## Sydney Opera House (SOH) Acoustic Assessment – The Acoustic Group 27 January 2016

## Background

This report measures the acoustic levels recorded within an apartment in the Bennelong Building on 24 April 2014 and compares that to an ambient noise level reading undertaken some 20 months later in January 2016.

## The following should be noted:

- 1. The location of the equipment used for the ambient noise measurement taken on 7 January 2016 was a light pole on Macquarie Street at the entrance to the Opera House round-about above the gathering point for tour groups (This is the **noisiest** location that could be found to measure sound in the area and it picks up buses with engines running, trucks with engines running, garbage trucks with engines running, extra loud Harley Davidson motorbikes speeding around the round-about, taken in the peak summer holiday period).
- 2. The study uses this ambient noise level as a basis for comparison with the music emanating from the Opera Bar in April 2014.
- 3. The report is believed to be deceptive and misleading.
- 4. Michelle Dixon, Director of Safety, Security and Risk from SOH quotes:
  - "the acoustic assessment submitted in support of the current DA was prepared in January this year. We understand that the report is based on measurement results from 2014 and 2016. 2016 testing was carried out on 7 January. I note that on page 6 the heading "Measurement Results 2014 Testing" should be "Measurement Results 2016 Testing". The text following that (incorrect) heading sets out what was recorded and where on 7 January 2016".
- 5. The stated ambient noise level of 59dBA on Level 5 of the Bennelong Apartments is inaccurate.
- 6. Independent testing of noise by residents of the ambient background noise inside apartments have shown readings under 50dB while noise from music and opera bar patrons have recorded readings in the high 70dB.
- 7. This demonstrates that the current entertainment at the Opera Bar is noncompliant with OLGA criteria for measurement at residential boundaries. It should also be noted that noise testing depends on the day they are undertaken, the volume of the music and the operator's decision whether to play the music loud or soft.
- 8. The acoustic report is a sham and should be totally disregarded. A new acoustic report should be undertaken that correctly measures the ambient noise and the noise emanating from Opera Bar at the same location, at the same time, at the peak seasonal time (the type and loudness of music played

- at the Opera Bar varies season to season). It should be noted that since this DA was lodged, the level of music from the Opera Bar has, we believe, temporarily been decreased substantially for the duration of the submission period for this DA.
- 9. It should be further noted that there has been on going verbal and email discussions over the last three years between the Opera House and the residents of the Bennelong Apartments regarding the excessive noise. The Opera House consequently acknowledged the excessive noise levels and in response to this undertook to do the following;
  - Cease playing loud amplified music;
  - Create a sound proof stage;
  - Turn all speakers away from Bennelong apartments; and
  - Cease playing drums.
- 10. To date, the Opera House has not been able to implement any of the undertakings as mentioned above.
- 11. The Acoustic Report ignores that the reality that larger umbrellas will trap the noise and funnel it back into the Lower Concourse Bar and Restaurant Area. Decibel readings in this area have already been measured at over 100dB with music and over 90dB with no music when at full capacity. It should be noted that this required 3m wide main thoroughfare is for the benefit of patrons of the Opera House to access the Opera House undercover from the bottom of the escalators and the carpark. These patrons are not necessarily using the venues within the major thoroughfare but are using this primary thoroughfare to access the Opera House. An increased dB level in this area would be unacceptable particularly for children who must walk through a crowded bar area and be subjected to loud noise. In this regard you would be aware of the recent World Health Organisation statement on the dangers of noise over 80dB on young children who are exposed to this noise for over 1 minute, and its effect on pregnant women and the elderly.
- 12. The acoustic report fails to mention that the proposed shade configuration specifies 4 speakers for each new umbrella, a total of 28 speakers. Currently there are 19 speakers under the existing umbrellas. This is an increase of some 36%. This is inconsistent with Opera House spokesperson Michelle Dixon who specifies there won't be any more speakers:
  - "the Environmental Impact Statement states that "Speakers are to be installed as per existing arrangements on the masts of the shade structures. There will be 4 speakers per mast angled to direct noise to the patrons and away from the direction of the nearest residences". We have confirmed with the acoustician that the current DA does not seek any more speakers than Opera Bar currently has."