirements were moved to 26.2.11.</p>		(JVK) After review there is no correlating committee action required.

<p>All devices shall be designed to function satisfactorily under the climatic and environmental conditions to which they could be exposed.</p> <p><del>26.7.2.3.1</del></p> <p>All devices shall be identified as suitable for the location and conditions for which they are installed.</p> <p><del>26.7.2.4</del></p> <p>All circuits, paths, and equipment necessary for the receipt of signals from a protected premises shall be monitored for integrity.</p> <p><del>26.7.2.5</del></p> <p>All systems and signal transmissions shall be under the control of a designated supervising station.</p> <p><del>26.7.2.5.1</del></p> <p>Designation shall be through a contract between the owner and the supervising station.</p> <p><del>26.7.2.5.2</del></p> <p>The contract between the owner and the supervising station shall be the only one in force.</p> <p><del>26.7.2.6</del></p> <p>All gateway equipment shall be listed for its purpose.</p> <p><del>26.7.2.7</del></p> <p>All gateway equipment shall be installed in locations accessible to the authority having jurisdiction for the purpose of inspection.</p> <p><del>26.7.2.8</del></p> <p>Gateway communications systems shall, in their entirety, be subject to a complete operational acceptance test upon completion of system installation.</p> <p><del>26.7.2.8.1</del></p> <p>The operational test(s) shall comply with the following:</p> <ol style="list-style-type: none"> <li><del>1. Be made in accordance with the requirements of the authority having jurisdiction</del></li> <li><del>2. In no case be less than those stipulated in Chapter 14</del></li> </ol> <p><del>26.7.2.8.2</del></p> <p>Operational acceptance tests shall be performed on any alarm reporting devices, as covered in Section 26.7, that are installed or modified subsequent to the test required by 26.7.2.8.</p> <p><del>26.7.2.9</del></p> <p>Personnel shall be qualified in accordance with the requirements of 10.5.7.</p> <p><del>26.7.3 Communications Methods.</del></p> <p><del>26.7.3.1 Application.</del></p> <p><del>26.7.3.1.1</del></p> <p>A gateway communications system shall include wireless network(s) for command and control communications between the protected premises, alarm processing equipment, supervising station, and PSAP.</p> <p><del>26.7.3.1.2</del></p> <p>A gateway communications system shall be permitted to be used with emergency communications systems covered under Chapter 24.</p> <p><del>26.7.3.2 Wireless Network(s).</del></p> <p><del>26.7.3.2.1</del></p> <p>The terms <i>wireless network</i> and <i>cellular transmission</i> shall be considered the same and interchangeable throughout this section.</p> <p><del>26.7.3.2.2</del></p> <p>All wireless networks shall meet the requirements of 26.7.3.2.3 through 26.7.3.2.6.</p> <p><del>26.7.3.2.3</del></p>						
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<p>In addition to the requirements of this Code, all wireless equipment shall be designed and operated in compliance with all applicable rules and regulations of the Federal Communications Commission (FCC) or, where required, the National Telecommunications and Information Administration (NTIA).</p> <p>26.7.3.2.4 Unlicensed wireless networks shall not be permitted.</p> <p>26.7.3.2.5 Fire alarm signals, other emergency alarm signals, and monitoring for integrity signals shall be permitted on the same wireless network, dedicated for that purpose.</p> <p>26.7.3.2.6 Two independent means shall be provided to retransmit an alarm signal from the gateway to the designated PSAP.</p> <p>26.7.4 Alarm Processing Equipment. The alarm processing equipment at the gateway required to receive and control signals from the protected premises shall be installed and maintained as defined in NFPA 1225.</p> <p>26.7.5 Visual Recording Devices. 26.7.5.1 Alarms shall be automatically received and recorded at the gateway.</p> <p>26.7.5.2 A device for producing a permanent graphic recording of all alarm, supervisory, trouble, and test signals received or retransmitted, or both, shall be provided at each gateway for each system.</p> <p>26.7.5.3 Reserve recording devices shall be provided in accordance with 26.7.5.3.1 and 26.7.5.3.2.</p> <p>26.7.5.3.1 Where each gateway is served by a dedicated recording device, the number of reserve recording devices required on-site shall be equal to at least 5 percent of the systems that are in service and in no case less than one device.</p> <p>26.7.5.3.2 Where two or more gateways are served by a common recording device, a reserve recording device shall be provided on-site for each gateway connected to a common recorder.</p> <p>26.7.5.4 Permanent visual records shall comply with 26.7.5.4.1 and 26.7.5.4.2.</p> <p>26.7.5.4.1 A permanent visual record and an audible signal shall be required to indicate the receipt of an alarm.</p> <p>26.7.5.4.2 The permanent record shall indicate the exact location from which the alarm is being transmitted.</p> <p>26.7.5.5 Facilities shall be provided with a device that automatically records the date and time of receipt of each alarm.</p> <p>26.7.6 System Integrity. 26.7.6.1 Circuits upon which transmission and receipt of alarms depend shall be constantly monitored for integrity to provide prompt warning of conditions adversely affecting reliability.</p> <p>26.7.6.2 The power supplied to all required circuits and devices of the system shall be constantly monitored for integrity.</p> <p>26.7.7 Trouble Signals.</p>						
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	<p><b>26.7.7.1</b> Trouble signals shall be indicated where there is a trained and competent person on duty at all times within a gateway.</p> <p><b>26.7.7.2</b> Trouble signals shall be distinct from alarm signals and be indicated by a visual and audible signal.</p> <p><b>26.7.7.3</b> A switch for silencing the audible trouble signal shall be permitted, provided that the visual signal remains operating until the silencing switch is restored to its normal position.</p> <p><b>26.7.7.4</b> The audible signal shall be responsive to faults on any other circuits that occur prior to restoration of the silencing switch to its normal position.</p> <p><b>26.7.8 Power Supply:</b></p> <p><b>26.7.8.1</b> The requirements of 26.7.8 shall be met for primary and secondary power for the gateway.</p> <p><b>26.7.8.2</b> Visual and audible means to indicate a 15 percent or greater reduction of normal power supply (rated voltage) shall be provided.</p> <p><b>26.7.8.3</b> Where the electrical service/capacity of the equipment required under Section 4.7 of NFPA 1225 satisfies the needs of equipment in this section, such equipment shall not be required to be duplicated.</p> <p><b>26.7.9 Engine Driven Generators:</b> The installation of engine driven generator sets shall be in accordance with NFPA 37, NFPA 110, and NFPA 1225.</p> <p><b>26.7.10 Equipment Fire Protection:</b> Where applicable, electronic computer/data processing equipment shall be protected in accordance with NFPA 75.