Expert witness work – why and how!!!!

Association of Noise Consultants

29th June 2016

Presented by Graham Parry (Managing Director – ACCON UK Limited)

The presentations:

- Expert Witness Roles and Reality – Toby Lewis
- The Expert Witness and the Perfect Report? A Practical Guide – Phil Dunbavin
- The Expert in the Courtroom – Michael Stephens

- Followed by a Q & A session

My personal position:

- 30+ years of expert witness work and still room for improvement?
- Surely we are all competent and doing it (broadly) the same way! So there should not be a need for different sides at Inquiries, Courts, Tribunals and Select Committees
- WRONG!!!!!!!!

The difference between experts

			[redacted] - LA10 18hr Road noise				[redacted] - LAeq 18hr Road + Rail noise			
Claim Property	**Façade**	**Floor**	**2004**	**2021**	**Change**	**Increase**	**2004**	**2021**	**Change**	**Increase**
22 Cordrey Gardens	S, front	1	42.2	51.4	9.2	Major	46.4	50.5	4.1	Moderate
	S, front	2	45.5	53.9	8.4	Major	51.2	54.0	2.8	Minor
	N, Rear	1	48.1	51.7	3.6	Moderate	59.2	59.4	0.2	Negligible
	N, Rear	2	49	52.8	3.8	Moderate	60.7	60.9	0.2	Negligible
51 Cordrey Gardens	S, front	1	43.8	55	11.2	Major	48.6	53.7	5.1	Major
	S, front	2	46.7	57	10.3	Major	53.4	56.7	3.3	Moderate
	N, Rear	1	49.7	55.5	5.8	Major	62	62.4	0.4	Negligible
	N, Rear	2	50.4	57.4	7	Major	62.9	63.5	0.6	Negligible
53 Cordrey Gardens	S, front	G	43.7	54.9	11.2	Major	50.2	54.2	4	Moderate
	N, rear	G	48.2	55.4	7.2	Major	57.2	58.4	1.2	Minor
79 Brighton Road	NW, front	G	71.8	73	1.2	Minor	69.3	70.5	1.2	Minor
	NW, front	1	73.5	74.7	1.2	Minor	71	72.2	1.2	Minor
	SE, Rear	G	48.1	49.1	1	Minor	48.3	48.9	0.6	Negligible
	SE, Rear	1	51	52.1	1.1	Minor	50.6	51.3	0.7	Negligible
55 Cordrey Gardens	W, Front	G	48.1	57.2	9.1	Major	58.6	59.9	1.3	Minor
	W, Front	1	48.7	58.5	9.8	Major	59.9	61.2	1.3	Minor
	E, Rear	G	41.1	46.5	5.4	Major	51.8	52.3	0.5	Negligible
	E, Rear	1	42.9	48.2	5.3	Major	53.3	53.8	0.5	Negligible
56 Cordrey Gardens	W, Front	G	48.1	57.3	9.2	Major	58.5	59.9	1.4	Minor
	W, Front	1	48.7	58.5	9.8	Major	59.7	61.1	1.4	Minor
	E, Rear	G	38.4	43.2	4.8	Moderate	43.9	45.1	1.2	Minor
	E, Rear	1	40.9	46	5.1	Major	44.7	46.5	1.8	Minor

Ensure that the evidence you rely upon is robust – this can include:

- **Measurement data**
- **Noise Predictions**
- **Guidance documents and relevant research literature**
- **Understand the effect of uncertainty on your conclusions**

