

AES Melbourne Section Chairman's report 2022-2023

By Graeme Huon, Chairman

This is the Annual Chairman's Report for the Audio Engineering Society (AES) Melbourne Section. AES Melbourne Section falls under the auspices of AES New York acting as an independent, not-for-profit Section.

2023 has seen the belated return of face-to-face meetings with a twist – online streaming. Attendances at the Zoom meetings have been strong and growing, but it is good to see the return of these on-site or face to face sessions which are always a bonus, especially for socialisation and 'off-agenda' items.

Meetings:

In the twelve months since the last AGM, AES Melbourne has held six presentation meetings for members on topics of interest to general and new members alike. Meetings are generally open to the interested public, only being restricted to members when limits to attendance numbers apply. For YouTube streamed meetings, attendees do need to register beforehand.

Full details on these meetings can be found as an Appendix to the text version of this Report which will be available on our website immediately following this meeting.

Committee meetings:

Your Section Committee has met three times in the 12 months to deal with the business of running the Section and planning the upcoming meetings.

The added ability to conduct online committee meetings has also helped with travel arrangements and convenience.

We are always on the lookout for guest speakers or topics you'd like discussed, we would be pleased to hear from you.

Online presence:

We have maintained our online presence with the regularly updated website, and also with simple social media LinkedIn, Facebook, Instagram, and Twitter account feeds in particular. These are managed as low maintenance activities that hopefully offer the prospect of gaining attention worldwide for the website, and the Section generally. We review the return for effort regularly and are closely monitoring 'X' (formerly Twitter) of late because of lack of benefit seen. We are currently concentrating our efforts on the more professional

LinkedIn platform as we see that as a better match for our professional community.

Our online presence could always benefit from members, friends, or other interested parties with appropriate skills to assist in maintaining our reach in this particularly important aspect of our communication.

Membership:

The membership of the section has stabilized, with 47 currently financial members. We also have the benefit of knowledge of 8 lifetime members of AES now, having remained members for 25 years, and in some cases, more.

AES Melbourne Section also remains keen to attract new members.

I now call upon our treasurer Graham Hayes to provide the financial report for the section. (Move acceptance, second, vote)

More detailed committee information can be found on the aesmelbourne.org.au website.

As Chairman I would like to thank the Committee for their continued effort in keeping Melbourne AES thriving, with particular thanks to our secretary Peter Smerdon for his hard work, dedication and leadership.

I would also like to thank volunteer AES Member Paul Messick who has been a tireless and valuable help to AES Melbourne in redesigning our website and migrating it to a new hosting service.

As per our articles of association, all office bearers are required to stand down and all positions have to be re-nominated and elected by vote each year.

As my last duty as chairman, I close the formalities and now call upon Rob Wanless who has kindly offered to facilitate the election process for 2022-23.

Graeme Huon

14 August 2023

Appendix:

Meeting detail follows:

AES Melbourne has been privileged to hold six very interesting presentations during 2022-2023. These came out from the lockdown restrictions of the previous years to merge both streamed and live sessions. Streamed sessions greatly increased AES Melbourne's reach allowing world-renowned presenters in any time zone to participate. For those interested in more detail, full reports can be found on the website aesmelbourne.org.au

August 2022 meeting

Following the Annual General Meeting, John Mulcahy gave an online presentation from Scotland on the general topic of room equalisation and the free software tool REW that he developed as a spare time project to automate testing whilst at TAG McLaren audio (TMA). He went on to describe the use of the tool and some of its features including Magnitude and phase response, Impulse response, Envelope, Step response, Impulse response delay estimation, Minimum phase estimation, Excess phase, Harmonic distortion, Group delay, ISO 3382 parameters (Early Delay Time, T20, T30, C50, C80, D50, Ts), Frequency-domain RT60, STFT decay (2D), Waterfall (STFT, Burst decay), Spectrogram (STFT, Wavelet, Burst decay), Trace arithmetic (sum, difference, product, ratio, regularised band-limited inverse), Response averaging (vector, rms, dB), Phase alignment tool to name a few.

October 2022 meeting

On the 3rd of October Angus Davidson of New Gisborne Victoria presented on modern surround formats, Dolby and Dolby Atmos in particular. Room size and fit-for-purpose aspects were summarised including acoustic treatment requirements, and some discussion on live and console mixing versus working 'in the box' with DAW. Angus emphasised the Dolby requirement for 85dBa at the listener from each channel, commenting that many loudspeakers intended for studio and production work could not achieve this without undue stress and indicated at least one brand that could. Angus demonstrated the Dolby Room design tool (DART) and specifically discussed the cinema Low Frequency Effects channel as intended originally for effects only and not as low frequency augmentation of surround channels, which is a separate requirement. The workflows for mastering and Production were also compared, and a production device that could take up to 16 channels of (HDMI) audio format this and provide output to a range of interfaces was described. Angus also commented on the general lack of progress for multi-channel surround on popular streaming services and summarised the Universal Music Group (UMG) progress on the topic.

December 2022 meeting

In December 2022, John Kean gave a presentation on the topic of Loudness for Streaming Audio. John has been chair of the AES Technical Group on loudness for streaming AES TD1008. This Technical Document addresses distribution requirements of audio-only program across multiple sources towards the same device. John has had extensive experience in radio broadcast and saw the streamed services as a natural extension of general broadcast issues. John pointed out that this was a real and present need for audio alone, and specific to distribution, rather than production and general audio-video issues. Streaming revenues had reached US\$6B in 2019 had doubled by 2022 and would exceed US\$17B by 2025.

February 2023 meeting

In February, AES Melbourne was treated to a presentation by David Hudson on some major restorations of vintage audio equipment – multi-track Studer A80 recorders. David undertook what was effectively a ground-up build for these machines, including manufacturing specialist parts and alignment tools. One of the machines was effectively only a transport as it was a C format layback machine converted to an 8 track Mk IV machine. This necessitated building on multi-track chassis extensions and the manufacture of new heads for the machine. David approached this as a world-project and linked with many technical experts familiar with the machines. These units met or exceeded original manufacturer's specifications and are now working in a live studio at the MONA Tasmania museum.

April 2023 meeting

In April 2023, Scott Stickland gave an informative presentation on state of the art Collaboration between Digital Audio Workstations. Scott's Digital Collaboration Framework DCF's web application utilises WebRTC protocols for a real-time videoconferencing capability, concurrent data exchange between users and for Web MIDI protocols. This work was an extension of Scott's PhD studies on the topic at U Newcastle, NSW. Scott has had extensive experience in both music and the support technologies. Scott also spoke about his commercialisation venture DCIA Technologies.

This was the first of the resumed Face to Face meetings, held at Collarts in Collingwood, and was also streamed live. Thanks also go to the support staff at Collarts.

June 2023 meeting

In June 2023, AES Melbourne were given a tour and presentation at the ABC Studios in South Bank by Alex Stinson. Alex is a world recognised expert in large scale and Classic Recording and Broadcast Techniques, and the necessary acoustics of recording spaces. The very informative talk covered issues related to recording, production and broadcast for everything from a solo instrument to large orchestras covering microphone types and techniques, the challenges of on-location recording and live broadcast and post production techniques including the various present-day surround and immersive effects.