



MINUTES CAA COMMITTEE ON STANDARDS

2016 September 20, 19:00 h,

Vancouver, BC;

Acoustics Week in Canada

Present: Tim Kelsall, Chair. Stephen Keith (by phone), David Quirt, John Swallow,

Joining while in progress: Bill Gastmeier, Peter VanDelden, Andy Metelka

Observers: Henk de Haas, Virgini Senden

1. **Welcome:** Tim Kelsall

2. **Minutes:** John Swallow - June minutes were approved (attached at the end of this document)

3 **Approval of Agenda:** Consent by all present

4. **Report from CAA Board - Tim Kelsall**

Tim had just attended the board meeting. (Note Committee voted, by ballot, approximately 4 years ago to publish our Guide to Standards and put it on the CAA website about two years ago.)

a) **CAA Website.** DQ submitted request to SubCtte chairs, approx Sept 7, asking what changes need to be made to the Website to bring it up to date? Responses received from Gastmeier, Keith, Quirt, Lixue Woo. They were requested to provide any other updates – particularly anything covered by legislation in Canada, also any other useful or relevant documents.

DQ reviewed the responses, there are few changes to be made; also noted that where US standards are to be adopted a French version will not exist, while for ISO Standards a French version will exist. See Item 1 attached

a) **Marketing:** TK asked how to determine the number of downloads from this site.

b) **CAA Standards Voting Body Qualification**

TK noted it will need ratifying in a short while; that establishing a Quorum is a problem.

c) Journal will publish our meeting minutes

1. **5. Sub-Committee Reports** (Written reports are available on the Standards page at the CAA website)

a) **Environmental** – See BG Report 2 attached. Note major changes to the way Ontario MOECC will evaluate wind turbines, with emission (IEC Standard) and auditing procedures for Immission , very stringent. MOECC removed authority from the Municipalities in an unusual manner; new procedure NPC 350 for immission. If Regulation not met, may require shutting down the wind turbine.

b) **Wind Turbine** – Brian Howe – no report (ed note: seems to be covered above)

c) **TC 43 / SC1** see SK report 3 attached. Note meeting occurred in Sept 2016.

d) **TC 29 / SC** See LW report 4 attached.

e) **Z 107.10 Editorial** Cameron Sherry. No Report. DQ reviewed:

f) **Building Acoustics**, NRC has concentrated on updates to NBCC 2015. The 2015 version for Sound Isolation (i.e. STC) is a mix of ISO and ASTM standards. Canada has been involved in the development of the new ISO standard , the NBCC reflects the coming changes in ISO Standards and is thus at the leading edge. A new version of the Guide to use with NBCC, with calculations of flanking paths, is now up on the NRC Website, there will be more before Dec 2016. Calculations for masonry, concrete construction will be complete early in 2017, wood frame later, no date set. Fall 2017 NRC will do seminars on the use of the Guide. Expect all material to be published in advance. See DQ Report 5 attached

Work is being done by others on Impact Noise. Chair now vacant, previously USA.

g) **ISO TC 108 SC4**, Human Response to Vibration. See Report 6 attached by AJ Brammer.

h) **Loudness Evaluation** – Colin Novak, No Report.

8 New Business - None

9 Next Meeting. Normally held in Spring, next meeting possibly with CSA.

ACTION: TK, coordinating with Christian Giguere.

10 Adjournment: 20:00 h

Minutes by John Swallow, jswallow@swallowacoustic.ca

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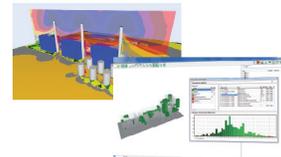
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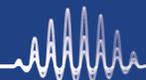
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STANDARDS MEETING

June 9, 2016

John Kean Boardroom, CSA Office, 178 Rexdale Blvd, Toronto.

Minutes of the Meeting

1. **Welcome:** The meeting started at 2:00 pm. Priya Malik went over CSA safety. Chair T. Kelsall welcomed members and guests, with a brief introduction of attendees. There were technical difficulties with the online connections and the members participating by teleconference joined at 2:25 pm.

In Person:		
Tim Kelsall	Hatch (CHAIR)	tim.kelsall@hatch.com
Bill Gastmeier	HGC Engineering	bgastmeier@hgcengineering.com
Christian Giguère	U. Ottawa	cgiguere@uottawa.ca
David Quirt	Consultant	JDQ.acoustics@bell.net
Peter VanDelden	RWDI Consulting	peter.vandelden@rwdi.com
Online:		
Tony Brammer	Enviro-Health Solutions	Anthonybrammer@hotmail.com
Stephen Keith	Health Canada	skeith@hc.sc.gc.ca
Jack Davis	Albert Utilities Commission	Jack.Davis@auc.ab.ca
Guests		
Andy Metelka	SVS Canada Inc.	ametelka@cogeco.ca
Ric Doedens	K.R. Moeller Associates Ltd.	rdoedens@logison.com
Regrets: Lixue Wu		

2. **Appointment of Minutes Taker:** Kristen Abels
3. **Approval of Agenda:** Approved as written (all in favor).
4. **Approval of Minutes:** Not applicable. Minutes were not recorded from the last meeting (Halifax 2015). Audio recording available.