</p> <p><b>26.7.11 Gateway:</b></p> <p><b>26.7.11.1</b> All equipment shall be listed for its intended use and shall be installed in accordance with NFPA 70.</p> <p><b>26.7.11.2 Alarm Processing Equipment:</b></p> <p><b>26.7.11.2.1</b> The alarm processing equipment shall be located where it can be monitored for alarm and trouble conditions.</p> <p><b>26.7.11.2.2</b> The alarm processing equipment shall be accessible in case of a pathway or communications failure with the communications center.</p> <p><b>26.7.11.3</b> Wireless alarm repeating systems used to repeat signals between a protected premises and the gateway processing equipment location shall meet the requirements of 26.7.11.3.1 through 26.7.11.3.4.</p> <p><b>26.7.11.3.1</b> There shall be a minimum of two complete and independent alarm repeater systems, including batteries and power supplies.</p> <p><b>26.7.11.3.2</b> If the gateway is configured with one alarm repeater in standby mode, the system shall be capable of both of the following:</p> <ol style="list-style-type: none"> <li>1. Detecting a communications failure</li> <li>2. Automatically switching to the backup system without interruption or loss of any alarm or trouble transmission</li> </ol>						
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	<p><del>26.7.11.3.3</del></p> <p><del>Gateways shall not be used for any purpose other than alarm communications between the protected premises and the PSAP.</del></p> <p><del>26.7.11.3.4</del></p> <p><del>Where it is not possible to use the gateway alarm reporting infrastructure to provide communications between the protected premises and a PSAP, alarm processing equipment at the contracted supervising station shall be used in accordance with Section 26.3, Section 26.4, or Section 26.5.</del></p> <p><del>26.7.11.4</del></p> <p><del>Pathways between the protected premises and the gateway alarm processing equipment shall be monitored for integrity, be dedicated, and not be used for any other purpose.</del></p> <p><del>26.7.11.5</del></p> <p><del>When communications protected premises and the gateway alarm processing equipment fails, the requirements of 26.7.11.5.1 through 26.7.11.5.3 shall apply.</del></p> <p><del>26.7.11.5.1</del></p> <p><del>A pathway or communications trouble condition shall be detected and annunciated at the protected premises, the originating supervising station, and the gateway alarm processing equipment within 200 seconds and meet the requirements of 26.7.7.</del></p> <p><del>26.7.11.5.2</del></p> <p><del>Visual and audible trouble alarm indications pertaining to a pathway or communications failure between the protected premises and the gateway alarm processing equipment shall be distinct from all other trouble alarms.</del></p> <p><del>26.7.11.5.3</del></p> <p><del>The gateway alarm processing equipment shall be manned by trained personnel until communications can be re-established.</del></p>						
SR-5139	<p><b>A.26.5.3</b></p> <p><del>As</del>At a minimum, the room(s)<del>or rooms</del> containing the remote supervising station equipment should have a 1-hour fire rating, and the entire structure should be protected by an alarm system complying with Chapter 23.</p> <p>As a useful guide for determining the nature of the design and integrity necessary to achieve proper protection, the remote supervising station building or that portion of a building occupied by a remote supervising station should compare the construction, fire protection, restricted access, emergency lighting, and power facilities to the requirements stated in the latest edition of UL 827, <i>Central-Station Alarm Services</i>.</p> <p>If the remote supervising station is located within an emergency response agency (ERA), the ERA should consider meeting the requirements of <del>Chapter 4</del> of NFPA 1225.</p>	Removed chapter reference in favor of pointing the user to NFPA 1225.	<p>Public Comment No. 166-NFPA 72-2023 [ Section No. A.26.5.3 ]</p> <p><b>A.26.5.3</b></p> <p>As a minimum, the room or rooms containing the remote supervising station equipment should have a 1-hour fire rating, and the entire structure should be protected by an alarm system complying with Chapter 23.</p> <p>As a useful guide for determining the nature of the design and integrity necessary to achieve proper protection, the remote supervising station building or that portion of a building occupied by a remote supervising station should compare the construction, fire protection, restricted access, emergency lighting, and power facilities to the requirements stated in the latest edition of UL 827, <i>Central-Station Alarm Services</i>.</p> <p>If the remote supervising station is located within an emergency response agency (ERA), the ERA should consider meeting the requirements of Chapter 4 of NFPA 1225.</p>	<p>Public Comment No. 166-NFPA 72-2023 [ Section No. A.26.5.3 ]</p> <p><b>Statement of the Problem</b></p> <p>NOTE: The following CC Note No. 24 appeared in the First Draft Report.</p> <p>Review the language of the third paragraph for the correct reference chapter number in NFPA 1225. NFPA 1221 was consolidated into NFPA 1225.</p> <p><b>Committee Statement</b></p> <p>Rejected but see related SR-5139</p> <p>Removed chapter reference in favor of pointing the user to NFPA 1225.</p>	SCR-xxxx	<p><b>A.26.5.3</b></p> <p><del>As</del>At a minimum, the room(s)<del>or rooms</del> containing the remote supervising station equipment should have a 1-hour fire rating, and the entire structure should be protected by an alarm system complying with Chapter 23.</p> <p>As a useful guide for determining the nature of the design and integrity necessary to achieve proper protection, the remote supervising station building or that portion of a building occupied by a remote supervising station should compare the construction, fire protection, restricted access, emergency lighting, and power facilities to the requirements stated in <del>the latest edition of</del> UL 827, <i>Central-Station Alarm Services</i>.</p> <p>If the remote supervising station is located within an emergency response agency (ERA), the ERA should consider meeting the requirements of <del>Chapter 4</del> of NFPA 1225.</p>	(JVK) NFPA staff recommends we remove the following text: "the latest addition of "  I agree with the change.
SR-5128	<p>A.26.6.1</p> <p>Refer to Table A.26.6.1 for communications methods.</p> <p>Table A.26.6.1 Communications Methods for Supervising Stations</p> <p>Remove Column Labeled "Two-Way Radio Frequency (RF) Multiplex Systems 26.6.5.1"</p>	Accepted	<p>Public Comment No. 132-NFPA 72-2023 [ Section No. A.26.6.1 ]</p> <p>A.26.6.1</p> <p>Refer to Table A.26.6.1 for communications methods.</p> <p>Table A.26.6.1 Communications Methods for Supervising Stations</p>	<p>Public Comment No. 132-NFPA 72-2023 [ Section No. A.26.6.1 ]]</p> <p><b>Statement of the Problem</b></p> <p>This public comment is being submitted on behalf of the performance-based design task group</p>		(JVK) After review there is no correlating committee action required	



