The Birth of a Standard – Part I: Who Are AASHTO and ASTM?

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Hi, I’m Brian Johnson. You may know me from such failed ballot attempts as D140, C1077, D3740, and the new standard that will probably never be published on sampling from a truck bed*. You may also know me from a successful ballot attempt on D5404, D2172, D3549, D2041, D3203, D3666, and the AASHTO Accreditation Program Procedures Manual. Why did some of these ballots pass through while others have failed in such a glorious way?

The answer is complicated. There are so many factors involved in the balloting process – the rationale behind the change, the execution of the ballot item, the understanding of the voting members about the need for the change, the culture of the subcommittee or committee, and the procedures of the standards body. The challenge for the standards writer is to understand all of those factors for each type of ballot that is prepared.

In order to really dig into this, we’ll have to analyze the various components of the balloting processes. Since our accreditation mainly focuses on AASHTO and ASTM standards, I’ll narrow the focus to those two standards bodies in the next few articles on this subject.

**AASHTO Subcommittee on Materials Membership**

AASHTO Subcommittees are organized by the work they do – there are subcommittees on materials, construction, right of way, environment, and the list goes on. The standards that are produced in the red books you know so well are maintained by the voting members of the AASHTO Subcommittee on Materials (SOM), which is part of the Standing Committee on Highways (SCOH). The SOM is comprised of the Materials Engineers from the state departments of transportation, the District of Columbia, Puerto Rico, The Port Authority of New York and New Jersey, participating Canadian provinces, and the Federal Highway Administration (FHWA).

Some people in the industry don’t really like the fact that the private sector is excluded from voting membership in AASHTO. Some feel it’s unfair that materials producers cannot directly vote on the specifications they are required to follow. On paper, it sure seems that way, but you might not realize how the people in the SOM try to engage their colleagues in academia and the private sector in standards development activities.

The SOM regularly takes recommendations from people and groups outside of their own membership when they revise the AASHTO standards. The SOM takes recommendations and draft standards from the FHWA’s Expert Task Groups, which are mainly comprised of producers, equipment manufacturers, researchers, Federal Highway Administration staff, and SOM members. There are also user-producer groups like the Rocky Mountain Asphalt User-Producer Group (RMAUPG) and regional groups like the Western Alliance for Quality Transportation Construction (WAQTC), who actively participate in the standards development process within AASHTO. We here at AASHTO re:source also regularly submit ballot ideas that come from the labs we visit in addition to our own staff members. Also, keep in mind that the SOM members themselves interact with the producers in their states, and they keep those interests in mind when ballot changes to the standards.

If you have recommendations for changes to the standards, you can either send it to us through our online form or go to the SOM website and email the chair of the relevant technical section with your recommendation. You can also request to become a “Friend of the SOM” by inquiring with the chair of the relevant technical section. Friends can receive ballots and submit comments. Their vote does not officially count, but comments are addressed after each ballot is closed. This is not just something they say – they actually do review them, and your change might even get published if your argument is convincing.

*AASHTO Subcommittee and Technical Section Organization*

The SOM, itself, a large committee. It is further divided up into material-specific Technical Sections, which are categorized by a material type and then further categorized by a set of logically grouped standards. For example, asphalt binder is 2b, asphalt mixtures are 2c, soil is 1b, and aggregate is 1c. The members of each one of those technical sections manage the specifications, test methods, and provisional standards that are listed under their group.
Each technical section has a chair and a vice-chair. They lead the meetings, set the agendas, and make rulings on editorial revisions. In the AASHTO process, the chair plays an important role and sets the culture of the technical section. They are also the people to contact if you want to propose a new standard or a ballot to revise a standard. The vice chair records minutes and assists the chair with the work of the technical section. The vice chair must also be available to stand in for the chair if needed.