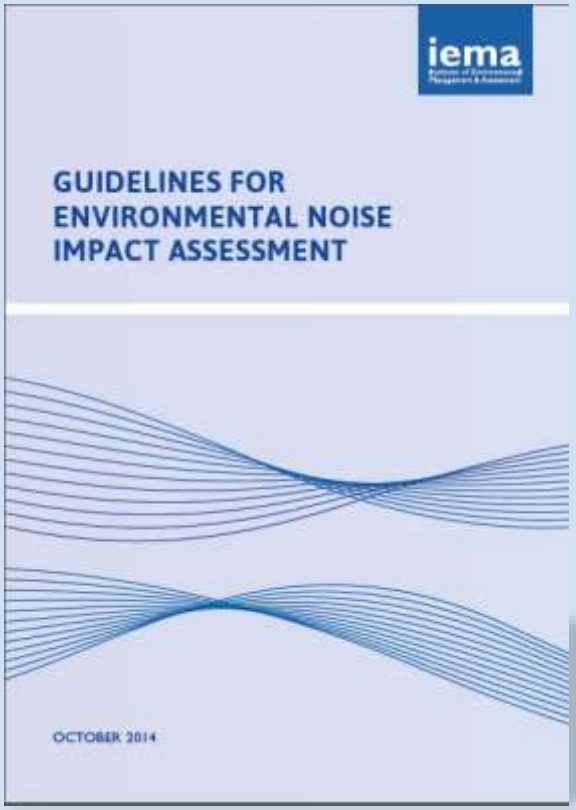
Prepare properly for giving evidence, cross-examination and potential re-examination

- Prepare the 'what if' scenarios
- Be prepared to listen carefully and do not pre-judge where a question is going or what the answer might be
- Answer the question put and only the question – there is no need for augmentation or embellishment
- Counsel on the opposing side are only doing their job - it is not personal – do not respond in a personal way
- Ensure that your answers are directed at the Decision Maker in such a way as they know when you are making a **BIG POINT**

Ensure that you have fully understood any guidance documents you rely upon.

- **Otherwise you will be invited to add 2+2 and it will = 5**
- **Have copies of any guidance documents readily to hand and mark up the relevant points with tabs where appropriate – not just the documents that you rely upon but also those that any other party might rely upon!**

Be careful when you selectively pick information from guidance documents!

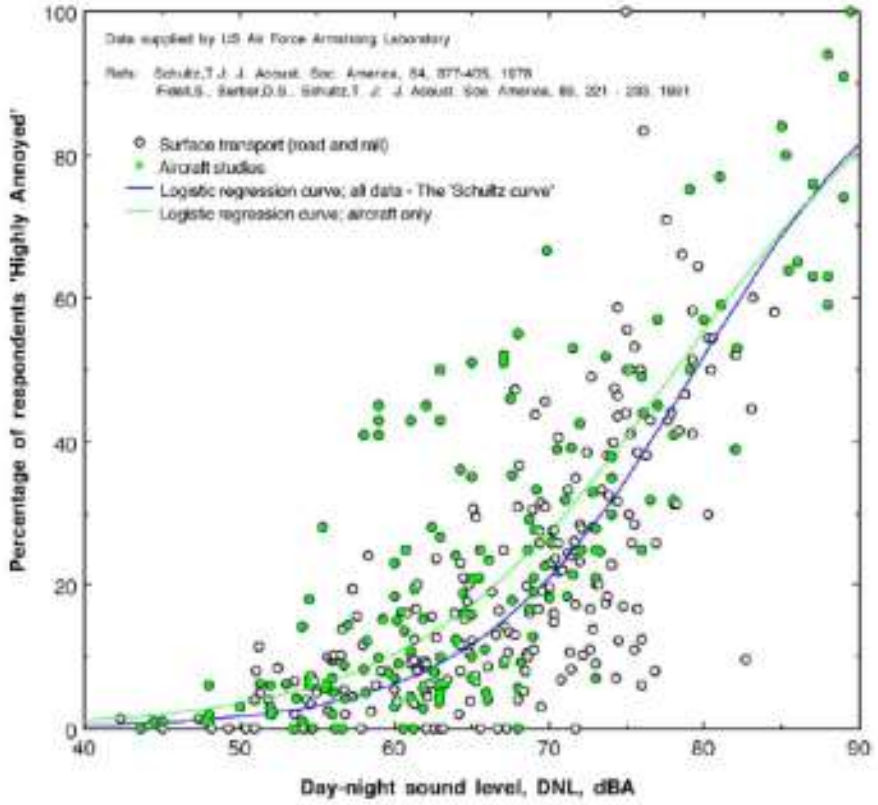


Take as much time as you reasonably need – both to settle yourself into the witness chair and to answer questions

Techniques that I have used (not necessarily recommended!)