			Remove Column Labeled "Two-Way Radio Frequency (RF) Multiplex Systems 26.6.5.1"	<p>assigned by SIG-SSS during the first draft meetings to review and consider modifications of Chapter 26 to remove communications technologies no longer in use and prescriptive performance-based methodologies for new and future communications technologies. This public comment is tied to Committee Input 5100. (removing 2 way Radio from Table)</p> <p><b><u>Committee Statement</u></b></p> <p>Accepted</p> <p>Two way radio technology has been eliminated from the table since the technology is no longer listed for fire alarm service.</p>		
SR-5141	<p><b>A.26.6.3</b></p> <p>Certain legacy technologies (e.g., active multiplex, McCulloh, directly connected non-coded and private microwave) have been removed from the text of the document. Existing systems utilizing these technologies are acceptable, because all these technologies also comply with the general provisions/requirements of 26.6.3.</p> <p>The object of 26.6.3 is not to give details of specific technologies but rather give basic operating parameters of the transmission supervision rates of technologies. The following list represents examples of current technologies that can be configured to meet the requirements and the intent of 26.6.3:</p> <ol style="list-style-type: none"> <li>1. Transmitters using <u>Internet protocol (IP)</u>(<del>Internet Protocol</del>)</li> <li>2. IP transmission over the public open Internet or over private IP facilities maintained by an organization for its own use</li> <li>3. Transmitters using various (non-dialup) digital cellular <del>technology</del>technologies</li> </ol> <p><i>Wired IP Transmission.</i> There are two types of wired IP transmission devices. One type connects the IP network directly to the <del>fire alarm control unit</del>FACU (integrated IP or native IP). The second uses an intermediary module that can include the following:</p> <ol style="list-style-type: none"> <li>1. IP dialer capture module</li> <li>2. IP data capture module (such as e.g., RS-232, keypad bus, RS-485)</li> <li>3. Relay contact monitoring module</li> </ol> <p>Devices referred to as "IP dialer capture modules" (an IP communicator used with a DACT) are transmission devices that connect to the DACT output of the <del>fire alarm control unit</del>FACU and convert the output data stream to IP (<del>Internet protocol</del>). As such, they are considered to use IP technology in their connection to the IP network. Therefore, they should be treated in this Code under the <del>performance-based technologies</del> requirements of 26.6.3, <del>performance-based technologies</del>, and not under the <del>digital alarm communicator systems</del> requirements of 26.6.4, <del>digital alarm communicator systems</del>.</p> <p><u>It should be noted that certain FCC-licensed carriers might provide interface hardware that is similar in function but not considered part of the alarm system equipment including DACT functions. Such carrier-provided interface equipment is considered part of the telecommunications network equipment and can be considered a functional gateway to the carrier network. It is not considered customer premises equipment or alarm signaling equipment. Such equipment is always provided by the carrier and wired accordingly on the network side of the FCC server name indication (SNI) or demarcation point (demarc). Such equipment will always carry the appropriate performance-based listing meeting the appropriate standard.</u></p> <p><i>Digital Cellular.</i> To accommodate an increase in the demand for mobile wireless communications as well as introducing new services over that same network, wireless voice communications no longer <del>utilizes</del>use dedicated connections to pass voice band frequencies. In place of the voice band, the voice conversation is converted into a stream of bits and packaged within data packets that conform to messaging protocols. The packets are addressed to a destination point, delivered into the network, received by the destination point, and converted back into intelligible voice-grade messages. The message exchange through this wireless data network is done through well-known</p>	The additional annex language provides more background and descriptive information on how telecommunications networks are regulated.	<p>Public Comment No. 220-NFPA 72-2023 [ Section No. A.26.6.3 ]</p> <p><b>A.26.6.3</b></p> <p>Certain legacy technologies (active multiplex, McCulloh, directly connected non-coded and private microwave) have been removed from the text of the document. Existing systems utilizing these technologies are acceptable, because all these technologies also comply with the general provisions of 26.6.3.</p> <p>The object of 26.6.3 is not to give details of specific technologies but rather give basic operating parameters of the transmission supervision rates of technologies. The following list represents examples of current technologies that can be configured to meet the requirements and the intent of 26.6.3:</p> <ol style="list-style-type: none"> <li>1. Transmitters using IP (Internet Protocol)</li> <li>2. IP transmission over the public open Internet or over private IP facilities maintained by an organization for its own use</li> <li>3. Transmitters using various (non-dialup) digital cellular technology</li> </ol> <p><i>Wired IP Transmission.</i> There are two types of wired IP transmission devices. One type connects the IP network directly to the fire alarm control unit (integrated IP or native IP). The second uses an intermediary module that can include the following:</p> <ol style="list-style-type: none"> <li>1. IP dialer capture module</li> <li>2. IP data capture module (such as RS-232, keypad bus, RS-485)</li> <li>3. Relay contact monitoring module</li> </ol> <p>Devices referred to as "IP dialer capture modules" (an IP communicator used with a DACT) are transmission devices that connect to the DACT output of the fire alarm control unit and convert the output data stream to IP (Internet protocol). As such, they are considered to use IP technology in their connection to the IP network. Therefore, they should be treated in this Code under the requirements of 26.6.3, performance-based technologies, and not under the requirements of 26.6.4, digital alarm communicator systems. <u>A distinction must be noted in that certain FCC approved Carriers may provide interface hardware that is similar in function but not considered part of the alarm system equipment including DACT functions. Such Carrier provided interface equipment is considered as a part of the Telecommunications Network Equipment. This equipment may be considered a functional gateway to the Carrier network. It is always FCC approved. It is not considered customer premises equipment or alarm signaling equipment. Such network equipment is always provided by the Carrier and wired accordingly on the Network side of the FCC SNI or Demarc. Such equipment will always carry the appropriate Performance Based listing meeting the appropriate standard.</u></p>	<p>Public Comment No. 220-NFPA 72-2023 [ Section No. A.26.6.3 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5141</p> <p>The additional annex language provides more background and descriptive information on how telecommunications networks are regulated.</p>		(JVK) After review there is no correlating committee action required.

