



Accredited Standards Committee C63[®]

Electromagnetic Compatibility

Subcommittee 7 Spectrum Etiquette

Chair: Vladimir Bazhanov Vice Chair: **Stephen Berger** Secretary: Allen Crumm

May 3, 2018; 1:00 PM – 3:00 PM - EDT

IEEE Headquarters
Piscataway, NJ

Approved Minutes

1. **Call to Order: Chair – Called to order at 1:45PM EST.**
 - 1.1 **Announcements: Chair's remarks – The chair welcomed everyone and thanked them for attending.**
 - 1.2 **Meeting logistics announcements: Host**
 - 1.3 **Introductions: Secretary – roll call** (record attending members with their affiliations and guests separately below) **Report any roster errors to the ASC-C63[®] Secretary** (insert [SC7 membership roster](#) from the website as shown below)

Dave Case, Don Witters, Jason Coder, Omar Al-Kalaa, Vladimir Bazhanov, Stephen Berger, Dheena Moongilan, Dan Hoolihan, Jeff Silberberg, Chris Dilay

Subcommittee 7 Membership Roster

Name	Role within SC 7	Affiliation
Bazhanov, Vladimir	Chair	VB Laboratory Services, LLC
Seidman, Seth	Member	FDA
Young, William	Member	?
Mohamad Al-Kalaa	Member	FDA
Berger, Stephen	Member	TEM Consulting
Case, Dave	Member	Cisco Systems
Coder, Jason	Member	NIST
Dilay, Chris	Member	SPAWAR Systems Center, Pacific
Hare, Ed	Member	ARRL
Hoolihan, Dan	Member	Hoolihan EMC Consulting
Jones, Steve	Member	FCC
LaSorte, Nick	Member	NTIA
Moongilan, Dheena	Member	Nokia Bell Labs
Vignesh Rajamani	Member	Exponent
Refai, Hazem	Member	University of Oklahoma
Silberberg, Jeff	Member	FDA
Witters, Don	Member	FDA
Qiong Wu	Member	Apple, Inc.

Guests and Observers: (non-voting) Randy Long, Doug Kramer, Aurelian Bria, Art Wall, Bob Delisi, Balaji Ayyaswamy, Henry Benitez, Victor Kuczynski, David Schaefer, Michale O'Dwyer, Zhong Chen, Janet O'Neil, Nate Potts, Jennifer Santulli, Harry Hodes, John Norgard, Bill Graff, Dan Sigouin, David

Zimmerman, David Chamberlain, Megan Riebau, Marcus Shellman, Michael Janezic, J.C. Chen, Don Heirman, Jerry Ramie

1.4 Quorum: (50% of roster + 1) constitutes a quorum. (rounding down) (Example: 9 roster members / 2 = 4.5 + 1 = 5.5 (therefore 5 people are required for a quorum) **Was quorum achieved? (Yes)** If not, any actions taken are subject to confirmation by electronic ballot or at a future meeting. (Quorum is not required for Working Group meetings)

2. Approval of the Agenda: Secretary - Approved

2.1 Approval of the previous Minutes - [Minutes of the previous meeting](#) Approved.

2.2 Review of the [patent slides](#) – No issues were raised.

3. Review of [Subcommittee Membership](#): Chair - Report any errors to the ASC-C63[®] Secretary

3.1 Review of Membership Guidelines – members at risk?

Subcommittees:

For an individual to remain a voting member of a Subcommittee, active participation in Subcommittee meetings and regular responses to Subcommittee email votes is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or remotely via web conference (when used)) or respond to at least one of every two consecutive Subcommittee email votes, their membership in that Subcommittee may be at risk.

Note: Abstentions shall be treated the same as a “yes” or “no” vote regarding the requirement to respond to email votes.

Working Groups:

For an individual to remain a member of a Working Group, active participation is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or via web conference (when used)) their membership in that Working Group may be at risk. Individual Working Groups may establish additional participation criteria and/or modify this requirement.

Member Attendance Log: (insert member attendance log as shown) **Any errors in the log? No.**

Name	11/12/13	04/29/14	11/10/15	05/10/16	11/08/16	05/11/17	11/9/17	5/3/18
Vladimir Bazhanov				X	X	X	X	X
Seidman, Seth		X	X			X		
Young, William		X		X	X		X	
Mohamad Al-Kalaa						X	X	X
Berger, Stephen	X	X	X	X	X	X	X	X
Case, Dave								X
Coder, Jason		X	X	X	X	X	X	X
Dilay, Chris		X		X				X
Hare, Ed	X							
Hoolihan, Dan	X			X	X	X	X	X
Jones, Steve						X		
LaSorte, Nick		X		X		X		
Moongilan, Dheena	X	X		X	X	X		X
Vignesh Rajamani						X	X	
Refai, Hazem		X						

Silberberg, Jeff	X	X	X	X	X	X	X	X
Whitesell, Steve	X							
Witters, Don				X				X
Qiong Wu						X	X	

Any members at risk? These members are at risk: Ed Hare, Refai Hazem, Steve Whitesell (send letter to each member at risk) **The secretary will send the letters to members at risk: Ed Hare, Hazem Refai, Nick LaSorte and Stephen Whitesell.**

3.2 Consideration of new members? [Application for C63® Subcommittee Membership](#)

4. Approval of [Scope](#): Chair - (Spring Meeting Only) (Report approval or any changes to the Main Committee)

Scope

Subcommittee 7 develops standards addressing spectrum etiquettes, wireless coexistence and related standards to provide new or amended measurement techniques, protocols or methods and associated instrumentation and operational constraints supporting more efficient spectrum utilization, including dynamic spectrum access.