5. Update since last meeting

a. CAA 101

- i. Translation: No progress. It was discussed that there is little reason to have a French introduction to an English document. A volunteer would need to be found to translate.
It was agreed that it would be very difficult to translate and to keep translations up to date. The main concern is the ANSI standard text and ASTM. There is the possibility of putting commentary in French.
- ii. Website / Journal Publication: **Action Item:** C Giguère will handle cleaning up list of standards (which currently contains out of date references).
- iii. Marketing of standard: Confined to Canadian Acoustics and Conferences. It was agreed that it would be a good way for someone more junior in the organization to get exposure. Looking for a volunteer to take on the marketing.
- iv. Sponsorship? Need for sponsorship is limited.
Thanks to CSA for allowing use of John Kean Boardroom for this meeting. The benefits of having the CSA and CAA meetings together are noted.
- v. T Kelsall explained new rule of limited terms for CSA Chair and Vice-Chair.

b. CAA Standards Voting Body Qualifications: Nothing to vote on at the moment.

6. Items from CAA board (Bill Gastmeier): No action items identified.

7. Update From Subcommittees (Written reports are available on the Standards page at the CAA website)

a. Environmental Noise (Bill Gastmeier, written report)

- i. NPC 300 issues of the consideration of vacant lands as noise sensitive receptors for industrial approvals and municipal uncertainty around handling Class 4 acoustical environments.
- ii. MOECC Modernization Programme consideration of expanding EASR programme to include medium sized commercial and industrial facilities would streamline the process; Concern about P. Eng not qualified to declare a complete and accurate study.
- iii. MOECC has updated Noise Guidelines for Wind farms (additional Noise Impact Assessment analysis requirements).
- iv. Comments on the draft update of the MOECC Compliance Protocol for Wind Turbine Noise due June 16th 2016.
- v. AWMA conference to be held Oct. 26th 2016 in Waterloo, ON; can submit papers now.
- vi. FCM-RAC presented a successful workshop on noise and vibration issues relating to land use planning in proximity to railway lands in Oct. 2015, which promoted a review of proximity Guidelines for New Development in Proximity to Railway Operations.
- vii. Alberta Update Submitted by Jack Davis (written report):
 1. Low noise concerns from Drilling and Service Operations, as drill counts at 5% utilization rate.
 2. Phase out of coal-fired power plants and creation of framework for increasing green energy initiatives.
 3. Recent approval of Grizzly Bear Creek – 2nd wind farm with major hearing dealing with health issues, infrasound, Rule 012 issues (40 dBA L_{eq} night-time permissible sound level). 46 dBA was the highest measurement; no judgement made on acceptability of those levels, however a Health Canada Study cited that there were 2 papers generated with discussion that 46 dBA was an acceptable level (could have been misinterpreted during the hearing). **Action Item:** J Davis will read that study and ensure there is no misinterpretation.
 4. J Davis is looking to establish a protocol for comprehensive sound level surveys and address the following issues: Determination of who owns the noise space when it comes to a complaint, as well as the issue of wind farms that have been approved but being granted extensions on their approval, and residents who are unaware of future wind farm developments. Another issue involves wind turbines being built upwind of wind farms (not jurisdiction of AUC as much as it is going to court).
 5. J Davis thought that the document ‘Graduated scale for wind in terms of permissible sound level’ (2008) would be taken off the books. Similar to Wind Noise Masking, which J Davis would be reluctant to promote, as it has no conditions. There has never been an application.

