Technical Note - Participation in the Balloting Process of ASTM International

K. Pospíšil*
*CDV – Transport Research Centre, *Corresponding author: karel.pospisil@cdv.cz*

ASTM International, formerly known as the American Society for Testing and Materials, is one of the largest voluntary standards development organizations in the world. It is a trusted source for technical standards for materials, products, systems, and services. There are 142 technical committees covering diverse industry areas ranging from metals to the environment. The author of the technical note is a balloting member of five of them and the paper introduces the business of these ones. They are:

- Committee C09 on Concrete and Concrete Aggregates
- Committee D04 on Road and Paving Materials
- Committee D18 on Soil and Rock
- Committee D35 on Geosynthetics
- Committee E07 on Non-destructive Testing

The above-mentioned committees ballot about 450 standards, guidelines, and their revisions every year, see Table 1.

Table 1: Number of ballots in specified committees, data come from author's record, i.e. they can differ slightly from official ones.

	Year				
Committee	2009	2010	2011	2012	Sum
	Number of ballots per committee in specific year				
C09 on Concrete and Concrete Aggregates	141	169	185	143	638
D04 on Road and Paving Materials	75	62	71	66	274
D18 on Soil and Rock	63	105	138	121	427
D35 on Geosynthetics	46	22	66	37	171
E07 on Nondestructive Testing	69	67	83	63	282
Sum in each year	394	425	543	430	
Total Sum within four years	1 792				

In connection with the author's Technical Notes, published in this journal in the years 2009, 2010, and 2011, and describing the activities of the mentioned committees, the aim of the Technical Note is to inform about the selection of technical issues solved in 2012 from the author's point of view. It is neither an official nor comprehensive report from the life of the committees.

Committee C09 on Concrete and Concrete Aggregates

The committee was balloting about new standards, guides and practices, or their revisions. The following seem to be interesting relating to actual domestic tasks: revisions of specifications for concrete aggregates, test methods for the soundness of aggregates by use of sodium sulfate or magnesium sulfate, test methods for density, relative density (specific gravity), and absorption of coarse and fine aggregate, test methods for density and void content of freshly mixed pervious concrete, test methods for determining the total water content of freshly mixed concrete using microwave oven drying, and so on. New standards on test methods for scaling the resistance of concrete surfaces exposed to deicing chemicals and for the determination of one-point, bulk water sorption of dried concrete. Specification for lightweight aggregate for internal curing of concrete.

Committee D04 on Road and Paving Materials

Asphalt and bituminous materials have taken up a large part of the committee's efforts but not only, i.e., practices for the effect of water on bituminous-coated aggregate using boiling water, for quantities of materials for bituminous surface treatments, for the recovery of asphalt from a solution using the rotary evaporator, for random sampling of construction materials and for measuring the delimitations in concrete bridge decks by sounding. Specifications for fabrication and jobsite handling of epoxy-coated steel reinforcing bars, for plain and steel-laminated elastomeric bearings for bridges, for high load rotational spherical bearings for bridges and structures, for materials for bridge deck waterproofing membrane systems, for joint and crack sealants, hot applied, for concrete and asphalt pavements, and for lubricant for the installation of preformed compression seals in concrete pavements.

Committee D18 on Soil and Rock

The Committee has been involved in the preparation or revisions of test methods, guides and other documents, such as the practice for thin-walled tube sampling of soils for geotechnical purposes, test methods for laboratory compaction characteristics of soil using standard and modified effort, for the measurement of pneumatic permeability of partially saturated porous materials through flowing air, for the density of soil and rock in place by the water replacement method in a test pit, for water content and density of soil in place by time domain reflectometry, for deep foundations under static axial compressive load, static axial tensile load and under lateral load, and so on.

Committee D35 on Geosynthetics

Interesting test methods, guides, practices, and other documents were discussed by the Committee, e.g., the practice for the sampling of geosynthetics for testing, test methods for index puncture resistance of geomembranes and related products, for the strength of sewn or thermally bonded seams of geotextiles, for determining the coefficient of soil and geosynthetic or geosynthetic and geosynthetic friction by the direct shear method for biological clogging of geotextile or soil/geotextile filters, for deterioration of geotextiles through exposure to light, moisture, and heat in a xenon arc type apparatus, for evaluating the unconfined tension creep and creep rupture behavior of geosynthetics and for the evaluation of stress crack resistance of polyolefin geomembranes using notched constant tensile load test and so on.

Committee E07 on Non-destructive Testing

The non-destructive testing committee has been involved in various documents, i.e., practices for the acoustic emission examination of welded steel sphere pressure vessels using thermal pressurization, for the ultrasonic testing of flat panel composites and sandwich core materials used in aerospace applications, for electromagnetic (Eddy-Current) examination of seamless and welded tubular products, austenitic stainless steel, nickel, and similar alloys for determining the impedance of absolute eddy-current probes and for the examination of welds using the alternating current field measurement technique, guides for electromagnetic acoustic transducers (EMATs) and for eddy-current testing of conducting materials using conformable sensor arrays, and so on.

SUMMARY AND ACKNOWLEDGEMENT

The Technical Note informs about selected problems solved by ASTM International which the author considers interesting from his point of view. Comprehensive information on ASTM International can be obtained from their website, www.astm.org. The author's participation in ASTM International is partly supported by a grant from the Ministry of Education, Youth, and Sports of the Czech Republic no. LA 09007.

Instructions to the authors

1 GENERAL GUIDELINES

Papers based on accepted abstracts and prepared in accordance to these guidelines are to be submitted through the journal's web site www.transportsciences.org. All papers, using Microsoft Word2000 (or newer) are limited to a size of at least 4 and no more than 8 single-spaced pages on A4 paper size (297 mm X 210 mm), including figures, tables, and references and should have an even number of pages. The paper's top, bottom, right and left margins must be 2.5 cm. No headers, footers and page numbers should be inserted.

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The title of the paper must be in title letters, Times New Roman, font size 16, and aligned left. Use more than one line if necessary, but always use single-line spacing (without blank lines). Then, after one blank line, aligned left, type the First Author's name (first the initial of the first name, then the last name). If any of the co-authors have the same affiliation as the first author, add his/her name after an & (or a comma if more names follow). In the following line type the institution details (Name of the institution, City, State/Province, Country and e-mail address of a corresponding author). If there are authors linked to other institutions, after a blank line, repeat this procedure. The authors name must be in Times New Roman, regular, and font size 12. The institution details
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