- Arrange your paperwork carefully and take a drink before indicating you are ready to give evidence
- Listen very carefully to questions and take notes, pause before replying
- Recognise that there is a time for inserting a ‘touch of theatre’

Uncertainty in general response to noise

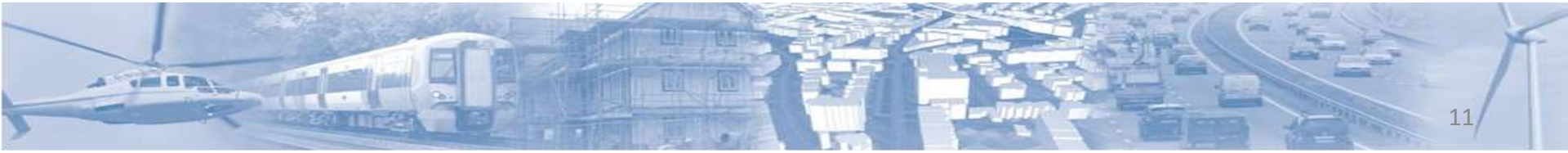


Be aware of terminology

Noise Impact – **The difference in the acoustic environment before and after the implementation of the proposals**

Noise Effect – **The consequences of the noise impact e.g. change in disturbance**

Significance – **The evaluation of the noise effect and deciding whether or not the impact is significant (Note that this is particularly important for EIA)**



Impact > Effect > Significance

MAGNITUDE (Nature of Impact)		DESCRIPTION OF EFFECT (on a specific sensitive receptor)	SIGNIFICANCE (as required within EIA)
Substantial	BENEFICIAL	**Receptor perception = Marked change** Causes a material change in behaviour and/or attitude, e.g. individuals begin to engage in activities previously avoided due to preceding environmental noise conditions. Quality of life enhanced due to change in character of the area.	More Likely to be Significant (Greater justification needed – based on impact magnitude and receptor sensitivities – to justify a non-significant effect)
Moderate	BENEFICIAL	**Receptor perception = Noticeable improvement** Improved noise climate resulting in small changes in behaviour and/or attitude, e.g. turning down volume of television; speaking more quietly; opening windows. Affects the character of the area such that there is a perceived change in the quality of life.	
Slight	BENEFICIAL	**Receptor perception = Just noticeable improvement** Noise impact can be heard, but does not result in any change in behaviour or attitude. Can slightly affect the character of the area but not such that there is a perceived change in the quality of life.	(Greater justification needed – based on impact magnitude and receptor sensitivities – to justify a significant effect) Less Likely to be Significant
Negligible		N/A = No discernible effect on the receptor	**Not Significant**
Slight	ADVERSE	**Receptor perception = Non-intrusive** Noise impact can be heard, but does not cause any change in behaviour or attitude, e.g. turning up volume of television; speaking more loudly; closing windows. Can slightly affect the character of the area but not such that there is a perceived change in the quality of life.	Less Likely to be Significant (Greater justification needed – based on impact magnitude and receptor sensitivities – to justify a significant effect)
Moderate	ADVERSE	**Receptor perception = Intrusive** Noise impact can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; closing windows. Potential for non-awakening sleep disturbance[8]. Affects the character of the area such that there is a perceived change in the quality of life.	
Substantial	ADVERSE	**Receptor perception = Disruptive** Causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in character of the area.	(Greater justification needed – based on impact magnitude and receptor sensitivities – to justify a non-significant effect) More Likely to be Significant
Severe	ADVERSE	**Receptor perception = Physically Harmful** Significant changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	Significant

Presentation of information

- Basic Information
- Location of receptors
- Period of Baseline Study
- Methodology
- Baseline Noise Levels
- Reliability of Data
- Predictions
- Summary of impacts
- Recommendations – this might highlight particularly sensitive receptors

Thank you for listening

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