<p>defined protocols such as <del>"Global System for Mobile"</del> global system for mobile" communications (GSM) for voice communications as well as <del>Code Division Multiple Access</del> code division multiple access (CDMA) for both voice and data and <del>General Packet Radio Service</del> general packet radio service (GPRS) for mobile data services. These protocols have been developed to operate in an optimal way for the intended application. For example, GSM <del>is used to</del> can efficiently establish voice-grade connections that deliver an appropriate level of intelligible voice quality, but might not be good enough to pass tones that represent data. Data transmission is better served by GPRS and CDMA where a connection into the wireless network is always available without having to "dial," and large amounts of data can be efficiently transmitted. However, the data passed using GPRS or CDMA are not <del>that of</del> coded tones such as <del>dual tone multi-frequency</del> [DTMF (Contact ID);] but are computer-type messages similar to IP.</p> <p>When using digital cellular, a DACT might <del>or might not</del> be used.</p> <p>For example, the digital cellular device might be used to back up the DACT or, if properly supervised, be used as a stand-alone device. If used, the DACT is connected to a digital cellular radio device that connects to the cellular network by means of an antenna. The digital cellular radio device is constantly connecting to the wireless network and is always ready to attempt to transmit to a destination address without having to "dial" a number. The radio device recognizes that the alarm panel is attempting to place a call by the DACT's "off-hook" signaling. The radio device accepts the DACT tone signaling, converts it into a packeted data stream, and sends the packets into the wireless network for delivery to a <del>pre-assigned</del> preassigned destination address.</p> <p><u>It should be noted that FCC-licensed carriers might provide similar services. These services are often optimized to consider both IP and cellular connectivity as needed. The telecommunication network equipment provided by such carriers will often present a single gateway to multiple communication technologies or pathways. In these cases, a DACT device will continue to function as legacy equipment capable of transmitting traditional tones, including frequency shift keying (FSK) or DTMF media. The carrier network can continue to carry both tone- and pulse-type signals if configured by the carrier. These carrier circuits are intended to permit legacy alarm DACT communication protocols to continue to function and communicate over the carrier network using different carrier-determined mediums, including combinations of IP, WAN, and cellular connectivity (as determined by the carrier).</u></p>		<p><i>Digital Cellular.</i> To accommodate an increase in the demand for mobile wireless communications as well as introducing new services over that same network, wireless voice communications no longer utilizes dedicated connections to pass voice band frequencies. In place of the voice band, the voice conversation is converted into a stream of bits and packaged within data packets that conform to messaging protocols. The packets are addressed to a destination point, delivered into the network, received by the destination point, and converted back into intelligible voice-grade messages. The message exchange through this wireless data network is done through well-known defined protocols such as "Global System for Mobile" communications (GSM) for voice communications as well as Code Division Multiple Access (CDMA) for both voice and data and General Packet Radio Service (GPRS) for mobile data services. These protocols have been developed to operate in an optimal way for the intended application. For example, GSM is used to efficiently establish voice-grade connections that deliver an appropriate level of intelligible voice quality, but might not be good enough to pass tones that represent data. Data transmission is better served by GPRS and CDMA where a connection into the wireless network is always available without having to "dial," and large amounts of data can be efficiently transmitted. However, the data passed using GPRS or CDMA are not that of coded tones such as DTMF (Contact ID), but are computer-type messages similar to IP.</p> <p>When using digital cellular, a DACT might or might not be used.</p> <p>For example, the digital cellular device might be used to back up the DACT or, if properly supervised, be used as a stand-alone device. If used, the DACT is connected to a digital cellular radio device that connects to the cellular network by means of an antenna. The digital cellular radio device is constantly connecting to the wireless network and is always ready to attempt to transmit to a destination address without having to "dial" a number. The radio device recognizes that the alarm panel is attempting to place a call by the DACT's "off-hook" signaling. The radio device accepts the DACT tone signaling, converts it into a packeted data stream, and sends the packets into the wireless network for delivery to a pre-assigned destination address.</p> <p>Public Comment No. 221-NFPA 72-2023 [ Section No. A.26.6.3 ]</p> <p><b>A.26.6.3</b></p> <p>Certain legacy technologies (active multiplex, McCulloh, directly connected non-coded and private microwave) have been removed from the text of the document. Existing systems utilizing these technologies are acceptable, because all these technologies also comply with the general provisions of 26.6.3.</p> <p>The object of 26.6.3 is not to give details of specific technologies but rather give basic operating parameters of the transmission supervision rates of technologies. The following list represents examples of current technologies that can be configured to meet the requirements and the intent of 26.6.3:</p> <ol style="list-style-type: none"> <li>1. Transmitters using IP (Internet Protocol)</li> <li>2. IP transmission over the public open Internet or over private IP facilities maintained by an organization for its own use</li> <li>3. Transmitters using various (non-dialup) digital cellular technology</li> </ol> <p><i>Wired IP Transmission.</i> There are two types of wired IP transmission devices. One type connects the IP network directly to the fire alarm control unit (integrated IP or native IP). The second uses an intermediary module that can include the following:</p> <ol style="list-style-type: none"> <li>1. IP dialer capture module</li> <li>2. IP data capture module (such as RS-232, keypad bus, RS-485)</li> <li>3. Relay contact monitoring module</li> </ol>	<p>Public Comment No. 221-NFPA 72-2023 [ Section No. A.26.6.3 ]</p> <p><b><u>Statement of the Problem</u></b></p> <p>Adds clarification that carriers may provide similar equipment, although NFPA 72 has no jurisdiction to regulate the operation of MFVNs that are located on the network side of the FCC demarcation point.</p> <p><b><u>Committee Statement</u></b></p> <p>Rejected but see related SR-5141</p> <p>The additional annex language provides more background and descriptive information on how telecommunications networks are regulated</p>	<p>(JVK) After review there is no correlating committee action required</p>
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			<p>Devices referred to as "IP dialer capture modules" (an IP communicator used with a DACT) are transmission devices that connect to the DACT output of the fire alarm control unit and convert the output data stream to IP (Internet protocol). As such, they are considered to use IP technology in their connection to the IP network. Therefore, they should be treated in this Code under the requirements of 26.6.3, performance-based technologies, and not under the requirements of 26.6.4, digital alarm communicator systems.</p> <p><i>Digital Cellular.</i> To accommodate an increase in the demand for mobile wireless communications as well as introducing new services over that same network, wireless voice communications no longer utilizes dedicated connections to pass voice band frequencies. In place of the voice band, the voice conversation is converted into a stream of bits and packaged within data packets that conform to messaging protocols. The packets are addressed to a destination point, delivered into the network, received by the destination point, and converted back into intelligible voice-grade messages. The message exchange through this wireless data network is done through well-known defined protocols such as "Global System for Mobile" communications (GSM) for voice communications as well as Code Division Multiple Access (CDMA) for both voice and data and General Packet Radio Service (GPRS) for mobile data services. These protocols have been developed to operate in an optimal way for the intended application. For example, GSM is used to efficiently establish voice-grade connections that deliver an appropriate level of intelligible voice quality, but might not be good enough to pass tones that represent data. Data transmission <del>is better</del> <u>may be better</u> served by GPRS and CDMA where a connection into the wireless network is always available without having to "dial," and large amounts of data can be efficiently transmitted. However, the data passed using GPRS or CDMA are not that of coded tones such as DTMF (Contact ID), but are computer-type messages similar to IP.</p> <p>When using digital cellular, a DACT might or might not be used.</p> <p>For example, the digital cellular device might be used to back up the DACT or, if properly supervised, be used as a stand-alone device. If used, the DACT is connected to a digital cellular radio device that connects to the cellular network by means of an antenna. The digital cellular radio device is constantly connecting to the wireless network and is always ready to attempt to transmit to a destination address without having to "dial" a number. The radio device recognizes that the alarm panel is attempting to place a call by the DACT's "off-hook" signaling. The radio device accepts the DACT tone signaling, converts it into a packeted data stream, and sends the packets into the wireless network for delivery to a pre-assigned destination address.</p> <p><u>It should be noted that FCC approved Carriers may provide similar services. These services are often optimized to consider both IP and Cellular connectivity as needed. The Telecommunication Network Equipment provided by such carriers often will present a single gateway to multiple communication technologies or pathways. In these cases, a DACT device will continue to function as legacy equipment capable of transmitting traditional tones including legacy Frequency Shift Keying (FSK) or Dual Tone Multi-Frequency (DTMF) media. The Carrier Network can continue to carry both tone and pulse type signals if configured by the Carrier. These Carrier circuits are intended to permit legacy alarm DACT communication protocols to continue to function and communicate over the Carrier Network using different Carrier determined mediums including combinations of IP, WAN, and Cellular connectivity (as determined by the Carrier).</u></p>			
SR-5140	<p><b>A.26.6.3.5</b></p> <p>When considering a fire alarm system <del>utilizing</del> <u>using</u> a single communication path to the supervising station, <del>consideration should be given to</del> the risk exposure that results from the loss of that path for any period of time and for any reason <u>should be considered</u>. Some of these outages can be regular and predicable and others transitory.</p> <p>One example of a single technology used to produce two paths is the use of a digital cellular premises unit communicating with two or more cell towers. In this case, the supervising station and the protected premises must be made</p>	Premises' was missing from the text and added for clarification.	<p>Public Comment No. 176-NFPA 72-2023 [ Section No. A.26.6.3.5 ]</p> <p><b>A.26.6.3.5</b></p> <p>When considering a fire alarm system utilizing a single communication path to the supervising station, consideration should be given to the risk exposure that results from the loss of that path for any period of time and for any reason. Some of these outages can be regular and predicable and others transitory.</p>	<p>Public Comment No. 176-NFPA 72-2023 [ Section No. A.26.6.3.5 ]</p> <p><b>Statement of the Problem</b></p> <p>Corrected a typo: notification is needed for the supervising station and the protected premises.</p> <p><b>Committee Statement</b></p>		(JVK) After review there is no correlating committee action required