6. Discussion about the use of $L_C - L_A$ (dBC – dBA) measurements for low frequency noise with wind turbines (Alberta Energy Regulator Directive 038).
 7. **Action Item:** J Davis working on supplement to Rule 012: Reading ‘Wind Turbine Noise’ by Leventhall and Bowdler and suggests that Chapter 7 by David Hessler would be of interest. Will read through that, as well as NPC 350 and put something together.
- b. Wind turbines Brian Howe (written report included in Environmental Noise report)
Discussed along with Environmental Noise.
 - c. CAC TC43 SC1, (Stephen Keith, written report) to report on ISO
 - i. Representation: New member for the Shooting Noise Standard (Ann Nakashima of Defence Research and Development Canada); Total 2 project leaders, 1 international secretary, 17 subject matter experts; 1 new member application for ISO Standards for Ducted Silencers (Karl Peterman of Vibro-Acoustics); Nicolas Sylvester-Williams of Aercoustics interested in joining general committee. No Canadian participation in working group on Detection of Tones (Colin Novak and Helen Ule interested in joining)
 - ii. Workload: reviewed 2 drafts (389-1, 12124) from ISO/TC43 main committee; Abstained on draft for hearing aid fitting; Final drafts on ISO 389-3 and ISO 389-ISO/TC43 SC1; Reviewed 2 drafts (362-3, 17201-6); Abstained on 2 drafts due to lack of expertise (tyre and road surface noise); Approved final drafts of ISO 1996-1 (main changes with community tolerance index), ISO 6926, ISO 16254.
 - iii. Upcoming ISO meetings – attendance at working groups, no Plenary this year. Thanks to Standards Council of Canada, Akoustik Engineering and Hatch for travel subsidies for meetings.
 - iv. In the advisory panel, some standards refer to the ISO standard that defines the reference quantities of acoustics, which refers to the neper instead of the decibel (which can lead to 10% error). **Action Item:** Must correct standards to ensure people do not use Nepers instead of dB.
 - d. IEC, Instrumentation (Lixue Wu, written report)
T Kelsall read the report provided by L Wu. No discussion.
 - e. CAA101 / Editorial (Cameron Sherry and David Quirt, verbal report by D Quirt)
 - i. T Kelsall already presented brief report on status – Unchanged and posted on website. French Translation has not proceeded any further. For all the Standards that are available in French, there is a French abstract available for the document; headings and subheadings are in both English and French, but still no formal French version available. At an impasse until a long-term sponsor is found to cover the substantial cost of translation of summaries for all of the ANSI documents. No volunteers found (should be taken to the CAA board for discussion).
 - ii. Subcommittee chairs should review the standard, as there are pertinent changes in building acoustics. **Action Item:** The editorial subcommittee should send a circular to other subcommittees to request them to start a review. D Quirt will do so.
 - f. Building Acoustics ISO/TC43/SC2 and ASTM E33 (David Quirt, written report)
 - i. Meeting in Milan last year (no Canadian delegate, as D Quirt had travel issues)
 - ii. Process for creating new ratings for sound transmission has started again with new chair. A working group is in place (should expect a working draft in coming year).
 - iii. ISO 15712 series: document changes approved in 2015 and published in January 2016. Current version of National Code (which makes use of apparent sound transmission class of the complete system rather than that of the separated assembly) hasn’t reached Provincial Code, but expected to over next 2 years. NRC is in process of creating documents to deal with the code change (expected that the remainder will be published over the next 18 months). It is possible that provinces will be looking at adoption of 2015 version of the Building Code before then (could lead to confusion). Assumed that NRC will provide seminars to train people on necessary details.
 - iv. ISO 15712 series referenced in 2015 Building Code are almost obsolete. It was decided in Milan to drop the obsolete ISO 15712 series and replace it with ISO 12354 (harmonized with European Standards). Canada voted affirmative in the ballot last month. In the next 2 or 3 months, the updated name of ISO standard must be included in any interim changes of the Building Code, and the committee dealing with revisions in the 2020 code will get started next month (to add revisions for insulation and impact sound).
 - v. Issues in ASTM E33: D Quirt commented on the problem that the building industry is familiar with the ASTM standards and ratings (STC rating in particular). Now there is a switch to ASTC, which uses an

ISO Standard. Brad Gover from NRC attended the last E33 meeting, and has attempted to get them to produce a guideline document on how to use the ISO standard (there is an NRC document available). However, ASTM is now looking into Structure-borne sound transmission. Other key issues being addressed are listed in the written report.

- vi. R Doedens adds a quick note to ASTM: work underway to update E1130, T2638, E1374, E1573 (related to interior office acoustics), and there is a new task group working on establishing performance guidelines for sound masking systems.

R Doedens wants to work alongside with CAA to move the sound masking industry and interior acoustic design forwards. Sound masking systems have evolved and can now precisely control minimum background sound levels to make entire acoustic design easier and more cost effective (so that over-insulating/building is not required).

R Doedens also expresses concerns that sound masking industries are overselling products and that key members are guilty of false advertising (suggesting product provides total acoustic performance without use of complimentary products/treatments). Discussion of approaching INCE or CISCA.

g. Human Vibration ISO TC 108/SC4 (Tony Brammer, written report)

- i. No documents have changed. There is a potential update on ISO 2631, and a working group is making progress on developing a test method for estimating the effectiveness of seats (ie. for high-speed boats). A Technical Report on a review of the frequency weighting used to predict the occurrence of hazards to the hands is in preparation.
- ii. ISO 5349-2 (which is included in the omnibus standard) has been revised and should be included in the next update of the standard.
- iii. ISO 10819 has been approved as international standard, but an amendment to the new standard is being undertaken.
- iv. T Brammer shares the decision made at this morning's CSA meeting to adopt several key ISO Health Related standards into CSA and CAA standards (ISO 5349-1/2, ISO 10819).

h. Loudness Evaluation – Colin Novak

- i. No update. Members agree to contact Helen Ule to ask if she is interested in joining the group.

8. New Business

Major Item: Starting over with our one standard and making sure it stays up to date.

9. **Next Meeting and Adjournment:** T Kelsall reported next meeting will be in September 2016 in Vancouver during Acoustics Week in Canada, in conjunction with the CSA committee meeting (tentative date is September 21st 2016).

T Kelsall mentions he will be chairing a session on Acoustical Standards at Acoustics Week in Canada September 2016 in Vancouver, and would appreciate papers on acoustical standards to pull together a session (abstract submission deadline is June 15th).

The meeting adjourned at 3:25 pm.