Approved by SC7.

Motion to the Main Committee: Approve the SC7 scope and duty.

4.1 Election of Officers (as required)

Chair will be elected at the Autumn meeting 2018.

Stephen Berger was appointed as Vice Chair.

Jason Coder was suggested as secretary. Another person from NIST hosting the Autumn 2018 meeting was also considered. Consultations with Stephen Berger to follow.

5. Working Group reports [More information about each standard](#) is available on the Standards Status Matrix page of the [C63® web page](#). This information will be reviewed for accuracy at each Subcommittee meeting.

5.1 C63.17 - Unlicensed Personal Communications Service (PCS) Devices -

Berger (insert link to [WG report](#)) Verify accuracy of document [status matrix](#) content and report any errors to the ASC-C63® Secretary.

C63.17-2013 Learn more	Unlicensed Personal Communications Service (PCS) Devices	SC 7	Berger, Stephen	C63.17 PINS	Current.
---	--	----------------------	---------------------------------	-----------------------------	----------

C63.17: C63.17-2013 Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices

Contact: [Berger, Stephen](#) (Former Working Group Chair)

Scope: Revision of IEEE Std C63.17-1998. Specific test procedures are established for verifying the compliance of unlicensed personal communications services (UPCS) devices with applicable regulatory requirements regarding radio-frequency (RF) emission levels and spectrum access procedures.

Status: Current. No plans for further maintenance at this time.

Purchase: [IEEE Store](#). To purchase individual standards, go to the IEEE store and search on the standard number.

Is this information correct? (Yes) (repeat this verification for all Standards covered by this Subcommittee)

5.2 C63.27 – Evaluation of Wireless Coexistence - Berger (insert link to [WG report](#))

Verify accuracy of document [status matrix](#) content and report any errors to the ASC-C63[®] Secretary.

C63.27-draft Learn more	Evaluation of Wireless Coexistence	SC 7	Berger, Stephen	C63.27 PINS	Published in 2017
--	------------------------------------	----------------------	---------------------------------	-----------------------------	-------------------

C63.27-draft: American National Standard for Evaluation of Wireless Coexistence

Contact: [Berger, Stephen](#) (Working Group Chair)

Scope: This revision of the C63.27 standard provides improvements to the evaluation procedure and supporting test methods for wireless coexistence and evaluation of key performance indicators (KPI). The revised standard will provide evaluation procedures, test methods and other guidance necessary for performing the evaluation.

Status: Current. New revision being developed.

Purchase: Current version available for sale.

Is this information correct? (Yes)

6. Other Old Business: Chair

6.1 Written reports - Written reports of the Subcommittee meeting shall be presented by the Subcommittee Chair at the Main Committee meeting. These reports shall be made using the [PowerPoint template](#). Prior to the Main Committee meeting, the reports and [approved previous meeting minutes](#) shall be provided to the projectionist for showing on the projector screen at the meeting. The Presentation and any written report shall also be sent by the Subcommittee Chair to the ASC-C63[®] [Newsletter editor](#).

6.2 Coordination with SC2 for definitions - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC2 Chair for evaluation and coordination of the definitions used.

6.3 Coordination with SC3 for harmonization - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC3 Chair for evaluation and coordination of any harmonization effort.

7. New Business: Chair

8. [C63.org](#) website use and updates: Secretary - We normally post documents to the [SC7 protected area](#). If any SC or WG needs help with this posting, a Technical Secretary is available to assist.

9. Review of the Action Items: Secretary -

9.1 Review of Action Items from this meeting: (read Action Items to Members, who must agree that they understand their meaning)

9.2 Review of Action Items from previous meeting: (insert consolidated Action Item table from the previous meeting Minutes as shown below)

Consolidated Action Items from previous Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
1	Contact WiFi Alliance and 3GPP community regarding their possible involvement in C63.27 WG	Vladimir Bazhanov	No response	This meeting	One more attempt to follow
2	C63.27 Workshops	Jason Coder	?	?	

10. Time and place of next meeting: Chair The next meeting will be in Boulder Colorado after Thanksgiving at NIST. November 26 – 30.

11. Closing remarks and Adjournment: Chair The meeting was adjourned at 2:20pm .EST

***** End of Meeting *****

Consolidated Action Items from 20180503 Meeting of SC7

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
1	Contact WiFi Alliance and 3GPP community regarding their possible involvement in C63.27 WG	Vladimir Bazhanov	No response from WiFi and 3GPP	Autumn meeting 2018	More attempts to follow by Chair and Vice Chair
2	C63.27 Workshops	Jason Coder	WS took place and ongoing	Status report at the Autumn meeting 2018	Very important activity
3	Offer invitation to have a co-sponsored study on the use of wireless technology in health care delivery to organizations that may be interested	Stephen Berger	Ongoing	Status report at the Autumn meeting 2018	Approved by Main Committee