	aware if communications <del>degrades</del> <u>degrade</u> to below two towers. Another example is the use of two different cellular carriers to produce the two paths. Similarly, in this case, the supervising station and the protected <u>premises</u> must be made aware if communications <del>degrades</del> <u>degrade</u> to one carrier.		One example of a single technology used to produce two paths is the use of a digital cellular premises unit communicating with two or more cell towers. In this case, the supervising station and the protected premises must be made aware if communications degrades to below two towers. Another example is the use of two different cellular carriers to produce the two paths. Similarly, in this case the supervising station and the protected <u>premises</u> must be made aware if communications degrades to one carrier.	Rejected but see related SR-5140  'Premises' was missing from the text and added for clarification.		
PC-240		Rejected  The submitted text doesn't provide additional guidance for the user as it relates to the requirement.	Public Comment No. 240-NFPA 72-2023 [ Section No. A.26.6.4.2.3 ]  A.26.6.4.2.3 To give the DACT the ability to disconnect an incoming call to the protected premises, telephone service should be of the type that provides for timed-release disconnect. In some telephone systems (step-by-step offices), timed-release disconnect is not provided. <u>All equipment supplied by FCC approved carrier connected on the Network side of the FCC SNI or Demarc shall be required to meet FCC and Telecommunications Industry transmission standards including but not limited to functions regulating telecommunication systems including: Battery feed (B), Overvoltage protection (O), Ringing (R), Signaling (S), Coding (C), Hybrid (H), and Test (T) functions</u>	Public Comment No. 240-NFPA 72-2023 [ Section No. A.26.6.4.2.3 ]  <b><u>Statement of the Problem</u></b>  Provides the proper industry standards for DACT signaling within the MFVN network.  <b><u>Committee Statement</u></b>  Rejected  The submitted text doesn't provide additional guidance for the user as it relates to the requirement.		(JVK) After review there is no correlating committee action required

