EMC Standards Activity

Wide-ranging Standards Activity since November 2017

In this issue of the EMC Magazine Standards Activity column, our readers are treated to a wide range of subjects. We report on three very different subjects that capture major EMC standards activity of three EMC Society committees that deal with or use EMC standards and one non-EMC Society committee called the EMC Advisory Committee on EMC (ACEC) of the International Electrotechnical Commission (IEC).

First will be a report on the EMC Society Standards Development and Education Committee (SDECom) and the Standards Advisory and Coordination Committee (SACCom). This was prepared by the EMC Society Vice President for Standards, Ed Hare, with input from John Norgard, chair of SACCom and Alistair Duffy, chair of SDECom. The next two articles are prepared by Don Heirman. The first article is a discussion on how EMC standards play a part in increasing the reliability of Smart Grid devices installed in the power grid. This closely aligns with the work in the EMC Society special committee on Smart Grid. The second article describes the deliberations of the IEC Advisory Committee on EMC (ACEC). Overall, these three articles will bring the reader up to date on these activities and provide contacts for further discussion.

The EMC Society Standards Development and Education Committee and Standards Advisory and Coordination Committee

By Ed Hare, EMC Society Vice-President for Standards

One of the major activities of the EMC Society is to be heavily involved in the creation of standards, education about standards, and monitoring standards activity worldwide. In addition to its other roles, the Society is a Standards Development Organization (SDO). Standardization is a major part of what helps make technology work, ensuring that products made by different companies will work together, and ensuring that the existence of one product will not cause a different, unrelated product not to work. The process of creating standards is a model for how cooperation and inclusion can work to bring diverse interests to a single table, to find common ground, to increase the scope of that common ground and to build on it in ways that help industry, and help the society served by products that industry manufactures.

The EMC Society is heavily engaged in the standardization process, playing a key role in the creation of standards and in keeping its members informed about and engaged in standardization work. Future articles in this column will talk about specific standards, ongoing work and the various ways this can help you in your work, or, better yet, how you can help in this work. Let us begin by talking about the two major oversight committees that the IEEE and the EMC Society have formed to help the Society in its standardization work.

Standards Development and Education Committee

The Standards Development and Education Committee (SDECom) essentially serves as the EMC Society “Board.” It is not directly responsible for doing the work of creating standards, but serves under the IEEE Standards Association as a sponsor of standards, proposing new industry standards, helping to form working groups to develop those standards, supporting those working groups and monitoring that all IEEE procedures are followed when standards are created. If process was followed, SDECom then recommends to the Standards Association that a standard be approved. [Final approval of standards is made by the Standards Association Standards Board (SASB)]. The SASB relies heavily on the monitoring and oversight of various sponsoring committees, such as SDECom, within the IEEE.

SDECom is made up of a wide range of interests with a broad-based interest in standards. People and companies with a strong interest in a specific standard should pursue that interest by joining or creating a working group to develop that standard. SDECom is focused on overseeing the development of all IEEE EMC standards. Dr. Alistair Duffy, currently working in academia, chairs SDECom. Its members are made up from a wide range of interests, from test labs to manufacturers to military, industry and radiocommunications. A
full list of its members and affiliations is available on the SDECom web page at http://www.emcs.org/development-and-education.html.

The “Scope and Purpose” of SDECom is described on its web page:

“The IEEE EMC Society Standards Development and Education Committee is responsible for guiding the development of IEEE EMC Standards, the training of those involved in the standards making process and the education of the EMC Society community on all aspects of EMC Standards. The IEEE EMC Society is the primary international developer of fundamental test, measurement and verification standards for EMC.”

SDECom is currently overseeing the maintenance or development of 27 different EMC standards. Future columns will discuss some of these standards, explaining their purpose and, in some cases, looking for help in their ongoing maintenance and updating. A list of EMC Society standards may be found on its “standards matrix” web page at http://www.emcs.org/status-of-emc-standards.html.

Upcoming SDECom Meetings

SDECom meets regularly in person at least three times a year. It also holds occasional webinar meetings, usually to address specific issues and like most committees, maintains ongoing dialogue through email and other exchanges. SDECom meetings are open to all who want to attend, as observers or those who may be interested in helping as full voting members. These are the upcoming meetings of SDECom and their locations. (Check the SDECom website for up-to-date information as meeting dates and times often change.) You can also contact its chair, Alistair Duffy, at apd@dmu.ac.uk.

Table 1: Date and Location of EMC Society SDECom and SACCom Meetings in 2018.

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<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Location</th>
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<tbody>
<tr>
<td>April 10</td>
<td>IEEE HQ, Piscataway, NJ</td>
<td>Asia-Pacific Symposium on EMC, Singapore (see text)</td>
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<tr>
<td>May 14-17 (TBD)</td>
<td>Asia-Pacific Symposium on EMC, Singapore</td>
<td>EMC and SIPI 2018 Symposium, Long Beach, CA (see text)</td>
</tr>
<tr>
<td>July 30-August (TBD)</td>
<td>EMC and SIPI 2018 Symposium, Long Beach, CA</td>
<td>(see text)</td>
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A full one-day meeting will be held on April 10 at IEEE Headquarters in Piscataway, NJ. SDECom and the Standards Advisory and Coordinating Committee (SACCom) will not hold a formal meeting in May in Singapore. Instead, it will hold a 1- or 2-hour session in Singapore either with a local presenter or via a webinar that will describe the current standards it maintains, ongoing work, followed by a presentation on the scope and current reporting of SACCom. At the end of July and the first week in August (30 July to 3 August) this year, SDECom will meet at the EMC Society Symposium on two separate days to review its current standards and then to wrap up with a review of any working group meetings that may have taken place at the Symposium.

Standards Advisory and Coordination Committee

Standards are being developed worldwide and in addition to overseeing its own standards development, the EMC Society monitors the EMC standards work being done by other SDOs worldwide. The EMC Society has formed an oversight committee, the Standards Advisory and Coordination Committee (SACCom), to identify other SDOs, to elicit regular reports from them and to report and discuss those reports in various meetings and articles. SACCom is chaired by Dr. John Norgard and consists of members who want to be more informed about EMC standards development worldwide.

The “Scope and Purpose” of SACCom is:

“SACCom is responsible for providing a technical liaison between the IEEE EMC Society Standards Development and Education Committee (SDECom) and various non-IEEE entities involved with EMC standards activities.

The purpose of the EMC Society SACCom committee is:

• To propose to the EMC Society Board of Directors (BoD) the appointment of representatives to various non-IEEE standards development entities
• To monitor the activities of various non-IEEE standards development organizations with the view towards making recommendations to the EMC Society BoD on any required coordination of those activities within the EMC Society
• To communicate and coordinate with non-IEEE standards development activities and the EMC Society SACCom on matters relating to the development of EMC related standards

To accomplish these goals, SACCom representatives strive to meet with the non-IEEE organizations and advise these standards development groups on potential EMC problems and coordinate any standards advisory activities with the EMC Society SDECom Committee.”


Meetings

SACCom also meets regularly in person at least three times a year. SACCom meetings are open to all who want to attend. The meetings occur at the same date and location of the SDECom as noted in Table 1 above. (Check the SACCom website for up-to-date information, as meeting dates and times do occasionally change.)

For further information, please contact the EMC Society Vice President for Standards, Ed Hare, at w1rfi@arrl.org or phone +1 (860) 594-0318.

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