**AASHTO Support Staff**

While the SOM is responsible for revising and maintaining the content of the standards, AASHTO staff helps to coordinate and publish them. While the staff does not hold voting rights, we contribute to the standards process behind the scenes by helping the chairs keep up with their administrative deadlines and by assisting them in coordinating the meetings. Evan Rothblatt, Associate Program Manager for the SOM, is in charge of making sure that ballots go out and the standards are ready for publishing on time. Erin Grady and Deb Kim of the publications department also make sure that the standards make their way into the books or online versions of the standards. Several other AASHTO staffers like Maria Knake, Katheryn Malusky, Tracy Barnhart, Henry Lacinack, Bob Lutz, Russell Dabbs, Brian Korschgen, and I also help the various technical sections with their administrative work.

**ASTM International Membership**

Where AASHTO focuses on writing standards that meet the needs of the domestic transportation industry, ASTM International focuses on writing standards that meet the needs of all the world’s industries. They maintain standards covering crayons to field goal posts and everything in between.

Membership in ASTM International is truly inclusive. All you have to do is sign up and pay an annual membership fee of $75, and you get a free subscription (book or online version) to one of the volumes of standards and the right to vote on all of the ballots you want. You can also get more involved by attending the meetings and proposing ballot items. The membership is comprised of American and international public entities (DOT, FHWA, FAA, USACE, EPA, other Federal agencies, counties, cities, municipalities, etc.), academia, associations, researchers, materials producers, equipment manufacturers, other interested parties like AASHTO re:source and CCRL.
ASTM Committee and Subcommittee Organization
While AASHTO’s SOM has a subcommittee and technical sections, ASTM has committees and subcommittees. One of the most confusing terms used by the two groups is the word “subcommittee.” An AASHTO subcommittee is the entire group of people responsible for the standards covering all of the material tests and specifications. An ASTM subcommittee is the smaller group of people responsible for a subset of standard test methods and specifications. The AASHTO Subcommittee on Materials is equivalent to the all of the various ASTM Committees that cover construction materials combined. There is not a formal ASTM equivalent to the AASHTO SOM. An ASTM subcommittee is equivalent to an AASHTO technical section.

ASTM committees are material-specific or subject matter-specific, and have various subcommittees under them. Each committee has its own leadership group with a chair, vice-chair, and secretary. Then there are the subcommittee chairs and vice-chairs, who run the meetings and lead the balloting processes.

The culture of each committee is a little different in ASTM because they are largely dominated by smaller groups of members. They all are required to follow the same rules of order and administrative guidelines, but the voting members truly set the culture.

All members can attend the ASTM meetings and contribute to the standards development process in person. Regardless as to whether you can attend the meetings in person, if you are a member of a committee or subcommittee, you get to electronically vote on all of the ballots that come your way whether your organization has one member or several. Only one member of any organization can have voting rights at subcommittee and committee meetings. In addition, there are rules for maintaining a balance of interest amongst committee and subcommittee members. This ensures that all stakeholders, such as users, producers, and general interest groups are represented equally in the voting process. Therefore, some members, such as those representing producers, may be put on a waiting list until a voting position becomes available.

ASTM Staff Support
Even though the standards are managed by the members, ASTM employs staff managers who support the members with administrative rulings, meeting coordination, balloting, and a number of other issues. These highly professional and effective staff managers are willing to help all members participate in the ASTM process. ASTM also has great support staff that are extremely helpful in assisting in ballot development, submittal, and editing activities.

Harmonization
How can these two different standards bodies manage to create standards that are almost identical? In the next article, we’re going to attempt to explain it to you with the help of one of the most instrumental SOM and ASTM members, Mark Felag from the Rhode Island DOT, who has been leading the charge to make AASHTO and ASTM standards more harmonized.

*Editor’s Note: This article was updated in June 2016 to ensure the most accurate information is presented.

* The truck bed sampling standard was never published, but D979 was updated to incorporate the important parts of the ballot into the more widely used existing standard. It ended up being a better solution in the end, and it showed that the process is effective.