Task Group 6 CC SCM SIG HOU Notes AGB

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-HOU	29.9.3	7	CR	<p><b>29.9.3 Household Fire and Carbon Monoxide Alarm Systems.</b></p> <p>29.9.3.1 Power for household alarm systems shall comply with the following requirements:</p> <p>(1) Household fire and carbon monoxide alarm systems shall have two independent power sources consisting of a primary source that uses commercial light and power and a secondary source that uses a rechargeable battery.</p> <p>(2) The secondary source shall be capable of operating the household alarm system for at least 24 hours in the normal condition, followed by 4 minutes of fire alarm or 12 hours of carbon monoxide alarm, <del>and comply with the following conditions:</del></p> <p><del>(a) The secondary power source for a household carbon monoxide system shall be capable of operating the system for at least 12 hours of alarm in accordance with 29.5.4.</del></p> <p><del>(b) The secondary power source for a household carbon monoxide system shall not be required to operate the system for 12 hours of alarm if the power source of carbon monoxide detectors and carbon monoxide audible notification appliances incorporating a low-power radio (wireless) transmitter/transceiver is capable of providing at least 24 hours in the normal condition, followed by 12 hours of alarm.</del></p> <p>(3) The secondary power source shall be supervised so that a distinctive audible and visible trouble signal results upon removal or disconnection of a battery or a low-battery condition.</p> <p>(4) A rechargeable battery used as a secondary power source shall meet the following criteria:</p> <p>(a) Be automatically recharged by an AC circuit of the commercial light and power source</p> <p>(b) Be recharged within 48 hours</p> <p>(c) Provide a distinctive audible trouble signal before the battery is incapable of operating the device(s) for alarm purposes</p> <p>(5) Low-power wireless systems shall comply with the performance criteria of Section 23.16, except as modified by 29.10.8.1.1.</p> <p><u>29.9.3.2 The secondary power source for a household carbon monoxide system shall not be required to operate the system for 12 hours of alarm if the power source of carbon monoxide detectors and carbon monoxide audible notification appliances incorporating a low-power radio (wireless) transmitter/transceiver is capable of providing at least 24 hours in the normal condition, followed by 12 hours of alarm.</u></p>	The MOS requires items in lists to be parallel. List items 29.9.3(1)(a) and 29.9.3(1)(b) are not parallel. With respect to (a) it is sufficient to reference 29.5.4 which requires compliance with 18.4.3.2 which contains the requirements. (b) is relocated to 29.9.3.2
SIG-HOU	29.10.4.2		CR	<p>29.10.4.2*</p> <p>Fixed-temperature alarms or detectors shall comply with both of the following conditions:</p> <p>(1) Have a temperature rating at least 20°F (11°C) above the maximum expected temperature in the room or space where installed</p> <p>(2) <del>Have a temperature rating not more than</del> <del>Not be rated</del> 50°F (28°C) higher than the maximum expected temperature in the room or space where installed</p>	The conditions for a fixed temperature alarm or detector rating could be interpreted to be that the temperature must be at least 20 F higher than expected and rated to any temperature above 50 F, but not 50 F specifically. The language in (2) is revised to be parallel to (1) and clarifies that the temperature rating must not be 50 degrees F higher than the maximum expected temperature.
SIG-IDS	29.7.1.1	?	?	<p>3.3.131 Fuel Gas Warning Equipment.</p> <p>Any detector, alarm, device, or material related to single- and multiple-station alarms or household fuel gas detection systems. [715, 2023] (SIG-IDS)</p>	Should this be tagged to SIG-HOU?
SIG-HOU	29.5.4		CR	<p>29.5.4*</p> <p>Carbon monoxide warning equipment to be installed in residential occupancies shall produce the T4 signal <del>consistent in accordance with</del> 18.4.3.2, <del>and after the initial 4 minutes of alarm the 5-second "off" time shall be permitted to be changed to 60 seconds ± 10 percent.</del></p>	18.4.3.2 contains the requirements for the T4 signal including the permitted off time, so duplicating the off time in this section is redundant. Additionally, 18.4.3.2 contains other requirements which are not captured in 29.5.4. 18.4.3.2 contains all of the requirements for the T4 signal and is sufficient as referenced.

Task Group 6 CC SCM SIG HOU Notes AGB

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-HOU	29.7.1.1 (4)	7	CR	<p>29.7.1.1*</p> <p>Where installed, listed carbon monoxide alarms and carbon monoxide detectors shall be located as follows:</p> <p>(1) Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel</p> <p>(2) On every occupiable level of a dwelling unit, including basements, excluding attics and crawl spaces</p> <p>(3) In all sleeping and guest rooms containing fuel-burning equipment</p> <p>(4) <del>In other</del> <u>Other</u> locations where required by applicable laws, codes, or standards</p>	The language in (4) is revised to be parallel to (1) (2) & (3)
SIG-HOU	29.10.2		CR	<p>29.10.2* Smoke Alarms, System Smoke Detectors, and Other Non-Heat Fire Detectors.</p> <p>Each device shall detect abnormal quantities of smoke or applicable fire signature, shall operate in the normal environmental conditions, and shall be in compliance with <del>applicable standards such as</del> UL 268, Smoke Detectors for Fire Alarm Systems, or UL 217, Smoke Alarms.</p>	Requirements for compliance with other standards have been made explicit for consistency within the code
SIG-HOU	29.10.6.8		CR	<p>29.10.6.8</p> <p>The control unit shall be in compliance with <del>applicable standards such as</del> UL 985, Household Fire Warning System Units; UL 1730, Smoke Detector Monitors and Accessories for Individual Living Units of Multifamily Residences and Hotel/Motel Rooms; or UL 864, Control Units and Accessories for Fire Alarm Systems.</p>	Requirements for compliance with other standards have been made explicit for consistency within the code
SIG-HOU	29.10.9.10.7		CR	<p>29.10.9.10.7 Transmission devices connected to the supervising station shall be in compliance with <del>applicable standards such as</del> UL 985, Household Fire Warning System Units.</p>	Requirements for compliance with other standards have been made explicit for consistency within the code

Task Group 6 CC SCM SIG HOU Notes AGB

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-HOU	A.29.5.10		CR	<p>29.5.10*</p> <p>Where low frequency sounders, tactile notification appliances, or both are required in rooms by governing laws, codes, or standards, they shall comply with either of the following:</p> <p>(1) The low frequency sounders shall have a fundamental frequency of 520 Hz ± 10 percent.</p> <p>(2) Tactile notification appliances shall meet the requirements of Section 18.10.</p> <p>A.29.5.10</p> <p>Governing laws, codes, or standards might require a certain number of accommodations to be equipped for those with hearing loss or other disabilities. Based on sleep studies to assess the waking effectiveness of different types of alarm signals, a low-frequency alarm signal with a fundamental frequency of 520 Hz has been shown to provide improved awakening for people with hearing loss when compared to typical alarms from high-frequency piezoelectric sounders used in most smoke alarms (Bruck and Thomas, 2009). Visual alarm signals, such as xenon strobes or LED strobes, have been shown to be ineffective at waking people with mild to severe hearing loss (Thomas and Bruck, 2009; Ashley and Du Bois, 2005). As for all alarm signals, effectiveness of the installed notification for the specific occupants should be tested by the occupants, if possible. The low-frequency alarm signal can be provided by the sounder in a smoke alarm or by a separate notification appliance. It is not the intent of this section to preclude devices that have been demonstrated, through peer-reviewed research, to awaken occupants with hearing loss as effectively as those using the frequency and amplitude specified in this section.</p> <p>Low-frequency <del>notification appliances</del> <del>or in combination with</del> tactile notification appliances such as bed shakers have been shown to be effective in waking those with normal hearing to profound hearing loss (CSE NIH report, 2005; Bruck and Thomas, 2009; Bruck, Thomas, and Ball, NFPA RF report, 2007; Ashley and Du Bois, 2005; UL 1971, 2018).</p> <p>Tactile signaling has been studied and found to be an effective way to alert and notify sleeping persons. However, there are many variables that have not been tested that might affect the reliability of their performance. <u>Consequently, in accordance with 18.10, tactile signals cannot be substituted for the required notification.</u></p> <p>Some of the appliance variables include the mass of the appliance, the frequency of vibration, and the throw or displacement of the vibrating mass. Occupant variables that might affect the reporting of test results and the effectiveness of the appliance include the person's age, how long a person has lived with their hearing loss, and what sleep stage the person is experiencing when the appliance operates. The type of mattress might also have an effect of the performance of certain tactile appliances. Mattress variables can include mattress thickness, mattress firmness, memory foam mattresses, pillow top mattresses, water beds, air beds, and motion isolation mattresses. Users of tactile appliances are cautioned to test how well they sense the effect of an appliance.</p>	<p>The Correlating Committee agrees to the Disability Access Review and Advisory Committee (DARAC) request for this revision for the following reasons:</p> <p>The first change clarifies that the research indicates that tactile notification could be used in conjunction with low-frequency notification appliances for additional effectiveness. The second change will better correlate the annex material to the code requirements found within 29.5.10 and 18.10. These changes will ensure that the annex more fully supports the requirements and the conclusions of the referenced studies.</p>
SIG-NAS	A.18.10.2		CR	<p>A.18.10.2</p> <p>Notification appliances including, but not limited to, supplemental tactile notification appliances are available for the deaf and hard of hearing. Tactile notification appliances can be capable of awakening people. Such appliances can, through hard wiring into the fire alarm system or by wireless methods, initiate in response to the activation of an audible smoke alarm.</p> <p>Some tests show that visual notification appliances might not be effective in awakening some sleeping individuals during an emergency. Some tactile notification appliances can be more effective in awakening individuals, regardless of hearing levels, from sleep. See the FPRF report, Review of Alarm Technologies for Deaf and Hard of Hearing Populations, and <del>A.29.5.10.2</del> <u>A.29.5.10</u> for further details.</p>	<p>SR-5144 eliminated A.29.5.10.2 and revised A.29.5.10 to include explanatory material on tactile on tactile notification appliances. The reference has been updated accordingly.</p>

### Task Group 7 CC Task Group SIG-TMS Review

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation	Column1
SIG-TMS	3.3.293.1		CR	3.3.293.1* Executive Software. Control and supervisory program that manages the execution of all other programs and directly or indirectly causes the required functions of the product to be performed. (SIG-TMS) A.3.3.293.1 Executive software is sometimes referred to as firmware, BIOS, or executive program and can include integrated fundamental cybersecurity protection. (SIG-TMS)	Manual of Style requires examples to be located in the Annex.	
SIG-TMS	14.4.14		CR	Maximum Public Mode Audible Levels was removed by SIG NAS as part of the RAMO revisions. Maximum Public Mode Audible Levels was put in during the first draft. Was the intent to remove requirements for Maximum Public Mode Audible Levels or to move testing requirements to Chapter 14?	14.4.14 references a section in Chapter 18 on Public Mode Audible Levels that no longer exists.	Task group could not confirm the intent and requests this to be discussed at the CC meeting with the NAS and TMS Chairs perspective.
SIG-TMS, SIG-FUN	A.14.6.1.1		CR	A.14.6.1.1 Examples of acceptable methods used to define the required sequence of operations and to document the actual sequence of operations include a logic diagram [see Figure A.14.6.1.1(a)] and an input/output matrix [see Figure A.14.6.1.1(b)]. <del>The required and actual sequence of operation should include all applicable items found in the list in A.7.4.9.</del>	A.14.6.1.1 references a list of items in A.7.9 that does not exist in the Code.	Circular reference as A.7.4.9 sends you to A.14.6.1.1 and the items required are in A.14.6.1.1 - also change FACP to FACU
SIG-TMS, SIG-FUN	3.3.293.3		CR	3.3.293.3 Cybersecurity Software. Software that is included in a system element and arranged such that its inclusion or exclusion in no way affects the executive or site-specific software execution and whose purpose is to reduce the vulnerability of the system and/or equipment to cybersecurity attacks. (SIG-FUN/TMS)	SIG TMS and SIG FUN created definitions for Cybersecurity Software, the SIG TMS definition was kept, however the definition should belong to SIG FUN.	
SIG-TMS	14.1.6		No Action	14.1.6 This chapter shall not require inspection, testing, or maintenance personnel to verify the adequacy of the design of existing previously approved systems during periodic inspection, testing, and maintenance.	Negative with Comment - Scibetta, Joe Duct detector sampling tubes, pressure switches and RAMO notification zones all require some type of analysis/comparison to original design documents. This new language in the second draft contradicts that and presents a conflict.	Informational only, no action recommended
SIG-FUN	7.3.4.8	3	Delete SR	<del>7.3.4.8 Design documentation for maximum public mode audible levels, including the definition of the protected space and design sound pressure levels, shall comply with 18.4.1.9.</del>	This SR has been deleted because the associated clause and requirements 18.4.1.9 have been deleted by SR 5065	
SIG-TMS	14.4.14	3	Delete SR	<del>14.4.14 Maximum Public Mode Audible Levels. Where maximum public mode audible levels are used in accordance with 18.4.1.9, annual testing shall include the following: (1) The ambient and maximum sound pressure levels in the protected space shall be recorded and compared against the design documentation required by 18.4.1.9. (2) Each area where the public mode sound pressure level has been reduced shall be reviewed to determine if the application has changed.</del>	This SR has been deleted because the associated clause and requirements 18.4.1.9 have been deleted by SR 5065	
SIG-FUN	10.6.11.3.2.3		CR	Manual-starting engine-driven generators used to provide secondary power for a supervising station shall comply with the requirements of Chapter 10 of NFPA 110 for a Type M, Class 24, Level 2 system.	Incorrect reference to chapter 10 has been corrected to chapter 4	



### Task Group 7 CC Task Group SIG-TMS Review

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation	Column1
SIG-TMS	3.3.293.2.1	7	CR	<del>3.3.293.2.1 Informational Site Specific Software. Programs and information that are included as part of the site specific software but whose inclusion, exclusion, or alteration does not affect the type and quantity of hardware on a system or the system's operational sequence as intended during emergency conditions. (SIG-TMS)</del>	The term is not used in the code	
SIG-TMS	3.3.293.2.2	7	CR	<del>3.3.293.2.2 Operational Site Specific Software. Programs and information that affects the equipment and operation of a system as intended during emergency conditions. Typically, operational site specific software defines the type and quantity of hardware and the specific operating controls or sequences of a system. (SIG-TMS)</del>	The term is not used in the code	

## Task Group 9 CC SCM SIG ECS Notes JVK 12102023

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-FUN,SIG-ECS	2.20		CR	2.2 NFPA Publications. NFPA 1600®, Standard on Continuity, Emergency, and Crisis Management, 2019 edition. NFPA 1620, Standard for Pre-Incident Planning, 2020 edition. NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery, 2024 edition.	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.
SIG-FUN,SIG-ECS	J.1.1		CR	J.1.1 NFPA Publications. NFPA 1600®, Standard on Continuity, Emergency, and Crisis Management, 2019 edition. NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery, 2024 edition.	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.
SIG-NAS, SIG-ECS, SIG-FUN	18.3.7, 24.3.10, Chapter 10		CR	See word document 72_SIG_FUN_SIG_NAS_SIG_ECS_NACs.docx	Correlate the DCNAC (18.3.7) and A-NAC(24.3.10) requirements between Chapter 18 and Chapter 24 and rename DCNAC to V-NAC to mirror A-NAC. During the SIG ECS SDM there was discussion to move the DCNAC and A-NAC requirements to Chapter 10 .
SIG-NAS, SIG-ECS,	18.3.7, 24.3.10 Alternate		CR	See word document 72_SIG_ECS_18_3_7_Revision 12102023.docx	Correlate the DCNAC (18.3.7) and A-NAC(24.3.10) requirements between Chapter 18 and Chapter 24 and rename DCNAC to DC power sourced notification appliance circuits and ACNAC to Non-dc power sourced notification appliance circuits .
SIG-ECS	24.3.13.11		CR	24.3.13.11 The risk analysis shall consider cybersecurity risks in accordance with Chapter 11 and 7.3.6.	No other requirements in 24.3.13 Risk Analysis reference 7.3.6 Risk Analysis Documentation. Annex A.24.3.13, for the the parent section for this requirement, directs the user to A.7.3.6 for a risk analysis checklist. Which contains items for cybersecurity.
SIG-ECS	24.3.14		CR	24.3.14* Emergency Response Plan Elements. A well-defined emergency response plan shall be developed in accordance with NFPA 1600 and NFPA 16201660 as part of the design and implementation of a mass notification system.	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.
SIG-ECS	A.24.3.13		CR	A.24.3.13 There are many credible risk assessment methodologies that can be utilized and/or referenced in conducting the risk assessment required in 24.3.13, some of which are listed as follows: 3.NFPA 16001660, Quincy, MA: National Fire Protection Association, www.nfpa.org	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.

### Task Group 9 CC SCM SIG ECS Notes JVK 12102023

TC	Sec. #	Issue	CR	DRAFT SCR	Notes/Substantiation
SIG-FUN,SIG-ECS	J.1.1		CR	J.1.1 NFPA Publications. NFPA 1600®, Standard on Continuity, Emergency, and Crisis Management, 2019 edition. NFPA 1660, Standard for Emergency, Continuity, and Crisis Management: Preparedness, Response, and Recovery, 2024 edition.	NFPA 1600 and NFPA 1620 were consolidated into NFPA 1660 2024 edition. Requirements contained in NFPA 1600 and 1620 are now located in NFPA 1660.